## Judahite Stamped and Incised Jar Handles: A Tool for Studying the History of Late Monarchic Judah

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The paper probes the distribution of the various stamped and incised Judahite jars with two criteria in mind: (1) their estimated date; (2) the assumption that in addition to Jerusalem, sites that yielded large quantities of stamped handles (mainly Lachish and Ramat Rahel) served as major collection centres while sites that yielded only a few dozen stamped handles served as secondary administrative centres of the kingdom. Based on their findings, the authors reconstruct the evolution of the royal administrative system in the late 8th through the early 6th centuries BCE.

KEYWORDS Kingdom of Judah, *lmlk* stamped handles, Rosette stamped handles, Manasseh, Josiah, Assyrian empire

Stamped and incised jar handles are a widely known phenomenon of late Iron Age Judah. Excavations and surveys conducted in this area have yielded over 2000 stamped or incised jar handles dated to the very short period spanning from the late 8th century to the destruction of the kingdom at the beginning of the 6th century BCE. The early and late *lmlk* stamp impressions are the earliest types, followed by incised concentric circles and then rosette stamp impressions (Lipschits, Sergi and Koch 2010: 8–9; Koch and Lipschits 2010). The continuity in the manufacturing of royal storage jars (Vaughn 1999: 148–150; Shai and Maeir 2003; Gitin 2006) and the use of royal emblems stamped on their handles (Lipschits, Sergi and Koch 2010: 7–10) indicate that the different stamps are all part of the same administrative system that probably had a constant function for about 140 years. Furthermore, the same administrative system continued after the 586 BCE destruction for an additional 450 years, during the Babylonian period (the *mwsh* and lion stamped handles; see Lipschits 2010), during the Persian and the Early Hellenistic periods (the *yhwd* stamped handles; see Vanderhooft and Lipschits 2007; Lipschits and Vanderhooft forthcoming) and until the Late Hellenistic period (the late *yhwd* and the

*yršlm* stamped handles; see Ariel and Shoham 2000: 159–163, with further literature; Vanderhooft and Lipschits 2007). Throughout this long period, Judah (and then Yehud and Judea) was under the reign of great empires. We assume that the stamped jar handles were part of the Judahite administrative system that was already established when Judah became an Assyrian vassal kingdom and continued to be in use as long as Judah was a vassal kingdom and afterwards a province under the rule of the Babylonian, Persian and Ptolemaic empires. The aim of this Judahite administrative system was to collect wine and/or oil from royal estates in order to enable the kingdom to pay its taxes to the empire once it had distributed and sold its agricultural products (Lipschits in preparation).

In this paper, we examine the distribution of the various stamped jar handles in the main Judahite sites, using our typological-chronological observations (Lipschits, Sergi and Koch 2010). We assume that in addition to Jerusalem, the few sites that yielded large quantities of stamped handles (mainly Lachish and Ramat Rahel) served as major collection centres, while sites that yielded up to a few dozen stamped handles served as secondary administrative centres (Lipschits and Vanderhooft forthcoming).<sup>1</sup> Thus, by examining the distribution of the royal Judahite stamped jar handles according to type and date, we can reconstruct the evolution of the royal administrative system from the late 8th through the early 6th centuries BCE. We shall demonstrate that following the Sennacherib campaign to Judah in 701 BCE there was a sharp decline in power of the Judahite Kingdom. Under direct, tightened Assyrian domination in the first half of the 7th century BCE ('the days of Manasseh'), the Judahite monarchical administration was limited to the areas north and south of Jerusalem. Only in the second half of that century, with the decline of Assyrian hegemony and the rise of the Twenty-Sixth Dynasty in Egypt, did the territories lost in the course of the Sennacherib campaign revert to the kingdom and was Judah integrated into the southern Levantine trade stimulated by the Egyptians centered in Ashkelon.

# Dating the Judahite stamped jar handles *Early and late* lmlk *stamped handles*

The Judahite stamped jar handles was the subject of our previous article in this journal (Lipschits, Sergi and Koch 2010). Since the time of the renewed excavations at Lachish the date of the *lmlk* stamp impressions found there have been indelibly associated with the destruction of Level III. Consequently, most scholars linked the dating of the *lmlk* stamp impressions to the late 8th century BCE, and associated them with Hezekiah's reign and Judah's preparations for the 701 BCE Assyrian attack (Ussishkin 1977; Na'aman 1979, 1986; Vaughn 1999; Kletter 2002). However, since unstamped jars of the type bearing the *lmlk* impression had already appeared in the late 9th–early 8th centuries BCE (Shai and Maeir 2003; Gitin 2006), and since Level III at Lachish had already been founded in the mid-8th century BCE and was of long duration (Ussishkin 2004a: 82–83), there was no archaeological base to determine the initial phase of the *lmlk* administrative system; this had already been mentioned by Ussishkin (1977: 56–57), who, in that stage of research,

<sup>&</sup>lt;sup>1</sup> This method would not be useful for rural settlements or nomadic groups, or for sites where only a few stamped handles were found, in which any further find could change the conclusions.

was careful concerning the date of the *lmlk* stamped handles. Furthermore, as we recently demonstrated (Lipschits, Sergi and Koch 2010: 3–7), the numerous seals that were in use for stamping the jar handles, the many stamped jars, the different symbols and the wide distribution of the jars seem to indicate that the system of *lmlk* stamp impressions began and developed over a long period before and after 701 BCE. The fact that stamped jar handles continued to be in use during the 7th century BCE and later, when the Babylonian, Persian and Ptolemaic empires ruled in Judah, is the best indication that this administrative system was not an ad hoc operation; rather, it represents a living administrative and economic system that was established when Judah became an Assyrian vassal kingdom, probably during the last third or the last quarter of the 8th century BCE (Lipschits, Sergi and Koch 2010: 6–7). Like other administrative arrangements made by the Assyrians, it continued to function hundreds of years after the collapse of the Assyrian empire.

By examining the distribution of the *lmlk* stamp impressions according to the detailed typology set out by Lemaire in 1981, it is possible to isolate the four-winged Type Ia and Ib *lmlk* stamp impressions and the two-winged Type IIa stamp impressions as those found in the destruction level of Lachish III and contemporaneous strata. These types should be considered as the ones that date to the final quarter of the 8th century BCE (Lipschits, Sergi and Koch 2010: 11 and Fig. 1). By contrast, three types of *lmlk* stamp impressions (Lemaire's IIb, IIc and XII) appear only in hill-country sites not destroyed in 701 BCE, or in strata attributed to the 7th century BCE with not even one stamped handle of these types found in a clear 701 BCE destruction level. Therefore, we can assume that these types were produced after the 701 campaign, at the beginning of the 7th century BCE (idem: 11, 13–17).<sup>2</sup>

#### Concentric circle incisions

Two hundred eighty-five jar handles with incisions of concentric circles have thus far been found at various sites within the borders of Judah; about a third of the concentric circles were incised on jar handles beside stamp impressions (Addendum, Table 3). The incisions were cut after the jars were fired, thus they postdate the stamping of the *lmlk* impressions and should be interpreted as a recycling of the jars. In view of the clear link of the incised jar handles to the *lmlk* administrative system and the large amounts found in the same administrative centres as the late *lmlk* types, they should be interpreted as a new phase of the Judahite administrative system, overlapping and possibly replacing

<sup>&</sup>lt;sup>2</sup> The 'private' stamp impressions are an essential part of the *lmlk* system, and the chronological overlapping of the two is obvious from both the archaeological and typological standpoints. With this in mind, the limited time-span during which the 'private' stamped jar handles were in use, which did not exceed the 701 BCE Assyrian campaign, becomes significant. The limited distribution of the 'private' stamped handles (mainly at sites located in the Shephelah), their small number (approximately one seventh of the entire corpus of *lmlk* stamp impressions) and their limited duration, together with the fact that the 'private' stamp impressions appear to be associated with the *lmlk* stamp impressions, support the assumption that they were used as part of the preparations for the Sennacherib campaign, between 704 and 701 BCE (Lipschits, Sergi and Koch 2010: 22–27). Since the 'private' stamp impressions about Judah's administrative system as a whole.

the original *lmlk* system. The existence of handles bearing concentric circles but not *lmlk* stamp impressions may indicate that the former were developed as an independent system of marking the same type of storage jars—some of them were old jars that were reused, and some of them new jars, probably replacing broken or missing vessels.

In attempting to date the system of concentric circle incisions, the *terminus ad quem* is 701 BCE, since not even a single incised handle was discovered in a 701 destruction level. Only a few jar handles with incised concentric circles were excavated in the Judahite Shephelah, all in post-701 BCE strata, and most of the handles were uncovered at Highland sites.

The distribution of the concentric circle incised handles is quite similar to the distribution of the late types of the *lmlk* stamp impressions dated to the early 7th century, but it is different from the distribution of the rosette stamp impressions, dated to the late 7th century BCE. Thus, it is reasonable that the system of concentric circle incisions overlapped the final phase of the *lmlk* system, before the rosette stamped handle system was introduced. The incised handles should thus be dated to the middle or to the second third of the 7th century BCE. This date, however, cannot be proven from the archaeological point of view, since there are no destruction layers and thus distinctive pottery assemblages from this period in Judah.

#### Rosette stamped handles

Two hundred twenty-four jar handles with rosette stamp impressions have thus far been found at various sites within the borders of Judah. The system of rosette stamped handles probably appeared during the last third of the 7th century BCE (Koch and Lipschits 2010; and cf. Albright 1933: 10; Aharoni 1964: 35; Na'aman 1991: 31–33, 2001: 273–274). This date is accepted since Aharoni (1964: 35) showed that not a single rosette stamped handle was found below the floors of Stratum VA at Ramat Raḥel, dated to this period (as confirmed by the renewed excavations at the site, and see Lipschits *et al.* 2009: 70; Lipschits *et al.* 2011: 33). The rosette handled jars remained in circulation until the destruction of the Judahite Kingdom in 586 BCE (Aharoni 1964: 35; Na'aman 1991: 31–33; Cahill 1995: 247; Koch 2008: 44–47). From the historical point of view, Na'aman (1991: 31–32) showed the correlation between the distribution of rosette stamped handles and the town list of Judah and Benjamin (Josh 15:21–62; 18:21–28), which is dated to the time of King Josiah.

There are archaeological and historical reasons not to accept the claims of Barkay (1985: 106–107); Cahill (1995: 247–248; 2001: 200) and Ussishkin (2004a: 109–111) for a shortened time-span of usage of the rosette stamped handles during the last few years before the 586 BCE destruction (Koch 2008: 45–47; Koch and Lipschits 2010: 14–18). The new study of the typology of the rosette jar handles (Koch 2008: 12–30) demonstrates that the large number of types that were in use within the system hints at its complexity and long-term usage, probably during the last third of the 7th century and until the 586 BCE Babylonian destruction.<sup>3</sup> Besides, there is clear administrative continuity between

<sup>&</sup>lt;sup>3</sup> The 224 known stamped handles are classified in four types and 24 sub-types that were stamped with 28 stamps (Koch 2008: 14–29; Koch and Lipschits 2010: 15–17).

the late *lmlk*, the concentric circle and the rosette systems. Note that: (1) there was one and the same production centre for all the *lmlk*, concentric circle and rosette jars (Yellin and Cahill 2004); (2) the rosette jars are a sub-type of the family of the *lmlk* jars (Gitin 2006: 517); (3) the jar handles were marked using the same method as the *lmlk* stamped jar, with the same basic concept as the concentric circle incision.

