

The Possible Harp-Lyre Transformation in Minoan Crete

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ZUSAMMENFASSUNG

Die Frage ist, warum es nach dem Niedergang der kykladischen Kultur (von ca. 2100 v. Chr. an) keinen Beleg für die historische Kontinuität der Harfe gibt. Beim derzeitigen Forschungsstand können die Probleme nur theoretisch angegangen werden. In diesem Beitrag werden mögliche Erklärungen dafür dargelegt. Außer den Marmorstatuetten von Harfenspielern und den Leiern vom minoischen Kreta wurden Siegelabdrücke kontrovers diskutiert. Doch fehlen Informationen über Gebrauch und Bedeutung von Musikinstrumenten jener Zeit. Daher ist es notwendig, Erscheinungen, die nicht direkt mit Musik zu tun haben, zum Vergleich heranzuziehen, z.B. die Dekoration mit dem Kopf eines Wasservogels. Dieser Kopf erscheint als Ornament auf der oberen Vorderseite eines Instruments und wird als soziokultureller Aspekt gedeutet. Wenn wir diese Annahme auf die kykladischen Zeichen projizieren, erhalten wir drei Optionen für die Transformation der Harfe in eine Leier. 1. Die Harfe ist um 90° zurückgebogen und wurde so in eine Leier verwandelt. 2. Die Harfe wurde in ihrer eigentlichen Spielposition gehalten, und in eine Leier umgewandelt. 3. Die Minoer haben ihre eigenen Instrumentenformen ohne jede Harfen-Leier-Transformation entwickelt. Allerdings ist es sehr schwierig, die mögliche Übernahme des Instruments durch die Minoer chronologisch mit Sicherheit zu rekonstruieren. Die symbolische und rituelle Bedeutung von Musikinstrumenten in verschiedenen Zeitabschnitten und an unterschiedlichen Orten, dazu noch in jeweils anderem Kontext, kann eine Rolle für die Darstellung dieses Instruments gespielt haben.

1 ON THE HARP IN ANCIENT GREECE AND ITS TEMPORAL GAP

Some years ago when I was studying the source and meaning of eleven marble harp statuettes from

the Cyclades in the Aegean Sea, I came across the problem of an apparent discontinuity of this type of harp, which I classify as an early type of frame harp¹. For music historians it is hard to accept that after the appearance of these Cycladic marble harp statuettes during the 3rd millennium B.C. (Fig. 1), there is no definite equivalent to be found in surrounding cultures. There is also no convincing explanation for the absence of harps in this part of Europe in the 2nd millennium. Opinions concerning the possible cause of this vary from an isolated organological development² to differences in determining the instrument³ and an all-embracing scepticism about the authenticity of the harp statuettes⁴ and therefore the very existence of this type of harp in southeast Europe.

Now it appears from current research that at least two maybe three harp statuettes did actually exist⁵. A subject of discussion, however, is the authenticity⁶ and provenance⁷ of the harp-player

¹ Schaik 1998a; Schaik 1998b, 30–31, 52.

² Stauder (1973, 28): “eine Neukonstruktion bzw. Eigenentwicklung”.

³ Cf. Hickmann (1956, col. 1540–1541): “dreieckige Rahmenharfe, der Prototyp der europ. Harfe”; Griffiths/Rimmer (1980, 193): “to be interpreted as asymmetrical lyres”; Lawergren (1996a, 58): “Harfe”.

⁴ See Gill/Chippindale 1993, 619; Lawergren 1996a, cols. 58–59.

⁵ See Schaik 1998b, 23–25, especially Tab. 1. In addition to this Lawergren (2000, 2) puts forward in a detailed critique: “We might say that no Cycladic harp statuette is definitely known to be genuine, but numbers 1 (= the Naxos figurine: Athens, National Archaeological Museum, Inv. No. 8833) and 2 (= the figurine from Athens: Athens, National Archaeological Museum, Inv. No. 3908) are our best candidates.”

