

## The Hyksos kings were Minoans

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### 1 Egypt in the Second Intermediate Period<sup>2</sup>

The unity of the Egyptian Middle Kingdom began to falter in the early 13th Dynasty due to a prolonged drought, local power struggles and increasing immigration from the Syro-Palestinian regions into the Nile Delta.<sup>3</sup> The migrants' countries of origin, in turn, had

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<sup>2</sup> Overviews in Refs 1–4.

<sup>3</sup> There is evidence of active contact between settlements in the Nile Delta and in the southern Levant as early as in the 4th millennium B.C. Ref 5.

trade contacts with Mesopotamia, Asia Minor and the Aegean islands. Thus, a crescent-shaped trade network existed around the eastern Mediterranean with branches as far away as southeastern Europe and the Black Sea region.<sup>4</sup> The 13th Dynasty includes many ephemeral kings, most of whom have not been proven archaeologically, and whose exact succession is unclear due to a lack of sources. The 14th Dynasty cannot be clearly distinguished from it. It may have been a concurrent local dynasty in Abydos, Xoïs or Avaris.

Little is known about the kings of the 15th Dynasty, known as the "Hyksos".<sup>5</sup> The historian Manetho (Ptolemaic period, 3rd century B.C.) founded the widespread assumption that the Hyksos were rulers of a foreign ethnic group who conquered the Nile Delta by force but "without striking a blow".<sup>6</sup> Historically, the Hyksos established their own kingdom in Lower Egypt between 1650 and 1630 B.C., with its southern border at *Qis* (al-Qusiyya, Middle Egypt) and its capital at Avaris (or Auaris) in the eastern Delta on the strategically located Pelusian branch of the Nile (Figure 1).<sup>7</sup> Even before the arrival of the Hyksos, Avaris was probably the residence of a small kingdom or principality. The city was originally founded as a planned settlement in the early Middle Kingdom<sup>8</sup> and later became an important trading hub. Today, there are the modern villages of Tell el-Da'ba, 'Ezbet Helmi, and 'Ezbet Rushdi. The Hyksos kings adopted Egyptian throne names, usurped royal statues from the Middle Kingdom, and otherwise modeled themselves after Egyptian royalty.<sup>9</sup>

However, there was probably no military conquest of the Nile Delta, although parts of the city were abandoned after the Hyksos took power.<sup>10</sup> In a study, the strontium isotopes ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) in the enamel of permanent teeth from elite burials at Tell el-Da'ba from the period before and during Hyksos rule were compared.<sup>11</sup> The buried individuals of the 12th and 13th Dynasties showed a wide range of origins. In contrast, buried individuals of the Hyksos period were mostly Egyptians by birth, and the minority of foreigners were mostly female.<sup>12</sup> A military conquest scenario would have resulted in a majority of male

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<sup>4</sup> Ref 6, pp 30–39, 169–201; Ref 17, pp 278–280.

<sup>5</sup> The exact beginning of the Second Intermediate Period is a matter of opinion, depending on whether one considers the beginning of the 13th Dynasty or the beginning of the Hyksos period as the turning point (the collapse of the Egyptian Middle Kingdom lies somewhere in between).

<sup>6</sup> Ref 7, pp 79–81; Ref 8, §§ 75–81.

<sup>7</sup> The Pelusian and other former branches of the Nile in the Delta are now silted up.

<sup>8</sup> Such planned settlements were mass accommodations for soldiers or construction workers.

<sup>9</sup> Cf. Ref 9, p 13; Ref 10, Ref 11.

<sup>10</sup> Ref 12, p 9.

<sup>11</sup> The ratio of strontium isotopes ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) in the enamel of permanent premolars indicates where a person lived between the ages of three and eight.

<sup>12</sup> Ref 13, pp 8–9 (figs 5B, 6).

foreigners (soldiers) in this group.



Fig. 1: Major archaeological sites (red) in the Nile Delta and beyond.

At the beginning of the Hyksos period, the Theban anti-kings of the late 13th Dynasty still ruled in Upper Egypt. The existence of a Theban 16th Dynasty is disputed. There was probably a further fragmentation of political power which led to the emergence of small kingdoms in Upper and Middle Egypt. Their rulers are almost exclusively attested on scarabs and the Turin King List. Thebes became a city-state ruled by the kings of the 17th Dynasty.

Since the Old Kingdom Egyptians had seen a united Egypt as the ideal. To them, foreign rule, even if only in part of Egypt, was a national disgrace. Stelae and tomb inscriptions report that the Theban king Kamose of the 17th Dynasty first advanced into the Sinai Peninsula, bypassing Avaris, while at the same time preventing the Nubian allies of the Hyksos from intervening by cleverly blocking their path to the north.<sup>13</sup> Kamose's successor, Ahmose, completed the reunification of Egypt around 1540 B.C.<sup>14</sup> However, there is no archaeological evidence of a major decisive battle.<sup>15</sup> Ahmose became the first

<sup>13</sup> Ref 14, pp 56–65.

<sup>14</sup> In the 11th, 18th or 22nd year of his reign, depending on the author.

<sup>15</sup> Ref 15, pp 82–83. Written sources are unreliable due to propagandistic rhetoric: the tomb autobiography of the officer Ahmose, son of Ibana (late 17th Dyn.), the Carnarvon Tablet (18th Dyn.),

king of the 18th Dynasty<sup>16</sup> in the reunited New Kingdom with Thebes as its capital.

## 2 Crete in the 2nd millennium B.C.<sup>17</sup>



Fig. 2: Archaeological sites of Minoan Crete: Red dots: palaces (with the palaces of Knossos, Phaistos and Malia as the main palaces); blue dots: villas, mansions; black dots: settlements or necropolises; stars: cave sanctuaries; black triangles: mountain sanctuaries.

The inhabitants of Crete in the Middle Bronze Age (“Minoans” according to Arthur Evans) lived off keeping small livestock and the cultivation of grain, olives and wine. Like all peoples of the Aegean, they were skilled seafarers and maintained connections with the Cyclades and the mainland of Asia Minor, as evidenced by finds of pottery and figurines. From the Early Minoan (EM) IIA onwards, the Levant and Egypt also became partners for trade and technology transfer. The Minoans obtained mainly hippopotamus ivory and gold from Egypt.

As part of a progressive urbanization of the most important Cretan settlements of Knossos, Phaistos and Malia in the Middle Minoan (MM) I, palaces were built there around c. 1950 B.C.<sup>18</sup> Whether these were sovereign principalities or decentralized residences of a Minoan king is unknown. During the early palace culture (Old Palace Period), the Minoans imported and imitated Egyptian scarabs in large numbers (as status symbols?). They also took the Egyptian model as an impetus for the production of seals<sup>19</sup> and developed a particular preference for Egyptian motifs and artifacts.<sup>20</sup> As the Middle Minoan period progressed, diplomatic exchanges with the eastern Mediterranean

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the Speos Artemidos of Hatshepsut (18th Dyn.), or the Papyrus Sallier I (19th Dyn.?). Most likely the Thebans besieged Avaris and the Hyksos capitulated.

