



## Understanding the Jal el-Bahr Storage-Jar Assemblage

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### Introduction

In my research of the archive of 2,048 sealings uncovered at Tel Kedesh<sup>1</sup> in Upper Galilee, Israel, I encountered articles written by the Lebanese archaeologist Ibrahim Kawkabani, and published in ›Archaeology and History in Lebanon‹<sup>2</sup>. In those detailed articles is a wealth of information about finds from »systématiquement« excavations (elsewhere described as »some soundings«<sup>3</sup>) – directed by Maurice Chéhab?<sup>4</sup> at Jal el-Bahr, a site at the northeastern entrance to ancient Tyre<sup>5</sup>, beginning in 1972. The publication of such a great amount of new inscribed Phoenician material is not only relevant to my research on the inscribed material from Kedesh, but also important to understanding the workings of Tyre, its bureaucracy and administration, especially in the second century BCE.

Although I originally examined the finds from Jal el-Bahr in order to contextualize a few of the sealings found at Kedesh it quickly became clear that one category of finds from Jal el-Bahr, an assemblage of stamped local storage-jar handles from the Hellenistic period, is almost on par in its importance with the exciting remains of a Tyrian archive at Kedesh. This study is the result of that realization. In this review article I present the fruit of my analysis of the richly

1 At Kedesh, a village in the chora of Tyre (*Ios. bell. Iud.* 2, 459; 4, 104), a regional administrative center (56 × 40 m) excavated between 1997 and 2010 by a team from the University of Michigan, University of Minnesota and Boston University included an archive dated to the first half of the 2nd cent. BCE. Just before the archive was destroyed by fire, Kedesh was the regrouping spot of a Seleucid force led by Demetrius II after a battle with Jonathan Apphus in 144/3 BCE (*1 Macc* 11, 63–67). A preliminary description of the administrative center and the archive in which the sealings were found was published in 2003 (HERBERT – BERLIN 2003, 50–53) and later (HERBERT 2013). Of the 2,048 sealings 1,717 were preserved to the point where its face could be identified, and 1,308 seals were identified, as detailed in the final report, already in press (HERBERT – ARIEL forthcoming). Most of the sealings related to the Jal el-Bahr finds were preliminarily published in 2003 (ARIEL – NAVEH 2003). I am grateful to Sharon C. Herbert and Andrea M. Berlin, directors of the excavations, for inviting me to work with them toward the final report on the Kedesh archive. I also thank Yaniv Schauer, who enhanced the generally poor photographs in KAWKABANI 2003; KAWKABANI 2005 and BOSSONE 2013, to create the illustrations for this review article.

2 KAWKABANI 2003; KAWKABANI 2005; KAWKABANI 2008.

3 KAWKABANI 2005, 5.

4 ELAYI 2004, 193.

5 See map on p. 98 of KAWKABANI 2003.

detailed, but also problematic, publications by Kawkabani of the exceptional assemblage of Tyrian stamped handles from Jal el-Bahr.

In order to reduce redundancy vis-à-vis what may be learned from the latest finds from the Tyrian cultural milieu in the 2nd cent. BCE, and the new expressions of Tyrian administration from that time, the forthcoming Kedesh archive volume is the most appropriate place where those subjects will be discussed. This is because little is known about the occupational history of the Jal el-Bahr site besides some tidbits in Kawkabani's publications. Much more is known about the Hellenistic-period local storage-jar handle assemblage in Kawkabani's 2005 article, and on an assemblage of 183 Aegean stamped handles<sup>6</sup> found with the storage-jar assemblage. The Kedesh excavations were certainly more robust and are therefore the place for the larger archaeological and historical analyses. In this review article I will occasionally refer to some comparable items noted in that volume — especially when discussions there support of my understandings of the Jal el-Bahr materials.

The archive at Kedesh is one of three archives now known in the Seleucid southern Levant. The second archive comprises 99 sealings found at Tel Izṭabba<sup>7</sup>, and the third was discovered in 2018 at the Idumean capital at Maresha (Marisa), now only beginning to be examined<sup>8</sup>. Moreover, the Idumean capital at Maresha is not in Phoenicia, while the administrative building at Kedesh was not merely Phoenician: it was clearly in the sphere of Tyre, being (over a century later) »a strong Mediterranean village of the Tyrians« (BJ 4.104). The writer of 1 *Maccabees* identified Kedesh as the place where a Tyrian force led by Demetrius II regrouped after a battle with Jonathan Apphus in 144/3 BCE (1 *Macc* 11, 63–67). The events of that year may have brought about the destruction of the Kedesh archive.

The relatively large archive at Kedesh, found in a large administrative building with public functions dating back to the Achaemenid period, produced evidence of significant activity in which officials were involved. As I develop the dating in this review article, it will become clear that Kedesh archive closely overlaps the period of the Jal el-Bahr storage-jar assemblage.

The site at Jal el-Bahr was accidentally discovered in 1972; perhaps some stamped handles with their Phoenician inscriptions were uncovered before controlled excavations were begun. The site was then excavated by Kawkabani, a senior archaeologist (»chef de service des fouilles«<sup>9</sup>) of the Lebanese Department of Antiquities<sup>10</sup>.

The site is very close to the Mediterranean Sea, some two km northeast of the centre of ancient Tyre (**fig. 1**). A Hellenistic temple with well-drafted ashlar (**fig. 2**) dedicated to the cult of Melqart was identified on the site, and the stamped handle assemblage on torpedo-shaped storage jars — mixed with remains of Aegean amphoras — was excavated within that precinct. Jal el-Bahr may have had an Achaemenid phase<sup>11</sup>, but what interests me here is the Hellenistic

6 KAWKABANI 2008, 6–53, nos. J-B 167–305; 307–350. One (p. 40, J-B 306) is not a stamped but an incised handle.

7 MAZOR – ATRASH 2018.

8 The Tel Izṭabba archive is private in character (MAZOR – ATRASH 2018, 127), and the Maresha archive also seems to be. In addition, these two archives overlap the Kedesh archive in its dating — and, I argue here, also the Jal el-Bahr assemblages — extending further in date, probably three decades later than the end of the Kedesh archive (ca. 144 BCE), into the period of autonomy after the collapse of Seleucid hegemony in Phoenicia.

I am indebted to Ian Stern for allowing me to examine the over 1,000 sealings found in the archive discovered and excavated by him at Tel Maresha (Marisa) in 2018.

9 KAWKABANI 2005, 4.

10 It seems that Kawkabani was not the last person to excavate there. Elayi noted that a more recent excavator was named N. Saroufim (ELAYI 2004, 194).

11 According to Joanne Bajjaly's report of a presentation at the American University of Beirut's museum in 2012, where Ali Badawi, a Tyre antiquities official, reported that the cultic structure at the site was a »Phoenician temple dating back to the 5th century BC« (BAJJALY 2012).

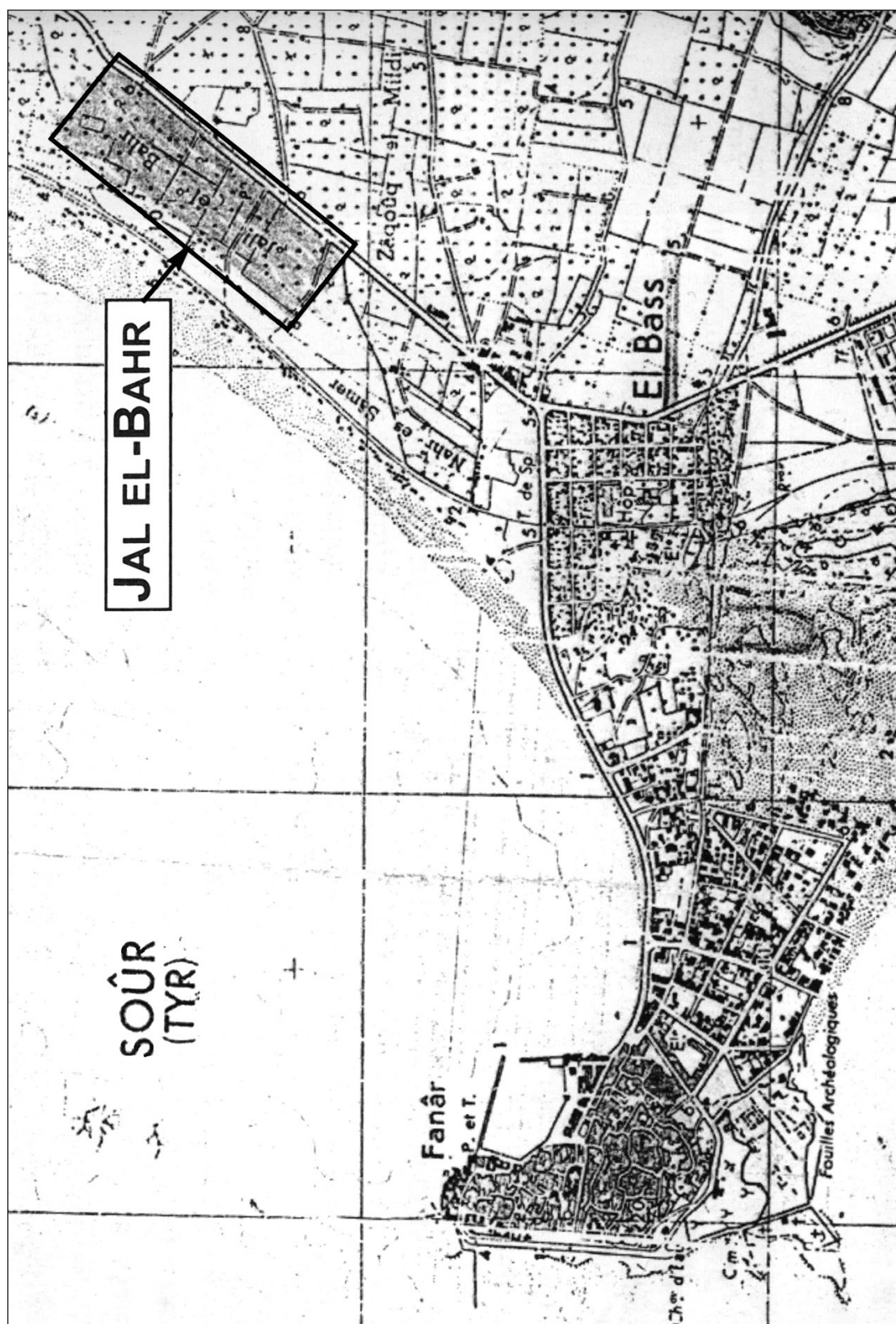


Fig. 1: Modern map of Tyre with location of Jal el-Bahr (from KAWKABANI 2003, 98 fig. 8)





Fig. 2: Jal el-Bahr temple soon after Kawkabani's excavation, viewed from east (from KAWKABANI 2005, 5 fig. 2; see also KAWKABANI 2008, 2 fig. 1).

period, and particularly the Seleucid portion of that period, in which most of the reported finds are datable.