⁶ On the basis of a number of deviating stylistic characteristics, particularly between the head and the rest of the statuette, Lawergren (2000) disputes the authenticity of the harp statuette in the Metropolitan Museum of Art in New York, Inv. No. 47.100.1. However, recently the Metropolitan harp statuette was studied in the Objects Conservation Department at The Metropolitan Museum by Elizabeth A. Hendrix (Laboratory Supervisor and Research Scientist DMSE of the Massachusetts Institute of Technology).

statuette in the New York Metropolitan Museum of Art. As examination has also shown that early Cycladic marble figures such as the statuette in New York were commonly covered with painted patterns⁸, it is time to reopen the discussion concerning the historical continuity of this type of stringed instrument. How did this type of stringed instrument develop as time went by? The apparent absence of evidence for an historical continuity of the harp after the decline of the Cycladic culture from about 2100 B.C. raises questions. The harp seems to have disappeared from Europe, as it were, in the 2nd millennium B.C. and then to reappear about 450 B.C. in quite a developed stage, depicted on Greek and south Italian vases and in Greek literature. When two Bronze Age harp items from Cyprus are considered as well, the temporal gap can be reduced by approximately thousand years⁹. What is the reason for this? This is a legitimate question, which at the present state of study can

only be answered hypothetically. I shall now offer a number of possible explanations.

When we consider the organological development in the Cyclades as a part of that of the Aegean region¹⁰, the first stringed instrument to appear after the Cycladic harps is a lyre on Minoan Crete. Part of a representation of this instrument is visible on a fresco fragment from the Villa of Hagia Triada (Fig. 2). It is dated between 1580 B.C. and 1510¹¹. A second iconographical representation can be found on a stone sarcophagus in the area near the same villa (Fig. 3). This depiction is a little later, dated between ca. 1450 and 1400 B.C.¹² In both illustrations water birds are depicted at both ends of the yoke arms. This is a characteristic detail which also appears repeatedly on the Cycladic harp statuettes and emerges to have a religious or ritualistic meaning in the context of death¹³. But there are no further resemblances between the Cycladic harp and the Cretan lyre

Study of the restoration between the head and neck of the harp player under ultraviolet light has shown that fluorescence of the head and the body is identical. This contributes to the argument that the stone on either side of the neck break comes from the same source and suffered the same external conditions. Lawergren also does not consider the fact that the 'Metropolitan harpist' is the only harp statuette carved in a style close to the Plastiras style figures. The anatomy of this style in general is quite exaggerated, even while some portions are surprisingly naturalistic (e.g. the curve of the thighs). The musculature of the arms may be a shift in focus for musculature, which is frequently and often beautifully depicted on the legs of some Plastiras-style and Kapsala-style figures. Next to this the possibility that stylistic deviation may also be the result of an evolving sculpture technique in a period of more than 400 years, or the option that sculptors were not meant to follow 'reality' fairly closely should be taken into consideration as well. See Schaik 2000, 239–245.

⁷ Recently John Craxton and Peter Warren (Craxton/Warren 2004, 109–113) put forward new doubts about the authenticity of the harp statuette. According to the authors, the Metropolitan Museum's figure is the work of Angelos Koutsoupis, a local sculptor who lived on the Cycladic island of Ios. Craxton, who visited Ios in January 1947, was told by Koutsoupis that he had been commissioned by an Athenian antiquities dealer, Theodoros Zoumboulakis (some years before), who had asked him to make a figure playing a harp. The dealer had sent him photographs (of the Keros harpist in Athens?) from which he had worked. In addition to this he made a sketch in Craxton's drawing book (Craxton/Warren 2004, 111, Fig. 8.3). According to the authors the commissioner had left a harpist statuette for approval with the Metropolitan Museum for a period, before they decided to purchase it in 1947. For that reason the harp player in the Metropolitan Museum of Art in New York has to be considered as a Neocycladic product of art. This story raises many questions. Could Koutsoupis, back in the early 1940s, have known that the Cycladic statuettes were often painted? Could Zoumboulakis have known this fact and disclosed it to Koutsoupis? If the paint was put on purpose on the figure's head by Koutsoupis (which means that it was made known to him that statuettes were painted), then he must have known that it was Zoumboulakis' intention to trade it as genuine, and this would make him a forger. It is also questionable, whether

the harp figurine made by Koutsoupis and the statuette in the Metropolitan Museum are indeed the same piece. Moreover, the sketch made by Koutsoupis is not an accurate rendering of the New York figure. The drawing reveals a figure sitting on a chair with a backrest holding something that is supposed to be a harp frame with its left hand. But there is no sound-box, no swan's head on top of the frame, and no skyward gaze of the harpist's head. Most other stylistic features differ as well. The only remarkable similarity between the statuette and the sketch is the harp player's left ear, as all other harp figurines don't have ears. But it would be a little far fetched to conclude that this similarity indisputably proves that it is the same object. Nevertheless, it makes the Metropolitan harp player suspicious, but the proof that it is a "Neocycladic product of art" is quite scanty.