<sup>16</sup> Manetho had a new dynasty begin with the emergence of the New Kingdom, although Ahmose came directly from the 17th Dynasty (he was probably a brother of Kamose).

<sup>17</sup> Overviews in Ref 6, Ref 16, Ref 17.

<sup>18</sup> Other smaller palaces or residences were built later (Agia Triada, Kato Zakros, Sitia, Chania, etc.).

<sup>19</sup> However, the Minoans developed their own forms of seals. Ref 17.

<sup>20</sup> Archaeologists coined the term “Egyptomania” for this, especially in Malia. Ref 17, p 80.

countries intensified. The Minoans used Minoan hieroglyphs and the Linear A syllabary (both of which have not yet been deciphered),<sup>21</sup> and later also Cypro-Minoan, for correspondence with Cyprus and Ugarit.

Crete lies in the contact and fault zone of the Eurasian, Aegean and African tectonic plates, one of the most active seismic zones on earth.<sup>22</sup> Around 1750 B.C. (end of the MM II period), a strong earthquake destroyed the palaces of Phaistos and Malina and severely damaged the palace of Knossos. A few years later, smaller earthquakes and landslides caused further damage. After the reconstruction of the palace of Knossos,<sup>23</sup> there followed an economic and cultural heyday (New Palace Period), during which Knossos became the leading urban center of Crete. The Minoans made a name for themselves with particularly high-quality pottery, sought-after woolen fabrics, and medicinal herbs. This period was abruptly ended by the volcanic eruption of Santorini (Greek Θήρα, Thera), an enormous natural disaster. The following period was a time of crisis on Crete, as evidenced by numerous finds of hoarded valuables and foodstuffs.

At the end of the Late Minoan (LM) I period, around 1450 B.C., the palaces of Phaistos and Malia, as well as many elite villas, were again destroyed (by an earthquake or by military unrest). Once again, hiding places for valuables were created, the contents of which the owners were apparently unable to retrieve later. In the LM II period, the ruins of the palaces and houses were demolished and new buildings were erected. On the Greek mainland, Mycenae became a superpower in the Aegean, and Crete came under the strong influence of the Mycenaean civilization. Written communication now took place in Linear B, an evolution of Linear A adapted to the Mycenaean language. In the LM III period, the palace of Knossos was again destroyed and rebuilt. This was followed by the period of the final decline of the Minoan culture. In parallel, the kingdoms in the Syro-Palestinian regions also experienced wars and upheavals due to conflicts among themselves and with Egypt. Around 1200 B.C., all the Minoan palaces on Crete and the Minoan trading bases on the mainland (e.g. Ugarit) were destroyed. Figure 3 (page 8) shows an overview of the events of destruction and reconstruction.

### 3 The Hyksos kings were Minoans

The origins of the Hyksos kings have been debated for long time. It is generally accepted

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<sup>21</sup> Due to the lack of decipherment of their writings, very little is known about the Minoan social structure, religion and rulers. The ancient Greek legend of King Minos and his labyrinth may have been based on a king with a similar name and to the labyrinth-like arrangement of rooms and corridors in Minoan palaces.

<sup>22</sup> Ref 18, pp 75–76. Minoan builders reinforced walls with wooden frames and embedded wooden beams (similar to half-timbered houses) to make them more resistant to earthquakes. Ref 17, pp 164–166.

<sup>23</sup> The palaces of Phaistos and Malia were not rebuilt until many decades later. Ref 17, p 83.

that they may have come from the Levant.<sup>24</sup> However, there are also arguments that suggest a Cretan origin for this dynasty.

### 3.1 Response to the enamel study

The authors of the study on dental samples from Tell el-Da'ba mentioned in Section 1 concluded from the results that a non-Egyptian elite had lived in the Nile Delta for some time and had divided Egypt from within.<sup>25</sup> Even if native Egyptians predominated in the elite burials of the Hyksos period, this conclusion is not compelling. As mentioned above, Avaris was a trading city. During the middle of the 12th Dynasty, the city had a high influx of people and the population grew rapidly. A comparison with similar trading posts, such as those along the ancient Silk Road, suggests that the newcomers were wealthy merchants and migrant workers with their families. After this "immigration boom" subsided, their descendants came to dominate the city's population.<sup>26</sup> Having grown up in Egypt, their <sup>87</sup>Sr/<sup>86</sup>Sr signature is indistinguishable from that of native Egyptians. In many publications it is taken for granted that the Hyksos kings came from this population group. However, the enamel study has little to do with the Hyksos kings, because their teeth could not be examined (their burials have not yet been discovered). The study simply confirms what was already known from an archaeological point of view – the Nile Delta was a destination for internal migrants and immigrants from the eastern Mediterranean during the Middle Kingdom and the Second Intermediate Period.<sup>27</sup>

### 3.2 The word "Hyksos"

The historian Flavius Josephus (1st century C.E.), referring to the writings of Manetho, derived the word "Hyksos" from the proto-Greek *hīk* ("ruler, chieftain") and *(u)sōs* ("herdsman") – "chieftain of herdsmen".<sup>28</sup> William G. Waddell suggested a connection with the Egyptian verb *h<sup>3</sup>q* ("to take booty, to take captives").<sup>29</sup> According to Adolf Erman and Hermann Grapow (based on a suggestion by Francis L. Griffith<sup>30</sup>), "Hyksos" is the Hellenized form of the Egyptian phrase *hq<sup>3</sup> h<sup>3</sup>s.t*, "ruler of a foreign land".<sup>31</sup> This phrase was used rather unspecifically for rulers of any foreign land since at least the early Middle

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<sup>24</sup> Other suggestions are summarized in Ref 19, p 208.

<sup>25</sup> Ref 13, p 10. See also Ref 20.

<sup>26</sup> Ref 9, pp 13–14; Ref 10; Ref 11. See Ref 21 for migration to Egypt during the 2nd millennium B.C.

<sup>27</sup> Strontium analysis does not allow for a more precise determination of origin within Egypt. Ref 13, p 9.

<sup>28</sup> Ref 7, pp 83–85; Ref 8, § 82; Ref 22, p 38.

<sup>29</sup> Ref 7, p 85, note 6 (the verb is misspelled there as *h<sup>c</sup>q*); Ref 23, Vol 3, p 33.6–11.

<sup>30</sup> Ref 24, p 351.

<sup>31</sup> Ref 23, Vol 3, p 171.29. This linguistic derivation is widely accepted.