### Stamped Storage-Jar Handles Inscribed in Phoenician

Kawkabani's first article (2003) presented the site and surveyed the local storage-jar assemblage mostly with stamps with Phoenician inscriptions, but also bilingual Phoenician-Greek inscriptions on their handles. The second article (2005) focused on the stamps on the storage-jar handles, providing a wealth of information. The third article in 2008 introduced the fact that stamped handles of Aegean transport amphorae were also found, and presented that material in a detailed way.

Of the 164 storage-jar handle stamps found at Jal el-Bahr, presented in robust detail in Kawkabani's 2005 article, 23 were illegible. Kawkabani reconstructed that the jars were normally impressed on one of the jars' two handles. He reported that the stamps contained two elements: a personal name, which Kawkabani considered a fabricant (on the model of Greek amphorae)<sup>12</sup>, and a date<sup>13</sup>.

The stamps, all apparently oval<sup>14</sup>, were applied to the highest part of the curvature of the twisted handles of the storage jars before firing, resulting in many cases of poor impressions<sup>15</sup>. Hence, in addition to the 23 illegible stamps, there are unfortunately numerous difficulties in relying upon portions of Kawkabani's presentation. Moreover, the photographs, which are generally poor and were published only for the legible stamps, affect one's ability to check the epigraphic and iconographic information. In a short discussion of the finds, Elayi noted this problem as well<sup>16</sup>, but proceeded, with caution, with provisional remarks on the readings.

12 Later, Finkielsztejn suggested that the personal names on the earlier (pre-Jal el-Bahr) stamped Tyrian handles identified the agoranomos, the official responsible for supervision of the markets, including the accuracy of weights and measures (FINKIELSZTEJN 1998, 114). Only one sealing of an agoranomos is known to me, from Goumani in Thesprotia (PREKA-ALEXANDRI 1989, 171 fig. 13).

13 KAWKABANI 2003, 95.

14 Kawkabani did not track how many of the jar handle stamps were vertically oval and how many are horizontally oval. From the images of the Jal al-Bahr assemblage, there seem to be majority of vertical oval stamps, but a significant minority of 'wide' oval stamps.

15 KAWKABANI 2003, 95.

16 ELAYI 2004, 195.

The stamps open new paths of inquiry into Tyrian administrative practices in the twilight of the Seleucid era. Kawkabani realized their importance for reconstructing the social, commercial and cultural life of Tyre, and that is clearly why he focused the two articles on his excavations on these finds. Despite numerous differences in the layout of the inscriptions on the stamps, there is an obvious overall uniformity to them. As noted, they are oval. They were cut in a free-hand, non-lapidary style, in between two to six rows, thus producing a large amount of text to be deciphered.

The texts themselves are uniform in content, although not in organization. The major components of the texts are numerals, most if not all of which represent dates, and certain key words, not all of which are understood. Short words appear, many of which are presumed to be personal names, but some could be places or institutions. Finally, there is the word, *št*, which introduces some, but not all of the dates, and the formula '*m šr*', with and without prepositional letters, which signifies the PoTE<sup>17</sup>; for more on the PoTE era see below). Occasionally, small symbols are added, as are isolated letters.

Most interesting is the high quantity of stamps. There are almost as many seals that were incised over many decades as there are stamps. Kawkabani knew of one pair of stamped handles impressed with the same seal: he described J-B 34 as two handles with identical impressions<sup>18</sup>. Another possible identical pair is J-B 36 and 90.

One of the obvious aspects of the many stamped Phoenician handles at Jal el-Bahr that is remarkable is that they were most likely found together. Although it appears unusual that storage jars — and Aegean transport amphoras — were found in a small temple compound, we are told that both assemblages derived from either within the temple, or in its surrounding temenos. There is little discussion of specific stratigraphic relationships in Kawkabani's 2005 report. Beside this general statement above about the finds' context, we are not given any more exact information, neither about their stratification (above a floor? below a floor?) or other objects found with the broken remains of those large vessels<sup>19</sup>. No chronological statement is proffered about the common wares, or other datable material, such as coins that may have been found. The lack of detail on these points is understood, as the articles are preliminary reports highlighting the exceptional finds from the excavation. Today, however, the absence of precise stratigraphic and chronological detail is strongly felt, well over a decade after the articles appeared, because no further publication has been forthcoming.

We are left with the stamped Phoenician-inscribed handles, and the Greek-inscribed stamps on imported Aegean amphoras — and a desire to know, at the least, the date of these assemblages. Can the chronological range of the deposit of the presumably local storage jars at Jal el-Bahr be unpacked from the plentiful details that have been published? Do the dates on the handles cluster in any way? Our starting point will be the unique Phoenician assemblage.

For the overwhelming majority of the stamps Kawkabani successfully read the inscriptions (e.g., **fig. 3**) and tallied the dates. For the most part, he determined correctly that the Seleucid era (SE) or the People of Tyre era were the eras for the dates. On the stamps, the SE dates seem always to appear above the PoTE dates. No designations naming the SE dates as such were found, but a few of the ›lower‹ inscriptions preserve the identity of their era as the

17 The People of Tyre Era, literally ›of the people of Tyre‹, was established when Tyre's last king was deposed, and a republic was formed (JONES 1937, 239). It has also been described as ›la première ère de Tyr‹ (ELAYI 2004, 195) or, in other words, the era before the one announced upon the disintegration of Seleucid hegemony. That later era, which began in 125 BCE, is denoted ATE (Autonomous Tyrian Era) in this article.

18 KAWKABANI 2005, 24.

19 Kawkabani has a section on ›le contexte archéologique‹ (KAWKABANI 2005, 65–68), in which he notes the ›les plus significatifs‹ objects. Of them, the only datable items I was able to identify were: a typical 2nd century BCE molded ceramic oil lamp (p. 66); a fusiform unguentarium, typical of the Hellenistic period, which he dates to between the 2nd and 1st cent. BCE; and a Rhodian stamped amphora handle, which seems illegible and does not appear in the 2008 publication.

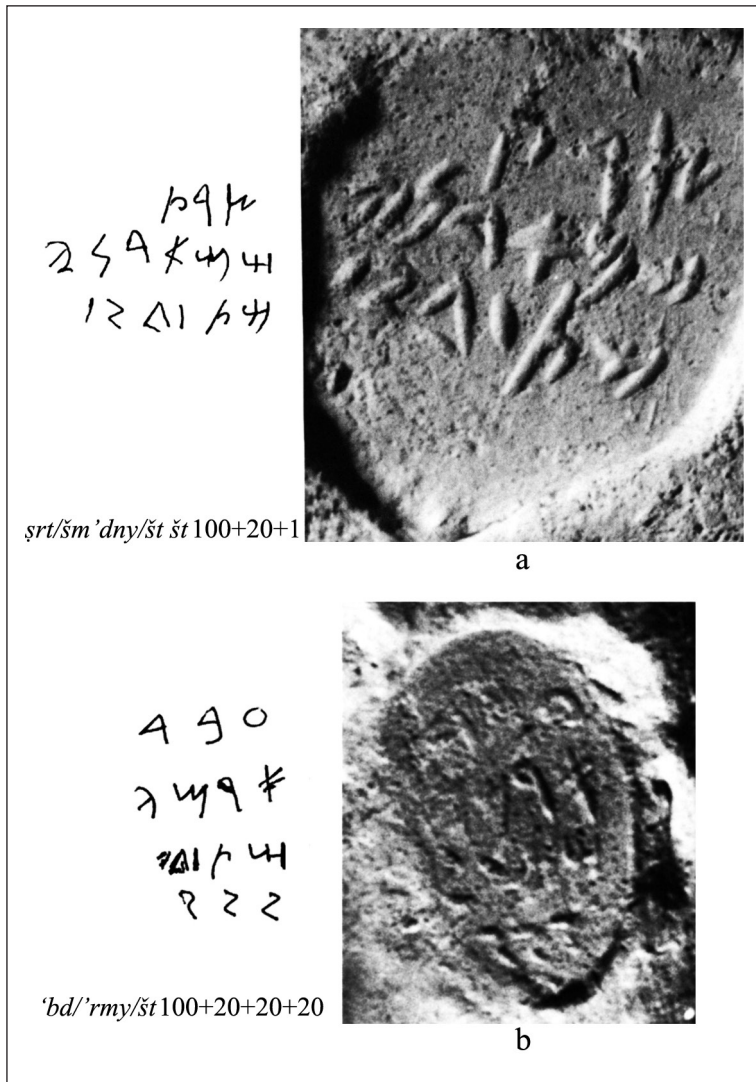


Fig. 3:

Examples of two well-preserved, well photographed and apparently well deciphered stamp impressions.

- a. Stamp impression J-B 5 and Kawkabani's drawing of its inscription (from KAWKABANI 2005, 12).

Kawkabani's reading is

*srt / šm'dny / št 100+20+1*.

The date (121), according to SE, is 192/1 BCE.

- b. Stamp impression J-B 1 and Kawkabani's drawing of its inscription (from KAWKABANI 2005, 10).

Kawkabani's reading is

*'bd / 'rmy / št 100+20+20+20*.

The date (160), according to SE, is 153/2 BCE.

PoTE. The full formula *št l'm šr*<sup>20</sup> (>year [according to the era] of the people of Tyre {numerals}<) appears four times<sup>21</sup>, and in two cases the numerals come in between the *št* and the *l'm šr* formula (>year {numerals} [according to the era] of the people of Tyre<)]<sup>22</sup>. Generally, however, only the word *št* is found, before the number.

20 In the Jal al-Bahr assemblage, *št* appears without prefix (KAWKABANI 2005, 62). I know of one exception to this, on the unprovenanced sealing published by Bordreuil, which reads *bšt* (BORDREUIL 1995, 190–191; BORDREUIL 1996, 48–49).

21 KAWKABANI 2005, 17 J-B 18; 35 J-B 60; 37 J-B 70; 39 J-B 74.

22 KAWKABANI 2005, 43 J-B 84; 46 J-B 93. On the same unprovenanced sealing in note 20 above, the number also appears between the *št* and the *l'm šr*. The word *št* also appears before the generally larger SE date. Consequently, in the majority of cases where only one number is legible, it can be difficult to identify to which of the two eras the number is referring. There are other >exceptions<, such as p. 48, J-B 98, where *št* precedes a large (presumably SE) date, then is followed by a word (*srt*, presumably referring to Tyre) and then *l'm šr*. In that case, one may guess that the PoTE date followed the formula, but was not preserved in the impression.



