# Beyond Food Women and Breastfeeding in the Phoenician and Punic World\*

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#### Abstract

The aim of this paper is to analyse the role of breast milk in the life cycle of the Phoenician and Punic communities. Despite its universality, our starting point is to consider breast milk and the ways it was used and understood as cultural and social phenomena. We explore the diverse uses of breast milk from birth to death in written and iconographic sources as well as the material record from Phoenician, Punic, Levantine, Egyptian, and Graeco-Roman societies. In the first part of the paper we discuss the beginning of breastfeeding for new-borns, its duration, and the process of weaning. We then move on to define the uses of breast milk in adulthood. We contend that breast milk might be used in curative practices, in communal rituals and in funerary rites. In doing so, we stress the essential role of breast milk from a biological, cultural, and ritual perspective and focus on the centrality of certain women in all these contexts.

#### Keywords

Breastfeeding; Milk; Weaning; Women; Children; Phoenician; Punic.

#### Introduction

It is generally accepted that breastfeeding is a vital component of infant care and is crucial in creating the mother-infant relationship. This idea comes mainly from the understanding of lactation as a universal practice that specifically and exclusively derives from our condition as mammals and, therefore, is closely related to our animal nature. Indeed, at a biological level the production of milk after delivery is part of the reproduction process itself and, as in the case of all mammals, its main aim is to provide adequate nutrition for the offspring.

However, in contrast to other mammals, among humans breastfeeding is constituted as a social and cultural practice and, therefore, its performance depends on the learnings, beliefs, values and norms related to the group of which we form part. This social and cultural character means that, while all human groups have considered maternal

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breastfeeding as a fact of nature required for the survival of the infant, its associated practices are not uniform, either in their execution or in their interpretation. In fact, breastfeeding practices and their meanings differ notably according to the cultural, historical, social and even personal context in which they take place<sup>1</sup>.

Despite the strong cultural and social component of these practices, the few studies devoted to breastfeeding in the past have usually ignored the role of women. The frequent relegation of one of the main actors (the mother) corresponds, on one hand, to the fact that most of these studies have focused on the substance (the maternal milk) and on the infant, to the detriment of the breastfeeder or nurse. Indeed, the consumption of maternal milk is a practice that does not generally involve the use of any material elements and so material culture either directly or indirectly related to it is scarce<sup>2</sup>; most studies have specifically focused on human remains. In this connection, while some studies have recently evidenced the metabolic costs of breastfeeding for the mother<sup>3</sup>, most of them have focused on the infant, developing possible reconstructions of the weaning process through cementum annulation analysis and isotope ratios<sup>4</sup>.

For their part, the iconographic representations of breastfeeding women with infants, traditionally encompassed under the etiquette of courotrophic images, have been frequently read through the lens of the divine. Widely diffused in the Mediterranean during the I Millennium BC, these representations have mainly been interpreted as nursing goddesses closely intertwined with fertility and with so-called mother goddesses<sup>5</sup>. Through these readings, breastfeeding women become a universal, abstract symbol shared by all the community, thus negating the individuality and agency of the flesh-and-blood women through the usurpation of their central and active role in the breastfeeding practice<sup>6</sup>.

In recent years, several studies have sought to recover the agency of real women in the Phoenician and Punic world, evidencing their active role in different arenas of daily life, both in the Levant and in the Western colonies<sup>7</sup>. However, none of these studies have focused on breastfeeding, in spite of the importance of this exclusively female practice that responds to the first food consumed by all humans, regardless of gender, class or status. In fact, until the invention of an optimal formula milk in the mid-twentieth century, maternal milk has been the only way to ensure the health and the survival of a newborn,

<sup>&</sup>lt;sup>1</sup> Rodríguez García 2015; Stuart-Macadam 2017.

Small spoons, vessels or bottles may have been used to feed infants during their first months of life, mostly when breastfeeding was not successful or the mother was unavailable to breastfeed the baby (REBAY SALISBURY 2017: 22). Although these artefacts are very rare, feeding vessels have been documented since Neolithic times (EIBNER 1973; MARAOUI TELMINI 2009; MELLER 2011) and their use is mostly related to the weaning process. Interestingly, some artefacts found in Graeco-Roman contexts have been interpreted as breast pumps (GOUREVITCH 1990; OBLADEN 2012; CENTLIVRES CHALLET 2016).

<sup>&</sup>lt;sup>3</sup> Rebay Salisbury 2017: 15-16.

HOWCROFT 2013; FULMINANTE 2015; SCHMIDT – KWOK – KEENLEYSIDE 2015; MILLER et al. 2017; REBAY SALISBURY 2017.

<sup>&</sup>lt;sup>5</sup> Bonafante 2003; Goodison – Morris 2013.

<sup>&</sup>lt;sup>6</sup> SERED 1994.

See, among others: Delgado 2008; 2016a; 2016b; Delgado – Ferrer 2007; 2011a; 2011b; 2012; Delgado – Rivera 2018; Ferrer – Lafrenz 2016; López-Bertran – Aranegui 2011; López-Bertran – Garcia-Ventura 2012; 2016; Oggiano 2012.

and the failure or impossibility of breastfeeding has been one of the main causes of infantile mortality<sup>8</sup>.

# 1. The vital role of breast milk: consumption and emotional bonds in early infancy

#### 1.1. Breast milk as primary food

In recent decades, the World Health Organization has repeatedly stressed the importance of early breastfeeding. Specifically, breastfeeding is strongly recommended within the first hour after labour because the sucking reflex is strong and the newborn is able to consume the colostrum, which is rich in nourishment and in immunoglobulin and other defensive substances<sup>9</sup>.

However, this modern-day recommendation has not been practised at other times and in other societies. For instance, Greek and Roman gynaecological treatises advised starting breastfeeding two or three days after birth, after wrapping the newborn, so as to avoid the consumption of colostrum. In his treatise *Gynaecology*, Soranus of Ephesus (second century AD) wrote that the newborn should not feed during the first days of life, because he or she was already fed by the nutrients given by the mother during the pregnancy. In the same vein, he proposed rejecting the colostrum, or "first milk", because it was considered greasy and difficult to digest, as well as incomplete. Soranus recommended the use of a wet-nurse during the first month of life or until the newborn was clearly in good health<sup>10</sup>.

However, this advice to delay the beginning of lactation was not universal, since other contemporary physicians, specifically Damastes and Apollonius, advocated an early start<sup>11</sup>. Early initiation was also recommended by contemporary rabbis, who advocated the use of wet-nurses only in exceptional circumstances because their milk was of poorer quality<sup>12</sup>. These heterogeneous data regarding the start of lactation and the consumption of the colostrum make clear that breastfeeding was not just a natural practice but a cultural construction as well.

Breastfeeding was considered important for the mothers as well as for the newborn. Several studies have demonstrated that lactation improves maternal health thanks to the release of prolactin and oxytocin, which enhances psychological well-being and prevents post-partum depression<sup>13</sup>. Additionally, breastfeeding reduces postpartum bleeding, contracts the uterus after birth and lowers the risk of breast infections<sup>14</sup>, and also increases mother-child bonding in an emotional and psychological sense.

In spite of all these positive aspects, however, lactation is very costly metabolically for the mother, as it requires the additional ingestion of calories (up to 500 kcal per day, according to some estimates). Indeed, breastfeeding is the most demanding stage in the reproductive cycle and is a less efficient way of transmitting energy than placental

<sup>&</sup>lt;sup>8</sup> RODRÍGUEZ GARCÍA 2015: 408.

<sup>&</sup>lt;sup>9</sup> KONIZ-BOOHER et al. 1991.

<sup>&</sup>lt;sup>10</sup> TEMKIN 1956: 88-89.

<sup>&</sup>lt;sup>11</sup> Temkin 1956: 87.

<sup>&</sup>lt;sup>12</sup> Weingarten 2005: 2.

<sup>&</sup>lt;sup>13</sup> Rebay-Salisbury 2017: 15.

<sup>&</sup>lt;sup>14</sup> Meek 2011.

absorption. Also significant are the osteological consequences of carrying an infant whose weight is gradually increasing<sup>15</sup>.

Turning now to the main focus of our study, the Phoenician-Punic world, unfortunately few medical and religious treatises state either the exact moment of the beginning of breastfeeding practices, or the cultural consideration of the colostrum. Nevertheless, some Canaanite literary sources record that lactation was started promptly. The short mythological account "The handsome gods" (KTU 1.23), for example, narrates the conception and birth of *Sabru* and *Salimu* are astral gods, sons of the god *Ilu* and two mortal women; interestingly, the two brothers are repeatedly labelled "the voracious [children] of only one day that suck from the breast of the Lady". The explicit reference to the early suckling of the two newborns suggests the possibility of early breastfeeding and does not reflect the negative construction of colostrum and its consumption mentioned above.