Kingdom.<sup>32</sup> Certain Hyksos kings confidently adopted it as a kind of title on scarabs, but otherwise the Turin King List is the only Egyptian source that applies the phrase to Hyksos kings (and even that passage is based on an uncertain reconstruction).<sup>33</sup> The word order, a so-called direct genitive, does not fit well as a term for an upstart from a long-established immigrant community whose Syro-Palestinian ancestors had settled in Egypt at some point. Thus, the old assumption that the first Hyksos king<sup>34</sup> seized power in Lower Egypt from outside (not necessarily by military force), and the question of where he actually came from, still remains.

In this article, the word "Hyksos" is used to refer to the 15th Dynasty of Egyptian kings, including the royal families. My hypothesis is that the first king of this dynasty came with Minoan refugees from a natural disaster or was one of their first generation descendants. He did not have any army at his disposal. He seems to have skillfully exploited the instability of the Egyptian kingdom with its pre-existing regional secessionist tendencies and a certain power vacuum in Lower Egypt.<sup>35</sup> The kings in Thebes were preoccupied with maintaining their power in Upper Egypt and were unable to offer any significant resistance to the political disintegration of Egypt.

### 3.3 Flight from a natural disaster

The question of which natural disaster could have caused the Minoans to flee to Egypt is difficult to answer. The eruption on Crete around 1750 B.C., which led to the destruction of the first palaces, occurred about 100 years before the beginning of the Hyksos period in Egypt. The next major natural disaster was the volcanic eruption on the island of Santorini, 140 kilometers north of Crete. The four outbursts (VEI  $\geq 7$ )<sup>36</sup> resulted in the partial destruction of Santorini and correspondingly destructive earthquakes and tsunamis on Crete.<sup>37</sup> Scholars who have commented on the dating of this eruption are divided into two factions, supporters of the "high" or "low" chronology. Using scientific methods (<sup>14</sup>C dating of short-lived organic materials, dating of volcanic sediments using other methods, <sup>10</sup>Be and unusual acidity levels in ice cores), a period of approximately

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<sup>32</sup> Example: "Ruler of a Foreign Land, Jbša" in the tomb of Khnumhotep II at Beni Hasan. This mural scene has been misrepresented in various media as being the depiction of a Hyksos king. In fact, it was created around c. 1900 B.C., about 250 years before the Hyksos period. An overview of the use of *ḥqꜣ ḥꜣs.wt* is provided in Ref 25.

<sup>33</sup> Ref 25, pp 206–208, 210–211 (figs 2, 4–5).

<sup>34</sup> According to Manetho, his name was Salitis (*Semqen?*). Ref 7, pp 79–81.

<sup>35</sup> Cf. Ref 26.

<sup>36</sup> Volcanic Explosivity Index (logarithmic scale) based on the volume of tephra ejected, the height of the eruption cloud, and qualitative criteria. Statistically, a VIE 7 eruption occurs once every 500–1000 years.

<sup>37</sup> Ref 18, pp 86–87.

1680–1600 B.C. has been determined as the time of the eruption.<sup>38</sup> Archaeological finds in association with the tephra layer date the event to 1550–1500 B.C.<sup>39</sup> The trigger for an exodus from Crete to Egypt at about 1650 B.C. could have been volcanic eruptions on Santorini (also before or after the great event), an earthquake on Crete,<sup>40</sup> or the climatic, social, or belligerent consequences of such events. The next known catastrophe with the destruction of the Cretan palaces the cause of which is uncertain,<sup>41</sup> occurred in around 1450 B.C., when Tutmose III reigned in Egypt (mid-18th Dynasty). It is therefore not a possible trigger for the Hyksos reign. The Minoans could have used either the existing coastal shipping routes or the open sea route to the Egyptian port of Pelusium (Tell el-Farama) as an escape route.<sup>42</sup> From Pelusium they could have reached Avaris via the navigable Pelusian branch of the Nile.<sup>43</sup>

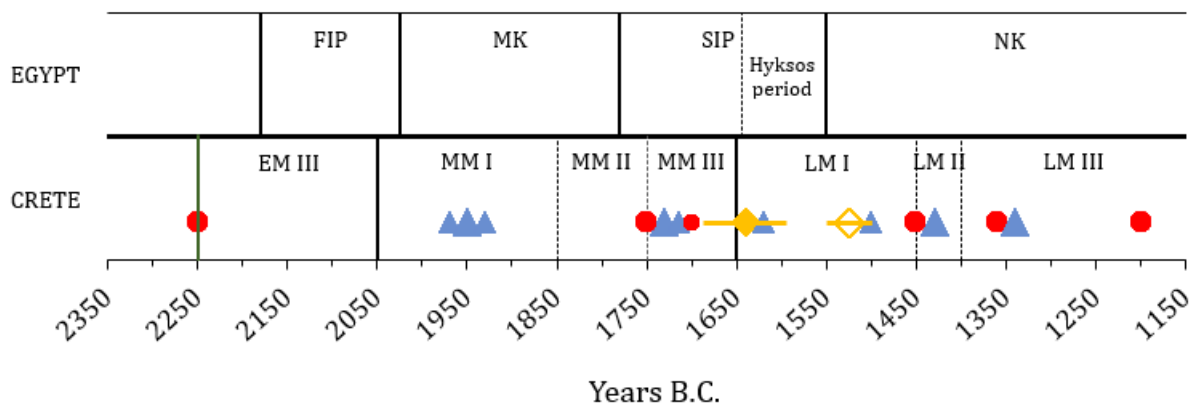


Fig. 3: Catastrophic events and reconstruction on Minoan Crete.<sup>44</sup>

Red dots: destruction; blue triangles: (re-)construction of one or more palaces; orange rhombs: disastrous volcano eruption on Santorini, tsunami and earthquakes on Crete (filled rhomb: scientific chronology, empty rhomb: archaeological chronology, both with time probability range); FIP: First Intermediate Period; MK: Middle Kingdom; SIP: Second Intermediate Period (incl. 13th Dyn.); NK: New Kingdom; EM: Early Minoan Period; MM: Middle Minoan Period; LM: Late Minoan Period.

<sup>38</sup> Ref 27 (review); Ref 28, p 418, fig 7; Ref 29, p 292 (fig 11).

<sup>39</sup> Ref 17, p 41 (fig 3); Ref 27, p 435; Ref 28, p 418, fig 7; Ref 29, p 292 (fig 11). See Ref 30 for a comprehensive overview of the discussion and the scientific, archaeological and textual evidence.

<sup>40</sup> Volcanic activity on Santorini and increased seismic activity on Crete occurred both before and after the major eruption. Ref 18, pp 78–80, 86–89.