From among the 124<sup>23</sup> stamped handles with Phoenician inscriptions found at Jal el-Bahr, five were sufficiently well preserved<sup>24</sup> to determine that the first date that appears on the stamps is a SE date, and in those cases no words designating them as SE appear before the numerals<sup>25</sup>. This arrangement, the SE date before the PoTE date, is found outside of Jal el-Bahr, on the only three double-dated objects known to me with SE and PoTE dates. They are the long-known inscription on a marble plaque from Umm el-Āmed<sup>26</sup>, a lead scale weight<sup>27</sup> and a seal represented by two sealings in the Kedesh archive<sup>28</sup>. They also do not designate the SE explicitly, but, like the four bilingual (Phoenician text and date in Greek numerals preceded by the sign L) stamped storage-jar impressions at Jal el-Bahr (below), the Seleucid date appears before the PoTE date. In addition, like the Jal el-Bahr bilingual stamps, the SE date on the scale weight is preceded by the L sign. The only inscription known to me that does cite the SE explicitly is the above-mentioned Umm el-Āmed inscription<sup>29</sup>, where the SE is given in Phoenician: *bšt 180 l'dn mlkm* (>in the year 180 of the lord of kings<).

It is clear that the absence of any designation for the SE is due to its pervasiveness in the empire<sup>30</sup>, and it is also clear that a hierarchy of dates exists on the double-dated citations of the SE and the PoTE, including the Jal el-Bahr stamps. The SE date comes first<sup>31</sup>. This suggests that even though the Tyrian administrators, who obviously made great efforts to include the PoTE on their *instrumenta publica*, recognized that the SE date was the either the more important of the two eras, or more commonly used, or both<sup>32</sup>.

Phoenician-inscribed handles have been collected by Finkielsztejn and Elayi<sup>33</sup> – and classified in slightly different ways. Their classifications, however, were made before Kawakabani's articles. With the exceptionally large find at Jal el-Bahr, it is now clear that Finkielsztejn's Group G<sup>34</sup> and Elayi's Groups I–III and VI<sup>35</sup> are the most numerous groups of Phoenician-inscribed stamped handles. Because the Jal el-Bahr finds are characterized by an emphasis on year dates in the inscriptions, this makes them closest to the description of Finkielsztejn's Group G<sup>36</sup>. Besides the Jal el-Bahr assemblage, other Phoenician-inscribed

23 The calculation of 124 does not include the stamps with dates in Greek letters (KAWKABANI 2005, 28 J-B 44; 39 J-B 73; 51 J-B 107; 60 J-B 132).

24 Kawakabani noted that there were eight impressions with double-dated inscriptions (KAWKABANI 2005, 62), but examination of the catalogue entries shows that only two impressions (p. 34 J-B 57 and p. 36 J-B 63), bear double dates.

25 KAWKABANI 2005, 30 J-B 47; 33 J-B 57; 36 J-B 63; 37 J-B 68; 43 J-B 84. According to Kosmin, the SE served as »a synecdoche of the empire« (KOSMIN 2018, 49). In a sense, then, it is not surprising that the pervasiveness of the SE obviated the need for the number representing the SE to be explicitly identified.

26 Umm el-Āmed is located some 20 km south of Tyre, near modern Naqoura (DUNAND – DURU 1962, 181–184).

27 FINKIELSZTEJN 2003, 478–480; FINKIELSZTEJN 2015, 92 no. 147.

28 ARIEL forthcoming, INS 002.

29 CIS I/1, 29–32 no. 7; KAI, no. 18. The second date employs the familiar formula, also in Phoenician, *l'm šr* (>[according to the era] of the people of Tyre<).

30 See above, note 25.

31 Although this is not the case with all double-dated inscriptions involving the SE; e.g. KOSMIN 2018, 40.

32 Even where other time systems were noted, the SE would »be retained as an overarching, umbrella referent« (KOSMIN 2018, 100).

33 FINKIELSZTEJN 1998; ELAYI 2003.

34 FINKIELSZTEJN 1998, 107–109.

35 Classed in four subdivisions using formulaic characteristics; ELAYI 2003, 28. 30.

36 FINKIELSZTEJN 2004, 250 n. 19.



Fig. 4:  
Partial view of the Jal el-Bahr temple as re-exposed in 2012 (from BOSSONE 2013; caption: The discovered Phoenician temple has a frieze of Egyptian gorges decorating at least one wall).

stamped storage-jar handles have been found at Akko (×5), Kabri (×1)<sup>37</sup>, Sarepta (×1)<sup>38</sup> and Beirut (×4)<sup>39</sup>. Thanks to the mention of Tyre on most of them, and the common morphology of the vessels<sup>40</sup>, these handles are correctly identified as having been produced in Tyre<sup>41</sup>.

The stamped handles from the four abovementioned sites have more in common than their differences, and one may wonder what this group can inform us about Tyrian administration. A key to that answer is most likely to be found at Jal el-Bahr.

This important assemblage of inscribed seal impressions on storage-jar handles, in the 2005 article, has barely received notice in subsequent publication. Despite Elayi's comments on Kawkabani's 2003 report, in which she stressed the importance of the finds<sup>42</sup>, and wrote: »il faut souhaiter une publication archéologique rapide et complète afin de voir si l'on peut répondre à certaines de ces questions«<sup>43</sup>, almost no mention and certainly no in-depth analysis of the discovery since the first of Kawkabani's articles has appeared. The only citation of the 2005 article known to me on the Jal el-Bahr Phoenician stamped handles, besides Kawkabani 2008, seems to be Sader 2007 (passim). Based upon online press reports that I was able to locate, I have only been able to reconstruct that in addition to the objects which Kawkabani presented from Jal el-Bahr, the site itself was effectively forgotten, only to be rediscovered in 2011 or 2012 hidden beneath 4 m of bamboo<sup>44</sup> (fig. 4). That report is difficult to fathom, as the preservation of the temple was quite substantial<sup>45</sup>. Portions of the interior were nicely

37 Both published in NAVEH 1997.

38 ELAYI 2003, 17–21.

39 SADER 2006, 567–570; SADER 2007, 58–63 nos. 1–3.

40 E.g., SADER 2006, 567.

41 One stamped handle from Beirut (SADER 2007, 62–63 no. 4) is not Tyrian.

42 ELAYI 2004, 192–194.

43 ELAYI 2004, 196.

44 BAJJALY 2012; BOSSONE 2013; MARIA LUCA – CHEHAYED 2013. Atrash, Mazor and Aboud knew only of Bossone's 2013 report, where only Tyre was given as the location and Jal el-Bahr was not specified (ATRASH ET AL. 2018, 66). Based on the published photo, they described its construction and compared it to another six structures identified as temples located along the Phoenician coastline, including the new site of Horbat Turit that they published. The authors concluded that the temples »display a wide variety of structures both in plan and dimensions« but that all seemed to date to the Hellenistic Period (ATRASH ET AL. 2018, 66–67).

45 KAWKABANI 2003, 9; 2005, 7.



appointed, having been painted in four colours in an architectural style<sup>46</sup>. Moreover, the presence of multi-storied buildings nearby, and a free-standing corrugated roof protecting the structure from the elements, the report of the site's disappearance and subsequent rediscovery in 2011 is incongruous.

After the 2003 publication I attempted to contact Ibrahim Kawkabani by email to express my interest in the finds from Jal el-Bahr, but received no reply. Years later, communication was facilitated between Kawkabani and myself<sup>47</sup>. Unfortunately, the interaction was short-lived. The continued importance of the assemblage for the study of Tyre remained great. I also recognized that there was no certainty that the objects found as much as 47 years ago, before Lebanon's civil war, are still extant<sup>48</sup>. Consequently, despite the lack of access to both the material itself, or even to high-quality images of the stamps, which I had requested but did not receive, I proceeded to judiciously analyze Kawkabani's published readings of the stamped local storage-jar handles.

My critical examination of the published material at Jal el-Bahr has been guided by two underlying assumptions. The first is methodological. In dealing with the problematic material in the articles, and particularly the readings, which sometimes did not match the drawings or the photographs, it seemed methodologically appropriate to accept Kawkabani's readings except in cases where there were internal discrepancies between the author's text, transcriptions and drawings, and except in cases where the resulting dates were obvious outliers. In the latter 'outlier' cases, I endeavored to check the images more carefully — aware that the images were generally poor. This underlying assumption permitted me to disregard the majority of the Phoenician stamps at Jal el-Bahr whose readings may or may not have been precise, and may or may not have become obvious outliers as regards their dates, were I to examine them more closely.

My second underlying assumption was that the practice of stamping the storage jars was restricted in date. This assumption is based upon four observations, which themselves rely on a further minor assumption, that municipalities in antiquity rarely carried out their administrative practices for very long periods.

1. Therefore, as the contents of the stamps suggest that they were impressed by the city of Tyre, and not by a private initiative, one need not expect a long-lived stamping practice.
2. The type of stamped storage jars found in significant quantity at Jal el-Bahr appear not to have been scattered throughout the region, because they have not been found, to date, elsewhere in the archaeological record. An obvious place to expect to find such stamped handles is Tyre itself of course, but also at the thoroughly-excavated Hellenistic administrative building at Tell Kedesh, 36 km to the southeast. The absence of these finds elsewhere supports the idea that the stamping did not last long.
3. The onomasticon of what appear to be personal names on the stamps in the assemblage is rather restricted. Examples of this are five sets of two different seals of the same year and with the same name: 52+111 (year 113), 19+22(?) (year 118), 77+78 (year 122), 36+59 (year 142), 50+109 (year 143).

The chronology of the repeated (apparent) personal names is also restricted. Among the Jal el-Bahr storage-jar handle impressions the shortest range is of 20 years (mnḥm)<sup>49</sup>. There

46 KAWKABANI 2005, 6.

47 My thanks to Claude Doumet-Serhal for her aid in making contact between Ibrahim Kawkabani and myself. Telephone contact was made with Mr. Kawkabani on March 17, 2017, but no answers to my questions were forthcoming.