In spite of this early initiation of breastfeeding, it is interesting that, according to some written sources, women who have just delivered are considered unclean. This postpartal impurity is perfectly illustrated by some Babylonian texts, in which the term *musukkatu*, "taboo", is used to refer to both menstruation and postpartum. These texts also state that after labour women must rest in confinement throughout the period of uncleanness, that may last thirty days; when this period is finished, they perform a ritual bath<sup>17</sup>.

The same conception of impurity appears in the Old Testament where it is explicitly stated that "if a woman conceives, and bears a male child, then she shall be unclean seven days; as at the time of her menstruation, she shall be unclean. When the child is male, she is unclean for these seven plus an additional 33 days; when the child is female, it doubles; she is unclean for fourteen plus an additional 66 days"<sup>18</sup>.

Interestingly, after these restrictions (initially to do with the delivery, and extended to the first period of lactation), taboos and restrictions continued to affect nursing mothers throughout the breastfeeding period. Most of these restrictions are to do with avoiding the corruption of breast milk, and thus underline the importance of this primary food had in Antiquity. Perhaps the most striking is the prohibition of sexual intercourse for mothers in lactation (and also for wet-nurses) mentioned in a Sumero-Akkadian proverb and in Soranus, so as not spoil the breast milk or hinder the infant's ability to suckle<sup>19</sup>.

#### 1.2. The prolongation of breastfeeding

The scarcity of literary sources not only limits our knowledge of the beginning of lactation, but its length as well. Near Eastern texts, especially medical and moral treatises or contracts of wet-nurses, clearly attest to the existence of long periods of breastfeeding of between two and three years. These data coincide with the periodization of lactation in pre-industrial societies<sup>20</sup>. Long periods of lactation are specifically reported in *Instructions of Ani* (New Kingdom, c. 1280 BC), a text intended to instruct the children in their duties towards their parents, where it is clearly stated that lactation is practised

<sup>&</sup>lt;sup>15</sup> Thompson 2013: 294; Rebay Salisbury 2017: 15.

<sup>&</sup>lt;sup>16</sup> DEL OLMO 1981.

<sup>&</sup>lt;sup>17</sup> Stol 2000: 205-206.

<sup>&</sup>lt;sup>18</sup> Lev. 12, 2.

<sup>&</sup>lt;sup>19</sup> STOL 2000: 184-185.

<sup>&</sup>lt;sup>20</sup> Gruber 1989; Marsans 2003; Fulminante 2015; Feucht 2016.

for three years<sup>21</sup>. Equally, contracts of lactation from the First Babylonian (1800-1500 BC) and Neo-Babylonian (c. 625-500 BC) periods record the same duration, and even detail the features of the services provided and the salary<sup>22</sup>. In the same vein, the deuterocanonical books, dated to the second century BC, also contain a reference to this long period of lactation, when a mother exhorts her son: "My son, have pity on me! Even before you were born, you grew inside my body for nine months. Then I nursed you at my breast for three years. And until this day, I have looked after you and taken care of you".<sup>23</sup>

In all probability, the lactation period tended to be long in the Phoenician-Punic world, in both urban and rural contexts and among both the elites and the commoners. The length of this practice is attested by some coroplastic representations of kourotrophic scenes documented in sites in the Levant and in the Western colonies. Indeed, all these figurines present the same iconography that reproduces a woman (seated or upright) breastfeeding a child who, to judge from his/her gestures and position, is no longer a baby (Fig. 1). In addition, some funerary razors deposited as grave-goods in several Punic tombs depict Isis breastfeeding her son Horus. Although this is an Egyptian motif, this image was very common in the Phoenician and Punic visual repertoire: in some cases, Horus is represented as an adult, standing on a kind of stool in order to suck Isis' breast (Fig. 1).

The long maintenance of lactation was intended to foster the child's biological development, but the practice may also have been used as a system of contraception since, as mentioned above, breastfeeding causes anovulation. The close relation between breastfeeding and fertility is illustrated in the Biblical passage of Gomer, wife of Hosea, who became pregnant immediately after she had finished breastfeeding their daughter, Lo-Ruhamah<sup>24</sup>.

Although urban elites may have practised long periods of lactation, it is also quite possible that they used wet-nurses in order to increase their own birth rates. According to literary sources and iconographic representations, this practice was common among Ancient Near East royalty and aristocracy<sup>25</sup>, and it is also mentioned in the Old Testament in relation to the royal family<sup>26</sup>.

The frequent recruitment of wet-nurses by the elites allowed children to be breastfed over a long period and thus reduced the risk of premature infant death due to dehydration. It also hastened the restoration of the biological mother's fertility and thus reduced the time span between her offspring. Given the importance of patrilineality in the Phoenician world, this increased fertility would have been especially valued if the previous child had been a girl. However, despite the presence of this practice among the elite families, the consumption of wet-nurse's milk might involve an element of risk: the newborn might not be immune to the germs carried by the nurse, or her mature milk might not be ideally matched to the needs of the infant during the first weeks of life<sup>27</sup>.

<sup>&</sup>lt;sup>21</sup> Orriols Lloch 2012: 20.

<sup>&</sup>lt;sup>22</sup> COUTO – GARCIA-VENTURA: in press.

<sup>&</sup>lt;sup>23</sup> 2 Mac. 7, 27.

<sup>&</sup>lt;sup>24</sup> Ho. 1, 8.

<sup>&</sup>lt;sup>25</sup> Marsans 2003: 202; Feucht 2016: 207; Couto – Garcia-Ventura in press.

<sup>&</sup>lt;sup>26</sup> Gen. 24, 59; Exod. 2, 9; 2 Kgs. 11, 2; 2 Cron. 22, 11.

<sup>&</sup>lt;sup>27</sup> Rebay Salisbury 2017: 21.

Among commoners, breastfeeding may also have been entrusted to wet-nurses, though mainly in the form of what is known as supportive lactation, without any economic retribution. In contrast to the elites, in this situation the nurses may have been other women in the community (either from the family or the wider social group) if biological mothers were unable to feed their offspring (for example, if the mother died after birth, or had a breast infection). This important practice, known as cross-nursing rather than wet-nursing, not only enabled the survival of the young but also strengthened solidarity between groups and connected people through a kinship (milk bonds) that can be interpreted in a social sense rather than a biological one<sup>28</sup>.

#### 1.3. The weaning process and the end of early infancy

Just as the composition of maternal milk changes over the lactation period, so do the social practices associated with its consumption. One of these practices is the weaning process, which begins with the introduction of supplementary foods and ends with the cessation of lactation; like breastfeeding, it is a cultural and social process rather than something that occurs at an isolated, unique point in time.

Several recent archaeological studies have focused on the process of weaning through a diversity of bio-anthropological approaches, in particular through the analysis of dental microwear on adult teeth and isotope ratios of nitrogen and oxygen in children's skeletons<sup>29</sup>. Most of these studies have been undertaken in prehistoric Europe and in the Graeco-Roman world<sup>30</sup> and, in the vast majority of cases, their results suggest that children were exclusively breastfed during the first six months of their lives. From that point onwards, lactation was accompanied by complementary feeding. This time point also coincides with the beginning of teething and the need to consume other nutrients, which are absent or only minimally present in maternal milk, such are iron, zinc and phosphorus<sup>31</sup>.

During this first stage of complementary feeding, foodstuffs like non-human animal milk, cereals and honey may have been essential. These foods may have been mixed together with water and consumed as porridges using small spoons as well as feeding vessels. The use of these materials to eat the first supplementary food seems to have been common throughout the Mediterranean. Greek terracotta figurines represent bottle feeding scenes<sup>32</sup>, and, indeed, some of these objects found in the Agora of Athens present teeth marks on the spout<sup>33</sup>. Later, Soranus explicitly recommends the use of feeding vases during the weaning process<sup>34</sup>. Judging from the visual imagery and the material record, this system of feeding also seems to have been customary throughout the Phoenician and Punic world. On the one hand, a clay figurine from the cemetery of Puig des Molins shows a seated woman with a small child on her lap, whom she is feeding by means of a vessel with a spout she is holding in her right hand (Fig. 2).

<sup>&</sup>lt;sup>28</sup> Chapman 2012.