<sup>41</sup> Possible causes are an earthquake or a military conflict with the Mycenaeans or Hittites.

<sup>42</sup> The Minoans began the construction of seaworthy ships around 2000 B.C., which was the basis of their naval supremacy (thalassocracy). Ref 17, pp 275–276, 278.

<sup>43</sup> The ancient port of Pelusium at the easternmost tip of the Nile Delta (Figure 1) is consistent with Manetho's claim that the Hyksos came from "regions of the East". Ref 7, pp 78–79; Ref 8, § 75. However, these are usually understood as Levantine regions.

<sup>44</sup> Data from Ref 17, pp 37–43, 55–103; Ref 27; Ref 28, p 418, fig 7; Ref 29, p 292 (fig 11).



### 3.4 Graffiti in the pyramid of Senwosret III

Reliable evidence of Hyksos iconography has not survived. A statue fragment of the Hyksos king Khyan (Chajan) is a usurped statue from the 12th Dynasty and shows only the legs and the throne.<sup>45</sup> The so-called Hyksos sphinxes are also usurped.<sup>46</sup> The much-quoted statue head of a dignitary from a necropolis west of Tell el-Da'ba, with a sleek "mushroom" hairstyle and a throwing stick over his shoulder, was found in a much older layer (c. 1800 B.C.).<sup>47</sup>

The French archaeologist Jaques de Morgan, while excavating of the pyramid of Senwosret III at Dahshur, found graffiti which, because of the strange style, he suspected had been made by looters of the Hyksos period.<sup>48</sup> Most modern scholars believe that these incised drawings of heads of different sizes were made in the Second Intermediate Period. The largest head wears a kind of turban with a striking volume over the forehead (Figure 4 a). The creator of the graffiti evidently saw this as a special characteristic. There are also several smaller, similar heads. Unfortunately, there is no inscription. Therefore, it is not known whether the heads are self-portraits or ironically exaggerated representations of strangers. The olive harvesters<sup>49</sup> on the Harvester Vase from Agia Triada on Crete (steatite rhyton with relief decoration from the LM I period) also wear caps or turbans that bulge above the forehead (Figure 4 d).<sup>50</sup> Among the graffiti at Dahshur is a similar head.<sup>51</sup> In Minoan frescoes from Knossos and Akrotiri,<sup>52</sup> young men in processions or during boxing matches have shaved heads, with a few long, wavy strands and forelocks of black hair left standing (Figure 4 e).<sup>53</sup> The long strands were probably tucked under a turban for work and daily life, but on other occasions the strands were allowed to hang out from under the turban, as seems to be the case in bull-leaping scenes and with the largest head in the graffiti at Dahshur (Figure 4 a, b).

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<sup>45</sup> Egyptian Museum Cairo CG 389/JE 28574.

<sup>46</sup> Egyptian Museum Cairo CG 393, CG 394, CG 530, CG 1243.

<sup>47</sup> Ref 31, pp 77–89.

<sup>48</sup> Morgan also suspected his excavating assistants of having made the incised drawings. Ref 32, pp 92–96; Ref 33, plts 23 c, d.

<sup>49</sup> Men with forks for stripping the ripe olives from the branches (similar tools are still used today in olive harvesting).

<sup>50</sup> Ref 34.

<sup>51</sup> See Ref 35, banner, far right.

<sup>52</sup> Minoan city on Santorini.

<sup>53</sup> See also Ref 36, pp 40, 51, 52 (figs 2, 3, 11, 12).



a) Detail of the graffiti in the pyramid of Senwosret III at Dahshur, Hyksos period (?)



b) Detail of a fresco from Knossos, 1600–1450 B.C.



c) Scene of a fresco from Akrotiri, c. 1600 B.C.



d) Detail of the Harvester Vase from Agia Triada (Crete), steatite, 1500–1450 B.C.



e) "Boxer fresco" from Akrotiri, c. 1700 B.C.

Fig. 4: Comparison of the headgear or hairstyle of the (presumed) Hyksos and the Minoans

### 3.5 The Minoan fresco found at Tell el-Da'ba

The material culture of the Hyksos period in Avaris does not support the hypothesis that the Hyksos kings came from the Near East, nor does it support my hypothesis that they came from Crete. Already in the 13. Dynasty, Avaris was a relatively independent principality under the leadership of Near Eastern elites and with a majority of Near Eastern inhabitants.<sup>54</sup> As a trading and immigrant city, it was characterized by a mixed culture with Egyptian and Syro-Palestinian influences.<sup>55</sup> Much of what is considered to be Hyksos cultural heritage (horses, chariots, sickle swords, compound bows, a new system of measuring weights, new metal casting molds, worship of the god Baal, who merged with Seth<sup>56</sup>) was already present when the Hyksos took power, or was brought into the country during the Hyksos period (trade with the Near East continued, albeit to a lesser extent). As far as we know, the Hyksos kings did not suppress the mixed culture they found, but rather benefited from all its achievements, leaving the existing administrative structure in place and tolerating the foreign religions.<sup>57</sup>

Individual artifacts of Minoan origin excavated at Tell el-Da'ba do not have any evidential value in the sense of my hypothesis, since they have already been found in necropolises of the 12th Dynasty.<sup>58</sup> An exception, however, is the Minoan fresco from the northwestern part of the former Avaris (modern 'Ezbet Helmi). The fresco, which is unique in Egypt, is identical to the Minoan frescoes in terms of painting technique, motifs, and colors (Figure 5).<sup>59</sup> The motifs point to the palace of Knossos.<sup>60</sup> The fresco was found in thousands of fragments in a palace district near a port on the former Pelusian branch of the Nile. The following finds were made at this excavation site (bottom to top): Stratigraphic layer e/2: palace district (surrounding fortification, garden [tree pits], a "mansion", brick water pipe<sup>61</sup>). Layers e/1.2 and e/1.1: remains of another small palace (I); pottery (foundation deposits); a military camp (donkey stables, grain silos, storage buildings, fireplaces, burials of young men, including some with anatomical features of the African type (Nubians)<sup>62</sup>. Layers d and c: two masonry platforms with access ramps and the foundations of mud-brick palaces on top (G, F); foundations of workshops beneath the

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<sup>54</sup> One could describe Avaris as a Near Eastern colony on Egyptian soil. Ref 9, pp 13–14.

<sup>55</sup> Ref 37 (pottery also from Cyprus and Nubia.); Ref 9, p 13; Ref 11; Ref 21.

<sup>56</sup> Ref 35.

<sup>57</sup> Ref 9, pp 19–20; Ref 10.

<sup>58</sup> For example, Kamares Ware (very thin-walled Middle Minoan pottery) and a golden pendant depicting two dogs. Ref 38; Ref. 39; Ref 40, pp 136–138.