⁸ Elizabeth A. Hendrix (2003a, 405–446) has found some minuscule paint remains on the head of the Metropolitan harpist. These are very tiny, but resolvable, bright red particles in the eye slits. However the color particles are not enough to give color to this area with the unaided eye, so they do not seem to have been placed there in order to convince the modern viewer that there was any paint. As far as I know no other Cycladic harp statuettes have faint traces of red paint in the grooves of the eyes, but some female non-musical figurines do (Thimme/Getz-Preziosi 1977). In addition to the existing arguments (a paint 'ghost' on top of the head and a chair with a backrest) this is a third argument for the figure's genuineness.

⁹ Aign (1963, 60, Object III/I, Fig. 25): Engomi, cylinder seal depiction (1600–1350 B.C.); Aign (1963, 62, Object III/3, Fig. 27): Kourion, bronze vase base (London, British Museum 1920.12–20.1; ca. 1100 B.C.). See also my remark in note 52 to the Athens, National Archaeological Museum, Inv. No. 784.

¹⁰ For a historical survey on this point I refer to the publications of Braun 1999b, 9–10, Figs. 1–2, particularly his discussion in Braun (2002, 58–65): Megiddo harp; Bachmann (2000, 148–149, 156, Fig. 5): frame harp(?). Cf. Höckmann 1982, 37, Note 22; Anati (1963, 210): asymmetrical lyre.

¹¹ Evans 1921–1936, Vol. 2/2, 836, Fig. 552b; Aign 1963, 43, Object II/10, Fig. 14; Anderson 1994, 8, Fig. 5.

¹² Evans 1921–1936, Vol. 2/2, 836, Fig. 552a; Aign 1963, 44, Object II/11, Fig. 15; Davaras *Phaistos*, Pl. 33, 36; Marinatos 1987, Fig. 16; Anderson 1994, 8, Fig. 6.

¹³ See Schaik 1998b, 32–41.

as regards construction and shape. A direct organological connection between both instruments can be more or less excluded. As regards their socio-cultural function, however, there are superficial resemblances. Both were used in relation to death or the afterlife. According to their brown skin colour the players of the Cretan lyre were supposed to represent priests. This places both the Minoan lyre and the Cycladic harp in a religious as well as a ritualistic context.

The Cycladic harp and the Minoan lyre, however, are not the only stringed instruments which we know from the Aegean region. Three seals and a number of seal drawings, all dating to the first half of the 2nd millennium B.C., are also of interest and at the same time bones of contention, when comparing the harp with the lyre.

No lesser person than Sir Arthur Evans, the great Knossos expert, suggested as early as 1928 that there were connections between the depictions on the seals and the “seven-stringed *cithara*”¹⁴. Evans, a knowledgeable archaeologist but not particularly knowledgeable as a musicologist, missed the fact that the instruments depicted on the seals do not correspond at all to the construction criteria of a *kithara*. Evans could have known about the *kithara* from popular handbooks such as *Musical Instruments* by Carl Engel, published in 1875. Nevertheless it was Evans’ opinion that gained credence and became a paradigm within musicology. Scholars such as Kenna, Aign and Wegner have based their ideas directly on those of Evans¹⁵. Others such as Anderson revert to the fundamental study from 1963 by Bernhard Aign¹⁶. Harking back to earlier ideas, is on the one hand, useful for the description of how far research has developed, but it has the disadvantage that only a same small number of seals are discussed. Exceptions to this can be seen in the study of Maas/Snyder, Schaik and Younger, who in addition to reviewing existing sources also discuss a number of other seals¹⁷.

2 SEALS, HIEROGLYPHIC SIGNS, AND OTHER VISUAL MATERIAL

Starting from the hypothesis that a number of depictions on seals can be interpreted as stringed instruments, I shall then consider more closely all known seals dealing with a related theme. This will be followed by a summing up of the archaeological and musicological characteristics per object. Where necessary, existing opinions and conclusions will be examined.