<sup>&</sup>lt;sup>29</sup> Bourbou et al. 2013; Howcroft 2013.

<sup>&</sup>lt;sup>30</sup> See Dupras – Tocheri 2007; Howcroft 2013; Fulminante 2015; Schmidt – Kwok – Keenleyside 2015; Redfern et al. 2017; Miller et al.

<sup>&</sup>lt;sup>31</sup> Kennedy 2005; Kramer – Katuma 2009.

<sup>&</sup>lt;sup>32</sup> GOUREVITCH 1992.

<sup>&</sup>lt;sup>33</sup> Sparkes – Talcot 1970: 161.

<sup>&</sup>lt;sup>34</sup> Temkin 1956: 117.

The archaeological record also shows the presence of feeding bottles from cemeteries and shrines<sup>35</sup>. Most of them are dated from the fifth century onwards, but vessels from older chronologies attest to their use before this time<sup>36</sup>. Similarly, analyses of a sample of a feeding bottle from Carthage have shown residues of flour (and probably also milk), which suggest that these vessels were used to give supplementary food during the weaning process<sup>37</sup> (Fig. 2).

Until the cessation of breastfeeding at the age of around two or three, babies and small children could consume solid and semi-solid foodstuffs in addition to purées. For example, Isaiah mentions that Emmanuel was given honey and curdled milk during his early childhood<sup>38</sup>. Honey and curdled milk were both highly valued in the Levant, which were offered to special guests in the Bible<sup>39</sup> and are recurrently mentioned as symbols of the Earth's richness and fertility<sup>40</sup>. As in other cultures<sup>41</sup> the intake of prestige food that is not part of the staple diet suggests that the status of early infancy (including the weaning process) would also be constructed and represented through a distinct diet.

Furthermore, through this change in diet, the end of breastfeeding seems to represent a social transition from infancy to childhood – a new state characterized by a higher degree of autonomy and, more importantly, by full membership of the household group. This change in status caused by the cessation of breastfeeding affected the mother as well as the children. For her, this moment represents her full return to the household group at many different levels (economic, reproductive and religious) as illustrated by the return of Hannah to the Temple of Shiloh after the end of breastfeeding her son Samuel<sup>42</sup>. In fact, this moment represents an important change for the whole household group, involving the incorporation of a new member (the child) and the recovery of another (the mother). Consequently, as in other rituals of transition related to the life cycle of the house such as birth, marriage and death, the complete cessation of lactation would also be celebrated with a special feast, like the one organised by Abraham after the end of Isaac's weaning<sup>43</sup>.

In the Phoenician-Punic world the end of breastfeeding was probably also celebrated through more institutionalized communal ceremonies enacted in sanctuaries. The "temple-boys" or "crouching-boys" found on temples from the Levant and Cyprus may have been materializations of these rites. These sculptures, made out of stone or clay, represent babies or (to judge from their bodily position) small children. They are either naked or wearing small pieces of cloth, and, on many occasions, they are holding objects like animals<sup>44</sup> (Fig. 3).

A common feature of the "temple-boy" iconography is the array of apotropaic objects hanging from necklaces, earrings or bracelets. The prevalence of amulets may materially construct the concern of the adults in the family with the survival of the children during

MARAOUI TELMINI 2009: 6.

<sup>36</sup> MARAOUI TELMINI 2009: 6.

<sup>&</sup>lt;sup>37</sup> Chelbi 1988: 234; Maraoui Telmini 2009: 313.

<sup>&</sup>lt;sup>38</sup> Is. 7, 15.

<sup>&</sup>lt;sup>39</sup> Gen. 18, 8; 2 Sam. 17, 29.

<sup>&</sup>lt;sup>40</sup> Among other references: Ex. 3, 8; Lev. 20, 4; Nm 14, 8; Dt. 6, 3; Ez. 20, 6.

<sup>&</sup>lt;sup>41</sup> Fouts 2004; Laroia – Sharma 2006.

<sup>&</sup>lt;sup>42</sup> 1 Sam. 1, 20-24.

<sup>&</sup>lt;sup>43</sup> Gen. 21, 7-8.

<sup>44</sup> STUCKY 1993; BEER 1994; MARÍN 2003; 2016; BENICHOU SAFAR 2013; CANEVA – DELLE PIZZI 2014.

the lactation and weaning periods. In fact, the end of early infancy is the time with the highest rate of mortality during childhood, not only due to the baby's increased curiosity, but also due to the intake of new food stored in vessels. Both these features may increase the risk of infection due to pathogenic and parasitic agents; for instance, the consumption of unpasteurised animal milk is associated with the risk of contamination and transmission of zoonoses from animals to humans, especially in the first weeks of life<sup>45</sup>. Mortality during the weaning period is attested in Phoenician-Punic Ibiza, where exhaustive demographic studies have shown that the age bracket with the highest mortality rate is the first five years of life<sup>46</sup>.

"Temple-boys" have also been defined as votive offerings, because a large number were found in temples such as the one near Sidon devoted to Eshmun, the god of healing, which contained votive inscriptions<sup>47</sup>. In this case, these sculptures may have been deposited by adults in charge of children performing rites of passage. It has been suggested<sup>48</sup> that the rite performed was circumcision, but it may also have been a religious rite to sanction weaning<sup>49</sup>. According to this interpretation of the end of lactation, the resulting dietary change and the full inclusion of the child in the household might have been perceived as a significant moment that required increased divine protection due to his/her biological and social transition.

As we have seen, breastfeeding and weaning were both important practices for the children but they also empowered certain women in the household, specifically the breastfeeders. According to archaeological and written sources, they took exclusive care of the offspring during lactation, but they were also responsible for introducing supplementary food and for deciding when to wean. All these practices and decisions are vital for the health of the child but also for the woman and the other members of the community; thus, these women were empowered as essential agents for maintaining the lifecycle of their households through the regulation of its domestic demography and of economic, social and religious aspects.

## 2. Beyond Infancy: Uses of Maternal Milk

Due to its fundamental role during early infancy, it is possible that maternal milk was considered a potent substance that could also be used by adults and thus be attributed other values and meanings. For example, human milk was used for therapeutic purposes, and in "ritual breastfeeding" with a symbolic and/or religious significance<sup>50</sup>.

#### 2. 1. Therapeutic uses of human milk

The benefits of maternal milk for babies are well known, both now and in the past. As we mentioned, its antibacterial, antiviral and antifungal properties are essential for the child's wellbeing. Added to its hydrating and anti-inflammatory properties due to its high

<sup>45</sup> ROWLAND – BARRELL – WHITEHEAD 1978; HOWCROFT 2013; REBAY SALISBURY 2017: 22.

<sup>&</sup>lt;sup>46</sup> MÁRQUEZ GRANT 2010: Figs. 2 and 3.

<sup>&</sup>lt;sup>47</sup> Zamora 2008: 216-217; Caneva – Delle Pizzi 2014: 504-505.

<sup>&</sup>lt;sup>48</sup> Beer 1994: 128-129.

<sup>&</sup>lt;sup>49</sup> BEER 1994: 134-135; BENICHOU-SAFAR 2013; CANOVA – DELLE PIZZI 2014: 510-511.

<sup>&</sup>lt;sup>50</sup> Rodríguez-Berzosa 2016.

fat content, these features have meant that breast milk has often been used for healing practices across history.

Some therapeutic uses of maternal milk are clearly recorded in ancient Egypt, especially in the medical texts. Medical Papyrus n°10059 of the British Museum, dated to the 18th Dynasty (c. 1550-1295 BC), explains the composition of a remedy to treat a baby's burns<sup>51</sup>. Throughout the text, the boy is assimilated to Horus, inspired by his myth, and it is also noted that the best maternal milk for healing is the "milk of one who has borne a male child"; this is a standard formula that appears in several papyri that mention this milk as a therapeutic substance.

The medical papyri also give instructions for consuming the milk. In the vast majority of cases it must not be drunk, but applied to the body mixed with other ingredients to obtain unguents, poultices or liquids for enemas. For instance, the papyrus mentioned above explains how the milk is mixed with pods of acacia, ground or cut grains of barley, and coriander<sup>52</sup>. Other papyri explain how maternal milk is also used to treat infections, especially infections related to the digestive, breathing and ocular systems through the application of a poultice accompanied by the recitation of a magical formula<sup>53</sup>.