<sup>59</sup> Some of the scenes are only known from Knossos. Ref 41.

<sup>60</sup> Ref 42.

<sup>61</sup> The palace itself has not been discovered. Its remains probably fell victim to a modern road and the El-Didamûn canal. Ref 41.

<sup>62</sup> K. Großschmidt (anthropologist), unpublished (Ref 12, p 10, note 9; Ref 41).

ramps; rubble heaps with fragments of the Minoan fresco.<sup>63</sup>

The excavators believe that these layers cover the period from the late 15th to the mid-18th Dynasty. In support of this claim, they offer the following explanations:<sup>64</sup> i) The buried soldiers are captives from a Theban military campaign in Upper Nubia in the early 18th Dynasty.<sup>65</sup> ii) A small part of the utilitarian and votive pottery, including Cypriot imports, associated with the military camp is classified as "early 18th Dynasty shapes" for reasons not explained.<sup>66</sup> iii) The two palaces (G, F) were built simultaneously during the reign of Tutmose III and may have been decorated with Minoan frescoes in honor of an unknown Minoan wife of the king.<sup>67</sup> iv) Scarabs with royal names from the first half of the 18th Dynasty, found in a workshop, are described as *termini post quos*.<sup>68</sup> v) Rounded pieces of pumice found in this workshop area, which according to analyses come from the great volcanic eruption on Santorini, are assigned to the time of Tutmose III or Amenhotep II, because the excavators support an extremely low chronology for the Santorini eruption.<sup>69</sup> vi) It has been suggested that the ancient port near the site is the naval base *Peru-nefer* of Tutmose III.<sup>70</sup> vii) Based on the rudimentary palace foundations, extensive architectural speculations (columns, ceiling, cornice battlements) have been made in order to draw parallels with the palaces at Deir el-Ballas from the early New Kingdom.<sup>71</sup> viii) Upper Egyptian marl and Theban silices have been found in the debris of the palaces; the delivery of this material to the Hyksos is ruled out although there was diplomatic contact between Avaris and Thebes.<sup>72</sup>

The archaeological dating of the palaces is therefore literally built on sand and is controversial.<sup>73</sup> The stratigraphy in the palace area has been disturbed by extensive excavation and embankment work done to create a second harbor basin, an artificial lake, and the two building platforms over seven meters high.<sup>74</sup> There is circular reasoning in the literature, e.g. if one author dates the upper palace layers (d, c) to the mid-18th Dynasty on the basis of pumice from Santorini, and another cites this pumice as evidence that the eruption on Santorini took place in the mid-18th Dynasty.

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<sup>63</sup> Ref 41; Ref 12, pp 9–11.

<sup>64</sup> Ref 41; Ref 12, pp 11–12.

<sup>65</sup> I can find no reason why a Theban king would have had captives brought from Nubia to Avaris.

<sup>66</sup> Ref 43, p 127; Ref 44, pp 77–82, 86–88, 90.

<sup>67</sup> Ref 41.

<sup>68</sup> Ref 28, p 408.

<sup>69</sup> Ref 27, p 435 (review); Ref 28, p 418 (fig 7); Ref 45, pp 176–201.

<sup>70</sup> Ref 46; In Ref 42, this assumption is taken as certain without any basis.

<sup>71</sup> Ref 41.

<sup>72</sup> Ref 41.

<sup>73</sup> Cf. Ref 11.

<sup>74</sup> Ref 28, p 410; Ref 41; Ref 46.

Here is my view: i) The dating of the palace district must be advanced by about 100 years relative to Egyptian chronology.<sup>75</sup> This means that the older palace district (layer e/2) belongs to the early Hyksos period. The fragment of a limestone doorjamb is inscribed with the name of the early Hyksos king, Sakir-Har (see section 3.6).<sup>76</sup> The palaces G and F belong to the middle of the Hyksos period. ii) Among the soldiers buried in layer e/1 were Nubian mercenaries,<sup>77</sup> since Nubia (Kingdom of Kush) was a military ally of the Hyksos.<sup>78</sup> The Hyksos had every reason to maintain a military unit to secure their territory.<sup>79</sup> iii) Cypriot pottery types such as White Slip Ware I and Base-ring Ware are not a firm reference to the 18th Dynasty. They developed in Late Cypriot IA (1650–1550 B.C., corresponding to the Hyksos period in Egypt) and were also widely distributed in the Syro-Palestinian area. It is not surprising that they appeared early in Avaris, this thriving, multicultural trading hub. In Egypt, the Cypriot ceramic style was copied or transferred to stone and glass during the Tutmosid period.<sup>80</sup> iv) The workshops were in use for at least 100 years.<sup>81</sup> The scarabs with names from the early 18th Dynasty could have been made or placed there long after the construction of these workshops. The pumice, which was used as an abrasive, is not useful for dating. At best, it can be a *terminus ante quem* with respect to the volcanic eruption.<sup>82</sup> v) Most of the fragments of the Minoan fresco were discovered in connection with a workshop at the foot of the access ramp to Palace F.<sup>83</sup> I believe that in this workshop (builders' hut) the painted plaster was chipped off older mud-brick blocks in order to make the blocks usable for the masonry of the new palace

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<sup>75</sup> The problems of dating are complex and cannot be discussed in detail here. See Ref 28, especially the <sup>14</sup>C results of phases D2–C2 (pp 412 [tab 1a], 416 [fig 6a]).

<sup>76</sup> The excavators believe that the doorjamb is a spolia. Ref 41.

<sup>77</sup> There were complete skeletons lying on their stomachs, showing some injuries and signs of disease. Beside the graves there were pits with broken pottery. All this is not sufficient to postulate an "excretion ritual" for prisoners of war, or an epidemic (Ref 12, p 11; Ref 41). Interestingly, only three skulls and nine fingers were found in locus #1055. This is reminiscent of the Minoan custom of secondary burial of skulls. Ref 17, pp 259–260.

<sup>78</sup> Ref 11; Ref 14.

<sup>79</sup> Flavius Josephus, quoting Manetho, wrote of a Hyksos army, although he greatly exaggerated the number of soldiers to 240,000. Ref 7, pp 80 (§ 78), 83, 87.

<sup>80</sup> Ref 27, pp 442–443; Ref 37, pp 392–396; Ref 47, pp 141–150; Ref 48, pp 21–43; Ref 49, p 51; Ref 50, p 247–251.

<sup>81</sup> Ref 41.

<sup>82</sup> Pumice is solidified lava. The lava from a large volcanic eruption on an island floats for years in huge rafts (pumice rafts) on the sea surface. Pumice has also been mined and traded. Ref 18, p 85; Ref 27, pp 441–442.