The first seal to be considered (Fig. 4) is a light green soapstone with red veins. It is shaped as a

three-sided prism with oval surfaces and originates from the workshop in Malia, Crete, discovered by André Dessenne in 1956¹⁸. The sealstone is part of the collection of the Archaeological Museum in Heraklion, Inv. No. 1748 and is dated between ca. 1850 and 1750 B.C. (Middle Minoan IIB phase).

On the *a* side a type of stringed object is depicted with two groups of five ‘strings’ strung in divergent directions. Younger is mistaken in his description of eight strings. The two sets of four strings according to him indicate a “low, heart-shaped double harp”¹⁹. This speculative organological interpretation is based on the “string lengths” becoming longer and shorter on both sides of the imaginary middle line. The instrument itself consists of a frame of two arms curved towards each other, which seem to rise from a horizontal base. On the upper side both arms come together in a lowering, which points slightly downwards. On about the place where both arms cross each other a triangular bulge points upwards (cf. Fig. 5b). Is this point meant to be a badly illustrated swan’s head? The right arm of the frame is curved slightly under the left arm. The strings are strung between the frame and the upper side of a rectangular construction which can be interpreted as a soundbox.

On the other two sides of the prism there are also illustrations. On side *b* there is a unidentifiable four-footed creature depicted. Side *c* shows a pear-shaped triangular vessel with an amphora above it, which is once again pear-shaped. Next to it on the right there is an object that cannot be identified. The relationship between the different illustrations is unclear.

The second sealstone (Fig. 5a–b) is a four-sided beaded seal of green jasper. This seal which is assumed to have come from the district of Heraklion on Crete is dated between 1850–1700 B.C. (Middle Minoan II–IIIA phase). The seal is now in the Oxford Ashmolean Museum, Inv. No. 1938.793.

On side *b* a type of stringed object can be seen with eight (two groups of four) ‘strings’ strung in divergent directions. At an angle next to it is a star and an illustration that is difficult to distinguish. Kenna identifies it as the head of a calf²⁰. There is

¹⁴ Evans 1921–1936, Vol. 2/2, 834–835.

¹⁵ Kenna 1960, Object No. 173; Aign 1963, 35–37; Wegner 1968, Object No. 83, 85.

¹⁶ Anderson 1994, 5–7.

¹⁷ Maas/Snyder 1989, 219–220, Notes 3–6; Schaik 1998b, 30, Note 51; Younger 1998, 13–14 Cat. No. 56; 58; 64; 67; 68.

¹⁸ CMS 1977, 110, Object No. 86; Platon 1965, 219, Fig. 9,1; Schaik 1998b, 75, Fig. 12B; Younger 1998, Cat. No. 56, Pl. 23. 4.

¹⁹ Younger 1998, 76, Cat. No. 56.

²⁰ See Kenna 1960, Object No. 170.

also a lily here and an object which looks like a mallet. It is remarkable that when the non-musical seal illustrations are seen in the correct position (i.e. the star above and the lily looking upwards) the stringed instrument seems to be depicted upside down (cf. Fig. 5b)²¹. This unusual reproduction, which is perhaps meant as a visual dividing line from the other illustrated objects, seems to Younger to presuppose that the stringed instrument has been added for decorative purposes²². The illustration is roughly similar to the 'stringed instrument' in the seal from Malia (Fig. 4): once again there is a heart-shaped frame with a slight indentation on the upper side. In the middle of the indentation there is a bulge towards the outer side which may suggest the head of a water bird. The eight strings are strung in a half vertical direction between the frame and the soundbox: four strings point to the right and four point to the left. The two groups of strings are more clearly divided here than in Figure 4. But it seems that the frame in Figure 5b comes out of the sides of the soundbox, while in the earlier figure the soundbox is depicted within the frame. The connection between both ends on the upper side of the frame also suggests that there is no interruption.

There are also eight strings on the clay seal impression that comes from the signet seal from the hieroglyphics depot in the Palace of Knossos (Fig. 6a). The impression is dated 1775–1700 B.C. (Middle Minoan III phase) and is now in the Archaeological Museum of Heraklion, Inv. No. 172a²³. Seals of the signet class have normally the characteristic of showing a more developed stage than ordinary seals: often the elegant motives are cut decoratively. This applies to our figure. Within a decorative circle of lion-head masks four pictures are illustrated, two of which are labelled as a lyre.