On some occasions, the consumption of milk is recommended for fertility testing or for childcare. The Berlin Papyrus, dated to the Middle Kingdom (c. 2160-1700 BC), describes a procedure by which to discern whether a woman is fertile (30381 I, 3-4v). The woman has to drink a potion comprising a mixture of watermelon and the maternal milk of a woman who has given birth to a male child; if she vomits, she will be pregnant. Equally, according to the same papyrus (3027 I, 7, 3-5), the breast milk of a woman who has borne a boy can be mixed with tips of papyrus and other grains to help a child achieve a long and healthy sleep<sup>54</sup>.

The therapeutic uses of maternal milk are also recorded in the material culture. For example, the small anthropomorphic jars used to store and pour female milk are imbued with high symbolic and ritual meaning. They represent a breastfeeder with her head and breasts perforated; presumably the liquid was introduced into the head, and then poured out through the breasts<sup>55</sup>. The association of these vessels with maternal milk is clearly demonstrated when they are inscribed with texts explaining how they are used to store maternal milk as medical prescriptions<sup>56</sup>. These special jars would have been used in rituals of transubstantiation in which the consumption of milk previously stored inside them would have transmitted its supposed therapeutic and magical properties. The milk becomes divine and powerful precisely because it is stored in jugs that, on many occasions, represent the goddess Isis<sup>57</sup>.

The same therapeutic uses of breast milk in certain medical afflictions, such as infections, burns, and fertility problems, are documented in the Graeco-Roman world. Influenced by Egypt, the Greeks and Romans also show a preference for maternal milk of women who have borne a boy<sup>58</sup>. However, in contrast to Egypt, the use and consumption

<sup>51</sup> BUDIN 2011: 144; MARÍN 2016: 89.

<sup>&</sup>lt;sup>52</sup> BUDIN 2011: 144.

<sup>&</sup>lt;sup>53</sup> Laskaris 2008.

<sup>&</sup>lt;sup>54</sup> BUDIN 2011: 145.

<sup>55</sup> KOEN 2008.

<sup>&</sup>lt;sup>56</sup> BUDIN 2011: 145.

<sup>57</sup> LASKARIS 2008: 460.

<sup>58</sup> LASKARIS 2008: 460; BOUDIN 2011: 148.

of this product by the Greeks is exclusively related to women and children, possibly due to the stigmatization of female bodies and their bodily fluids. In Roman culture its use seems to be more generic, as it is also used to treat the ailments of adult men. Along with its use in potions or unguents, in the Roman world maternal milk was also directly consumed through sucking, a practice strongly recommended by Galen<sup>59</sup>.

The wide therapeutic use of maternal milk in several Mediterranean cultures closely related with the Phoenician and Punic world opens up the possibility that these peoples also used it to treat disease. The discovery of surgical materials attests to the performance of medical interventions in this culture, as do osteological analyses that indicate traces of medical manipulation<sup>60</sup>. In addition, the existence of divinities devoted to well-being and healing shows the concern of the Phoenician and Punic peoples with health and recovery from disease. In this connection, the therapeutic and votive terracotta figurines are particularly interesting: mainly deposited in shrines related to health, they have been already analysed through the materialization of pain and curative practices<sup>61</sup>.

Some of these figurines have been found in the sanctuary of Bes in Bithia, Sardinia, where breast milk was probably used in certain therapeutic practices. Bes, an Egyptian divinity or demon, was considered the protector of pregnant women, women in labour, and children, and was also in charge of fertility and sexuality in general terms<sup>62</sup>. It seems likely that women would have visited the shrine in order to increase their chances of conceiving, to ensure a safe pregnancy and labour.

Along with these problems, mostly related to the reproduction, fertility and the wellbeing of the child, the data also refer to diseases which could also affect the mother during puerperium, and which have been largely ignored. For instance, some Mesopotamian texts, related either to the royal elites or to commoners, show a more comprehensive and complex reality of female healing remedies<sup>63</sup>. Some of these texts make explicit reference to women after birth (called *haristu*) who are the cause of concern in some oracles (K2370+10322 rev. iii). One of them, for example, describes a woman who has given birth and who is sad and not hungry; the conclusion is that her belly is full with air<sup>64</sup>. The same concerns surrounding puerperium women appear in some therapeutic Babylonian texts, which mention remedies for conditions directly caused by labour (such as abdominal pain, anus prolapse or "loose navel") and common diseases (like colds) during postpartum<sup>65</sup>.

With these recurrent concerns for the wellbeing and the health of women who have just given birth, it is likely that some women would also have visited the sanctuary to resolve problems connected to breastfeeding, like breast inflammations or the end of amenorrhea. According to Graeco-Roman medical texts, various diseases or conditions can be treated and healed with maternal milk<sup>66</sup>.

<sup>&</sup>lt;sup>59</sup> Laskaris 2008: 461-462.

<sup>60</sup> MARTÍN RUIZ 2016.

<sup>&</sup>lt;sup>61</sup> GALLEAZZI 1991; GARBATI 2008; LÓPEZ-BERTRAN 2017.

<sup>&</sup>lt;sup>62</sup> Velázquez 2007.

<sup>&</sup>lt;sup>63</sup> Couto 2018: 45.

<sup>&</sup>lt;sup>64</sup> COUTO 2018: 56.

<sup>65</sup> STOL 2008: 203-204.

<sup>66</sup> GOUREVITCH 1990; LASKARIS 2008: 460.

Egyptian and Graeco-Roman medical treatises indicate other diseases in which maternal milk was consumed, such as ocular infections<sup>67</sup>. Interestingly, some of the figurines found on the votive deposit of Bitia<sup>68</sup> and Neapolis<sup>69</sup> present the gesture of touching the eyes. They have been interpreted as representations of trachoma, an ocular infection that initially causes irritation and secretion and, if not treated properly, may eventually lead to blindness<sup>70</sup> (Fig 4). Along with these figurines, in these deposits some jugs and vases have also been recorded which may have been used to store unguents and/or poultices to heal ocular or other diseases. As in the Egyptian and Graeco-Roman world, these remedies may have had breast milk among their components.

The probable significance of maternal milk in these healing practices is also suggested by the strong emphasis in these figurines on the breasts. Most of these figurines are characterized by a highly schematic and simple representation of the human body; however, they present this strong emphasis on the breasts, through the addition of clay buttons or small incisions. Furthermore, a common gesture in these terracottas is the touching of breasts (Fig. 4). This special focus on the breasts is recorded not just in figurines associated with female genitalia, but in undetermined and masculine figures as well<sup>71</sup>. Therefore, the central role of breasts in these figurines may emphasize the curative and protective capacities of breast milk, as well as its use by visitors to the temple of healing and shrine of Bitia and Neapolis.

#### 2.2. The communal consumption of maternal milk

Along with its use for therapeutic purposes, maternal milk probably had a significant role in ritual contexts as well, being consumed (either literally or symbolically) to forge or strengthen the bonds between the participants. The joint consumption of maternal milk, a corporal fluid of great importance in the constitution of the person in both biological and social terms, could stress the ties created between the members of the ritual community during these ceremonies. The people would be connected through kinship, not in a biological or genetic sense but in a social one.

This collective consumption might be materialized through some anthropomorphic terracottas shaped like bottles, most of them documented in the tophets of Carthage, Motya and Monte Sirai (Fig. 5). These figures were manufactured with the same technique used to make bottles and jugs, although they could not be used as containers because of the large apertures in their bottom<sup>72</sup>. Likewise, their anthropomorphic representation is strongly schematized, with the sole exception of the body orifices, especially the breast and the genitals, which are emphasized. Both features can be interpreted in relation to the importance that Phoenician-Punic people attached to body fluids and, especially, to maternal milk. On the one hand, the bottle shape of these terracottas stresses the role of fluids like blood, semen and maternal milk, which were key substances in the construction of Phoenician-Punic corporealities as well as of persons as social entities. On the other hand, like the therapeutic-votive terracottas, the

<sup>67</sup> LASKARIS 2008.

<sup>&</sup>lt;sup>68</sup> Pesce 1965.

<sup>&</sup>lt;sup>69</sup> Moscati 1989.

<sup>&</sup>lt;sup>70</sup> Pesce 1965; Zucca 1997: 133-134.

<sup>&</sup>lt;sup>71</sup> LÓPEZ-BERTRAN 2017: 57-58.

<sup>&</sup>lt;sup>72</sup> LÓPEZ-BERTRAN 2016.

frequent exaggeration of the breasts does not seem to act as a gender marker, as they are associated with figurines with either male or female genitals<sup>73</sup>. In fact, the importance attached to the breasts seems to allude to the relevance of breastfeeding practices and, especially, to maternal milk.