48 The site itself had been covered (recouvert) before the war (ELAYI 2004, 193).

49 KAWKABANI 2005, 16 J-B 16 [year 161]; 29 J-B 43 [year 180].

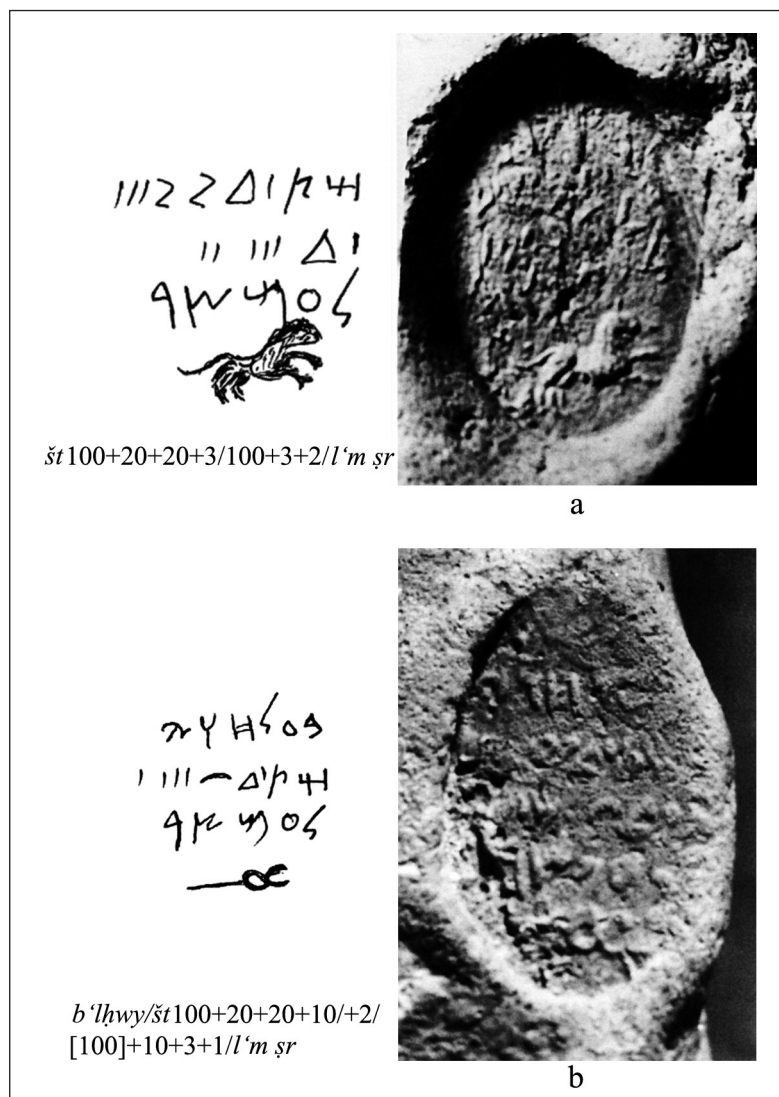


Fig. 5:  
Examples of two double-dated  
stamp impressions.

- a. Stamp impression J-B 68 and Kawkabani's drawing of its inscription (from KAWKABANI 2005, 38 [the second line is missing from Kawkabani's inscription drawing]). Kawkabani's reading is  $\text{št } 100+20+20+3 / 100+3+2 / l'm \text{ šr}$ . The date, 143 according to SE and 105 according to PoTE, is 170/69 BCE.
- b. Stamp impression J-B 47 and Kawkabani's drawing of its inscription (from KAWKABANI 2005, 30). Kawkabani's reading is  $b'l \text{ hwy} / \text{št } 100+20+20+10 / +2 / [100]+10+3+1 / l'm \text{ šr} / \text{caduceus}$ . The date, 152 according to SE and 114 according to PoTE, is 161/0 BCE.

is a 19- year range for *gry*<sup>50</sup>, but *gry* may be a generic hypocoristic of ›client of the Lord‹<sup>51</sup>. For other words, such as the forms *mšry* or *mšrym* there is even less certainty that they are personal names<sup>52</sup>.

4. There are definite indications of two eras on the Jal el-Bahr stamps, the Seleucid Era (SE) and the era of the People of Tyre (PoTE). They are the textual indication of the PoTE dates ( $\text{št} \dots l'm \text{ šr}$ ) on the stamps and for the SE, the appropriate difference of years between the PoTE and SE dates on the double-date stamps (e.g., **fig. 5**). There is no evidence of dates according to the autonomous era of Tyre (ATE), neither through an explicit textual

50 KAWKABANI 2005, 20 J-B 25 [year 102]; 21 J-B 28 [year 120].

51 SADER 2006, 568. Sader's discussion comes in the context of her reading of a stamp in Beirut naming *gry* — if the difficult reading of the Beirut stamp can be trusted. The reading of the date on the Beirut stamp reinforces the generic nature of the word. In addition, the word at Beirut diverges from the dates giving by Kawkabani for *gry* at Jal el-Bahr by some 42 years. Elayi considered *rmy* as perhaps the name of a deity (Elayi 2004, 195). Expectedly, the Tyrian deity's name, *mlqrt*, appears numerous times. The complete word is found 17 times (KAWKABANI 2005, 10–61 J-B 2. 6–7. 34–35. 39. 42. 60. 77–78. 83. 93. 97. 99. 105. 110. 131 and 164) and *mlqrt* is restored by Kawkabani another 6 times (KAWKABANI 2005, 35–58 J-B 60. 81. 87. 92. 114 and 128).

52 A second option is that the root of *mšr* is *šr*, with either the *mem* acting as a preposition, meaning ›from Tyre‹, or the *mem* being the final letter of the preceding word. That raises a third tantalizing possibility. The word *mšrm* on J-B 140 may simply be read as relating to the date, as in  $l'm \text{ šr } m$ , ›(according to the era) of the people of Tyre‹ + *m*.

indication of the date nor on the basis of a double date. Kawkabani's assignment of other eras to dates on a minority of the stamps appear to be methodologically unsound. More on this subject is found below.

All four observations suggest that the practice of stamping the storage jars was restricted in date, making that my second underlying assumption.

A support for a restricted timespan of the stamping practice is the multiplication of stamps citing the same year. Here I have to assume that the eras of the stamps naming the same years reference the same era, which is something that cannot be proven. Twelve separate years are represented by three or more stamps (years 113, 120, 122–125, 140, 142–143, 145–146, 161). The highest number of handles for a single year is 10 (for year 143)<sup>53</sup>. Admittedly, there is uncertainty with the numbers just mentioned. As noted, the likelihood is that those years reference the two eras, SE and PoTE, is clearly attested. Which one of the eras is intended can only be distinguished in stamps where both are attested; i.e., double dates. In the above case of 10 stamped handles for year 143, although there are 11 stamps attesting to that year, because J-B 57 is a stamp with a double date, and year 143 is definitely the SE date, I can only count 10 stamps. But, mathematically, even in that case, there are at least 5 stamps falling in the same year, regardless of era.

Beyond the four observations, the clear sense that the dates on the stamped storage-jar handles were restricted comes from the dates on the stamped handles themselves.

In his 2005 article, Kawkabani concluded that the chronological profile of the assemblage extended between 206 and 115 BCE<sup>54</sup>. In his 2008 article, he noted a different date range for the Tyrian assemblage, »comme c'est déjà prouvé« (!?), as 237–135 BCE<sup>55</sup>. Because of this inconsistency, and others I had identified, I set about examining which of the Jal el-Bahr stamps produced the beginning and end dates of Kawkabani's two chronological conclusions. I also wanted to see whether my examination of the outliers would produce a new chronological range. An important question for me related to 125 BCE — the universally accepted date of the later autonomous era of Tyre (ATE). Would it be necessary to view any of the SE dates, presumed to be those appearing at the top of the stamp impressions, or any of the PoTE dates lower down as extending beyond the beginning of the ATE, 125 BCE?

At Jal el-Bahr, two handles have dates lower than 100. The first is J-B 45, whose stamp is dated to year 7 by Kawkabani. Examination of the photograph, however, suggests to me that after the name (*hn*) a vertical stroke is legible before the impression is broken off. The vertical stroke can only introduce a hundred sign; thus, dates of 107 or higher are likely. This would bring J-B 45's BCE date down to the end of the 3rd century (206/5 BCE, if a SE date) or 2nd century (169/8 BCE, if a PoTE date).

The second earliest datable stamped handle reads 71 (actually »seventy one« in Phoenician letters and not numerals<sup>56</sup>. It, however, is clearly dated by the PoTE. Based upon a 275 or 274 era<sup>57</sup> for the People of Tyre this translates to 205/4 or 204/3 BCE<sup>58</sup>.

53 Kawkabani's cautious guess of 143 as the date in J-B 106 is improbable.

54 KAWKABANI 2005, 68.

55 KAWKABANI 2005, 55 on the Greek-stamped amphora handles.

56 KAWKABANI 2005, 38 J-B 69; FINKIELSZTEJN 2004, 251.

57 The formulation for the beginning date of the PoTE used in this article, »275 or 274 BCE«, is explained below, in the section entitled »The Absolute Date of PoTE«.

58 This is very close to Kawkabani's earliest date (in his 2005 report) of 206 BCE. However, according to Kawkabani's 275/4 date of PoTE, 71 years would translate to 204/3 BCE. Another way of reaching Kawkabani's 206 BCE earliest date is to accept, as I suggested, that the date J-B 45 (p. 29) is not 7 but 107 (possibly seen in the photograph) and suppose it is SE. Kawkabani, however, did not indicate this, and I do not know to which stamped handle he was referring when he provided his earliest date of 206 BCE.



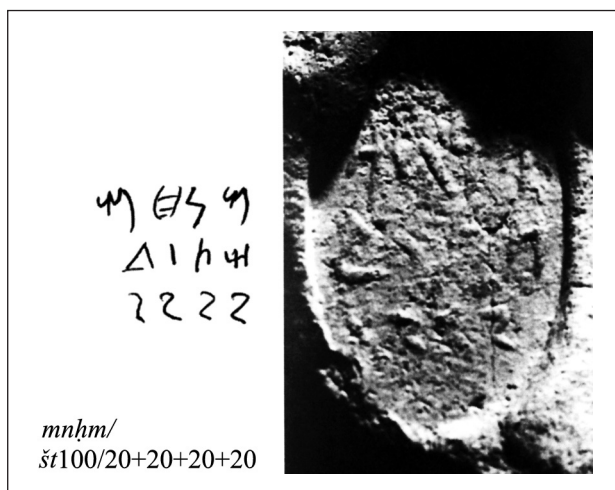


Fig. 6:  
Stamp impression J-B 43 and Kawkabani's drawing of its inscription (from KAWKABANI 2005, 29).

Kawkabani's reading is  
*mnḥm / št 100 / 20+20+20+20*.

That 180 reading — if PoTE (96/5 or 95/4 BCE) — dates the impression 30 years beyond the beginning of the ATE, and is therefore methodologically not possible.

Identifying what was the latest dated stamped handle at Jal el-Bahr was more difficult. The latest date read at Jal el-Bahr is 180 (J-B 43; **fig. 6**), and it is not clear with which era to associate it. According to the SE year 180 would be 133/2 BCE, and according to the PoTE, 96/5 or 95/4 BCE. Methodologically, using the PoTE era for J-B 43 is impossible, as 96/5 (or 95/4) BCE falls 30 years beyond the beginning of the ATE, which began in 125 BCE. J-B 43, thus, bears a SE date of 133/2 BCE, seven years before the beginning of the ATE<sup>59</sup>.