In contrast to both of the earlier seal illustrations, in the upper half of Figure 6a there is not a heart-shaped but an oval frame to be seen, suggesting the shape of a lyre (Fig. 6b). Eight strings are strung vertically in a slightly diverging manner between frame and soundbox. Despite the number of strings there is no clear symmetrical juxtaposition. There is also no sign of the head of a water bird.

Below this object in the form of a lyre is a second hieroglyphic sign (Fig. 6c). This consists of a curved frame in the shape of an upside-down heart with an opening on the upper side. From the inward indentation two straight parallel lines are drawn in the direction of the two converging ends of the frame. Both halves are therefore more or less symmetrical. Evans supposes that this is "another stringed instrument", in which the two pairs of parallel lines are supposed to be strings, which calls up associations with another signet

seal²⁴. But Evans' observation is dubious, because the shape differs in essential points from the other Minoan seal illustrations with stringed instruments: for example in its open frame and the complete absence of a soundbox²⁵. Psaroudakes, who studied the scale of the lyre soundbox, doubts if such shallow soundboxes really ever existed, and believes that they are iconographic simplifications of reality²⁶. For some inexplicable reason Minoan and very many Geometric lyres are drawn with a very shallow soundbox, almost non-existent or with a lunar-like soundbox at best. But after all, especially the Minoan instrument was a large lyre with long strings, and it must have needed a substantial soundbox volume in order to give an adequate sound. It is also remarkable that in the footnote to his argument Evans talks of "six cord-like lines" instead of four. Here there is possibly a wrong interpretation with wide ranging consequences, because seventy years later Younger, following in Evans' footsteps, still calls the illustra-

²¹ In Evans (1921–1936, Vol. 1, 277, Fig. 207 c1–4) the drawing of side *b* is accompanied by three illustrations of another seal. In a later publication, Evans (1921–1936, Vol. 2/2, 835, Note 5) points to that mistake and gives a correct description of the seal, but now the 'instrument' is represented in a mirror image (his Fig. 550b). However, this mistake of Evans has consequences for later studies. Some scholars regard both drawings as depictions of two different seals, whereas it is the same object: Aign (1963, 35, Object II/1, Fig. 6): "Tropfen-Siegelstempel"; Aign (1963, 36, Object II/2, Fig. 7): "Karneol-Siegelstempel"; Wegner 1968, U 77–78, Object No. 83, 85; Anderson 1994, 6, Fig. 3a. Kenna (1960, Object No. 170, Pl. 7) is the first one who depicts all four sides of the seal in the right arrangement. A number of authors publish only side *b* on which the stringed instrument is visible: Wegner 1968, Object No. 83, 85; Younger 1993, 165; Anderson 1994, 6, Fig. 3a; CHIC, Object No. 283; Schaik 1998b, 75, Fig. 12A; Younger 1998, Cat. No. 58, Fig. 23, 6.

²² Younger 1998, 76, Cat. No. 58.

²³ Evans 1921–1936, Vol. 1, 276, Fig. 205; Evans 1921–1936, Vol. 2/2, 834–835, Fig. 551; Wegner 1950, Fig. 6; Hickmann 1960, 524, Fig. 110; Aign 1963, 36, Object II/4–5, Fig. 9; Gill 1965, H1=P64a 1/2; Anderson 1994, 6, Fig. 3b; CHIC 1996, Object No. 123; Younger 1998, 78, Cat. No. 64, Pl. 24. 6.

²⁴ Evans (1921–1936, Vol. 2/2, 835, Note 3): "The two-horned sign below the 'lyre' on this impression may also represent an instrument, since the six cord-like lines here seen recur on another signet (Evans 1909, 192, Figs. 30–31, Pl. 30d). With its 'stand' below it recalls a Late Mycenaean type of 'lyre' found at Menidi, and since restored in the Athens Museum. The sign as a rule, however, shows no trace of strings."

²⁵ Aign (1963, 37): "[...] fällt gänzlich aus dem Rahmen der übrigen hieroglyphischen Instrumentenzeichen. Man vermisst vor allem die Andeutung eines Schallkörpers".