#### Time-span of the royal Judahite stamped jar handles: An overview

The early *lmlk* stamp impressions (Types Ia, Ib and IIa) were in use in the royal administrative system of Judah during the final quarter of the 8th century BCE (Lipschits, Sergi and Koch 2010: 6–7). Three systems functioned in the 7th century BCE: late *lmlk*, concentric circle incised and rosette stamped (*ibid*.: 20-21). Four hundred one late *lmlk* type handles, 285 concentric circle incised handles and 224 rosette stamped handles have been found. If we take the total number of handles and the time line when they were used and add to that the conclusions we presented in the discussion above, we can deduce that the late *lmlk* system was in use for a longer period than the concentric circle and the rosette systems. Since 97 of the concentric circle incised jar handles were in effect a recycling of the *lmlk* jars, the two systems were to a certain extent functioning in tandem. Thus, we may assume that the late *lmlk* stamp impressions (Types IIb, IIc and XII) were in use during the first half of the 7th century BCE, and the concentric incisions overlapped the last phase of this system in the middle of the 7th century BCE, probably during the second third of the century. The rosette stamp impressions were introduced during the last third of the 7th century BCE, and served until the destruction of Judah in 586 BCE.

#### Royal Judahite administrative systems according to marked handles

Table 1 summarizes the number of marked handles according to their geographical and chronological distribution. Note that:

- (1) Since in 97 of the 285 cases concentric circles were incised next to *lmlk* stamp impressions, and since the concentric circles were incised after the *lmlk* stamp impressions and represent a later stage of the system, we must assume that these handles represent the later ('intermediate') administrative system. Thus, we counted jar handles bearing incision and stamp impression together in the following table *only* as part of the concentric circle system. The exact number of each stamped/ incised handle can be found in the complete corpus in the addendum (on pp. 30–35) at the end of this paper.
- (2) We counted only jar handles. Since typical jars had four handles, and from the few complete restorable jars it is clear that in some cases one, two, three and even four handles of the same jar were stamped (Ussishkin 2004b: 2143), we can say nothing here about the number of the actual stamped jars that were discovered at each site.

#### TABLE 1

Site		Early <i>lmlk</i> *	Late <i>lmlk*</i>	Unident. Imlk*	Concent. circle	Rosette
	Jerusalem	ca. 90	ca. 145		116	83
	Ramat Rahel	45	128	40	64	45
	el-Jib (Gibeon)	15	56	3	41	2
	Tell en-Nașbeh (Mizpah)	27	31	13	19	2
	Tell el-Fûl		3	8	5	4
	Hebron	1	6	6		
	Kh. Tubeiqa (Beth-Zur)		8	3	1	5
Highlands	Bethlehem				1	
	Kh. el-Burj			24	17	
	Moza			2	5	4
	Repha <sup>3</sup> im Valley	1		3	4	5
	Nebi Samwil		3	1		3
	Umm-Tuba	1	1			
	Kh. Rabud (Debir)	1				
	Mamilla		2	1	1	
	Total	181	383	104	274	153
	Lachish	378	3	30	2	24
	Beth-Shemesh	32				
	Tel Goded	17		21	1	
	Tel Batash	12	3		1	6
	Azekah	14		2	1	10
	Maresha	6		13		1
Judahite	Tel 'Erani	1	1	13		
Shephelah	Kh. Abbad (Socoh)			min. 10		3
	Tell Beit Mirsim	4				
	Tel Halif	1				
	Kh. Qila (Keila)	2				
	Tel Zayit			2		
	Tell eş-Şāfi (Gath)	7				2
	Total	474	7	91	5	46
	Tel Beersheba	1	,	71	5	10
	Tel Arad	3	4	2	1	3
	Tel Ira	1		2		4
Doorshoho Vollov	Tel Malhata	1				4
Beersheba Valley		2		2	1	4
	'Aroer	3		3	1	
	Bir es-Seba			1		
	Total	8	4	6	2	11
	Tel Goren (En Gedi)		1		1	11
	Jericho		1		1	1
Eastern Fringe	Vered Yericho					1
	Qumran		1	2		
	Kh. es-Samrah		1	2	2	12
Outside Judahite Territory	Total	10	2	2	2	12
	Gezer	10	4	23	1	2
	Ashdod	1	1	2		1
	Tel Miqne (Ekron)	1		2		
	En Tut			7	1	
	Mt. Meiron			1		
	Total	11	5	33	2	2
Total		674	401	236	285	224

\* Without *lmlk* stamped handles with concentric incisions, which were counted only as part of the system of concentric circles.

## The Judahite administrative system in the late 8th century BCE *The importance of Lachish and the Shephelah*

Most of the early *lmlk* stamped handles were discovered in the Judahite Shephelah (467 out of about 674 handles), reflecting the demographic and economic strength of this area at the end of the 8th century BCE, as well as the importance of this region to the royal Judahite administration (Broshi and Finkelstein 1992: 52; Vaughn 1999; Dagan 2000: 200–207; 2004: 2680–2681; 2007: 34\*–39\*; Faust 2008: 172–173). Lachish yielded the largest number of early *lmlk* stamped handles—348 are of the four-winged type and 30 of the two-winged Type IIa, almost 92% of the total number of 413 *lmlk* stamped handles discovered at Lachish (Ussishkin 2004b: 2135–2138; Barkay and Vaughn 2004: 2151–2159). Accordingly, it is safe to say that during the late 8th century BCE Lachish was the main Judahite administration collection centre.

If the *lmlk* system was, indeed, operational when Judah became an Assyrian vassal kingdom, one can understand why Lachish was vital to the local administration; it was needed to administer the collection of products from royal estates (Lipschits in preparation), as is also indicated by the size and architecture of the site. One can also understand why Sennacherib chose this site as the main target for his 701 BCE campaign against Judah, as denoted by the reliefs with which he panelled his royal palace in Nineveh (Ussishkin 1982; Uehlinger 2003, with further literature) and in the inscriptions that accompanied them (Na'aman 1979, 1994; Mayer 2003, with further literature).

Other important sites in the Judahite royal-economic administrative system during the late 8th century BCE were also located in the Shephelah. Beth-Shemesh (with at least 32 stamped jar handles) could have functioned as a local administrative centre in the northern lowland region, probably controlling the large agricultural area of the Sorek Valley (Bunimovitz and Lederman 2009: 136–139). Judahite sites in the Elah-Guvrin-Lachish basin yielded large numbers of *lmlk* stamped jar handles (39 at Tel Goded, including one *lmlk* stamp impression that was later incised with concentric circles, 17 at Azekah, including one with concentric circles, 15 at Tel 'Erani, 19 at Maresha and at least 10 at Kh. Abbad). We can date only the few that have been properly published. It seems that most of the identified stamp impressions from these sites belong to the early types. These sites should be considered as local administrative centres for sub-districts in the Shephelah.

Gezer posits a problem for the assessment of the *lmlk* administrative system. Although it was not a Judahite town, at least 37 *lmlk* stamped jar handles were found at the site (Table 1). Moreover, it seems that unlike other lowland sites, some late *lmlk* types were discovered here. Even so, the history of Gezer actually supports our conclusion. It is commonly acknowledged that during the 8th century BCE (Strata VII–VI) Gezer was an Israelite city that was destroyed in the course of Tiglath-pileser III campaigns between 732 BCE (see 2 Kings 15:29; and cf. Gitin 1990: 16–18; Dever 1998: 181–187; Finkelstein 2002: 285–286). After its destruction Gezer was probably incorporated into the Assyrian administration system (Stratum V) and deportees were settled there (Reich and Brandl 1985; Na'aman and Zadok 1988; Dever 1998: 188–189; Finkelstein 2002: 286–287). Since the *lmlk* stamped handles from Gezer could not have originated from the Israelite

pre-732 BCE Strata VII and VI, we may safely argue that they represent the Assyrian administrative centre of Stratum V (and see also Dever 1998: 188). During this time, royal commodities from Judah were transferred there; the fact that both early and late *lmlk* stamped handles were found in Stratum V strengthens its dating to the late 8th and first half of the 7th centuries BCE.

To sum up, more than 83% of the *lmlk* stamped handles found in the Judahite Shephelah belong to the early types (467 early types, seven late types and 89 unidentified). If we calculate the identified types only, then 98% of the *lmlk* stamped handles from the lowlands belong to the early types. These data demonstrate the administrative importance of this region in the early days of the *lmlk* system.

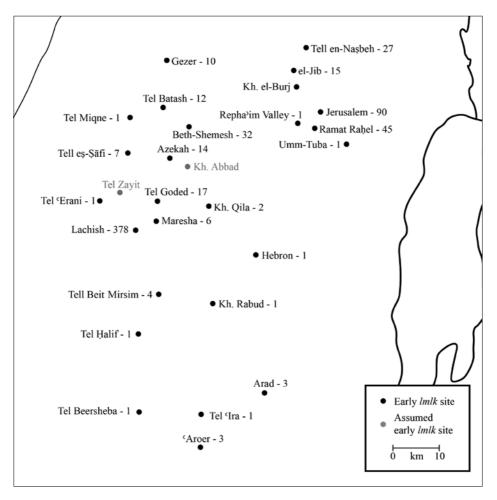


FIGURE 1 Distribution of the early *Imlk* stamped handles.\*

\* The 'assumed early *lmlk* sites' are sites in which unidentified *lmlk* stamped handles were reported. These sites were within the borders of the Kingdom of Judah and were destroyed in the late 8th century BCE. Therefore, we assume that the *lmlk* stamped handles from these sites were part of the early phase of the administrative system discussed here.

#### Early lmlk stamped handles in the hill country

Jerusalem has about 90 early *lmlk* stamped jar handles—13% of the corpus. It is impossible to determine whether these stamped handles came from 8th- or 7th-century BCE contexts, since the city was not destroyed in the Assyrian 701 BCE campaign and the early *lmlk* stamped jar handles could also be part of the system that continued to be operational after 701 BCE (Lipschits, Sergi and Koch 2010: 7–8).

Ramat Rahel (with 45 early, as compared with 128 late *lmlk* stamped jar handles) was probably built after the destruction of Lachish in 701 BCE, as the new collection centre of wine and oil from the Judahite royal estates (Lipschits *et al.* 2009: 60–64; Lipschits *et al.* 2011). After the heavy destruction of the Shephelah and the loss of large parts of its territories to the neighbouring kingdoms, the hill country became much more important in the royal economy. The Jerusalem countryside, including the Repha<sup>3</sup>im Valley and its surroundings,<sup>4</sup> burgeoned at the end of the 8th and the beginning of the 7th centuries BCE as one of the main agricultural districts in the hill country, side by side with the area of Benjamin to the north of the capital (Lipschits and Gadot 2008). Similar to the case of Jerusalem, in Ramat Rahel the early *lmlk* stamp impressions may not represent the pre-701 BCE situation and could have been part of the system that continued to operate after 701 BCE. In any case, the early and late *lmlk* stamp impressions at Ramat Rahel were all excavated at the same stratigraphic location, especially under the floors of the second phase palace (dated to the final third of the 7th century BCE, and see Lipschits *et al.* 2009: 60–64; Lipschits *et al.* 2011: 20–34; Sergi in preparation a, b).

The distribution of the early *lmlk* stamped handles in the hill country of Judah shows a clear dichotomy between the north and the south. In addition to Jerusalem and its surroundings, which yielded about 136 early stamped *lmlk* jar handles (90 in Jerusalem, 45 in Ramat Rahel and one in the Repha'im Valley), early *lmlk* stamped handles were discovered in the area of Benjamin, especially in Tell en-Naṣbeh (27) and el-Jib (15). Only three early stamped jar handles were discovered in the central and southern hill country area—one each at Kh. Tubeiqa, Hebron and Kh. Rabud. This seems to indicate that the royal administrative activity in the Highland region concentrated in and around the capital.