<sup>83</sup> Ref 41.

platforms.<sup>84</sup> vi) In one of the workshops, 140 Aegean bronze arrowheads were found.<sup>85</sup> vii) The floor plans of the palaces (J, G, F), which are in parts unusual by Egyptian standards, show details that are known from Minoan palaces.<sup>86</sup>

It is hard to imagine why a king would have used Minoan architecture in his palace and would have decorated the walls with typical Minoan scenes in Minoan fresco technique (e.g. bull-leaping,<sup>87</sup> or a woman in Minoan costume), unless he was a Minoan himself. None of the other Egyptian kings did so, even though Minoan craftsmanship was highly valued in Egypt (and vice versa).<sup>88</sup>

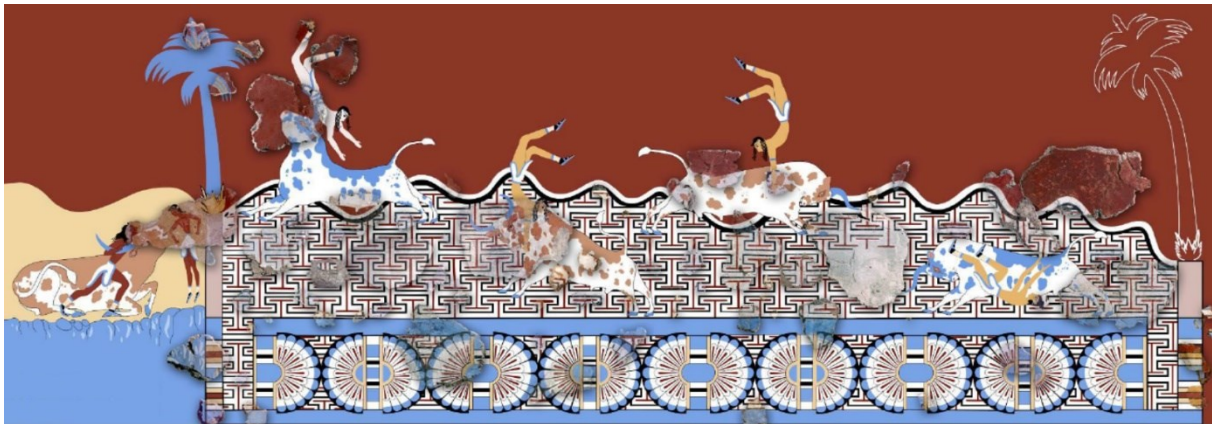


Fig. 5: Fragments of a fresco from 'Ezbat Helmi, reassembled on the basis of Minoan models.

<sup>84</sup> The painted hard plaster would have reduced the cohesion of the bricks in the walls of the palace platform. It was probably removed from the wall blocks with little effort, so that there are no tool marks visible on the fragments. Even the excavators wrote that the fresco on mud bricks was not durable and fell off by itself (Ref 42). The main colors, red and blue, were also found in the remains of the interior decoration of the older "mansion" (layer e/2), albeit not painted in fresco technique (Ref 41).

<sup>85</sup> Ref 41.

<sup>86</sup> General: building on an elevated platform; compact layout; lack of axial symmetry; inner courtyard; labyrinthine arrangement of corridors and rooms; access to the main entrance via a ramp; paved floors and outdoor area. Oldest palace district: brick water pipe (or sewer). Palace F: square inner courtyard with portico on three sides; stairs at three corners; grain silos and workshops at the western end (as in Cretan Malia). Palace G: dominant inner courtyard; "throne room" in a non-central part of the palace with three openings in the rear wall (polythyron); (probably) wooden colonnades on low base walls; particularly narrow storerooms with shafts; entrance areas with water basins (lustral basins) and water jugs in Aegean-Cypriot style. Ref 41. Compare this with the architecture of the Minoan palaces and elite residential buildings. Ref 17, pp 112–124, 233–234, 157–169. By comparison, ancient Oriental palaces had multiple inner courtyards. Ref 17, pp 114–115.

<sup>87</sup> The dangerous bull-leaping, in which young men performed a handstand somersault on an approaching bull, was a typical motif in Minoan frescoes. It is believed to have been some kind of initiation rite as part of a public spectacle. Ref 17, pp 245–248.

<sup>88</sup> Ref 17, pp 283–289.



### 3.6 The personal names of the Hyksos kings

The alleged Near Eastern origin of the Hyksos kings is argued, among other things, with their personal names. The names were mainly found on wall fragments, seal impressions and scarabs: *Smqn* (Šamuqēnu), *Skr-Hr* (Sakir-Har), *ꜥpr-ꜥntj* (Aper-Anati), *Hjjꜥn* (Khyan/Chajan), *Jppj* (Apepi/Ipepi), and *Hndjj* (Khamudi).<sup>89</sup> Khyan's cartouche was also found at Knossos,<sup>90</sup> Hattuša,<sup>91</sup> Edfu, and Baghdad (Babylonian Empire)<sup>92</sup>. The personal names are not necessarily West Semitic, Canaanite, Amurrite or Hurrian, as has been suggested.<sup>93</sup> They are the result of rendering personal names from the mother tongue of the Hyksos kings – according to my hypothesis the Minoan language<sup>94</sup> and Linear A – with Egyptian hieroglyphs. The transfer of personal names between unrelated phonetic and writing systems can only ever be makeshift.<sup>95</sup> Egyptian students of writing even had to practice Minoan names.<sup>96</sup>

It is also possible that the Hyksos kings deliberately chose their names in order to assimilate into the Near Eastern-dominated Avaris or to curry favor with Asian allies.<sup>97</sup> Interestingly, there are no artifacts of the last two Hyksos kings, Apepi/Ipepi and his successor Chamudi, on which they call themselves "rulers of a foreign land" like the Hyksos kings before them (see section 3.2).<sup>98</sup> I would not rule out a Syro-Palestinian origin for these two kings. The name Apepi refers to the mythological serpent Apep (Greek: Apôphis), which played the role of an adversary in the Egyptian sun myth. In Near Eastern myths, however, the Great Serpent was as the giver of life.<sup>99</sup> Moreover, Apepi (and only he) is mentioned in Egyptian texts reporting on the reconquest of the Nile Delta under the term *ꜥꜣm* (*āam*), an Egyptian term for peoples of the Levante,<sup>100</sup> and "Chief of

<sup>89</sup> Ref 24, pp 350–353; Ref 52; Ref 53, p 378; Ref 54, pp 120–125. According to Syncellos (8th century C.E.), who quoted Manetho, the names of the Hyksos kings were: Saitês, Bnôn, Apachnan, Staan, Apôphis, Archlês. Ref 7, p 91. The order may vary in the literature. Recent findings place Khyan at the beginning of the 15th Dynasty. Ref 51.

<sup>90</sup> On the lid of an anointing jar (alabastron).