The centrality of body fluids seems to be materialized also through the presence of feeding vessels in these ritual spaces, especially the anthropomorphic ones that present not just facial features but also breasts and phalluses in their spouts<sup>74</sup> (Fig. 5). The use of these vessels during ceremonies carried out in the tophets does not directly suggest the use and/or consumption of maternal milk: any liquid poured through these breast spouts could be used. Furthermore, the liquids consumed through these vessels could be defined as "social fluids", as they served to create emotional and social bonds among all their ritual consumers. In fact, the collective consumption of the same substance poured through these clay breasts not just recalls the act of breastfeeding, but also constitutes and strengthens a lactating community<sup>75</sup>. Therefore, if sharing the same wet-nurse enables the creation of milk-kinship, collective consumption from these vessels would establish and reinforce the same bonds in a ritual arena.

Besides, these terracottas and feeding vessels would have held considerable value in the constitution and reaffirmation of the person and, specifically, of his/her social relationships. Through these objects and, especially, through their emphasis on lactation, people would recall the beginning of their creation as a social person, but pre-existing bonds would also be re-established and strengthened, creating a sense of communion. Significantly, these objects were documented mainly in the tophets, where they were placed not in specific urns but in communal spaces as votive deposits located close to the cultic installations<sup>76</sup> or directly above the steps of a temple located in the tophet area<sup>77</sup>. Therefore, if we understand the tophets as complex spaces where different ritual practices were carried out<sup>78</sup>, it is possible that these objects participated in ritual actions whose main aim was to constitute and strengthen bonds among the members of the ritual community.

This collective consumption of maternal milk in some ritual ceremonies relocates certain women, specifically breastfeeding women, at the core of the community. In this case, the use of these vessels stresses the importance of these women and transfers the act of breastfeeding to the community as a whole. As in the domestic setting, through this act of generosity all the participants in the ceremony are brought together, and the bonds between them are consolidated. Besides, just as the mother establishes the first stages of the life of her infant with her decisions regarding lactation, this ritual consumption also marks and regulates the symbolic consolidation of these ritual communities.

<sup>&</sup>lt;sup>73</sup> LÓPEZ-BERTRAN 2016: 422.

<sup>&</sup>lt;sup>74</sup> Maraoui-Telmini 2009.

<sup>&</sup>lt;sup>75</sup> Chapman 2012: 7-8.

<sup>&</sup>lt;sup>76</sup> In the case of Motya: CIASCA – TOTI 1994: 8.

<sup>&</sup>lt;sup>77</sup> In the case of Monte Sirai: MOSCATI 1981: 19.

<sup>&</sup>lt;sup>78</sup> Xella 2013.

#### 2.3. The consumption of maternal milk and the afterlife

Maternal milk acquires a strong relevance during the first stages of life, as the first food consumed and the basis of the diet in early infancy. Breast milk was also highly regarded in other transitional periods of the lifecycle: for example, at the time of death, the final vital transition that, like birth, all people (regardless of gender, class or status) must face.

The centrality of maternal milk in this final step is keenly reflected through a series of objects deposited in the tombs as grave-goods to accompany the deceased during her/his journey into the afterlife. Among these objects are feeding vessels (guttus), documented in both child and adult graves. The deposition of these vessels suggests the presence (either literal or symbolic) of milk not only during the funerary rituals, but also (and more importantly) in this final journey<sup>79</sup>. On the one hand, its presence materializes the importance of milk in liminal moments, protecting the consumer from the risk that he/she may face during this time of danger; and on the other, milk is presented as a regenerative food, giver of life and, consequently, a basic food for nurturing the deceased during the initial stages of the afterlife. In this regard, the presence of feeding vessels in some graves would act in much the same way as the "jugs of milk" documented in Egyptian funerary contexts, through which the revitalizing power of maternal milk would be evoked as a primordial food<sup>80</sup>. This regenerating power of maternal milk is clearly illustrated in some later terracottas, such as the one documented in the rural sanctuary of Thinissut (Tunisia) dated in the first century BC, representing a "dea nutrix" breastfeeding an infant whose bodily position suggests that he or she is dead (Fig. 6).

The importance of milk as a protector and regenerator and as a marker of life's transitions is not only materialized through the presence of feeding vessels. In fact, a similar interpretation could be offered of several anthropomorphized jugs which, like the ones documented in the tophet, display some clearly highlighted body parts, especially the breasts, or the presence of some kourotrophic figurines documented mainly in funerary contexts as grave-goods. The presence of these figurines stresses not just the importance of the maternal milk, but also the power of breastfeeding as an act of regeneration.

Breastfeeding also appears depicted in funerary contexts in a variety of amulets, mainly those that reproduce the iconographic model of kourotrophic Isis<sup>81</sup> and plaque-amulets with the representation of the cow/Udjat<sup>82</sup> (Fig. 7). Kourotrophic Isis amulets are documented in Levantine cemeteries like Akziv and Byblos as well as in Western Phoenician colonies, and their use spanned the beginning of the I Millennium BC until the third century BC. This long-time frame and wide geographical area bear witness to the great success of this iconography (which is also present in other material supports, such as razors) as well as the importance attached to the practice of lactation, considered as an act of protection for both the living and the dead.

This power given to breastfeeding is also highlighted through plaque-amulets, which present the Egyptian eye Udjat, a representation of the god Horus and of good health on

<sup>&</sup>lt;sup>79</sup> Maraoui Telmini 2009: 322.

<sup>&</sup>lt;sup>80</sup> LÓPEZ GRANDE 2012: 42.

<sup>&</sup>lt;sup>81</sup> VELÁZQUEZ et al. 2012.

<sup>&</sup>lt;sup>82</sup> LÓPEZ GRANDE – VELÁZQUEZ 2012.

one side, and Hathor as a divine cow on the other. This last image is frequently attested in Central Mediterranean, mainly from the mid-sixth century onwards and throughout the fifth century, in the form of a cow feeding a calf<sup>83</sup>. This is an image that, again, stresses the act of breastfeeding.

#### 3. Conclusions

For the Phoenician and the Punic world there are only very scarce material, iconographic and textual references to breast milk, the practices of its consumption, and the ways these practices were understood. However, all of them seem to suggest the importance of maternal milk in biological, social and ritual terms. In fact, as we have shown, breast milk is attested to different degrees and at different intensities throughout the lifecycle of these peoples, from birth until death.

Through the analysis of the vital role of breast milk in Phoenician and Punic communities, we have distinguished two main arenas of use and significance, both closely related with the lifecycle. On the one hand, breast milk was crucial for the survival of infants as their exclusive source of nutrition during their first months of life. The end of lactation also represented a significant moment in the lives of children, but also in the lives of the mothers. On the other hand, maternal milk continues to be an important substance during adulthood: though no longer a staple food, its symbolic and biological properties turn it into a powerful substance consumed either literally or symbolically as medicine or as ritual. Breast milk was also fundamental in the afterlife, allowing dead people to be born again in the hereafter.

To conclude, we highlight the role of women in both arenas involving the consumption of maternal milk. Indeed, breastfeeding is part of the female reproductive cycle and, beyond its physical consequences, it empowers breastfeeders in the household cycle through the nurturing of the new generations. At the same time, the centrality of maternal milk in rituals of healing, communality and the afterlife situate these women as fundamental actors. Although women have been traditionally hidden and belittled, their action as nurturers and caregivers make them powerful agents in the creation and reinforcement of social bonds beyond the nuclear family through this exclusively female liquid.

<sup>83</sup> LÓPEZ-GRANDE – VELÁZQUEZ 2012: 510-511; 520-521.