After year 180, the next earlier group of dates are years 160, 161, 163, 160+ (=165?)<sup>60</sup>, 166 and 168, representing 11 handles (J-B 1 and 8 [year 160]; J-B 16, 24 and 64 [year 161]; J-B 44 and 108 [year 163]; J-B 132 [year 160+ (=165?)]; J-B 105 [year 166]; and J-B 73 and 107 [year 168]). According to the methodology used above, that dates in the SE and PoTE cannot fall after the beginning of the ATE, all of these dates must be according the SE<sup>61</sup>.

Kawkabani read year 159 on two stamped handles, and associated them with the PoTE, based upon the formula, *št ...l'm šr*. He read the date on J-B 37 as follows: On the first line with the date (line 3): 20+20+100 *nw* (*št* 140), on the second line (line 4): 3+3+3+10 (19), and on the third line (line 5): *l'm šr*<sup>62</sup>. If this reading were reliable, it would translate, according to a 275 or 274 era for the PoTE, as 117/6 or 116/5 BCE. That date is eight years beyond the beginning of the ATE. Therefore, according to the methodology presented above, I checked the published photograph, and found that the image, not of particularly high quality, showed that the second numeral meaning 20 was uncertain. Without the second 20 numeral, the date on the impression would read 139 (120+19), and the 275- or 274-PoTE would be 137/6 or 136/5 BCE — well enough before the beginning of the ATE so as not to constitute a problem.

What of the second stamped handle Kawkabani read as 159 PoTE? It is J-B 93<sup>63</sup>. In this case, again following my methodology above, I checked the handle's details and there was a discrepancy between the transcription and the line drawing. The line drawing was missing a

59 Following the SE, Finkielsztejn dated the J-B 43 to 133/2 BCE (FINKIELSZTEJN 2004, 251) but noted that the era was uncertain. Examination of the photo of J-B 43 places the date of 180 also in some doubt. The numerals in fact may be read as: 20+20+20/100 (the final 20 numeral read by Kawkabani is unclear). Methodologically, it is not necessary to suggest an emendation of the Kawkabani's reading, because no reading of *l'm šr* accompanies the 180 date, and, as an SE date, the year 180 is not an outlier. It may be added, however, that assuming a 133/2 BCE date on the handle also means that J-B 43 is the only stamped handle in the assemblage to postdate the Tyrian one-time announcement on coins of some level of autonomy before the advent of the ATE (Τύρου ἑρῶς καὶ ἀσύλου; 172 SE [=141/0 BCE]; SC II/I, 301 no. 1961; 302 no. 1965).

60 The numeral reads ΠΞΡ and so is apparently equivalent to 165.

61 Finkielsztejn also dated J-B 44 (year 163) to the SE (FINKIELSZTEJN 2004, 251).

62 KAWKABANI 2005, 26.

63 KAWKABANI 2005, 47.

line reading 10+20+20 in Phoenician numerals. These numerals are in fact visible in the (poor) photograph. However, in line 3, I found the 100-numeral was an uncertain reading. Without the 100-numeral the date on the impression would read 59, and the 275- or 274-PoTE would be 217/6 or 216/5 BCE, some 12 years before the earliest PoTE date noted above (J-B 69).

Undoubtedly, my methodology of doubting the outlier date is not ideal. In fact, having PoTE dates fall after the inauguration of the ATE did not disturb Kawkabani who, based upon his own readings, dated the end of the assemblage ten years (115 BCE) beyond Tyrian autonomy<sup>64</sup>.

In antiquity, there are cases of ancient eras being cited despite the existence of eras that superseded them. For example, three parchments from Dura Europos, from 180, 238–244 and 251 CE, where, after the normally accepted dating system for that period of time, the SE (years 491 and 562 are legible) is cited as »κατὰ δε τὸν πρότερον ἀριθμὸν« or »[κ]ατὰ δε τὸν πρότερον ἀριθμὸν) δευτέρου« (>[after] the former reckoning«)<sup>65</sup>. The Dura Europos examples, however, are exceptional. The phrasing, »the former reckoning«, in fact, emphasizes that those composing the documents were aware of their use of SE dates as anomalous. It is more difficult to accept that the Tyrian officials cutting the seals to stamp the storage jars, and had witnessed, in 125 BCE, the city's proclamation of its own autonomy from outside imperial rule, would not have immediately embraced the new ATE, as they had with the Tyrian tetradrachms, which were issued from year one of the ATE.

Returning to J-B 37 and J-B 93, once the number 159 according to PoTE is removed from the assemblage, the next earlier PoTE date at Jal el-Bahr is 114<sup>66</sup>. In other words, the alternate latest dated stamp using the PoTE at Jal el-Bahr dates to 162/1 or 161/0 BCE, at least 45 years earlier than Kawkabani's date of 116/5 BCE for J-B 37 and 93.

My »manipulations« of the readings of some of the Phoenician storage-jar stamps at Jal el-Bahr are predicated by the methodological difficulty just described. It must be remembered that the SE dates are never identified as such at Jal el-Bahr. The definite SE dates are (1) those that appear on stamped handles before other (smaller) dates, and (2) those whose dates would extend beyond 125, if they were to be associated with the PoTE. According to those criteria, the earliest SE date is 143, found on two handles, Nos. J-B 57 and J-B 68<sup>67</sup>. The two handles date to 170/69 BCE. The latest certain SE dated handle is No. 47<sup>68</sup>, whose SE date is 152, or 161/0 BCE. The latest uncertain SE dated handles are J-B 73 and 107, dated 168 SE, equivalent to 145/4 BCE<sup>69</sup>.

Therefore, once my minimalist approach is adopted vis-à-vis the period of stamping of the Tyrian storage-jar handles at Jal el-Bahr, the resulting dates extend from 205/4 (or 204/3)<sup>70</sup> to 133/2 BCE, a period of 73 years. The upper extreme of this range is based upon a PoTE dating. The lower extreme is based J-B 43, which reads year 180, and can only be a SE date, equivalent to 133/2 BCE. The only date for which an assignation to the SE did not change its status as an outlier, year 7 (J-B 45), was emended to date no earlier than 206/5 BCE. All the other dates, read by Kawkabani and for which no suspicion of his readings was necessary, fall well within the 205/4 (or 204/3) to 133/2 BCE range suggested here.

Now the four bilingual (noted above) stamped handles at Jal el-Bahr may be examined. These are also the stamps I referred to above as the minority of the stamps which Kawkabani

64 KAWKABANI 2005, 68.

65 WELLES ET AL. 1959, 127. 152. 177. The use of the by then essentially antiquated SE era on double-dated documents of the second and third centuries CE, is, in Kosmin's terms, »an overarching, umbrella referent« (KOSMIN 2018, 100).

66 KAWKABANI 2005, 30 J-B 47; FINKIELSZTEJN 2004, 251.

67 KAWKABANI 2005, 34 and 38 respectively.

68 KAWKABANI 2005, 30; FINKIELSZTEJN 2004, 251.

69 KAWKABANI 2005, 39 and 38 respectively.

70 Or 217/6 BCE if J-B 93 is read as 59 PoTE.

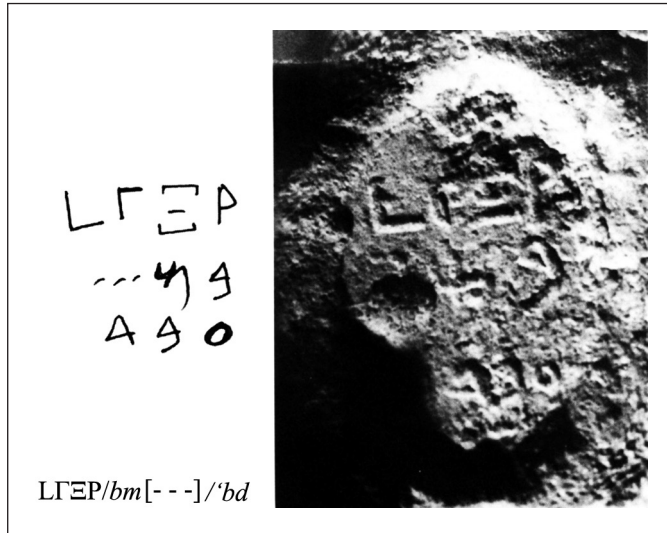


Fig. 7:

Stamp impression J-B 44 and Kawkabani's drawing of its inscription (from KAWKABANI 2005, 28).

Kawkabani's reading is

LΓΞP / *bm* [---] / 'bd.

This is one of four bilingual (Phoenician text and date in Greek numerals) impressions at Jal el-Bahr. Its date, according to SE, is 150/49 BCE.

assigned to eras other than the SE and the PoTE. The stamps<sup>71</sup> bear Phoenician texts not very different from the rest of the assemblage, but the dates (163 [fig. 7], 168 [x2], and 165?<sup>72</sup> respectively) appear in Greek numerals and are preceded by the sign L. Incongruously, Kawkabani interpreted these impressions as dated by the Alexandrine era (August 30, 30 BCE)<sup>73</sup>. He bizarrely concluded that the handles dated between 133 and 138 CE (!). Indeed, the prefix L as a symbol indicating a date is traced to the Ptolemaic empire. However, this sign is a Ptolemaic legacy. Its use was continued under the Seleucids, in territories previously subject to the Ptolemies, including Phoenicia<sup>74</sup>. There is therefore no reason to view these twisted stamped handles on torpedo-shaped storage jars as dating more than two-and-a-half centuries later than the remainder of the assemblage. The four bilingual stamped storage-jar handles at Jal el-Bahr undoubtedly reference the SE<sup>75</sup>. They cluster within five years and date between 150/49 and 145/4 BCE, towards the end of the PoTE date range I identified<sup>76</sup>.

Kawkabani's inexplicably late dating for the four bilingual stamped storage-jar handles even contradicts his own dating of the assemblage to 206–115 BCE<sup>77</sup>. The 2nd century CE dates for the four bilingual stamped handles at Jal el-Bahr may thus be rejected.

A preliminary result of this analysis of the Tyrian component of the Jal el-Bahr assemblage is that the new dating overlaps the date of the lifetime of the Kedesh archive, another exceptional example of Tyrian public administration. It seems clear that both the storage-jar assemblage and the Kedesh archive provide extensive evidence for a period of highly organized Tyrian municipal administration in the first half of the 2nd century BCE.

71 KAWKABANI 2005, 28 J-B 44; 39 J-B 73; 51 J-B 107; 60 J-B 132.

72 See above, note 60.

73 KAWKABANI 2005, 64.

74 KUSHNIR-STEIN 2011, 52, but see FINKIELSZTEJN 2014, 67 n. 12.

75 Associating them with the PoTE would place them after the beginning of the ATE. Finkielstejn concurred for J-B 44 (see above, note 61).