Still, there is a sharp contrast between the relatively small number of the early *lmlk* stamped jar handles in and around Jerusalem (181, or approximately 27% of the total number), compared with the 467 stamped handles discovered in the Judahite Shephelah (approximately 69% of the total number). In the late 8th century BCE, Jerusalem was at its demographic peak (Na'aman 2006, 2007a; Finkelstein 2007; Geva 2008: 55–56), and the territory around it was flourishing (Katz 2008: 171–178, with further literature). This situation emphasizes even more the importance of the Shephelah to the Judahite economy and administration, and reaffirms the enormous effect of its destruction by the Assyrians on the fate of the kingdom during the 7th century BCE.

<sup>&</sup>lt;sup>4</sup> The Jerusalem environment is usually drawn up to Moza and Nebi Samwil in the west and northwest, the area up to French Hill in the north, the modern-day Arnonah neighbourhood and the village of Sur Bahir to the southeast and the area of the Repha<sup>3</sup>im Valley and Bethlehem to the south.

#### Early lmlk stamped handles in the Beersheba–Arad Valleys

Only 8 early *lmlk* stamped handles (1% of the total number) were excavated at sites located in the Beersheba–Arad Valleys: three at 'Aroer, three at Arad and a single stamped handle each at Tel Beersheba and Tel <sup>c</sup>Ira. This is a small number of stamped handles for an area that prospered during this period (Singer-Avitz 1999: 56–57; Thareani-Sussely 2002: 81–84; Thareani 2009: 185). The settlement pattern in the Beersheba–Arad Valleys included four fortified towns: Tel <sup>c</sup>Ira VII (Beit Arieh 1999: 170–173), <sup>c</sup>Aroer III (Thareani 2010: 55–271), Tel Malḥata IV (Kochavi 1993: 935–936; I. Beit-Arieh, personal communication) and probably biblical Beersheba (Bir es-Seba) (Panitz-Cohen 2005). An administrative centre was built in the west (Tel Beersheba Stratum II, and see Aharoni 1973: 10–18; Herzog 1997: 244–248; Singer-Avitz 1999: 11) and a military fortress was constructed in the east (Arad Stratum VIII, and see Herzog 2002: 35–40).<sup>5</sup>

The explanation for the meagre number of *lmlk* stamp impressions in this area should be sought in the character of the southern Judahite region during the late 8th century BCE. Many scholars have demonstrated the importance of the south Arabian trade routes to the Assyrian imperial policy in the west (Tadmor 1966; Otzen 1979: 255–256; Na'aman 1979; Eph<sup>c</sup>al 1982: 93–94; Elat 1990; Finkelstein 1992: 159–162; Jasmine 2006; Thareani 2009). The south Arabian trade was not an Assyrian initiative, and it seems that the Assyrians imposed themselves on existing trade systems. These had been managed by Arabs and Philistines generations before the Assyrians arrived in this region (Na'aman 1979, 2007b; Elat 1990; Liverani 1992; Sass 2007). Nevertheless, the Assyrian involvement was not just passive (by profiting through taxes) and they stimulated these trade systems by providing security and administration (Elat 1990; Singer-Avitz 1999: 53-59; Thareani-Sussely 2007a: 73-75; Katz 2008: 118-120). The extent of the long distance trade with south Arabia, its directions and the place of the Beersheba-Arad Valleys in it are reflected in the archaeological finds in the strata dated to the late 8th century BCE.<sup>6</sup> The uniqueness of the late-8th-century BCE finds in the Beersheba-Arad Valleys, compared with finds at other Judahite sites (such as Lachish or Jerusalem), calls for a distinction between the southern part of the kingdom and the rest of its territory (Singer-Avitz 1999: 56; Katz 2008: 139–141), with conspicuously different monarchical involvement manifested also in the small scale of administrative activity there.

<sup>&</sup>lt;sup>5</sup> Na'aman (1979: 75) suggested that the sites in the Beersheba–Arad Valleys were destroyed before the *lmlk* system was introduced in Judah, perhaps during the campaigns of Sargon II, between 720 and 711 BCE. However, the lack of any evidence for an Assyrian attack on Judahite sites before the Sennacherib campaign in 701 BCE rules out this possibility, as Na'aman himself later accepted (1994: 245–247; Finkelstein and Na'aman 2004: 61).

<sup>&</sup>lt;sup>6</sup> A high percentage of ceramic vessels with coastal characteristics and Edomite/Assyrian style pottery was found at Tel Beersheba Stratum II and Arad Stratum VIII together with imported products (Singer-Avitz 1999, 2002: 160–162; Herzog 2002: 98–99; Na'aman and Thareani-Sussley 2006). Some scholars have recently tried to minimize the significance of the South Arabian trade to the settlement prosperity in this region and connect this prosperity with vast grains agriculture (Faust and Weiss 2005: 74–75; Faust 2008: 171). This conclusion is highly unlikely given the limited rainfall and agricultural capacity of this region. See the criticism of Master (2009: 308–310) and the discussion below.

The limited number of *lmlk* stamped jar handles found in the Beersheba Valley may attest to its marginal importance within the Judahite administration, in spite of its significance in controlling the trade routes. If the *lmlk* administrative system is understood as a method of 'royal financing', then the lack of stamped handles in this region means that it was not directly financed by the royal economy.<sup>7</sup> The Beersheba–Arad Valleys could support itself through exchange of commodities. The officials stationed there were probably provided with royal supplies for their own use, part of the surplus that remained in the central collection centre in the Shephelah.<sup>8</sup>

## The Judahite administrative system in the first-half of the 7th century BCE

### *Late* lmlk *stamped handles in the hill country and the status of Ramat Rahel*

Three hundred ninety-six late *lmlk* jar handles were found within the Judahite territory, of which about 145 were discovered in Jerusalem (36% of the corpus), 128 at Ramat Rahel (32%), 56 at el-Jib (14%) and 31 at Tell en-Naşbeh (8%). Overall, 95% of the late *lmlk* handles were discovered in a very small radius around Jerusalem as contrasted with 27% of the early *lmlk* jar handles.

The significance of these numbers is that in the early 7th century BCE the administrative status of the hill region increased. Jerusalem and Ramat Rahel replaced Lachish as the main *lmlk* administrative centres. Jerusalem, the capital of the kingdom, was probably the main consumption centre, while Ramat Rahel (in its first building phase—see Lipschits *et al.* 2009, Lipschits *et al.* 2011: 10–20) became the main collection centre during the post-701 BCE period. This supports the theory that Ramat Rahel was a royal-Judahite administrative centre when Judah became an Assyrian vassal kingdom (Na'aman 2001: 270–275; Lipschits *et al.* 2009, Lipschits *et al.* 2009, Lipschits *et al.* 2011). Furthermore, it strengthens the theory that the royal stamped jar system was introduced in order to improve the collection of taxes for the Assyrian empire (Lipschits, Sergi and Koch 2010: 6–7).

North of Jerusalem, the Benjamin plateau gained new administrative importance during this period, with 93 stamped handles (23% of the total corpus). The main increase is seen at el-Jib, with 56 stamped handles, 14% of the total find, compared with about 2% in the previous system. This site probably became the main production centre in the Benjamin area along with the administrative centre of Tell en-Naşbeh (31 stamped handles).

<sup>&</sup>lt;sup>7</sup> Zimhoni (2004: 1795) already made a similar suggestion while discussing *lmlk* jars from Lachish.

Further support of this view may be found in the Arad ostraca, which specify only a small ratio of agricultural commodities that were issued to (probably) military forces in the Beersheba–Arad Valleys (Aharoni 1981; Ahituv 2008: 92–153; Dobbs-Allsopp *et al.* 2004: 5–105). Although the ostraca were found in an archaeological context dated to the late 7th century and not to the 8th century BCE, the number of stamped jar handles dated to the late 8th century (early *lmlk*) and to the late 7th century (rosette stamp impression) is practically equal. Therefore, the evidence of the ostraca is coherent with the limited number of royal jars that were distributed in the region.

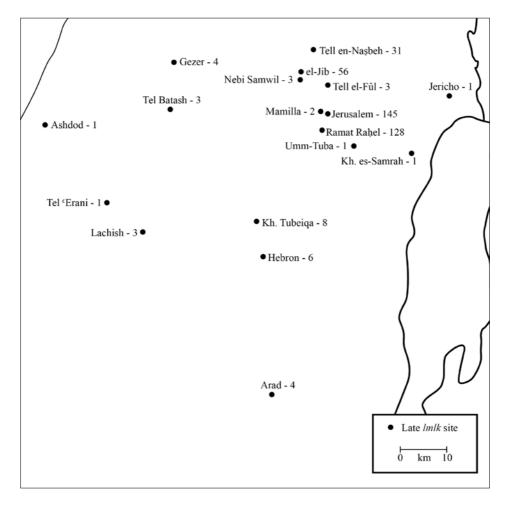


FIGURE 2 Distribution of the late Imlk stamped handles.

### *Late* lmlk *stamped handles in the Judahite Shephelah and the effect of the Assyrian destruction*

In sharp contrast to the numbers of late *lmlk* stamp impressions found in the northern Judahite hill country, only seven late *lmlk* handles were found in the Judahite Shephelah (three at Lachish, out of clear archaeological context, three at Tel Batash and one at Tel <sup>c</sup>Erani). Four were found in Arad and no others were discovered in the Beersheba–Arad Valleys.

The sharp contrast between the hill country and the Shephelah in the first decades of the 7th century BCE reaffirms the effect of the Assyrian destruction and the dramatic demographic decline in the lowlands (Na'aman 1993: 117–120, with further literature; 1994: 247–250; Blakely and Hardin 2002; Grabbe 2003; Dagan 2004: 2682; Finkelstein and Na'aman 2004). From the point of view of the *lmlk* jar handles too (Fig. 2) it is clear that Judah lost its most important economic, demographic and administrative region.

The small quantity of late *lmlk* stamped handles that was found in the Shephelah indicates that this region had not recovered during the first half of the 7th century BCE. The lack of stratified late *lmlk* stamped handles from Lachish or Beth-Shemesh emphasizes that these former important administrative centres did not function as such during the first half of the 7th century BCE, and perhaps did not even exist during this period. A similar reconstruction fits other lowland sites, where not a single late *lmlk* stamped jar handle was found. Thus, the find of three stratified late *lmlk* handles at Tel Batash Stratum II stands out. It may indicate that Tel Batash II represents a settlement from the early 7th century BCE, earlier than other 7th century strata in the Judahite Shephelah. The stamped jar handles cannot confirm or reject the observation made by Finkelstein and Na'aman (2004: 71–72), who noticed that short-lived strata in lowland sites (such as Tell Beit Mirsim A, Tel Halif VIA and Tel Ceton I) were built above the destruction levels of 701 BCE, but yielded Lachish III pottery

The lack of late *lmlk* stamped handles as well as concentric incisions in Beth-Shemesh stands against the view adopted by Fantalkin (2004: 255), who argued that the reuse of the reservoir of Beth-Shemesh during the early 7th century BCE reflects the cooperation of Judah and the Kingdom of Ekron under the *pax Assyriaca*. Though farmsteads around Beth-Shemesh could have existed in the early 7th century BCE, there is no evidence of royal Judahite involvement in this process. It seems that the hinterland of the Sorek Valley, with the area of Beth-Shemesh in it, was transferred to the Kingdom of Ekron. The fact that in the 7th century BCE the inhabitants of the area had Judahite material culture (Bunimovitz and Lederman 2003: 22 n. 14, and see Fantalkin 2004: 253–254) has nothing to do with their territorial, political or administrative affiliation.