#### References

- BARNETT MENDELSON 1987 = R. D. BARNETT C. MENDELSON, *Tharros: A Catalogue of Material in the British Museum from Phoenician and Other Tombs at Tharros, Sardinia*, London 1987.
- BARTOLONI 1996 = P. BARTOLONI, La necropoli di Bitia, Roma 1996.
- BEER 1994 = C. BEER, Temple-Boys: A Study of Cypriot Votive Sculpture, Jonsered 1994.
- BÉNICHOU-SAFAR 2013 = H. BÉNICHOU-SAFAR, "Les temple-boys: des desservants en puissance pour le sanctuaire", in F. BRIQUEL-CHATONNET C. FAUVEAUD I. GAJDA (eds.), *Entre Carthage et l'Arabie heureuse*, Paris 2013: 117-191.
- BONAFANTE 2003 = L. BONAFANTE, "Nursing Mothers in Classical Art", in A. O. KOLOSKI-OSTROW C. LYONS (eds.), *Naked Truths. Women, Sexuality and Gender in Classical Art and Archaeology*, London 2003: 174-193.
- BOURBOU et al. 2013 = C. BOURBOU B. T. FULLER S. J. GARVIE-LOK M. P. RICHARDS, "Nursing Mothers and Feeding Bottles: Reconstructing Breastfeeding and Weaning Patterns in Greek Byzantine Populations (6-15th Centuries AD) Using Carbon and Nitrogen Stable Isotope Ratios", *Journal of Archaeological Science* 40, 2013: 3903-3913.
- BUDIN 2011 = S. L. BUDIN, *Images of Woman and Child from the Bronze Age. Reconsidering Fertility, Maternity, and Gender in the Ancient World,* New York 2003.
- CANEVA DELLI PIZZI 2014 = S. G. CANEVA R. DELLI PIZZI, "Classical and Hellenistic Statuettes of the So-Called "Temple Boys": A Religious and Social Reappraisal", in C. TERRANOVA (ed.), *La presenza dei bambini nelle religioni del mediterraneo antico. La vita e la morte, i rituali e i culti tra archeologia, antropologia e storia delle religioni*, Ariccia 2014: 495-521.
- CENTLIVRES CHALLET 2016 = Cl. E. CENTLIVRES CHALLET, "Tire-lait ou biberons romains? Fonctions, fonctionnalités et affectivité", *L'Antiquité Classique* 85, 2016: 157-180.
- CHAPMAN, R. C. 2012 = R. C. CHAPMAN, "Oh that you were like a brother to me, one who had nursed at my mother's breasts". Breast Milk as a Kinship-Forging Substance", *Journal of Hebrew Inscriptions* 12, 2012: 1-41.
- CHELBI, F. 1988 = F. CHELBI "Objects de pharmacie dans la Tunisie Antique", *Revue d'Histoire de la Pharmacie* 76, 1988: 231-235.
- CIASCA TOTI 1994 = A. CIASCA M. P. TOTI, Scavi a Mozia. Le terrecotte figurate, Roma 1994.
- COUTO 2018 = E. COUTO, "Parteras, nodrizas y cuidadoras en Mesopotamia", in J. J. JUSTEL A. GARCIA-VENTURA (eds.), *Las mujeres en el Oriente cuneiforme*, Alcalá de Henares 2018: 45-64.
- COUTO GARCIA-VENTURA in press = E. COUTO A. GARCIA-VENTURA, "Nodrizas y lactantes en el Próximo Oriente Antiguo", *Dialogues d'histoire ancienne*.
- DELATTRE 1900 = A. DELATTRE, "La nécropole punique voisine de la colline de Sainte-Monique à Carthage. Rapport semestriel (janvier-juin 1900)", Comptes rendus des Séances de l'Académie des Inscriptions et Belles-Lettres 44, 1900: 488-511.
- DELATTRE 1901 = A. DELATTRE, "Fouilles exécutées das la nécropole punique voisine de Sainte-Monique, à Carthage", *Comptes rendus des Séances de l'Académie des Inscriptions et Belles-Lettres* 45, 1901: 583-602.
- DELGADO 2008 = A. DELGADO, "Alimentos, poder e identidad en las comunidades fenicias occidenttales". Cuadernos de Prehistoria y Arqueología de la Universidad de Granada 18, 2008: 163-188.
- DELGADO 2016a = A. DELGADO, "Mujeres, grupos domésticos y prácticas cuotidianas en las comunidades fenicias y púnicas occidentales", *Treballs del Museu Arqueològic d'Eivissa i Formentera* 74, 2016: 47-84.
- DELGADO 2016b = A. DELGADO, "Producción artesanal y trabajo femenino en las comunidades fenicias occidentales: una mirada crítica a las teoría de las esferas separadas", in A. DELGADO M. PICAZO (eds.), Los trabajos de las mujeres en el mundo antiguo, Tarragona 2016: 67-76.
- Delgado Ferrer 2007 = A. Delgado M. Ferrer, "Alimentos para los muertos: Mujeres, rituales funerarios e identidades coloniales", *Treballs d'Arqueologia* 13, 2007: 29-68.
- DELGADO FERRER 2011A = A. DELGADO M. FERRER, "Life and Death in Ancient Colonies: Domesticity, Material Culture and Sexual Politics in the Western Phoenician World", in B. Voss E.

- CASSELLA (eds.), *The Archaeology of Colonialism: Intimate Encounters and Sexual Effects*, Cambridge 2011: 195-213.
- DELGADO FERRER 2011B = A. DELGADO M. FERRER, "Representing Communities in Heterogeneus Wordls: Staple Foods and Ritual Practices in Phoenician Diaspora", in G. ARANDA M. SÁNCHEZ-ROMERO S. MONTÓN (eds.), Guess Who's Coming to Dinner: Feasting Rituals in the Prehistoric Societies of Europe and the Near East, London 2011: 184-2002.
- DELGADO FERRER 2012 = A. DELGADO M. FERRER "La muerte visita la casa: mujeres, cuidados y memorias familiares en los rituales funerarios fenicio-púnicos", in L. PRADOS C. RUIZ J. PARRA (eds.), La arqueología funeraria desde perspectiva de género, Madrid 2012: 123-155.
- DELGADO RIVERA 2018 = A. DELGADO A. RIVERA, "Death in Birth: Pregnancy, Maternal Death and Funerary Practices in the Phoenician and Punic World", in M. SÁNCHEZ-ROMERO R. M. CID (eds.), *Motherhood and Infancies in the Mediterranean in Antiquity*, London 2018: 54-70.
- DEL OLMO 1981 = G. DEL OLMO, Mitos y Leyendas de Canaán según la tradición de Ugarit. Madrid 1981.
- DUPRAS TOCHERI 2007 = T. L DUPRAS M. W. TOCHERI, "Reconstructing Infant Weaning Histories at Roman Period Kellis, Egypt, Using Isotopes Analysis of Dentition", *American Journal of Physical Anthropology* 134, 2007: 63-74.
- EIBNER 1973 = C. EIBNER, "Die urnenfelderzeitlichen Sauggefäβe. Ein Beitrag zur morphologischen und ergogischen Umschreibung", *Praehistorische Zeitschrift* 48, 1973: 144-199.
- FALSONE SPATAFORA FAMÀ 1980 = G. FALSONE F. SPATAFORA M. L. FAMÀ, "Gli scavi della zona K a Mozia e il caso stratigrafico del locus 5615", *Kokalos* 2, 1980: 877-929.
- FERRER LAFRENZ-SAMUELS 2016 = M. FERRER K. LAFRENZ-SAMUELS, "Women's Ritual Practice in the Western Phoenician and Punic World", in S. L. BUDIN J. M. TURFA (eds.), *Women in Antiquity: Real Women across the Ancient World*, London 2016: 533-551.
- FEUCHT 2016 = E. FEUCHT, "Motherhood in Pharaonic Egypt", in S. L. BUDIN J. M. TURFA (eds.), Women in Antiquity: Real Women Across the Ancient World, London 2016: 204-217.
- FONTAN LE MEAUX (coord.) 2007 = E. FONTAN H. LE MEAUX, La Méditerranée des Phéniciens: de *Tyr à Carthage*, Paris 2007.
- Fours 2004 = H. N. Fours, "Social and Emotional Contexts of Weaning among Bofi Farmers and Foragers", *Ethnology* 43, 2004: 65-68.
- FULMINANTE 2015 = F. FULMINANTE, "Infant Feeding Practices in Europe and the Mediterranean from Prehistory to the Middle Ages: A Comparison between the Historical Sources and Bioarchaeology", *Childhood in the Past: An International Journal* 8, 2015: 24-47.
- GALEAZZI 1991 = O. GALEAZZI, "Le figurine votive di Bithia tra paleo-patologia e paleo-antropologia", *Atti del II Congresso internazionale di studi fenici e punici*, Roma 1991: 875-886.
- GARBATI 2008 = G. GARBATI, Religione Votiva. Per una interpretazione storico-religiosa delle terrecotte votive nella Sardegna punica e tardo-punica, Pisa / Roma 2008.
- GOODISON MORRIS 2013 = L. GOODISON C. MORRIS, "Goodesses in Prehistory", in D. BOLGER (ed.), *A Companion to Gender Prehistory*, London 2013: 265-288.
- GÓMEZ-BELLARD GÓMEZ-BELLARD 1989 = C. GÓMEZ-BELLARD F. GÓMEZ-BELLARD, "Enterramientos infantiles en la Ibiza fenicio-púnica", *Cuadernos de Prehistoria y Arqueología Castellonenses* 14, 1989: 211-238.
- GOUREVITCH 1990 = D. GOUREVITCH, "Les tire-lait antiques et la consommation médicale de lait humain". *Histoire des Sciences médicales* 24, 1990: 93-98.
- GOUREVITCH 1992 = D. GOUREVITCH, "Femme nourrissant son enfant au biberon", *Antike Kunst* 35, 1992: 78-81.
- GRUBER 1989 = M. GRUBER, "Breast-Feeding Practices in Biblical Israel and in Old Babylonian Mesopotamia", *Journal of the Ancient Near Eastern Society* 19, 1989: 61-83.
- HOWCROFT 2013 = R. HOWCROFT, Weaned Upon a Time. Studies of the Infant Diet in Prehistory, Stockholm 2013.
- KENNEDY 2005 = G. E. KENNEDY, "From the Ape's Dilemma to the Weanling's Dilemma: Early Weaning and its Evolutionary Context", *Journal of Human Evolution* 48, 2005: 123-145.