<sup>91</sup> Capital of the Hittite Empire in Anatolia from the late 17th to the early 12th century B.C.

<sup>92</sup> Granite lion statue, British Museum EA987.

<sup>93</sup> Accordingly, the names vary even in modern literature. Ref 52; Ref 53, p 378; Ref 54, pp 120–125.

<sup>94</sup> Very little is known about the Minoan language (probably neither Indo-European nor Semitic). Ref 55.

<sup>95</sup> Examples of the results of such translations: Ref 55: Minoan words to Egyptian hieroglyphs; Ref 56, Ref 57: Egyptian names to Akkadian cuneiform.

<sup>96</sup> A hieratic writing-board with the heading "Doing the names of the Keftiu" has survived (British Museum EA5647 recto). Ref 55, pp 217–219.

<sup>97</sup> King Khyan maintained diplomatic contacts with Upper Egypt and the Babylonian Kingdom. Ref 25, pp 211, 212; Ref 58, pp 115–118.

<sup>98</sup> Ref 25, pp 210–211.

<sup>99</sup> Ref 59.

<sup>100</sup> Ref 23, Vol 1, p 167.19–21.

*Retjenu*", a Syro-Palestinian region.<sup>101</sup>

### 3.7 Why not “*Keftiu*”?

If the Hyksos were Minoans, why did the Egyptians not call them *kft.jw* (*Keftiu*, “Cretans”<sup>102</sup>)? Traditionally, the *Keftiu* are identified with the Minoans.<sup>103</sup> The word “*Keftiu*” is documented only from the 18th Dynasty. It is probably related to the Egyptian verb *kft* with the meaning spectrum “to displace”, “to expose, to uncover”, and “to loot, to rob”.<sup>104</sup> With the verbal noun *kft.t*,<sup>105</sup> and the nisba *kft.jw* formed from it, it means “those who belong to the displacement/exposure/looting”. Thus, Waddell’s derivation of the word “Hyksos” from the Egyptian verb *ḥʿq* (“to take booty”; substantivized: *ḥʿq.w* “booty-maker, marauding leader”) is not entirely unreasonable.<sup>106</sup> In any case, the context of destitute (“exposed”) refugees from a natural disaster who, out of necessity, did not shy away from looting in their host country is not too far-fetched.

In New Kingdom art, the *Keftiu* were depicted as tribute bearers<sup>107</sup> or as captives of the Sea Peoples wars during the Ramesside period<sup>108</sup>. From the mid-18th Dynasty on, however, they have a hybrid iconography with the ancient Near Eastern hairstyle (chin-length hair with a headband, a longer pointed beard) and/or a Mycenaean-style kilt (Figure 6 c, d).<sup>109</sup> This indicates that the Minoans were then no longer perceived as a distinct people,<sup>110</sup> or that Egyptian artisans no longer took appearances so seriously<sup>111</sup>. At this time, *Keftiu* could mean “seafarers from and to Crete”<sup>112</sup> (could also be Syro-

<sup>101</sup> Ref 4, p 128; Ref 25, p 206.

<sup>102</sup> Ref 23, Vol 5, p 122.5 (there also given as the place name “Crete”).

<sup>103</sup> Ref 60, p 264. It is not known what the Minoans called themselves.

<sup>104</sup> Ref 23, Vol 5, p 119.4–18.

<sup>105</sup> The dictionary by Erman and Grapow lists *kft.t* as a noun of unknown meaning, first attested in the Middle Kingdom, and as a word for a gaping wound (lit. “the exposed”). Ref 23, Vol 5, pp 120.1, 120.4.

<sup>106</sup> Ref 7, p 85, note 6 (Waddell misspelled the noun as *ḥʿq* and translated it as “prisoner of war”); Ref 23, Vol 3, pp 33.6–11, 43.1.

<sup>107</sup> Ref 60.

<sup>108</sup> For example, in the Temple of Ramesses II in Abydos.

<sup>109</sup> In the wall paintings of the tombs TT71 and TT131 (reign of Hatshepsut) the tribute-bearers of the *Keftiu* are depicted in almost complete detail, i.e. beardless, with shaved heads with a few strands of black, wavy hair left standing, and dressed with a loincloth over the buttocks and a codpiece as in the processions in the Minoan frescoes (Figure 6 a). Ref 36, pp 40, 51, 52 (figs 2, 3, 11, 12); Metropolitan Museum of Art 30.4.49 (facsimile); Ref 60, p 264 (fig 1).

<sup>110</sup> By this time the Mycenaeans had gained dominance over Crete.

<sup>111</sup> D. Panagiotopoulos: “The main concern here will be to look not *at* the pictures but *through* them, trying not to examine the artistic manner of the Egyptian painters, but to read the message they wanted to convey.” (Italics in original). Ref 60, p 266.

<sup>112</sup> Ref 23, Vol 5, p 122.6.



Palestinian merchants<sup>113</sup>). In inscriptions in some private tombs of the New Kingdom, the collective term "peoples of the islands in the middle of the Mediterranean" was used to refer to the Aegean peoples.<sup>114</sup> Thus, the distinction between Cretans and other Aegean and eastern Mediterranean peoples became blurred, and not only iconographically.<sup>115</sup> This could explain the disappearance of the Hyksos from the stage of history after 1550 B.C.<sup>116</sup>



a) Rhyton bearer with Minoan hairstyle and Minoan loincloth, TT71, Western Thebes, 1479–1458 B.C.

b) Rhyton bearer with Minoan hairstyle and Mycenaean kilt, TT 86, Western Thebes, 1479–1425 B.C.

c) Rhyton bearer with Near Eastern hair and beard style and Mycenaean kilt, TT 86, Western Thebes, 1479–1425 B.C.

d) Captive with Near Eastern hair and beard style, Temple of Ramesses II, Abydos,<sup>117</sup> 13th century B.C.

Fig. 6: Iconography of the Cretans (*Keftiu*) in the New Kingdom

<sup>113</sup> Ref 61, pp 822–824.

<sup>114</sup> This probably included the Peloponnese. Ref 60, p 263; Ref 62, pp 273–280; Ref 63, pp 93–99.

<sup>115</sup> See also Ref 7, p 76, note 1.

<sup>116</sup> According to Manetho/Flavius Josephus, the Hyksos left Egypt and settled in Judea. Ref 7, p 89; Ref 8, § 90; Ref 20; Ref 22, p 54. According to the tomb inscription of the officer Ahmose, son of Ibana, they fled to Sharuhén (in the present-day Gaza strip), where king Ahmose pursued them and defeated them again. Ref 22, p 54. In my opinion, they could have retreated to their homeland on Crete.

<sup>117</sup> In this frieze, all captives have the same iconography, regardless of the name of the people attached to them.