#### The Judahite administrative system in the mid-7th century BCE *The Highlands versus the Shephelah*

The distribution of the concentric incised handles shows a clear connection to the previous, late *lmlk* system (Fig. 3). The majority of the 285 handles was located in the Jerusalem area: 116 handles were excavated in Jerusalem (40.5% of the total find, compared with 35% of the late *lmlk* system); 64 were discovered at Ramat Rahel (22.5% of the total find, less than the 32% of the late *lmlk* system); 41 came from el-Jib (14.5%, similar to the 14.5% of the late *lmlk* system); 19 were discovered at Tell en-Naşbeh (about 7%, similar to the 8% of the late *lmlk*) and 34 (about 12% of the corpus) from seven other Highland sites (17 from Kh. el-Burj, five from Moza, five from Tell el-Fûl, four from sites in the Repha<sup>3</sup>im Valley and one each from Mamilla, Kh. Tubeiqa and Bethlehem). Only five incised handles were found outside the Highlands in the Judahite Shephelah—two at Lachish, and a single handle each at Tel Goded, Azekah and Tel Batash (2% of the total find, similar to 2% of the late *lmlk* system). A single handle each with concentric circles was found at Arad and <sup>c</sup>Aroer. These data reflect the continuous loss of the Shephelah region and the Beersheba–Arad Valleys in the Judahite administrative system.

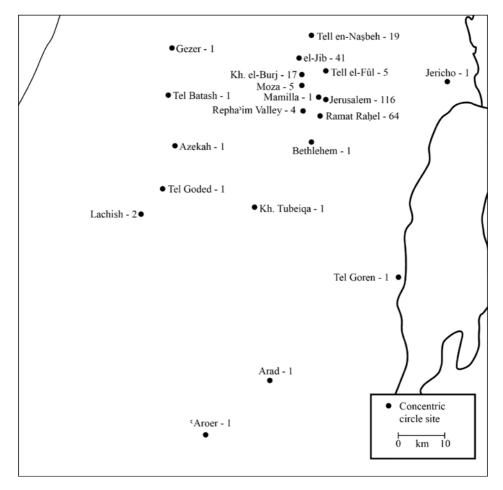


FIGURE 3 Distribution of the concentric incised handles.

During this period, the hill country shows a clear continuity: Jerusalem, as the capital, was the main centre with 40.5% of the total finds, while Ramat Rahel continued to be in second place with about 22% of the finds. The importance of the Benjamin region continued, with about 29% of the finds.<sup>9</sup>

The loss of the Shephelah and its significant effect on the Judahite administration is also reflected in the size of the administrative system as a whole: some 674 early *lmlk* stamped handles were found across Judah, compared with about 401 late *lmlk* stamped handles and even a smaller number reflecting the later administrative systems (about 285handles bearing concentric incisions and 224 rosette stamped handles). It seems that the result of the Assyrian campaign forced Judah to operate on a smaller scale and to tighten the administration over a much more restricted area. These data demonstrate the shrinkage of Judah and its concentration around the capital.

<sup>&</sup>lt;sup>9</sup> For the role of the Benjamin region in the Kingdom of Judah during the late 8th and 7th centuries BCE, see Na'aman 2009 (especially pp. 216–218).

#### The status of the Beersheba–Arad Valleys

Only four late *lmlk* stamped jar handles were found at Arad, and one concentric circle incision each was found at Arad and 'Aroer (but not in a clear archaeological context). At first glance it might seem that the administrative status of southern Judah did not change dramatically. Yet, four compared with eight stamp impressions dated to the late 8th century is a sharp decline, which is also expressed by their limited distribution. The fortified settlements probably recovered quite quickly, without a long occupation gap. 'Aroer Stratum II and Tel Malhata Stratum III were rebuilt during the 7th century BCE (Thareani-Sussely 2007b). Tel 'Ira Stratum VI was rebuilt according to the outline of the former city plan of Stratum VII (Beit-Arieh 1999: 176–177),<sup>10</sup> and there are some indications for continuity at the site between Strata VII–VI without a long occupational gap. The most important change in the settlement pattern was the loss of the two Judahite administrative-military centres: Tel Beersheba and the Arad fortress. Tel Beersheba was never rebuilt after its destruction by Sennacherib. The fortress at Arad was reconstructed in the 7th century (Strata VII–VI), probably in its second half.<sup>11</sup>

The overall picture that emerges from the above is that at least some of the settlements in the Beersheba–Arad Valleys may have been rebuilt during the first-half of the 7th century, while the main Judahite administrative centres in the region were rebuilt only in the second-half of the 7th century BCE. The lack of late *lmlk* stamped jar handles in this region should be interpreted as part of the shrinkage of the Judahite monarchical power in the Beersheba–Arad Valleys after the Sennacherib campaign. The Assyrians did not give up the trade routes passing through this region. The focused destruction of Beersheba II and Arad VIII—the sites manifesting the Judahite monarchical power—was meant to punish Judah while minimizing the damage to Assyrian interests. Thus, it took some decades to reconstruct the royal Judahite centres of the region. This included the rebuilding of the fortress at Arad and the eastern Negeb

<sup>&</sup>lt;sup>10</sup> The excavators of Tel <sup>(</sup>Ira dated Stratum VII to the late 8th and the beginning of the 7th centuries BCE (Beit-Arieh 1999: 171–173; Freud 1999: 194–214). But it seems that the opinion stressed by Singer-Avitz (1999: 56) and Thareani-Sussely (2007a: 71–72) that this stratum should be dated to the late 8th century and its destruction to 701 BCE, should be accepted. The excavators of the site accepted this suggestion as well (L. Freud, personal communication). Apparently the destruction of <sup>(</sup>Ira VII was not conclusive. It concentrated mainly on the northeastern part of the fortification system and only there a clear occupational gap was detected (Ayalon 1999: 44–45; Finkelstein and Beit-Arieh 1999: 76, 81). The city was reconstructed along the same outlines as the former stratum and in some areas (mainly residential), there is clear evidence of continuity from Stratum VII to VI (Beit-Arieh and Bunimovitz 1999: 20; Beit-Arieh and Negbi 1999: 29; Finkelstein and Beit-Arieh 1999: 82). This may indicate that the gap between the destruction of Stratum VII and the rebuilding of Stratum VI was not significant.

<sup>&</sup>lt;sup>11</sup> There is no doubt that the date of the destruction of Arad Stratum VI is at the beginning of the 6th century. Since both Arad Stratum VI and Stratum VII yielded letters by the same person (Herzog 2002: 40–41, 48–49 *contra* Mazar and Netzer 1986; Ussishkin 1988) Stratum VII should not be dated much earlier than the mid-7th century BCE. This dating might explain the few pottery vessels identical to Stratum VIII (late 8th century) and the late *lmlk* stamp impressions with one concentric incision (Singer-Avitz 2002: 180–182).

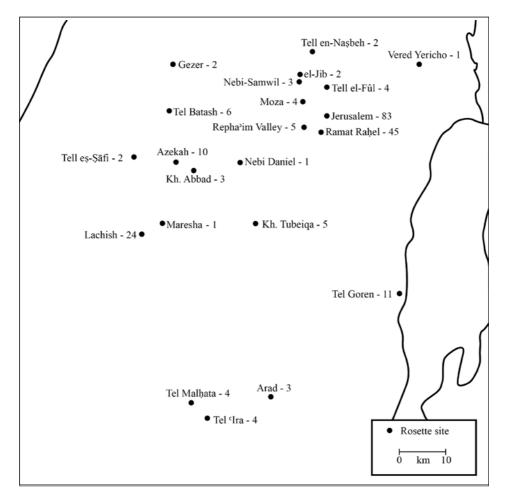


FIGURE 4 Distribution of the rosette stamped handles.

fortresses together with the first indications for royal administration in the form of 11 rosette stamped handles found at 'Ira, Malhata and Arad.

Thareani (2009: 184) proposed that in the 8th century BCE the Beersheba and Arad Valleys were ruled by local Judahite elite subordinated to the Assyrian regime. We accept this reconstruction, but would date it to the early 7th century BCE and associate it with the decline of the Judahite-monarchical administrative activity at that time. The region did not thrive during this period, but there are some clues for the existence of a town at Tel Malhata (I. Beit-Arieh, personal communication) and the caravanserai at <sup>c</sup>Aroer (Thareani-Sussely 2007b; Thareani 2010). In light of these data, we would like to propose that during the first half of the 7th century BCE trade was operated by the local elites in accordance with Assyrian interest.

### The Judahite administrative system in the late 7th and early 6th centuries BCE

Two hundred twenty-four rosette stamped handles reflect the change in the administrative system of Judah during the late 7th and early 6th centuries BCE. There is a clear continuity in the status of Jerusalem (with 83 stamped handles, 36% of the total finds) and Ramat Rahel (with 45 stamped handles, 20% of the total finds) within the royal economic-administrative system. Recent excavations at Ramat Rahel have shown that in the late 7th century BCE the second administrative centre was developed, and the site was rearranged with an ashlar masonry edifice with open courtyard and a royal garden (Lipschits et al. 2011: 20–34). As already observed by Aharoni (1964: 35, and see above), not a single rosette stamped handle was found below the floor level where early and late *lmlk* stamped handles and concentric circle incised handles were found. It is thus clear that the second administrative centre at Ramat Rahel was founded before or-more plausibly-simultaneously with the introduction of the rosette stamp system, probably as one development. The establishment of this new system, which was probably launched during the 30s or the 20s of the 7th century BCE, falls in the period following the withdrawal of the Assyrians from the Levant and prior to the Babylonian conquest of the region in 605–604 BCE).

#### The rosette stamped jar handles and the rehabilitation of the Shephelah

The new administrative system indicates a process of reintegration of the Shephelah within the royal economic-administrative system. Forty-four rosette stamped handles (about 20% of the total finds) were found in this region, and Lachish became the third most important centre in this new royal administrative system (after Jerusalem and Ramat Raḥel), with 24 stamped handles (about 11% of the total finds). It seems that the foundation of Level II at Lachish was contemporaneous with the introduction of the rosette stamp system, and that the site was rebuilt after a long gap.<sup>12</sup> Yet Lachish was not restored to its pre-701 BCE importance.

Azekah could have been another local administrative centre in the Shephelah, with ten rosette stamped handles (5% of the total corpus)—the sixth most significant in this

<sup>&</sup>lt;sup>12</sup> The reason for the late reestablishment of Lachish is not clear. Usshishkin (2004a: 90–92) claimed that it could have happened only after the retreat of the Assyrians and the destruction of Ekron, the dominant city in the region. However, Ekron continued to flourish at least until the Babylonian occupation (Na'aman 2003), and this date seems to be too late for the foundation of Lachish. Furthermore, Lachish is located in the southern Shephelah and its sphere of influence was shared with Ashdod or Gaza rather than with Ekron. These cities endured long after Judah was destroyed by the Babylonians (Lipschits 2005: 41–42) and therefore it is difficult to connect the occupational gap in Lachish with the Philistine dominance. It is more plausible that the Assyrians did not allow Judah to rebuild Lachish, and possibly also other cities in the Shephelah, because of strategic considerations and perhaps also for reasons of propaganda—the ruins of Lachish (and perhaps other border towns such as Azekah) served as a symbol of the defeat of a kingdom that rebelled against Assyria. Lachish was rebuilt only after the Assyrian retreat from the Levant.

new royal administrative system. We may assume that during the late 7th century, Azekah became the administrative centre of the Valley of Elah, on the border with Ashdod.