- KOEN 2008 = E. T. KOEN, *Women in Ancient Egypt: The Religious Experiences of the non-Royal Women*, Unpublished thesis, Stellenbosch 2008.
- KONIZ-BOOHER et al. 1991 = P. KONIZ-BOOHER C. FISHMAN M. PARLATO A. ROBERTS, Recommendations from the Expert Meeting of Optimal Infant Feeding Practices, Washington 1991.
- KRAMER KATUMA 2009 = M. S. KRAMER R. KATUMA, "Optimal Duration of Exclusive Breastfeeding", *The Cochrane Library*, 2009: 1-18.
- LAROIA SHARMA 2006 = J. A. LAROIA D. SHARMA, "The Religious and Cultural Bases for Breastfeeding Practices Among the Hindus", *Breastfeeding Medicine* 1, 2006: 94-99.
- LASKARIS 2008 = J. LASKARIS, "Nursing Mothers in Greek and Roman Medicine", *American Journal of Archaeology* 112, 2008: 459-464.
- LÓPEZ-BERTRAN 2016 = M. LÓPEZ-BERTRAN, "Exploring Past Ontologies: Bodies, Jugs and Figurines from the Phoenician-Punic Western Mediterranean", *Cambridge Archaelogical Journal* 26, 2016: 413-428.
- LÓPEZ-BERTRAN 2017 = M. LÓPEZ-BERTRAN, "Materializar las enfermedades en el mundo púnico: las terracotas terapéutico-votivas", in B. ANTELA-BERNÁRDEZ C. ZARAGOAZÀ SERRANO A. GUIMERÀ-MARTÍNEZ (eds.), *Placer y Dolor. Las mujeres en la Antigüedad*, Alcalá de Henares 2017: 49-73.
- LÓPEZ-BERTRAN ARANEGUI 2011 = M. LÓPEZ-BERTRAN C. ARANEGUI, "Terracotas púnicas representando a mujeres: Nuevos códigos de lectutra para su interpretación", *Saguntum* 43, 2011: 83-94.
- LÓPEZ-BERTRAN GARCIA-VENTURA 2012 = M. LÓPEZ-BERTRAN A. GARCIA-VENTURA, "Music, Gender and Rituals in Ancient Mediterranean: Revisiting the Punic Evidence", *World Archaeology* 44, 2012: 393-408.
- LÓPEZ-BERTRAN GARCIA-VENTURA 2016 = M. LÓPEZ-BERTRAN A. GARCIA-VENTURA, "The Use of Facial Characteristics as Engendering Strategies in Phoenician-Punic Studies", *NEA* 79, 2016: 206-213.
- LÓPEZ GRANDE 2012 = M. J. LÓPEZ GRANDE, "Evocaciones a las diosas nutricias, a la leche materna y al nacimiento en recipientes rituales hallados en la necrópolis de Dra Abu el-Naga", in *Séptimo centenario de los estudios orientales en Salamanca*, Salamanca 2012: 39-49.
- LÓPEZ GRANDE VELÁZQUEZ 2012 = M. J. LÓPEZ GRANDE F. VELÁZQUEZ BRIEVA, "Amuletos-placa de iconografía egipcia: El modelo Vaca/Udjat en el ámbito Fenicio-Púnico", *CuPAUAM* 37-38, 2012: 509-523.
- MARAOUI TELMINI 2009 = B. MARAOUI TELMINI, Les vases-biberons puniques du bassin occidental de la Méditerranée: Monographie d'une forme, Manouba 2009.
- MARÍN 2003 = M. C. MARÍN CEBALLOS, "El niño", in J. Á. ZAMORA (ed.), El hombre fenicio. Estudios y materiales, Roma 2003: 199-215.
- MARÍN 2016 = M. C. MARÍN CEBALLOS, "La infancia en el mundo fenicio-púnico", in B. COSTA (ed.), Aspectos de la vida y la muerte en las sociedades fenicio-púnicas. XXIX Jornadas de arqueología fenicio-púnica, Eivissa 2016: 85-105.
- MARQUEZ GRANT 2010 = N. MARQUEZ GRANT, "La época púnica desde una perspectiva biológica: aportaciones del studio de restos humanos de la isla de Ibiza", *Mainake* 32, 2010: 159-203.
- MARSANS 2003 = H. MARSANS Women in Ugarit and Israel, Leiden 2003.
- MARTÍN Ruíz 2016 = J. A. MARTÍN Ruíz, "Enfermedad y medicina en la sociedad fenicio-púnica", in B. Costa (ed.), Aspectos de la vida y la muerte en las sociedades fenicio-púnicas. XXIX Jornadas de arqueología fenicio-púnica, Eivissa, 2016: 107-151.
- MELLER 2011 = H. MELLER, Bronzerausch: Spätneolithikum un Frühbronzezeit, Halle an der Saale 2011.
- MILLER et al. 2017 = V. A. MILLER B. K. HANKS M. JUDD A. EPIMAKHOV D. RAZHEV, "Weaning Practices among Pastoralists: New Evidence of Infant Feeding Patterns from Bronze Age Euroasia", *American Journal of Physical Anthropology* 162, 2017: 409-422.
- MOSCATI 1981 = S. MOSCATI, "Una figurina fittile da Monte Sirai", RStudFen 9, 1981: 19-21.
- MOSCATI 1989 = S. MOSCATI, Le figurine fittili di Neapolis, Roma 1989.
- MOSCATI 1990 = S. MOSCATI, L'arte dei Fenici, Milano 1990.
- OBLAIDEN 2012 = M. OBLAIDEN, "Guttus, Tiralatte and Téterelle: A History of Breast Pumps". *Journal of Perinatal Medicine* 40, 2012: 669-675.