76 Incidentally, the Jal el-Bahr bilingual stamps date roughly two decades after the earliest bilingual (Phoenician and Greek) coins appear in the region, under Antiochus IV, beginning in 168 BCE. Bilingualism may have been part of an administrative reform by that king at that time (see, most recently, FINKIELSZTEJN 2019, 303–304). No other bilingual Tyrian *instrumenta*, for example, the double-dated lead scale weight (FINKIELSZTEJN 2003, 478–480; FINKIELSZTEJN 2015, 92 no. 147) and three sealings in the Kedesh archive (ARIEL forthcoming, INS 002 and 007) antedate the 168 BCE date either.

77 KAWKABANI 2005, 68.



### Aegean stamped amphora handles

There is an independent way to examine the chronological framework for the Jal el-Bahr stamped Tyrian handle assemblage. At the site, some 183 handles stamped in Greek and deriving from likely Hellenistic Aegean transport amphora forms were excavated and published<sup>78</sup>. That assemblage was uncovered at the same time, and in the same context<sup>79</sup>, as the storage-jar handle assemblage, the focus of our review. Owing to the preponderance of finds of Rhodian transport amphoras in the eastern Mediterranean littoral, most (84 %) of the imported stamped handles from the site are, as would be expected, of that class<sup>80</sup>.

Because Kawkabani had very limited access to Hellenistic stamped amphora treatises he did not in fact try to date the material. From Kawkabani's list of references possibly only one employed Grace's lowered chronology<sup>81</sup>, and none of the bibliography of which he used was aware of Finkielsztein's more recent 2001 revised chronology, which is lower still. From the Hellenistic amphora reports available to him, Kawkabani concluded that in general the dating of the Greek stamped amphora assemblage at Jal el-Bahr fell within the same chronological range as the stamped Phoenician handle assemblage<sup>82</sup>. I will now summarize the dates of the best dated Rhodian amphora stamps from Jal el-Bahr, basing myself on the more refined advanced datings of the 48 roughly datable Rhodian eponym stamps (from a total of 154 Rhodian stamps<sup>83</sup>), according to Finkielsztein's 2001 chronological framework.

The assemblage's eponym range begins in 202 BCE with Θεόδωρος<sup>84</sup>. As for the latest date of the eponyms in the assemblage, some of Kawkabani's readings of the eponym stamps would seem to provide late dates, e.g., in Period VI (107–88/6 BCE), or Period VI or VIIa (107 to after 88/6 BCE). Using the same approach that I used for the outliers of the Tyrian material, I examined J-B 273, which Kawkabani read as Σωκράτης<sup>85</sup>, and J-B 340, read by Kawkabani as the eponym Ἀπολλώνιος<sup>86</sup>. Kawkabani's reading of Σωκράτης should probably be emended to Ἰπποκράτης. Rather than the Period VI date for the eponym Σωκράτης<sup>87</sup>, the stamped handle would thus identify a fabricant dated between 189–145 BCE. As for Ἀπολλώνιος, the poor photograph was insufficient to establish or reject Kawkabani's reading of the eponym's name<sup>88</sup>. What can be said is that 7 letters are visible from the photograph, while 20 appear in Kawkabani's reading. If Kawkabani read the inscription correctly, the stamped handle would date to Period VI or VIIa (107 to after 88/6 BCE)<sup>89</sup>, and in that case J-B 340 would be a true outlier, as the dates of the remainder of the stamped Rhodian eponyms fall between 202 BCE

78 KAWKABANI 2008, nos. J-B 167–350. One (p. 40, J-B 306) is not a stamped but an incised handle.

79 KAWKABANI 2008, 2.

80 By my calculation: 84 stamps naming eponyms, 62 naming fabricants (no dating attempted) and 8 definitely Rhodian (but illegible) stamps. Other stamps were Knidian (4), Thasian (3), Chian (1) and Parian (1). Kawkabani (KAWKABANI 2008, 55) only noted Thasian and Cypriote. None of the dates of the non-Rhodian classes noted here need affect the chronological conclusions reached from the Rhodian stamps.

81 GRACE 1974. If Kawkabani's citation to a volume of mine under the publication date 2002 is actually my 1990 book, then Grace's 1974 revision would have been known to him.

82 KAWKABANI 2005, 55; KAWKABANI 2008, 56.

83 By my calculation: 84 stamps naming eponyms, 62 naming fabricants (no dating attempted) and 8 definitely Rhodian (but illegible) stamps. Other stamps were Knidian (4), Thasian (3), Chian (1) and Parian (1).

84 KAWKABANI 2008, 22 J-B 235; 30 J-B 260; all dates are *circa*.

85 KAWKABANI 2008, 32.

86 KAWKABANI 2008, 51. I am grateful to Gérald Finkielsztein for his assistance in examining the photographs of the Greek amphora stamps in Kawkabani's 2008 article.

87 FINKIELSZTEIN 2001, 161 Table 13.

88 KAWKABANI 2008, 51 J-B 340.

89 FINKIELSZTEIN 2001, 162 Table 14.



(Θεύδωρος, above) and the other eponyms that are much earlier than Period VI or VIIa noted above.

Moreover, the shape of the rose within the circular stamp of J-B 340, looks unlike roses of Periods VI and VIIa, and appears to be earlier in date<sup>90</sup>, and raises the possibility that this is a stamp of a fabricant named Ἀπολλώνιος, active in the beginning of the 2nd century BCE<sup>91</sup>. It should be added that no circular stamps naming the eponym Ἀπολλώνιος, or the month Σμίνθιος, is found in Cankardeş-Şenol's Lexicon<sup>92</sup>.

Consequently, following my approach, the latest Rhodian eponyms in the Jal el-Bahr assemblage are:

- Ἀστυμήδης (144 BCE)<sup>93</sup>
- Ἀριστόγειτος (141/0 BCE)<sup>94</sup>
- Ἀναξίβουλος (140/39 BCE)<sup>95</sup>
- Ἀλεξιάδας (138 BCE)<sup>96</sup>
- Καλλικράτης 3rd (130 BCE)<sup>97</sup>

In my examination of the outliers among the Rhodian eponym stamps, there could be the same sort of confirmation bias here as in my discussion above on the Phoenician stamps. Nonetheless, the poor quality of Kawkabani's 2008 report — and the inaccessibility of the finds — together with the importance of the material, forces me to use a large measure of whatever common-sense tools there are at my disposal.

This examination of the dates of the Rhodian eponyms at Jal el-Bahr results in the tentative conclusion that the Aegean transport amphora assemblage dates between 202 BCE (Θεύδωρος, above) and 130 BCE (Καλλικράτης 3rd), with the readings of both J-B 273 (Σωκράτης) and J-B 340 (Ἀπολλώνιος) being emended. So, the answer to the question posed above, how does my dating of the Jal el-Bahr Phoenician storage-jar stamps after certain ›manipulations‹ of their outliers compare with the two emended Rhodian stamped transport amphora handles naming purported eponyms, is the following.

In general, there is a very good overlap between my dating of the Tyrian impressed storage-jar handles (205/4 [204/3]–137/6 BCE) and the dates of most of the Rhodian eponyms (202–130 BCE).

There are outliers or possible outliers that seem to date later than the ATE (125 BCE). For the Tyrian impressed torpedo amphora handles, the two possible outliers would date to 117/6 BCE, while the two possible Rhodian eponym outliers would date after 107 BCE. For one, J-B 273, Kawkabani's reading was certainly in error. For the other, J-B 340, which could not be read by me from the photograph, the reason that I do not prefer Kawkabani's reading is that the other Rhodian eponyms all now date before 130 BCE. An alternative to rejecting Kawkabani's reading of J-B 340 would be to suppose the stamp was inadvertently added to the report on the Aegean assemblage and derived from elsewhere on the Jal el-Bahr site.

90 Gérald Finkielsztein, pers. comm.

91 Cf. JÖHRENS 1999, 66 no. 170.

92 CANKARDEŞ-ŞENOL 2016, 272–273.

93 KAWKABANI 2008, 47 J-B 327 (my reconstruction of the name).

94 KAWKABANI 2008, 29 J-B 256.

95 KAWKABANI 2008, 30 J-B 262.

96 KAWKABANI 2008, 18 J-B 214.

97 KAWKABANI 2008, 13 J-B 198.

Fig. 8:  
Stamp impression J-B 53 and  
Kawkabani's drawing of its  
inscription (from KAWKABANI  
2005, 32).  
Kawkabani's reading is  
*mtnb 'l / št 100+20+20 / 3+3+3 /*  
*Rhodian rose.*  
Its date, according to SE, is  
164/3 BCE.



### Symbols on the Stamped Storage-Jar Handles

Above, in addition to the characteristics of the texts inscribed on the stamped handles, such as what seem to be personal names, and of course a date, small symbols are occasionally depicted.

Eight iconographic devices were found on the stamps at Jal el-Bahr. They are (in descending order in number of iterations):

1. Flower (or floral device); 14 stamps<sup>98</sup>. The well-read dates on the stamps cluster between 142 and 156<sup>99</sup>. Because only half of these would fall before the ATE, if their era is the PoTE, then it is likely that all of them are SE dates. Hence the absolute dates of these floral devices are likely to be 171/0–157/6 BCE. Some of these flowers are called Rhodian roses (e.g., **fig. 8**) and others are called trilobate grape clusters.
2. Olive branch; four stamps<sup>100</sup>. Three deciphered dates, probably between 171/0 and 153/2 BCE.
3. Grape cluster; three stamps<sup>101</sup>. The grape cluster device appears on only one stamp with a deciphered date: year 163, which must be equivalent to 150/49 BCE.
4. Ear of wheat; three stamps<sup>102</sup>. Date (from two deciphered dates), one equivalent to 170/69 (SE) or 133/2 or 132/1 (PoTE) and the other 160/59 BCE (SE).
5. Caduceus; two stamps<sup>103</sup>. Dates between 205/4 or 204/3 BCE and 161/0 BCE. Caducei in Tyrian and Phoenician contexts are fully discussed in the Kedesh report, owing to the

98 KAWKABANI 2005, 23 J-B 32; 32 J-B 53; 33 J-B 56; 35 J-B 61; 36 J-B 63; 40–41 J-B 76; 42 J-B 80; 44 J-B 84; 44 J-B 86; 48 J-B 96; 53 J-B 112; 54 J-B 116; 55 J-B 120; 57 J-B 125.

99 The year 149 read stamp is associated by Finkielstejn to the SE (FINKIELSZTEJN 2004, 251).

100 KAWKABANI 2005, 27–28 J-B 41; 11 J-B 4; 13 J-B 8; 42 J-B 79 (this last one was erroneously described by Kawkabani as a floral device).

101 KAWKABANI 2005, 28–29 J-B 44; 57 J-B 123; 59 J-B 130 (J-B 44 was described by Kawkabani as either a grape cluster or an acorn).