Further to the north, six rosette stamped handles were excavated at Tel Batash. This find may raise questions regarding the city's affiliation: Was it located in the Kingdom of Ekron (Mazar and Panitz-Cohen 2001: 181) or of Judah? Cahill (2001: 199–200) explained the stamped handles at Tel Batash as evidence of the emergency supply sent to the city by King Jehoiakim, as part of the kingdom's preparations for the Babylonian campaign. We propose another option, based on the possible gap between the destruction of Ekron and the destruction of Tel Batash, the Judahite finds that were discovered at Tel Batash<sup>13</sup> and the fact that no rosette stamped handles were discovered at Ekron.<sup>14</sup> After Ekron was destroyed by the Babylonians in 604 BCE (Na'aman 1992: 41–42; Lipschits 2005: 41–42, n. 19), its territory was divided; the east, where Jehoiakim was considered a loyal vassal of Nebuchadrezzar II, was transferred to Judah (cf. already Mazar 1985: 321; 1994: 262–263). It is reasonable to assume, therefore, that between 604 BCE and the destruction of Judah in 586 BCE, Tel Batash and the area around it were part of Judah (for a complete discussion, see Koch and Lipschits 2010).

The data presented above strengthen the accepted date for a limited recovery of the Judahite administration in this region:<sup>15</sup> Many of the administrative centres (like Beth-Shemesh and Tel Goded) were never rebuilt after their destruction by Sennacherib.

#### The rosette stamped jar handles and the status of the Benjamin region

Although the sites in the Benjamin region flourished during the 7th century BCE, with cities like el-Jib (Pritchard 1962: 162–163) and Tell en-Nasbeh (Zorn 1993) and newly thriving sites such as Tell el-Fûl (Lapp 1981: 39–46) and Nebi Samwil (Magen and Dadon 2003), there was a sharp decline in the administrative status of this region; only 15 rosette stamped handles were found there: four each in Tell el-Fûl and Moza, three in Nebi Samwil and two each in el-Jib and Tell en-Nasbeh.

Since there is no information on demographic decline in this region, and especially in Tell en-Nasbeh and el-Jib, which were very prominent in the late *lmlk* and concentric circle systems, we would propose to connect the decrease in the region's importance with the recovery of the Shephelah and its reintegration into the royal Judahite administrative system.<sup>16</sup> The new option of the kingdom to rebuild Lachish and Azekah as administrative–

<sup>&</sup>lt;sup>13</sup> Judahite material at Tel Batash includes pottery, figurines, weights and loom weights (Mazar and Panitz-Cohen 2001: 160–161, 208–210, 238–243). Na'aman (1991: 49) explained these finds as reflecting the *pax Assyriaca* and the 'open borders' of that period.

<sup>&</sup>lt;sup>14</sup> The "possible Rosette" from Ekron that was mentioned by Cahill (1995) belongs to a group of 'Rosette-like' stamped handles from the Persian period, and not to the late 7th–early 6th century group (Koch 2008: 26–27).

<sup>&</sup>lt;sup>15</sup> For a similar reconstruction, see Na'aman 1991: 27, 49, 57–58; 1994: 248; Dagan 2000: 208–210; Bunimovitz and Lederman 2003: 3–4, 20–21; Faust 2008: 173; for a different opinion regarding the date of the resettlement, see the literature in Finkelstein 1994: 181; and cf. Finkelstein and Na'aman 2004; Fantalkin 2004.

<sup>&</sup>lt;sup>16</sup> Na'aman (2009: 116) proposed connecting the decrease of the administrative importance of Benjamin with the destruction of the high place in Gibeon during King Josiah's reforms (2 Kings 23).

economic centres and to develop the rural area around them caused the diminution in the importance of Benjamin. The area north of Jerusalem, which gained important administrative and economic status following the 701 BCE Assyrian campaign, returned during the last third of the 7th century BCE to its former status, but only for a short period. After the 586 BCE Babylonian destruction of Jerusalem and the second blow inflicted on the lowland sites, the area of Benjamin regained its standing and became the new centre of Judahite life in the new province of Yehud.

### The rosette stamped jar handles and the status of the Beersheba–Arad Valleys

In the Beersheba–Arad Valleys, too, a new royal enterprise was launched after an extensive period in which Judah had no administrative role in the region.

Four rosette stamped jar handles were found in the new administrative centre that was founded in Tel 'Ira (Stratum VI); three stamped handles were excavated at the fortress in Arad (Strata VI–VII); and four other rosette stamped handles were discovered at Tel Malhata (Stratum III). Alongside these centres, several new fortresses were established in this period, including Horvat 'Anim, Horvat 'Uza and Horvat Radum (Beit-Arieh 2007).

On the eastern fringe of the kingdom, Tel Goren appears as a major site with 11 rosette stamped handles (5% of the total finds). One more stamped jar handle was discovered at Vered Yericho. Jericho and Tel Goren were surrounded by an array of forts and small settlements, and at least ten fortresses and dozens of other small sites protected the roads leading to the area from the hill country (Lipschits 1997: 317–325; Faust 2008: 170).

#### Discussion

#### The impact of Sennacherib's campaign against Judah

During the last quarter of the 8th century BCE, a sophisticated administrative system developed in Judah for collecting wine and oil produced at royal estates in main collection centres. The Shephelah, with Lachish at its heart, was the centre of the production, collection and distribution of the jars.

One of the main results of the 701 BCE Assyrian campaign was the drastic decline of the Judahite royal administration and its concentration in Jerusalem and the area around it. Until the destruction of the kingdom in 586 BCE, the system of the stamped jar handles continued to function to a modest extent, never regaining its initial scale or strength.

These conclusions, based on archaeological and demographic research and on the the comparison between the early and late *lmlk* stamped jar handles, stand in clear contrast to recent attempts to reduce the impact of Sennacherib's campaign to Judah. Faust (2008: 188) asserted that the 701 BCE Assyrian campaign to Judah was "much more partial and less severe than is commonly thought". He based his conclusion on the argument that almost all the excavated sites in the regions that were part of Judah in the 7th century BCE, aside from the Shephelah, were densely populated, even more than they had been in the late 8th century. This argument is far from accurate.

To begin with, one cannot overestimate the significance of the Shephelah for the Judahite economy. The combination of soil types and the reasonable amount of rainfall made it possible to grow cereal crops under optimal conditions more than in any other region in Judah (Dagan 2007: 9\*-13\*). It is not surprising, therefore, that most of the Judahite fortified towns, in which the main economic activity took place, were located in the Shephelah. The number of 8th-century stamped jar handles found there only reaffirms this assumption. Hence, the loss of such an area had to have a major impact on the royal economy.

Faust's claim that Judah was densely populated in the 7th century BCE is true, but it ignores the fact that this demographic calculation reflects the situation in the second half of that century, indicating that the recovery of the kingdom after the 701 BCE destruction was long and gradual. The problem is that given the current state of research the 7th century sites cannot be dated with certainty. The pottery assemblages traditionally dated to the 7th century BCE are defined according to the finds in the destruction of Lachish Level II and its contemporaries, dated to the beginning of the 6th century BCE (Zimhoni 2004). Yet, there is no way to date the beginning of the Lachish II repertoire, or to date the transition from the pottery types of Lachish III (late 8th century) to those of Lachish II. Clearly, other stratigraphic and historical considerations should be involved when trying to assess settlement development in 7th century Judah, and there is no room for broad generalizations that telescope the entire century as if it were a short, unified moment in history. It is only logical to assume that the pottery types of the destruction levels of 701 BCE did not change overnight and the introduction of the Lachish II assemblage took a few decades.<sup>17</sup> Therefore, the transition should probably be dated close to the mid-7th century if not somewhat later. The comparison of the distribution of the late *lmlk* stamped jar handles and the handles bearing concentric incisions, which we suggest dating to the first half to middle of the 7th century BCE, with the rosette stamped handles dated to its second half, supports this conclusion. Only the rosette stamped jar handles were distributed both in the Judahite Shephelah and in the Beersheba-Arad Valleys; hence, it was only in the second half of the 7th century BCE that the royal administrative system of Judah was once again installed in these areas, to regain the scope it had had prior to 701 BCE.

Faust (2008: 171–172) argued: "It is clear that the Assyrian destruction was devastating ... but the evidence suggests that the recovery was much more significant...and it is possible that the destruction was less encompassing than it is commonly accepted". He also argued that the "fringe areas were extensively settled in the 7th century BCE" (2008: 171). Following Finkelstein (1994), he stressed that "the participation in the Arabian trade was just 'another' factor in the expansion to the desert", while its main cause was to compensate Judah for the loss of grain fields in the Shephelah as a result of Sennacherib's campaign. Nevertheless, the estimate that the Beersheba–Arad Valleys could grow surplus grains is based on an optimal calculation of annual rainfall (Herzog 1994), while the archaeological evidence points to marginal agriculture activity in this arid region (Master

<sup>&</sup>lt;sup>17</sup> This is also reflected by the pottery attributed to the post-701 BCE short-lived reoccupation levels at Tel Halif, Lachish, Tel 'Eton, Tell Beit Mirsim and Beersheba, which is identical to the assemblages of the Lachish III horizon (Finkelstein and Na'aman 2004: 63–67).

2009: 308–310). It is more likely that the desert agricultural activity was aimed only at providing sustenance for the local towns and fortresses, while the primary reason for the economic prosperity in the south was the lucrative trade routes (*ibid.*). Moreover, as noted above, the dating of the new settlements in the Judean Desert and the Beersheba–Arad Valleys to the first half of the 7th century is far from definite.

Let us examine the evidence for the assumed recovery and settlement peak of the 7th century (Faust 2008: 173-176). Bar-Adon (1989: 3-14, 18-29), who investigated the sites of the Dead Sea area, argued that Rujm el-Bahr and Kh. Mazine/Qasr el-Yahud are two desert forts that had already been built in the 8th century BCE. Nevertheless, the stones used for building these forts feature marginal masonry that is characteristic of Hellenistic structures, and since no clear stratigraphy is attributed to the site it is difficult to know which, if any, of the walls should be affiliated with the supposed Iron Age fortress. Moreover, only a few sherds (mainly of bowls) dated to the Iron Age were published (*ibid.*), while most of the pottery dates to the Hellenistic–Roman periods. In this state of publication one cannot determine the function, character or size of the Iron Age settlement at these sites and, in any case, the handful of Iron Age pottery sherds that have been published all belong to the Lachish Level II horizon (Bar-Adon 1989: Fig. a9: 1-5, C21: 1-8), traditionally dated to the late 7th century BCE. The sites of 'Ein el-Ghuweir and 'Ein et-Turaba (*ibid*: 33–49) show characteristics of Iron Age architecture and yielded Iron Age pottery. All of the latter (except one cooking-pot, *ibid*.: Fig. f6: 6) is of the Lachish Level II horizon (*ibid*.: Figs. e1–16, f5: 1–14, f6: 1–19). Thus, in the current state of research, all we can say is that the settlement process in the Dead Sea region should be dated roughly to the second-half of the 7th century BCE.