- OGGIANO 2012 = I. OGGIANO, "Scopi e modalità delle azioni rituali femminili nell'area siro-palestinese del I millenio a.C.: Il contributo dell'archeologia", in V. NIZZO L. LA ROCCA (eds.), *Antropologia e archeologia a confronto*, Roma 2012: 223-249.
- ORRIOLS LLOCH 2012 = M. ORRIOLS LLOCH, "Mujer ideal, mujer infractora. La transgresión femenina en el antiguo Egipto", *Lectora: revista de dones y textualitat* 18, 2012: 17-40.
- PESCE 1965 = G. PESCE, Le statuette puniche di Bithia, Roma, 1965.
- RAMON TORRES 1996 = J. RAMON TORRES, "Puig des Molins (Eivissa). El límite NW de la necrópolis fenicio-púnica". *Pyrenae* 27, 1996: 53-82.
- REBAY SALISBURY 2017 = K. REBAY SALISBURY, "Breast is Best and Are There Alternatives? Feeding Babies and Young Children in Prehistoric Europe", *Mitteilungen der Anthropologischen Gesellschaft in Wien* CXLVII, 2017: 13-30.
- Redfern et al. 2017 = R. Redfern R. Gowland A. Millard L. Powell D. Göcke, "From the Mouths of Babes: A Subadult Dietary Stable Isotope Perspective on Roman London (Londinium)", *Journal of Archaeological Science* 36, 2017: 1127-1134.
- RODRÍGUEZ-BERZOSA 2016 = S. RODRÍGUEZ-BERZOSA, La lactancia en el Antiguo Egipto: una aproximación léxica y cultural. Tesis Doctoral. Barcelona 2016.
- RODRÍGUEZ GARCÍA 2015 = R. RODRÍGUEZ GARCÍA, "Aproximación antropológica a la lactancia materna", *Revista de Antropología Experimental* 23, 2015: 407-429.
- ROWLAND BARREL WHITEHEAD 1978 = M. ROWLAND R. BARREL R. WHITEHEAD, "The weanling's dilemma", *The Lancet* 311, 1978: 136-138.
- SCHMIDT KWOK KEENLEYSIDE 2015 = J. SCHMIDT C. KWOK A. KEENLEYSIDE, "Infant Feeding Practices and Childhood Diet at Apollonia Pontica: Isotopic and Dental Evidence", *American Journal of Physical Anthropology* 159, 2015: 284-299.
- SERED 1994 = S. SERED, Priestess, Mother, Sacred Sister. Religions Dominated by Women, Oxford 1994.
- SPARKES TALCOTT 1970 = B. A. SPARKES L. TALCOTT, Black and Plain Pottery of the 6<sup>th</sup>, 5<sup>th</sup> and 4<sup>th</sup> Centuries BC, Princeton 1970.
- STOL 2000 = M. STOL, Birth in Babilonia and the Bible. Its Mediterranean Setting, Groningen 2000.
- STUART-MACADAM 2017 = P. STUART-MACADAM, Breastfeeding: Biocultural Perspectives, London 2017.
- STUCKY 1993 = R. A. STUCKY, Die Skulpturen aus der Eschmun-Heiligtum bei Sidon. Griechische, römische, kyprische und phönizische Statuen und Reliefs vom. 6. Jahrhundert v.Chr. bis zum 3. Jahrhundert n. Chr., Basel 1993.
- TEMKIN 1956 = O. TEMKIN, Gynecology, Soranus of Ephesus, Baltimore 1956.
- THOMPSON 2013 = M. E. THOMPSON, "Comparative Reproductive Energetics of Human and Nonhuman Primates", *Annual Review of Anthropology* 42, 2013: 287-304.
- VELÁZQUEZ 2007 = F. VELÁZQUEZ BRIEVA, El dios Bes: de Egipto a Ibiza, Eivissa 2007.
- Velázquez et al. 2012 = F. Velázquez M. J. López-Grande A. Mezquida J. Fernández, "Amuletos de Isis *curótrofa* en el Mediterráneo fenicio-púnico. Producciones egipcias y/o elaboraciones locales", in *Séptimo centenario de los estudios orientales en Salamanca*, Salamanca 2012: 79-88.
- WEINGARTEN 2005 = S. WEINGARTEN, "Children's Food in the Talmudic Literature", in W. MAYER S. TRZCIONKA (eds.), *Feast, Fast or Famine: Food and Drink in Byzantium*, Adelaide 2005.
- XELLA 2013 = P. XELLA, "Tophet. An Overall Interpretation", in P. XELLA (ed.) *The Tophet in the Phoenician Mediterranean*, Verona 2013: 259-281.
- ZAMORA 2008 = J. Á. ZAMORA, "Epigrafía e historia fenicias: Las inscripciones reales de Sidón", in J. J. J. J. J. J. P. VITA J. Á. ZAMORA (eds.), Las culturas del Próximo Oriente Antiguo y su expansión mediterránea, Zaragoza: 2008: 211-218.
- ZUCCA 1997 = R. ZUCCA, "La città punica di Neapolis", in P. BERNARDINI R. D'ORIANO G. SPANU (eds.), *Phoinikes B Shrdn. I Fenici in Sardegna*, Cagliari 1997: 131-135.

# Figures



Fig. 1. A. Relief representing a breastfeeding woman with a child (Moscatt 1990); B. Terracotta representing a breastfeeding woman, found close to Tyre, 8th century BC (Fontan-Le Meaux 2007: fig. 233); C. Terracotta form La Albufereta (Photography: MARC-Museo Arqueológico de Alicante); D. Razors representing Isis breastfeeding Horus (Delattre 1900: 501; 1901: Fig. 4)



Fig. 2. On the right, terracotta from Puig des Molins representing a sitting woman feeding a child with a feeding-vase (Photography: Museu Arqueològic d'Eivissa i Formentera). On the left, some feeding vessels:

A. Mozia (after Falsone – Spatafora – Famà 1980: fig. 6 n° 305); B. Bitia (after Bartoloni 1996: n° 592); Eivissa (after Ramon 1996: fig. 32); D, E and F Tharros (after Barnett – Mendelson 1987: n° 36; 53 y 55)



Fig. 4. Therapeutic-votive terracotas from Bitia and Neapolis (Bitia: Museo Archeologico Nazionale Cagliari; Neapolis, after Moscatti 1989: figs. 29 and 121)



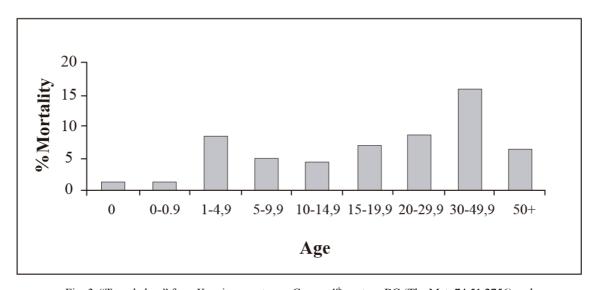
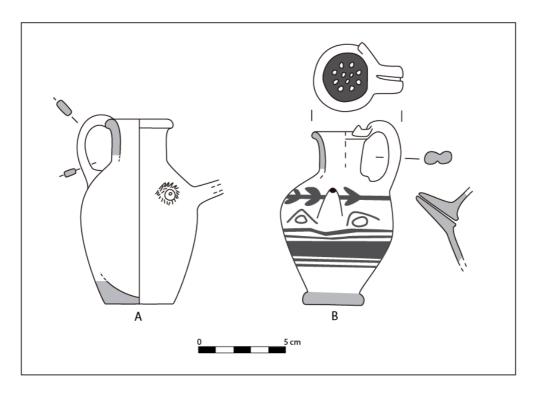


Fig. 3. "Temple boy" from Kourion sanctuary, Cyprus 4<sup>th</sup> century BC (The Met: 74.51.2756) and percentages of mortality in Eivissa during the Punic period (after MÁRQUEZ GRANT 2010: fig. 2).



 $\label{eq:fig. 5.} Feeding-vessels \ with \ representation \ of \ eyes \ from \ (A) \ Puig \ des \ Molins \ (after \ G\'omez \ Bellard - G\'omez \ Bellard - G\'omez \ Bellard - G\'omez \ Bellard - G\'omez \ (after \ Barnett - Mendelson \ 1987: \ Fig. \ 46).$ 



Fig. 7. Amulets of Isis curotropha (López Grande 2012:  $n^o$  168 y 169) and plaque with Udjat and cow (López Grande – Velázquez 2012: fig. 3 y 5)

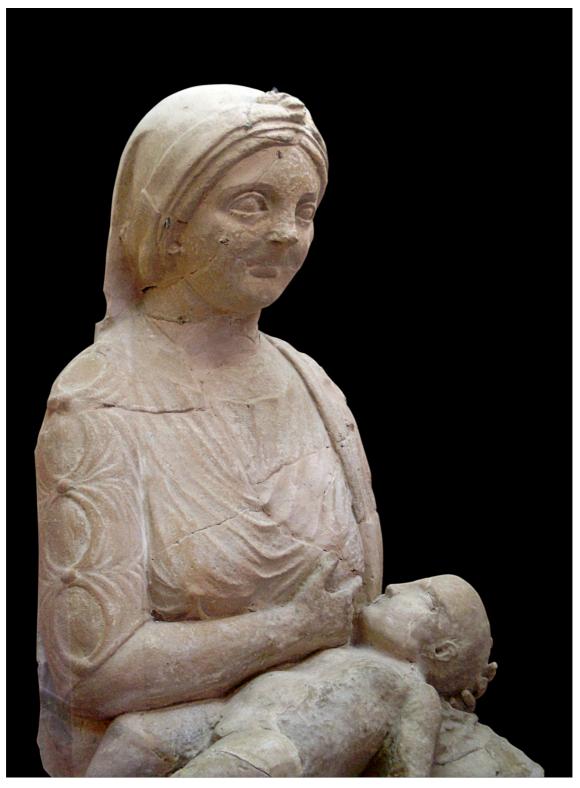


Fig. 6. Terracotta statue representing a woman or Demeter breastfeeding a deceased child, Thinissut sanctuary (Tunisia),  $1^{st}$  century BC –  $2^{nd}$  century AC (photography from M. Rais [public domain], by Wikimedia Commons)