102 KAWKABANI 2005, 59 J-B 129; 45 J-B 87; 56 J-B 122.

103 KAWKABANI 2005, 30 J-B 47; 38 J-B 69.



presence of a caduceus as the main symbol on an administrative bilingual, double-dated seal (two specimens) in the archive<sup>104</sup>.

6. Lion; one stamp<sup>105</sup>. This device shares a date with the ›unclear horizontal device‹ (No. 8 below), and the two sealings were laid out similarly (and both are double-dated), but they were not impressed with the same seal. Date: 170/69 BCE.
7. Tanit symbol; one stamp<sup>106</sup>.
8. Unclear horizontal device; one stamp<sup>107</sup>. Elayi had already noted the absence of club devices at Jal el-Bahr<sup>108</sup>. It is nevertheless possible that the ›unclear horizontal device‹ may be a club<sup>109</sup>. As both (double-dated) sealings were similarly arranged, the device, if a club, would easily be related to the lion symbol through the first of the twelve labors of Heracles, killing the Nemean lion. Date: 170/69 BCE

Another Heracleian connection is found in another sole appearance of a small depiction of a bird on another type of *instrumentum publicum* from Tyre, a sealing<sup>110</sup>. Bordreuil interpreted the bird on the sealing as a symbol of Heracles-Melqart<sup>111</sup>. I know of no other definitive support for Bordreuil's interpretation in the written or archaeological record.

Clubs are mintmarks for Tyre throughout the Hellenistic period and later, and are found over a dozen times on Tyrian scale weights<sup>112</sup>. The club is the only device appearing on the seal impressions on jar handles from 'Akko, found on three or four of the five handles from there<sup>113</sup>. It also appears on a stamped handle from Sarepta<sup>114</sup>. Therefore, one cannot rely on the uncertainty that any club was depicted at Jal el-Bahr as a compelling argument against its role as a Tyrian *parasemon*.

All told, there are 27 devices depicted on the stamped storage-jar handles at Jal el-Bahr. Although less than 20 % of the legible stamps. Sader described them as »a characteristic feature« of the Jal el-Bahr storage-jar assemblage<sup>115</sup>.

The devices are likely to have functioned as identifiers of the gem engravers or producers of the storage jars. Many of the iconographic additions appear on stamped handles with preserved dates. The only chronological clustering of any device is found for the most numerous device, the 14 stamps with a flower (or floral device), with dates restricted to 15 years (171/0–157/6 BCE). Could some of these devices have been marks to identify the engraver? As noted above, Kawkabani first suggested that the personal names on the stamps of the Phoenician assemblage be identified as fabricants, along the lines of the Greek amphoras. Above, I did discuss the possibility that *mnḥm* and *gry* were personal names. The eight small iconographic devices represented at Jal el-Bahr may be similar to the usage of fabricants'

104 ARIEL forthcoming, INS 002.

105 KAWKABANI 2005, 38 J-B 68.

106 KAWKABANI 2005, 61 J-B 140.

107 KAWKABANI 2005, 34 no. 57.

108 ELAYI 2004, 194.

109 KAWKABANI 2005, 34 J-B 57.

110 BORDREUIL 1996, 53–54 no. IIa.

111 Bordreuil's interpretation of the bird as a symbol of Heracles-Melqart may derive from the reverses of the autonomous Tyrian tetradrachms/sheqels. However, those birds (eagles) are more likely to be inspired by the eagles on Ptolemaic (and some earlier Seleucid) tetradrachms, and, to my knowledge, should not be considered an attribute of Melqart.

112 FINKIELSZTEJN 2015, passim.

113 NAVEH 1997, 115 nos. 2–3. 5, and probably 4.

114 ELAYI 2003, 17–18.

115 SADER 2007, 60.

›devices‹ alongside inscriptions produced by them on stamps for Aegean amphoras and as ›control marks‹ on contemporary coins in the East? If this is the case, then the images depicted may not have been a symbol of municipal or regional iconographical significance, but rather simply an identifying mark for the person (or seal-producing enterprise) who produced the seal. In the light of the Jal el-Bahr Tyrian storage-jar handle assemblage, such a conclusion is possible if not likely. There is enough similarity between the stamps on the Tyrian storage-jar handles and the Aegean amphora handles to suggest that Tyre adopted elements of the long-established stamping traditions of Aegean transport amphoras<sup>116</sup>.

In sum, whether the devices identified the producer of a seal for stamping storage-jar handles or the producer of the storage jars themselves, or not, the symbols themselves suggest that they had little symbolic significance vis-à-vis the city of Tyre that supervised the stamping of the storage jars.

### The Absolute Date of PoTE

In both the double-dated inscription from Umm el-Āmed, and the synchronism between Ptolemy II's twenty-sixth year and the PoTE on the Maṣṣuba inscription, the PoTE is separated by 37 years from the SE. This is also true of the double-dated seal from the Kedesh archive<sup>117</sup>. Assuming a Macedonian (autumnal) calendar, the era for the People of Tyre began in 275 BCE<sup>118</sup>. However, the double-dated finds from Jal al-Bahr seem to uniformly produce a 38-year gap between the SE and the PoTE<sup>119</sup>. With two gaps between the SE and the PoTE, one can no longer rely on 275 BCE as the common notation of autumn 275 through autumn 274 date for the first year of PoTE<sup>120</sup>.

Kawkabani discussed the synchronism of the SE with the PoTE<sup>121</sup>. He noted that the consensual date of the PoTE was 275/4 BCE, and that another view, based upon the Maṣṣuba inscription, resulted in a date for the PoTE as 274/3 BCE.

One way to reconcile the different 275/4 BCE and 274/3 BCE era determinations for PoTE is to assume a different, Babylonian (vernal) calendar for PoTE. Then, during the first half of PoTE, there would be a difference of 38 years, and during the second half of PoTE, the difference would be 37 years. This, however, would not explain what appears to be a regular use of a 38-year gap in the Jal el-Bahr material as opposed to what appears to be regular use of a 37-year gap elsewhere<sup>122</sup>. It therefore seems likely that there was confusion between the numbers of years separating the two eras, resulting in use of both 37- and 38-year gaps. This may have been exacerbated by a separate autumn calendar for SE and a separate spring calendar for PoTE<sup>123</sup>. Today, when the date of the PoTE era is not known exactly, and I cannot definitively reconcile the problem, I can nevertheless encourage the abandonment of the common notation of 275 BCE as the date of the People of Tyre era, adopted by Naveh and

116 See FINKIELSZTEJN 1998, 84; ARIEL – SHOHAM 2000, 139.

117 ARIEL forthcoming, two sealings, INS 002A–B.

118 For bibliography on the PoTE, see ELAYI 2004, 194 n. 30.

119 According to both Kawkabani (KAWKABANI 2005, 62–64) and myself, six stamps are double-dated. However, only three stamps in his (J-B 57, J-B 63, J-B 69, J-B 70, J-B 74 and J-B 84) and my (J-B 47, J-B 57, J-B 63, J-B 68, J-B 73 and J-B 84) lists overlap.

120 A similar difficulty to my inability to determine the date of the PoTE is found in the first publication of a double-dated lead scale weight by Finkielstejn (FINKIELSZTEJN 2003, 479). Finkielstejn was uncertain whether to read year as PoTE 106 or 107 on a Tyrian scale weight with a SE date of 145. In 2003 he dated the weight to 170/169 or 169/168 BCE. In 2015 (p. 92 no. 147), he dated the weight to 169 BCE.

121 KAWKABANI 2005, 82–84.

122 An era is a fixed day in one year, as Kawkabani noted regarding the Alexandrine era (below), and not as he elsewhere referred to the PoTE, as 274/3 BCE (KAWKABANI 2005, 62).

123 Such issues may even be a possible explanation for what appears to be the addition of a digit on sealing INS 002B from the Kedesh archive (ARIEL forthcoming).

myself in 2003, and by Finkielsztein<sup>124</sup>. One should desist from referring to the PoTE as »vers 275«<sup>125</sup>, or other formulas (Kawkabani cited 274 BCE in one place<sup>126</sup> and »environs de 274/3« in another<sup>127</sup>). The PoTE can only be fixed as either 275 or 274 BCE.

### **The Jal el-Bahr Storage Jars and Tyrian Public Administration in the Middle of the Hellenistic Period (c. 275/4–126 BCE)**

The era »of the people of Tyre« (PoTE) has a political underpinning about which only the barest of details are known<sup>128</sup>. Not a regnal era, it was certainly influenced by the preeminent SE which was instituted only 38 or 37 years earlier. The PoTE may in fact have been the first era to imitate — or try to compete with? — the SE. Thereafter, similar eras were inaugurated for neighboring Aradus (259 BCE) and Sidon (sometime in the first half of the 3rd century BCE). The establishment of an era within the period of Ptolemy II's tutelage over the region itself suggest a *laissez faire* approach by the Ptolemies, on some level, regarding Tyre's local matters. Recently, Kosmin argued that a connection may be found between the creation of local eras, including those of these Phoenician cities, and resistance to the establishment of imperial control over broad, multi-ethnic territories that had never been conjoined before<sup>129</sup>. One cannot envision how the institution of the PoTE would have been received by the Ptolemies, who did not institute any dynastic era such as the innovative Seleucid era. The evidence of the PoTE dates on the various surviving *instrumenta publica* seems to suggest that the PoTE was used intermittently and, incidentally, never on coins. If the discovery of the stamped storage-jar handles at Jal el-Bahr changes our perception to imply an increase in the popularity of its use in Tyrian administration only in the second century, under the Seleucids, that would be unsound. Kawkabani read eight different year numbers which he dated according to the PoTE, and restored a ninth PoTE number<sup>130</sup>. The earliest four have their dates spelled out in Phoenician words (e.g., **fig. 9**)<sup>131</sup>. Thereafter, the PoTE years appear in numerals. The first two of these textual dates fall during Ptolemaic hegemony, 205/4 or 204/3 BCE (71 PoTE)<sup>132</sup> and 203/2 or 202/1 BCE (73 PoTE)<sup>133</sup>, while the next two are already under Seleucid rule, 201/200 or 200/199 BCE (75 PoTE)<sup>134</sup> and 198/7 or 197/6 BCE (78 PoTE)<sup>135</sup>. The change in regimes does not seem to have affected the institution of stamping. The employment of the PoTE persisted until 114 PoTE (161/0 BCE according to its synchronic 152 SE date<sup>136</sup>) and it is likely that it continued

124 FINKIELSZTEJN 1998, 114; FINKIELSZTEJN 2003, 479; FINKIELSZTEJN 2015, 85.

125 ELAYI 2003, 21.

126 KAWKABANI 2005, 64.

127 KAWKABANI 2005, 71.

128 See above, note 17.

129 KOSMIN 2018, 97–98.

130 KAWKABANI 2005, 47–48 J-B 98. I am discounting the two stamps that Kawkabani read as 159, as those dates are now uncertain.