The Iron Age settlement from Qumran was dated to the late 8th and to the 7th century BCE on the basis of two *lmlk* stamped handles (de Vaux 1973: 2–3; Magen and Peleg 2007: 24–28). Only one of these *lmlk* handles was published (Magen and Peleg 2007: Fig. 31), and it is a two-winged stamp impression too blurred to be dated with any degree of certainty. The pottery from the site has never been published, but Magen and Peleg (*ibid.*) concluded that Iron Age Qumran was quite small and might have been inhabited only in winter and spring. Thus, even if Qumran was already inhabited during the late 8th or early 7th centuries BCE, considering the date of the other sites in the region (especially Tel Goren Stratum V) it is difficult to see any settlement 'wave' in the eastern fringe of the kingdom during the 7th century BCE, certainly not in its first half.

The integration of the Judean Desert within the Judahite royal administrative system should be dated, in our opinion, to the end of the 7th century BCE. Eleven rosette stamped handles were excavated at Tel Goren Stratum V, which was founded in the late 7th century (Mazar, Dothan and Dunayevski 1966: 17–38; Stern 1994: 404; Lipschits 2000). Although the 'Archaeology of the Days of Manasseh' attributes the beginning of the royal estate to the early years of this century (Finkelstein 1994: 177–178; Faust 2008: 181), there is not a single piece of evidence for this assumption within the archaeological data. On the contrary, the pottery assemblages from Tel Goren and the other eastern fringe sites belong to the Lachish II horizon (Yezersky 2007: 86–87); there are no stamped jar handles in this region other than the rosette handles (Stern 2007) and the expansion

to the area of Jericho could have occurred only after the Assyrian retreat from the Levant (Na'aman 1991: 25; Stern 1994: 400). The settlement growth in the area of Jericho and the agricultural industry at Tel Goren Stratum V should be dated to the second half, or even the last third of the 7th century BCE (Stern 1994; Lipschits 2000, 2005: 232–237).

One cannot rule out the possibility that the Judahite towns at Tel 'Ira, 'Aroer and Tel Malhata, which suffered only partial destruction in the 701 BCE Sennacherib campaign, were rebuilt early in the 7th century BCE (Thareani-Sussely 2007a). Yet, as demonstrated above, the involvement of the Judahite royal administration in this process is evident only with the establishment of the fortress of Arad Strata VII–VI, which cannot be dated earlier than the mid-7th century BCE. As for the Judahite fortresses on the eastern border of this region (Horvat 'Uza and Horvat Radum), Faust (2008: 175) stated that they were built in the "7th century". He did not provide any explanation for his dating, ignoring the later date that was given to these sites by their excavators (Beit-Arieh and Cresson 2007: 314; Beit-Arieh 2007: 331–334; Freud 2007a: 120, 2007b: 318).

The evidence of the stamped jar handles supports the dating of the settlement wave in the desert fringes of Judah to the late 7th century (though it may have started on a small scale somewhat earlier). This is so since only three late *lmlk* stamped handles were found in the Beersheba–Arad Valleys, compared with 11 early types, and 11 rosette stamped handles dated to the late 7th century BCE.

#### Back to 'the archaeology of the days of Josiah'?

For more than two decades, scholars have promoted the concept of 'The Archaeology of the Days of Manasseh', regarding the Beersheba–Arad Valleys (Na'aman 1987; Beit Arieh 1987; Finkelstein 1994; Knauf 2005; Thareani-Sussely 2007a; Faust 2008). According to this theory, the Beersheba–Arad Valleys flourished during the 7th century BCE because of the royal involvement, initiated by the lack of resources in Judah after the 701 BCE trauma. In light of the discussion above, this concept requires reconsideration. The meagre number of early-7th century stamped jar handles found in the Judahite Shephelah and in the Beersheba–Arad Valleys indicates a decline in the royal economic activity as well as in the king's power and control during the days of Manasseh. The fact that almost all of the stamped or incised jar handles dated to the first half of the 7th century BCE were found in and around Jerusalem, as opposed to their vast distribution in the late 8th, as well as in the late 7th century BCE, is an indication of the weakness of the monarchic administration at that time.

This should come as no surprise. Following Hezekiah's revolt, the Assyrian interest was to weaken Judah (Na'aman 2003: 87). This is demonstrated by the growth of Ekron in the 7th century BCE at the expense of former Judahite territories in the Shephelah, and probably also in the reduction of the monarchic involvement in the trade passing through the Beersheba–Arad Valleys. It is highly unlikely that the Assyrians would have permitted the expansion of the kingdom in the decades following

Hezekiah's revolt. The restoration of Judah could not have taken place under these conditions.

Only in the second-half of the 7th century, when the Assyrians lost their power in the southern Levant, and the Saite Dynasty in Egypt gradually spread its hegemony, did the Assyrian yoke on Judah loosen and the kingdom begin to recover. The main interest of the Saite rule in Egypt was trade, and it derived from the Egyptian expansion over the Levantine coast (Redford 1992: 434–435). During the second half of the 7th century BCE, Egyptian control had been extended to Tyre and probably Arvad as well (*ibid.*: 441–442). Ashkelon grew into a cosmopolitan trading centre mainly in the second half of the 7th century and its material culture shows trading connections with Judah, Arabia, Transjordan, Phoenicia, Greece and Egypt (Stager 1996; Master 2003; Stager *et al.* 2008). The expansion of the Judahite settlements to the Shephelah and to the fringe areas in the east and south, dated to the second half of the 7th century BCE, should be understood against this background.

The industrial character of Tel Goren V, its isolated desert location and its status throughout the Hellenistic–Roman periods, support the suggestion that it was a royal estate (Stern 1994; Lipschits 2000; Katz 2008: 170–171). It was probably established by the Judahite monarchy in the last days of Manasseh's reign or during the early years of Josiah, in order to exploit the Dead Sea resources (Master 2009: 307). Though the beginning of the settlement in the Judean Desert could have started in the late 8th century, the 'settlement wave' should be connected to the establishment of the industrial site at Tel Goren (Stager 1976; Master 2009: 305–308). Its exquisite products were probably not meant for local Judahite consumption but rather for export through the Philistine coast.

The establishment of the fortresses in the Beersheba–Arad Valleys during the same period represents an attempt by the Judahite monarchy to control the international trade routes passing through this region. Redford (1992: 444–445) argued that the presence of Greeks to whom—according to the Arad ostraca (Aharoni, Y. 1981)—the Judahite authorities issued rations should be construed with Egyptian imperial encroachment rather than asserting that Judah independently employed Greek soldiers from across the sea (and see Na'aman 1991). It seems that the fortresses at Horvat <sup>c</sup>Uza and Horvat Radum also guarded the route from the Dead Sea region to the Beersheba–Arad Valleys, connecting the industrial enterprises to the international trade routes. Thus, expanding royal Judahite presence through economic, administrative and building projects reflects mainly the kingdom's trading interest under Egyptian hegemony.

### Judah as a 'breadbasket' of the regional economy in the second half of the 7th century BCE

Recent studies of finds from Ashkelon suggest that the city imported grain from Judah (Weiss and Kislev 2004; see also Faust and Weiss 2005; Master 2009). Faust and Weiss (2005) have convincingly shown that Judah and Philistia were a single economic unit linked

to the international trading centre of Ashkelon, in which Judah was the 'breadbasket'. Since they attributed this economic prosperity to the period of the Assyrian domination (with the dating of the settlement in the Beersheba–Arad Valleys to the '7th century') they had to admit that the idea of Judah as "the grain basket of the region might first seem unlikely" (Faust and Weiss 2005: 82). They therefore concluded that grain production for trading purposes took place in the Judahite Highlands as well as in the desert fringes and by that, they explained the expansion of Judah into the latter regions. However, the view that the Beersheba-Arad Valleys were some sort of agricultural centre should be rejected. Having grain agricultural centres in the Highlands is much more plausible (as is evident in the grain centre discovered at Moza-Greenhut and De Groot 2009). Yet it could not have produced the surplus needed for international trade (Geva 2008: 56). Moreover, the establishment in the late Iron II of wine production centres around Jerusalem (Greenberg and Cinnamon 2006; Lipschits and Gadot 2008) indicates that growing grapes was much more common in this region. The difficulties raised by Faust and Weiss concerning grain production can be solved by shifting the economic system they have reconstructed to the second half of the 7th century. During that period, with the rebuilding of Lachish (Level II) Judah returned to the Shephelah, which could easily be exploited as a breadbasket for trading purposes. It is much more plausible to assume that under Egyptian hegemony, the role of Judah in international trade was grain production in the fertile lands of the Shephelah.

The spread of Judahite weights provides further support to the above reconstruction. Only a few weights were found in clear late 8th-century contexts, while the majority were attributed to late 7th-century BCE levels (Lachish II, Arad VII–VI, Ramat Rahel V). As proposed by Kletter (1998: 47–48), it is reasonable that the weights were introduced to the Judahite economic system as early as the late 8th century but became common only during the 7th century BCE. The hierarchy of their regional distribution resembles that of the rosette stamp impression: the majority of weights were found in Jerusalem and its environs (between Benjamin and Ramat Rahel) with 92 weights, the Shephelah with 60 weights and the Beersheba–Arad Valleys with 33 weights (see *ibid.*: 49–58). The weights do not necessarily represent royal economic activity (*ibid.*: 128–131), but they demonstrate a unified monarchical scale system. Hence, their distribution points to the economic centres of Judah in the 7th century: Jerusalem at the top, followed by the Shephelah (mainly Lachish) and then the Beersheba–Arad Valley, mainly in Arad, which was the royal Judahite fortress in this area.

#### Summary

The stamped jar handle systems were adopted by Judah/Yehud/Judea as a system that was meant to administer the state's products as a royal payment to its officials and to the imperial power. This administrative system was first introduced when the Kingdom of Judah was integrated into the Assyrian empire and persisted until the formation of the Hasmonaean state. In this paper we have shown that the stamped jar handles can be used as a chronological tool in order to reconstruct developments and changes in the administration of Judah. In the late 8th century BCE the Judahite administrative system was at its zenith, encompassing the maximal territorial extent, with major centres in the fertile Shephelah. Sennacherib's campaign inflicted a severe blow on Judah, resulting in the reduction of its economic activity as well as a decline in its monarchical power.

During the first-half of the 7th century, the Judahite administration was limited to the areas north and south of Jerusalem, under direct, tightened Assyrian control. During the second half of the 7th century, as Assyrian hegemony in the southern Levant was gradually replaced by that of Egypt, Judah became part of the southern Levantine trade that was centred in Ashkelon. Only then did the territories lost in the course of the Sennacherib campaign revert to the Judahite Kingdom:

- (1) The Judahite monarchy regained its control over the fertile Shephelah and rebuilt the administrative centres at Lachish and Azekah.
- (2) A royal estate was founded at Tel Goren in order to exploit the lucrative resources of the Dead Sea such as date palms, herbs, clay, salt and possibly balm (see King 1993: 153; Lipschits 2000: 31; Master 2009: 313, with further literature).
- (3) In the Beersheba–Arad Valleys the fortress of Arad was rebuilt and an array of other forts, manifesting monarchical expansion and authority, was erected.
- (4) A new phase of the administrative system—the rosette stamp impression—was introduced, restoring the scope of the pre-701 BCE royal system.

These developments indicate governmental centralization, and should be associated with the reign of King Josiah. This monarchical economic power is also reflected in the cult centralization attributed to this king (see Uehlinger 2007; Na'aman 2006).