### 3.8 Evidence in texts

Manetho's writings are lost and are known only from quotations by other ancient historians (Flavius Josephus, Africanus, Syncellos, Eusebios). Quoting Manetho, Flavius Josephus recounts the Hyksos conquest of the Nile Delta:

"I shall quote his [Manetho's] own words, just as if I had brought forward the man himself as a witness. Toutimaos:<sup>118</sup> In his reign, for what cause I know not, a blast of God smote us; and unexpectedly, from the regions of the East, invaders of obscure ethnicity marched in confidence of victory against our land. By main force they easily seized it without striking a blow;"<sup>119</sup> (Emphasis added).

If the Hyksos had been immigrants from the Levant, the Egyptian Manetho would not have called them "invaders of obscure ethnicity (*genos*)", for such immigrants had been known in Egypt since prehistoric times and had long constituted the majority of the population in Avaris.<sup>120</sup> The Jewish Flavius Josephus, who identified the Hyksos with the Judaeans in order to prove the antiquity of the Jews,<sup>121</sup> could easily have altered the phrase "invaders of obscure ethnicity" to suit his own agenda, but he quoted Manetho verbatim.

The inscription on the Speos Artemidos, a rock temple of queen Hatshepsut (18. Dynasty) near Beni Hasan, lets the queen speak:

"I have restored what was dilapidated, and I have reconstructed what was exquisite in the beginning [of the time], when people of the Levant were in Avaris in Lower Egypt. Strangers in their midst used to tear down what the forefathers had made."<sup>122</sup> (Emphasis added).

So it was the old familiar immigrants from the Levant (*šm.w*) who lived in Avaris, but there were strangers (*šm š.w*) among them who brought about the overthrow.

Last but not least, a cuneiform text from Ugarit<sup>123</sup> dating from 1500–1300 B.C. that reads:

"Carry [my message in] your head, [my words] between your eyes, [and sail] a thousand [lengths in the] sea, ten thousand [lengths] in the Two Streams. [Cross

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<sup>118</sup> Unidentified king of the 13th Dynasty.

<sup>119</sup> Ref 7, pp 78, 79, with slight modification. Josephus' original text in Ref 8, §§ 74–76. Alternative translation in Ref 22, p 55.

<sup>120</sup> Regarding the „regions of the East“, see note 43.

<sup>121</sup> Ref 7, pp 77, 79 (“Manetho speaks of *us* as follows”); Ref 8.

<sup>122</sup> Own translation of the hieroglyphic text in Ref 64, p 390, lines 4–8. The text reflects the resentment in the New Kingdom against the Hyksos. There is no evidence that the Hyksos demolished Egyptian buildings on a large scale.

<sup>123</sup> Ugarit (near the modern Syrian port of Latakia) was one of the most important eastern Mediterranean trading centers and was also used as a trading post by the Cretans. Ref 17, pp 289–290.

over to the] mountains, cross over [to the] hills, cross over [to the] islands on the horizon of the sky. Go there, O fisherman of the Athirat, arrive, O Qidšu-Amrur!<sup>124</sup> Then turn to the divine Memphis in its entirety, to Crete, its throne, to Memphis, its hereditary land!"<sup>125</sup> (Emphasis added).

The text clearly speaks of a belonging together ("entirety") of Memphis and Crete (*kptr*<sup>126</sup>), with Crete being referred to as the throne of Memphis and Memphis as the hereditary land of Crete. This can only mean that Memphis was once ruled by Cretans. Until the Third Intermediate Period, there was only one foreign rule in Memphis, and that was the Hyksos rule.<sup>127</sup>

#### Abbreviations

B.C.: before Christian era; Dyn.: dynasty; ed/eds: Editor(s); EM: Early Minoan; Fig: figure; KVHAA: Kungl. Vitterhets Historie och Antikvitets Akademien; LM: Late Minoan; MM: Middle Minoan; p/pp: page(s); plt/plts: plate(s); Ref/Refs: reference(s); tab: table; TT: Theban tomb; VIE: Volcanic Explosivity Index; Vol/Vols: volume(s).

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<sup>124</sup> Athirat was a sea goddess worshipped at Ugarit and Qidšu-Amrur was her messenger.

<sup>125</sup> Cuneiform texts from Ugarit (KTU) 1.3, VI 1–24. Ref 65, pp 70–71.

<sup>126</sup> Crete: Ugaritic: *kptr*; Assyrian: *kaptara*; Akkadian: *kaptūru*; Greek: Καφθορ (*Kapthor*).

<sup>127</sup> The Hyksos kingdom extended as far south as *Qis* (al-Qusiyya) and thus included Memphis. According to Mantho/Flavius Josephus, the first Hyksos king resided in Memphis. Ref 7, p 81.

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- Fig. 2: Map of Minoan Crete. Graphics: [https://de.wikipedia.org/wiki/Palast\\_von\\_Malia#/media/Datei:Map\\_Minoan\\_Crete-de.svg](https://de.wikipedia.org/wiki/Palast_von_Malia#/media/Datei:Map_Minoan_Crete-de.svg) (accessed December 12, 2024; CC 0)
- Fig. 3: Catastrophic events and reconstruction on Minoan Crete. Own figure.
- Fig. 4: a) Graffiti in the pyramid of Senwosret III in Dahshur (detail). Photo: G. D., in D. Arnold, *The Pyramid Complex of Senwosret III at Dahshur: Architectural Studies* (New York, 2002), pl. 23 d (CC 0).
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- c) Fresco from Akrotiri (detail). Photo: H. Meller (ed), *1600 – Kultureller Umbruch im Schatten des Thera-Ausbruchs?* (Halle/Saale, 2013), p 153, [https://commons.wikimedia.org/wiki/File:Akrotiri\\_fresco\\_shipwreck.png](https://commons.wikimedia.org/wiki/File:Akrotiri_fresco_shipwreck.png) (accessed December 4, 2024; CC 0).
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- Fig. 5: Minoan fresco from Tell el-Da'ba. Photo: Austrian Academy of Sciences, <https://www.auaris.at/html/helmi41.html> (accessed December 4, 2024; CC 0).
- Fig. 6: a) Cretan rhyton bearer (wall painting scene from the tomb of Senenmut, Western Thebes [detail]). Photo: The Metropolitan Museum of Art 30.4.49, facsimile by Nina de Garis Davies, <https://www.metmuseum.org/art/collection/search/544562> (accessed December 12, 2024; CC 0).
- b) Cretan rhyton bearer (wall painting scene from the tomb of Menkheperaseneb I, Western Thebes [detail]). Photo: The Metropolitan Museum of Art 30.4.55, facsimile by Nina de Garis Davies, <https://www.metmuseum.org/art/collection/search/544600> (accessed December 12, 2024; CC 0).
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