131 KAWKABANI 2005, 62 (from the unusual way these dates were presented in KAWKABANI 2003, Finkielsztein listed two erroneous dates (FINKIELSZTEJN 2004, 251 Table I). Interestingly, the earliest *instrumentum publicum* known to use the PoTE also has the number of the year also spelled out. The year was PoTE year four and the object was a sealing (BORDREUIL 1995, 190–191; BORDREUIL 1996, 48–49). Elayi noticed that not all year numbers under 100 were spelling out, and concluded that one cannot generalize the spelling out of year numbers as a rule (ELAYI 2004, 194). Nevertheless, it is reasonable that as the year number grew, there would have been a tendency to use numerals instead of words for the number.

132 KAWKABANI 2005, 38 J-B 69.

133 KAWKABANI 2005, 40 J-B 74.

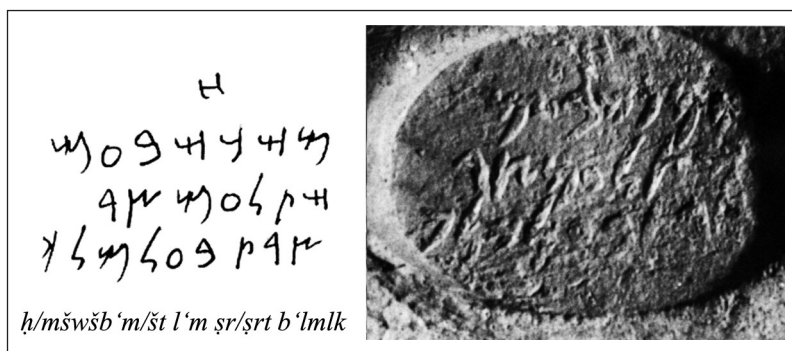
134 KAWKABANI 2005, 17 J-B 18.

135 KAWKABANI 2005, 35 J-B 60; 38 J-B 70.

136 KAWKABANI 2005, 30 J-B 47.



Fig. 9:  
Stamp impression J-B 18 and  
Kawkabani's drawing of its  
inscription (from KAWKABANI  
2005, 17).  
Kawkabani's reading is  
*ḥ / mš wšb 'm / št l 'm šr / šrt b 'lmlk*.  
The date is rendered in words  
(>five and seventy<).



for the full century-and-a-half until the institution of the ATE. Kosmin's broad perspective, whereby local eras imply opposition to Seleucid imperial control and particularly its era<sup>137</sup>, cannot be identified in the frequency of PoTE dates found in the archaeological record.

### The Seeming Exceptionality of the Jal el-Bahr Storage-Jar Assemblage

Should the stamping practices on the Jal el-Bahr storage jars be considered exceptional? Why, for example, have no stamping traditions been found on storage jars of Sidon? In my view, it is entirely possible that an assemblage of stamped storage jars will yet be found in Sidon, as other objects reflecting institutions of independent Phoenician administrations have appeared over the decades. Sidonian *instrumenta publica* are known. A mold for producing lead scale weights was uncovered in Sidon<sup>138</sup>. In the Kedesh archive a sealing impressed with an official seal of Sidon was identified<sup>139</sup>, and a second inscribed sealing may also reference Sidon<sup>140</sup>.

The Jal el-Bahr storage-jar assemblage was a fortuitous find. Very few Tyrian storage-jar stamped handles of this general type were found before the discovery; they were individually reported and later summarized by Finkielsztejn (×4)<sup>141</sup>, and Elayi (×8)<sup>142</sup>. Another example of a similar fortuitous find is the Dor group of storage-jar stamps. The first 19 were found in excavations at that city in 1980–1981<sup>143</sup>. Since then, an additional two Dor group stamped handles were found at Har Hourshan<sup>144</sup>. There is evidence for other Phoenician cities adopting the practice of placing stamps on storage jars. Besides Tyre, the city with the most numerous apparently locally produced stamped handles is Berytus (×7)<sup>145</sup>, and there may be a connection between the extensive excavations there and the discovery and subsequent ascription of a new group of stamped handles to that city.

137 KOSMIN 2018, 97–98.

138 FINKIELSZTEJN 2015, 83–84.

139 ARIEL – NAVEH 2003, 75–77; ARIEL forthcoming, INS 007.

140 ARIEL forthcoming, INS 004. One of the inscriptions in the Jal el-Bahr assemblage may reference Sidon. It was read by Kawkabani (KAWKABANI 2005, 23 J-B 31) as *b'l šdny*, but it might also be *b'l šdn y*, the Baal of Sidon and the letter yod. This, however, is not an official seal of Sidon, but of Tyre.

141 FINKIELSZTEJN 1998, 107–109.

142 FINKIELSZTEJN 2003, 28–29 Groups I–III; 30 Group VI.

143 For a complete stamped storage jar, of a bag-shaped type, see ARIEL ET AL. 1985, 136. Elayi suggested that the torpedo-shaped jars described by Kawkabani were also bag-shaped (ELAYI 2004, 193).

144 FINKIELSZTEJN 1998, 89.

145 FINKIELSZTEJN 1998, 91–95.

Beyond the careful collection of known stamped Hellenistic jar handles made by Finkielsztejn and Elayi, more isolated finds of stamped handles apparently from locally produced jars continue to be identified. In 2005, in analyzing an unclassified stamped handle from excavations at 'Akko, whose stamp had what were thought to be »Semitic characters«, I added much additional unpublished material not in Finkielsztejn's and Elayi's surveys, including items from Lebanon and Israel<sup>146</sup>. Although it was difficult to come to conclusions for the production sources of most of the items, it is clear that traditions of stamping storage-jar handles have had a long history in the Southern Levant. With the influx of many classes of transport amphorae with stamps on their handles from the west in the 3rd cent. BCE, it was natural for the practice to regain its former popularity, or to be adopted *de novo*.

### Conclusion

Towards the end of Kawkabani's third article, the author summarized the contribution of the Aegean amphora handles, including an unclassified subgroup of five stamped handles<sup>147</sup>, and came to the essentially unfounded conclusion that they lower the dating of the Phoenician inscribed material, down to the 2nd and 1st centuries BCE<sup>148</sup>. It seems the L symbol itself and other details on above-mentioned bilingual stamped handles (he noted a retrograde letter, apparently referring to the epsilon on J-B 132<sup>149</sup>) led him to that position. In the discussion that immediately followed, on the temple, this post-2nd-century dated brought Kawkabani to further state that not only were the objects later than the second century, but the temple as well functioned until the end of the Hellenistic period<sup>150</sup>. The four bilingual stamped handles are, in fact, consistent with the dates of the SE and PoTE eras, and there is no evidence that they belong anywhere but in the 2nd century.

Whether or not my refinement of the dating of the Jal el-Bahr Hellenistic assemblage (205/4 [204/3]–133/2 BCE) is accepted, it seems reasonable to propose that the site was no longer in use after the murder of Demetrius II in 125 BCE, and, after the declaration of autonomy from Seleucid suzerainty in the following year.

The Jal el-Bahr Tyrian storage-jar assemblage serves to highlight the city's administrative prowess, even though relatively large numbers of *instrumenta publica* were known beforehand. One need only look to regions adjacent to Phoenicia, for example Syria in the north and the region to the south and east, then called Judah, from the end of the 3rd century BCE through the first two thirds of the 2nd century BCE, to understand how highly developed, relative to those regions, Tyrian administrative institutions were. Tyre's »special position in the Hellenistic Levant«<sup>151</sup> is particularly seen in the dominance of its mint over all other Phoenician mints in the Hellenistic period, by large numbers of extant scale weights from the city (though not as many as from Aradus and Marathus), and by more official sealings from that city (without even counting the material from the Kedesh archive).

The relative quantities of the Jal el-Bahr Phoenician-inscribed stamps may also make a contribution. If one can assume that the fluctuations in the dates on the handles are not the result of the failure of the crops or produce that would have been contained in the Tyrian storage jars, or fluctuations based upon other 'natural' causes, then the frequencies of the dates on the stamps may reflect the ebb and flow of Tyrian administrative institutions. Of the roughly 110 well-dated handles, I find that they peak between 190/89 and 170/69 BCE. The mean year

146 ARIEL 2005, 185–187. A more recent find of a locally-stamped jar handle comes from Tel Hebron (Ariel in preparation).

147 KAWKABANI 2008, 55.

148 KAWKABANI 2008, 56.

149 See above, note 60.

150 KAWKABANI 2008, 56.

151 FINKIELSZTEJN 2015, 85.

was 175/4 BCE (138 SE), and the year with the most handles represented is 170/69 BCE (143 SE) with 11 handles. These dates harmonize with the dated sealings in the Kedesh archive and suggest that there was growth of Tyrian administrative institutions during the middle of the first half of the 2nd century BCE, roughly contemporary with the reign of Antiochus IV (175–164 BCE).

Another confluence may be drawn between the dates of the four bilingual Tyrian stamped handles at Jal el-Bahr and the Greek-inscribed stamped handles from what may also be called southern Phoenicia. The 21 handles stamped at Dor to the south and noted above are all in Greek and all (consensually) date to the Seleucid usurper Tryphon's second regnal year, 141/0 BCE<sup>152</sup>. Three other individual stamped handles in Greek and dated by the SE, with no suggested place of stamping were found: one at Jaffa<sup>153</sup>, one at Tell Shiqmona<sup>154</sup> and one at Khirbat Sharati<sup>155</sup>. The range of dates of the Tyrian bilingual stamps falls between 150/49 and 145/4 BCE. This may suggest that Greek was more common on *instrumenta publica* in the years just before the first (major?) Phoenician autonomy, of Tyre in 125 BCE.

I have noted that the practice of stamping storage-jar handles at Jal el-Bahr was unaffected by the transfer of Tyre from Ptolemaic to Seleucid hegemony at the end of the 3rd century BCE. It also does not seem to have been affected by the city's receipt of the status of ἱερός και ἀσύλῳ (>holy and inviolate<), which appeared on Tyrian coins beginning in 141 BCE. The latest dated stamped handle from Jal el-Bahr seems to be J-B 43 (133/2 BCE), roughly eight years after that city's milestone. Therefore, the end of Jal el-Bahr, somehow, appears to be related to the events leading up to Demetrius' last stand at Tyre or the aftermath of his death, which coincided with the >outbreak< of autonomy in 125 BCE. This analysis of the Jal el-Bahr storage-jar assemblage raises the possibility, if not likelihood, that the year of Tyre's autonomy, 125 BCE, was as much a year of disruption as it was a year of new beginnings.

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152 ARIEL ET AL. 1985, 141–142; KOSMIN 2018, 93.

153 FINKIELSZTEJN 1998, 87 A1, 133/2 BCE.

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