### Addendum

#### TABLE 2

#### Corpus of Imlk Stamped Jar Handles

Region	Site	Early <i>lmlk</i>	Late <i>lmlk</i>	Unidentified <i>lmlk</i>	Total
Highlands	Jerusalem <sup>1</sup>	ca. 90	ca. 180		270
	Ramat Rahel <sup>2</sup>	46	133	45	224
	el-Gib <sup>3</sup>	17	63	12	92
	Tell en-Nașbeh4	27	38	23	88
	Tell el-Fûl⁵		5 (13?)	8 (0?)	13
	Hebron <sup>6</sup>	1	6	6	13
	Kh. Tubeiqa <sup>7</sup>		8	3	11
	Kh. el-Burj <sup>8</sup>			24	24
	Moza <sup>9</sup>			2	2
	Mamilla <sup>10</sup>		2	1	3
	Repha <sup>3</sup> im Valley <sup>11</sup>	1		3	4
	Nebi Samwil <sup>12</sup>		3	1	4
	Umm-Tuba <sup>13</sup>	1	1		2
	Kh. Rabud <sup>14</sup>	1			1
Shephelah	Lachish <sup>15</sup>	378	4	31	413
	Beth-Shemesh <sup>16</sup>	32			32
	Tel Goded <sup>17</sup>	Min. 17	Min. 1	21	39
	Tel Batash <sup>18</sup>	12	3		15
	Azekah <sup>19</sup>	14		3	17
	Maresha <sup>20</sup>	6		13	19
	Tel 'Erani <sup>21</sup>	1	1	13	15
	Kh. Abbad <sup>22</sup>			10+	10
	Tell Beit Mirsim <sup>23</sup>	4			4
	Kh. Qila <sup>24</sup>	2			2
	Tel Halif <sup>25</sup>	1			1
	Tel Zayit <sup>26</sup>			2	2
	Tell eş-Şāfi <sup>27</sup>	7			7
Beersheba	Tel Beersheba <sup>28</sup>	1			1
Valley	Bir es-Seba			1	1
	Arad <sup>29</sup>	3	4	2	9
	Tel 'Ira <sup>30</sup>	1			1
	<sup>c</sup> Aroer <sup>31</sup>	3		3	6
Eastern	Tel Goren <sup>32</sup>		1		1
Fringe	Jericho <sup>33</sup>		1		1
C	Qumran <sup>34</sup>			2	2
	Kh. es-Samrah <sup>35</sup>		1	-	1
Outside	Gezer <sup>36</sup>	10	4	23	37
Judahite	Ashdod <sup>37</sup>		1	-	1
Territory	Tel Miqne <sup>38</sup>	1	-	2	3
	En Tut <sup>39</sup>			8	8
	Mt. Meiron <sup>40</sup>			1	-
Total		677	459	263	1400

#### TABLE 3

Site		Incised next to					
	Early <i>Imlk</i>	Late <i>Imlk</i>	Imlk unidentified	<i>Imlk</i> unknown	Private	No stamp	Total
Jerusalem <sup>41</sup>	2	35		7	3	69	116
Ramat Rahel <sup>42</sup>	1	5	5			53	64
el-Jib43	2	7	9			23	41
Mamilla <sup>44</sup>						1	1
Tell en- Nașbeh <sup>45</sup>		7	10			2?	19
Gezer <sup>46</sup>						1	1
Kh. el-Burj47				17			17
Azekah <sup>48</sup>			1				1
Tell el-Fûl <sup>49</sup>		2				3	5
Lachish <sup>50</sup>		1	1				2
Tel Goren <sup>51</sup>		1					1
Moza <sup>52</sup>						5	5
Kh. Tubeiqa				1			1
Repha <sup>,</sup> im Valley				4			4
Tel Batash						1	1
Arad						1	1
Tel Goded		1					1
<sup>c</sup> Aroer						1	1
Jericho							1
Bethlehem							1
En Tut			1				
Total	5	58	27	22	3	170	285

#### Jar Handles Incised with Concentric Circle

The data of the *lmlk* stamped handles from Jerusalem is not complete, since many stamp impressions have not vet been published, or have been published without the necessary details. It seems that more than 285 *lmlk* stamped handles have been found in Jerusalem (Wilson and Warren 1871: 152, 474; Warren and Conder 1884: 156, 534; Sayce 1893: 30; Clermont-Genneau 1900; Macalister and Duncan 1926: 188, Fig. 202: 1, 13–14; 190 Fig. 204; Duncan 1931: Pl. opposite p. 141; Barkay 1985: 429-440; Nadelman 1989: 131; Franken and Steiner 1990: 127-131; Avigad and Barkay 2000: 247, 252; Shoham 2000: 75; For stamp impressions found in the City of David and published without complete typological details, see Steiner 2001: 126-130. See also summaries by Vaughn 1999: 185-189; Barkay and Vaughn 2004: 2167, Fig. 29.18). Only 100 of the stamped handles discovered in Jerusalem can be safely identified: 30 are of the late 8th-century BCE types and 70 are of the early 7th-century types (Lipschits, Sergi and Koch 2010: 11, 14-17, with further literature). Assuming that this ratio is also valid for the remainder of the finds, we conclude that Jerusalem yielded approximately 90 early *lmlk* stamped handles and 180 late *lmlk* stamped handles. It should be noted that since this data was collected, many more *lmlk* stamp impressions have been found in various excavations within the limits of Iron Age Jerusalem (in the City of David, on Mount Zion and in the Western Wall Plaza). These impressions have not been published and thus cannot be calculated here. For the partial data of the concentric circle incised handles, see Wilson and Warren 1871: 118–119; Avigad and Barkay 2000: 246; Shoham 2000: 77; Steiner 2001: 126–131.

<sup>&</sup>lt;sup>2</sup> A total of 224 *lmlk* stamp impressions were found at Ramat Rahel during the various excavations conducted at the site in 1954, 1959–1962 (by Y. Aharoni) and 2004–2010 (by the Tel Aviv–Heidelberg team). Aharoni reported only 145 *lmlk* stamp impressions though 164 stamp impressions were found

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during his excavations at the site. A new catalogue of all the *lmlk* stamp impressions from Ramat Rahel and their publication in stratigraphic context demonstrated that 133 of them belong to the late types, 46 to the early types and 45 cannot be identified (Sergi in preparation a, in preparation b).

- <sup>3</sup> Pritchard (1959: 18–26) reported 80 *lmlk* stamp impressions from el-Jib, but published photos of only 15 of them (*ibid*.: Fig. 9). Vaughn (1999: 190, n. 27) collected 12 more *lmlk* stamp impressions from the site, thus bringing the total number to 92 (though for some reason he calculated the total number as 95). Garena published the photos of all 92 stamp impressions from el-Jib on his website (http://www.lmlk.com/research/lmlk\_gibeon.htm). A thorough examination of the unidentified stamps collected by Garena revealed at least five more late types. No. 60 is HIIb or ZIIb and thus belongs to the late types. According to the inscribed *lamed* above the left wing and seemingly some traces of a *nun* below it is probably a late Type HIIb. The second *lamed* above the left wing of No. 63 has a straight stroke slightly slanted left and the connection of the wings with the emblem's body imply that it is a late type and might be HIIb. The letter *peh* is clearly legible below the left wing of Stamp No. 66 and thus it might be an MIIb type. In any case, because of the way the wings are connected to the emblem's body it should be considered as a late type.
- McCown (1947: 161) reported 86 *lmlk* stamp impressions from Tell en-Nasbeh; of these, 15 bear a four-winged emblem. He published photos of only 14 *lmlk* stamp impressions (*ibid*.: Pl. 56: 1–14), which enables their dating. Garena reported two additional stamp impressions and published photographs of all 88 found at the site (http://www.lmlk.com/research/lmlk nasbeh.htm). We have reconsidered the identification of the stamp impressions in order to categorize them as 'early' or 'late' types. Here are some modifications to Garena's list: It seems that Stamps Nos. 43-44 belong to the late types (even though the place names are unidentified, but they are probably Types MIIb and MIIc). According to the shape of the emblem of Stamp No. 51, it should also be considered as a late type. The remains of the *lamed* and *mem* above its right wing imply that it probably was an HIIb type. Garena argued that Stamp No. 52 has two sins (above and below the right wing). Nevertheless, the remains above the wing are of a *lamed* and probably a *mem*. According to the shape of its enblem and the letter *sin* below the right wing, it is probably another late Type SIIb. Stamp No. 54 may be considered a late type because of the emblem's shape. On Stamp No. 60 (which Garena did not identify) there are clear traces of the upper stroke of the *lamed* above the left side of the emblem's head; thus it should be considered a late type, probably XII. The same is true for stamp No. 65, which belongs to the same type. A long tail is visible below the right wing of Stamp No. 72 and it probably belongs to the letter *mem*. Its location and the shape of the emblem's wings imply that the place name is undivided and thus it may be an early Type MIIa.
- <sup>5</sup> Albright (1933: 10) reported five *lmlk* stamp impressions from Tell el-Fûl; all of them bear a two-winged emblem. Unfortunately, they are not published and we cannot examine their specific typology in order to date them. Sinclair (1960: 32, Pl. 16B: 2, 3, 6–8) reported an additional five *lmlk* stamp impressions from Tell el-Fûl, all of which bear a two-winged emblem. Their photographs are hardly sufficient for examining their typology. Nevertheless, at least two of the five stamp impressions have a distinctive 'wing' shape and they belong to the late types (Sinclair 1960: Pl. 16B: 6, 8). Lapp (1981: 111) reported three additional stamp impressions, all of which have features of the late types (Lapp 1981: Pl. 28: 1–2 = Pl. 29: 1, Pl. 28: 3 = Pl. 29: 3, Pl. 28: 4 = Pl. 29: 2). To sum up, 13 *lmlk* stamp impressions were found at Tell el-Fûl, none of which have a four-winged emblem. Five of them clearly belong to the late types. Since all of them bear a two-winged emblem and the five identified belong to a late type it is reasonable to assume that most if not all of them are late types.
- <sup>6</sup> Five *lmlk* stamp impressions were reported by Ofer (1986; 1987), at least four of which belong to the late types (Ofer 1993: 93). Eight more were reported by Kletter (2002: 142); one of them bears a four-winged emblem and belongs to the early types and at least two belong to the late types (see the data collected by Garena with photographs: http://www.lmlk.com/research/lmlk\_hebron.htm).
- <sup>7</sup> Sellers (1933: 52–53) reported 11 *lmlk* stamp impressions from Kh. Tubeiqa, but they were not published with specific typology. Garena recollected the field drawings and found only ten *lmlk* stamp impressions. He published photographs of nine, eight of which belong to the late types and one is unidentified (http://www.lmlk.com/research/lmlk\_zur.htm).
- <sup>8</sup> According to the corpus collected by Vaughn 1999: 191, n. 32.
- <sup>9</sup> Brandl, Greenhut and Wainstub 2009: 128–129, Fig. 5.4: 3–4.
- <sup>10</sup> Amit (2009: 104) reported three *lmlk* stamp impressions found in a 'farm house'excavated near the Mamilla pool. One of them clearly has an inscribed *mem* below the right wing and thus it is probably a MIIb type which belongs to the late types (Amit 2009: Fig. 11, a). Another one has a

two-winged emblem, and according to the shape of the emblem it is probably an HIIb type and should be regarded as a late type as well (*ibid*.: Fig. 11, b). The last stamped handle probably bears a two-winged emblem but since it is broken and only partially preserved it was impossible to identify its specific type according to the photo published (*ibid*.: Fig. 11, c).

- <sup>11</sup> Greenberg and Cinamon (2006: 231–232) reported four *lmlk* stamp impressions from the Repha<sup>3</sup>im Valley. One of them bears the four-winged emblem and thus belongs to the early types. The other three bear the two-winged emblem, but since they were not fully published, we cannot determine whether they are early or late types. For the rosette stamped handles, see *ibid.*: 232, Fig. 3.
- <sup>12</sup> Magen (2008: 41) reported a few *lmlk* stamp impressions that were found in construction fills in Nebi Samwil. A photograph published shows four stamped handles, all of which bear a two-winged emblem. At least three of the stamped handles belong to the late types (two *lmlk* stamp impressions of ZIIb type and one ZIIc are clearly visible there).
- <sup>13</sup> According to the IAA publications at http://antiquities.org.il/article\_Item\_ido.asp?asp?module\_ id=&sec id=25&subj id=240&id=1495#as.
- <sup>14</sup> Kochavi 1974: 18, Pl. 4: 2.
- <sup>15</sup> Barkay and Vaughn (2004: 2151–2159) collected all the data about the *lmlk* stamp impressions found at Lachish in their stratigraphic context and exact typology.
- <sup>16</sup> Vaughn (1999: 190, n. 29) reported more than 48 *lmlk* stamp impressions from Beth-Shemesh, though none has ever been published (Grant and Wright [1939: 84] mentioned 19 *lmlk* stamp impressions from Beth-Shemesh). Garena has published photographs of 32 stamp impressions; all belong to the early types and were probably found in previous excavations. The stamp impressions found during the new excavations have not yet been published. According to Garena, the total number of the *lmlk* stamp impressions from Beth-Shemesh is 71, but since we only have the photos he published we cannot tell their typology or their exact number. Since all the 32 published *lmlk* stamp impressions from Beth-Shemesh belong to the early type it is reasonable to assume that the rest are also early types.
- <sup>17</sup> Thirty-seven *lmlk* stamp impressions were reported by Bliss (1900b: 207) and by Bliss and Macalister (1902: 106–107), but their publication is not sufficient to date them. Eight of them are published with drawings (Bliss 1900b: Plate VI: 1–8). Of these, seven belong to the early types (*ibid*.: Pl. VI: 2–8) and only one to the late types (probably XIIb or XII, *ibid*.: Pl. VI: 1). In addition to that they have counted a total of 11 stamps bearing a four-winged emblem which are obviously considered here as early types. Thus, we may conclude that at least 16 early *lmlk* stamp impressions and at least one late *lmlk* stamp impression were found at Tel Goded. The rest (a total of 20 stamp impressions) are considered a unidentified types, though it is reasonable to assume that most of them should probably be considered at Tel Aviv University.
- <sup>18</sup> Mazar and Panitz-Cohen (2001: 190–195) reported 15 *lmlk* stamp impressions from Tel Batash, four of which belong to the same type and were stamped on the four handles of the same jar. Eight *lmlk* stamp impressions belong to the early types and were all found in the destruction of Level III (five of the eight have a four-winged emblem, see *ibid*.: 191–193; Stamps 1–3, 8 and 9, Photos 112–114, 119, 120. Three of the eight have two-winged emblems with an undivided place name inscribed below it; see *ibid*.: Stamps 4–7, Photos 115–118). The excavator could not identify Stamp No. 7 since it is broken and has no remains of the place name. However, an apostrophe is clearly visible above the *mem*, which was inscribed above the right wing. Only Type ZIIa has such an inscribed apostrophe. The form of the wings also fits this type and thus there can be little doubt that typologically (as well as chronologically and stratigraphicaly) this stamp impression belongs to the early types as well. Three more stamp impressions were attributed to Level II; all of them belong to the late types (see *ibid*.: 194–195, Stamps Nos. 11–13, Photos 122–124 and further discussion in Lipschits, Sergi and Koch 2010: 11 n. 16).
- <sup>19</sup> Bliss (1899a, 1899b, 1900a) reported 17 *lmlk* stamp impressions found at Azekah. Only 11 of them were drawn (Bliss 1899a: 104, Pl. V: 1–9; 1900a: 13). Eight have four-winged emblems (and thus belong to the early types). Three additional stamps bear two-winged emblems and at least one has an undivided place name and thus belongs to the early type as well (Bliss 1899b: Plate V: 9). In their final report, Bliss and Macalister (1902: 107) counted a total of thirteen *lmlk* stamp impressions bearing four-winged emblems. We may therefore conclude that out of the 17 *lmlk* stamp impressions found at Azekah, at least 14 should be considered as early types and the rest as unidentified.
- <sup>20</sup> Bliss and Macalister (1902: 107) reported 17 *lmlk* stamp impressions from Maresha. Kloner (1993: 952) reported two more, bringing the total number from the site to 19. Since none of these stamps

was fully published, we can only consider six of the stamp impressions bearing a four-winged emblem. Accordingly, at least six *lmlk* stamp impressions from Maresha belong to the early types.

- <sup>21</sup> Yeivin (1959: 270; 1961: 9) reported 13 *lmlk* stamp impressions from Tel <sup>c</sup>Erani. Only two of them were published (Yeivin 1961: Plate II). One is an early type and the other is a late type. Vaughn (1999: 192, n. 35) mentions three more *lmlk* stamp impressions from Tel <sup>c</sup>Erani, but none of them is published.
- <sup>22</sup> More than ten *lmlk* stamp impressions werefound at Kh. Abbad (see Garfinkel 1988: 70; Vaughn 1999: 192, n. 38). None of them were published.
- <sup>23</sup> Albright 1932: 78, Pl. 40: 3–4; 1943: 74, Pl. 29: 8, 10.
- <sup>24</sup> Vaughn 1999: 194, n. 53
- <sup>25</sup> Stored at the IAA. See: http://lmlk.com.research/lmlk\_corp.htm.
- <sup>26</sup> According to data collected by Garena, http://www.lmlk.com/research/lmlk\_corp.htm.
- <sup>27</sup> Bliss and Macalister (1902: 107) reported six *lmlk* stamp impressions from Tell eş-Şāfi, all of which have a four-winged emblem and thus belong to the early types. Another four-winged *lmlk* stamp impression was found during the renewed excavations by A. Maeir. It has not yet been published but a photograph is available at the project's website: http://gath.files.wordpress.com/2007/07/lmlkswkh-handle-safi-2007.jpg.
- <sup>28</sup> Aharoni (1973: 76–77, Pl. 32: 2) reported one four-winged *lmlk* stamp impression (and thus an early type) stamped on a pithoi handle (and not on an *lmlk* jar). Another *lmlk* stamp impression originated in the old city's market (Bir es-Seba) and thus it is not included here.
- <sup>29</sup> M. Aharoni (1981) reported nine handles from Arad, most of which are unidentified. The data from the Arad excavation is currently being prepared for publication by Z. Herzog and L. Singer-Avitz. They assisted Garena in reviewing the *lmlk* stamp impressions from the site. In his review, Garena identified three early types and four late types. The two other *lmlk* stamp impressions are unidentified, and see photos at: http://lmlk.com.research/lmlk arad.htm.
- <sup>30</sup> One stamp impression bearing a four-winged type (and thus belonging to the early types) reported by Aharoni (1958: Pl. 16d).
- <sup>31</sup> Two of the *lmlk* stamped handles found at 'Aroer are missing (Thareani 2010: 214); another is a broken two-winged stamp impression that cannnot be identified (*ibid*.: Pl. 188: 1). Three more are clearly early types, two of which are four-winged types (*ibid*.: Pl. 106: 2; 193: 8) and one a ZIIa type (*ibid*.: Pl. 48: 2).
- <sup>32</sup> One stamp impression of Type ZIIb (late types) reported by Stern (2007: 139, Photo 4.7.1.1.). See discussion in Lipschits, Sergi and Koch 2010: 14.
- <sup>33</sup> Sellin and Watzinger 1913: Pl. 42.
- <sup>34</sup> Two *lmlk* stamped handles were discovered in Qumran (de Vaux 1973: 2–3; Magen and Peleg 2007: 24–28). Only one of them was published (Magen and Peleg 2007: Fig. 31), and it is a two-winged stamp impression. Since it is blurred, it cannot be dated with any certainty.
- <sup>35</sup> One late *lmlk* stamp impression was found at Kh. Res es-Samarah, reported by Cross and Milik (1956: 8 Photo 2). See also Lipschits, Sergi and Koch 2010: 15–16, n. 20.
- 36 It is impossible to assess the number of *lmlk* stamp impressions found at Gezer or to check their typology, since they have not been published. In his summary, Gitin (1990: 17, n. 16) wrote: "The number of *lmlk*-stamped handles from R.A.S. Macalister's (PEF) excavations has always been problematic, as Macalister did not publish an accurate record of his finds. H.D. Lance's documentation provides a minimum number of 31...with J.D. Seger's Phase II excavations the minimum total number from Gezer is 37", and see also Macalister 1912: 209-210. Lance studied Macalister's finds at the Istanbul Museum but he never published the *lmlk* stamp impressions. He concluded, "Minimum total stamps from Gezer would be 31. It may easily run as high as 50 judging from the remarks of W.F. Albright ... " (Lance 1971: 330, n. 17). Nevertheless, Albright (1925: 45) did not have a clear indication of the number of *lmlk* stamp impressions found at Gezer (or in Judah generally) and thus cannot be taken as evidence. Out of the 37 reported stamp impressions, only two were fully published (Macalister 1912: Fig. 361: 1; Dever et al. 1974: Pl. 41: 8; but see also Lance 1967: 45 Fig. 6). Garena has published 14 photographs of the *lmlk* stamp impressions from Gezer and correctly identified them (http://lmlk.com.research/lmlk gezer.htm) so it is clear that ten belong to the early types and four to the late types. At the present state of publication, we can only regard the rest of the 23 unpublished *lmlk* stamp impressions from Gezer as unidentified, and in any case, they have no effect whatsoever on our conclusions.
- <sup>37</sup> One late *lmlk* stamp impression (probably Type XII) found in Ashdod (Dothan 1971: Pl. XCV: 4).

- <sup>38</sup> Dothan and Gitin 1986: 106.
- <sup>39</sup> http://www.hadashot-esi.org.il/report\_detail.asp?id=1412&mag\_id=117
- <sup>40</sup> For this impression see Meyers and Meyers (1990: 126, Pl. D: 1). The drawing of the stamp impression is blurred and not detailed, making it impossible to identify its exact type or even to know if it is indeed an lmlk stamp impression.
- <sup>41</sup> See the data collected by Baraky 1985: 440–450, and also the finds from the Jewish Quarter (Avigad and Barkay 2000: 243–257), City of David (Shoham 2000: 75–77) and the Ophel (Nadelman 1989: 128–136).
- <sup>42</sup> Sergi and Koch in preparation a; in preparation b.
- <sup>43</sup> Pritchard 1959: 20–23.
- 44 Amit 2009: Fig. 11, d.
- <sup>45</sup> McCown 1947: 157.
- <sup>46</sup> Macalister 1912: 210
- <sup>47</sup> According to data collected by Garena, http://www.lmlk.com/research/lmlk\_corp.htm.
- <sup>48</sup> Bliss and Macalister 1902: Pl. 56: 18.
- <sup>49</sup> Sinclair 1960: Pl. 16b:1, 4, 8; Lapp 1981: 184, Pl. 28: 1 = 2, 6, 7.
- <sup>50</sup> Diringer 1953: 343; Barkay and Vaughn 2004: 2152, No. 41.
- <sup>51</sup> Stern 2007: 139, Photo 4.7.1.1.
- <sup>52</sup> Brandl, Greenhut and Wainstub 2009: 129–130, Fig. 5.5: 6–10.

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