²⁶ Psaroudakes 2004, 59–67. In this respect the lyre playing monkey on the Monkey Frieze from Xeste 3, Room 4 in Akrotiri, Thera (16th century B.C.) does not offer a great deal of information since the fresco is handed over fragmentary; only the upper part of five strings, the yoke and the right arm of the instrument are partially visible (see Marinatos 1989, 114, Fig. 78; Rehak 1999, 705–709).

tion “a short double harp with two sets of three strings” while on the added illustration there are only two pairs of ‘strings’ to be seen²⁷. The German classifier of instruments Leopold Vorreiter is alone in actually linking his drawing of the instrument to Evans’ description²⁸. Vorreiter also classifies Fig. 6c as the oldest in the group of “Doppellyren mit gemeinsamen Schallkörper”:

“In technologischer Hinsicht können beide Arme verbundene Stierhörner (des minoischen Stieres!) sein, deren Verbindungsstelle vom Siegelbild zwar nicht wiedergegeben oder geschickt kaschiert wurde, die aber nach mechanischen Erfordernissen, die Kraft des Saitenzuges und den Haltedruck durch den Spieler (die Hörner bilden ja kein geschlossenes statisches System wegen des offenen Abstandes zwischen den oberen Hornenden) aufnehmen zu müssen, als metallisches, kräftiges Verbindungsstück (z. B. ein Rohr) bestanden haben muß und die unteren dicken Hornenden starr eingespannt hat; wahrscheinlich hat dieses Stück an der Rückseite auch die “Patronen” (Saiten-Einhängnägel) getragen. [...] Infolge der in den Hörnern eingeschlossenen korrespondierenden langen (beide Hörner zusammen 180 cm und mehr) und dicken Luftsäule war ein kräftiger und sonorer Klang dieser Lyra höchstwahrscheinlich. Übrigens darf angenommen werden, daß diese Doppellyra kultischen Zwecken diene und ihre Hörner vergoldet waren”²⁹.

Vorreiter’s interpretation of the object is not only fictitious, but also without any historical justification whatsoever. His explanation is even more astonishing, because he seems well aware that this would be a unique example when he writes that “weder von antiken Schriftstellern noch von bisher bekannten Ikonogrammen die Kenntnis von der Existenz und Funktion von Doppellyren im Altertum vermittelt worden ist”³⁰. The possibility that this might be a non-musical abstract form or figure also does not seem to occur to him.

On Figure 6a on the inner side of the decorative circle there is another hieroglyphic sign to the left and right of the middle, which as regards form can be compared to a half-peeled banana; but overstraining our imagination a bit we can also see the abstract form of a bird³¹. There only remains the uncertainty about the connection and the meaning of this sign in combination with the other two symbols.

The next two illustrations, which are named in literature as “hieroglyphic signs on clay documents” (Figs. 7–8), have been included in the study of stringed instruments on seals for decades. Both prints originate from the Hieroglyphic Deposit at Knossos palace and are dated between ca. 1775 and 1700 B.C. (Middle Minoan III phase). But it is unknown where the clay documents are currently.

These seal illustrations were published and discussed for the first time by Evans in Volume II of his study *The Palace of Minos*³². Evans writes explicitly, “but too much importance must not be attached to these secondary forms”³³. As will be apparent later this statement has lost most of its importance in the light of the present picture concerning the history of the lyre.

Figure 7 shows a rudimentarily drawn frame. From its base rise two slightly diverging lines upwards, which are interpreted by Aign as two “geschwungenen und nach außen gebauchten Jocharme”³⁴. The lines become thicker the higher they go. On the upper side both lines bend inwards and are connected by a sort of horizontal connection, a “Querjoch” (‘crossbar’). Inside the framework from the base in the direction of the cross section three thick, slightly diverging lines have been drawn, which are interpreted as three ‘strings’. Until now this interpretation could be followed easily. But my powers of imagination are tested when asked to recognise from a bulge on the left upper side of the frame the head of a water bird and in the indentation below the connection between the neck and the pillar. Is this a casual deviation or is it meant to represent reality? Anyhow, in comparison with the Minoan lyre the beak should be pointing to the other side, towards the ‘strings’; and the right hand side arm has a different shape; and as we know, Minoan lyres were symmetrical about the vertical axis.

Figure 8 is rather similar in form to Figure 7, although the framework is more rectangular in form and the so-called strings do not diverge and are not thread through to the framework. In discussing both illustrations Evans points out in a footnote a derivative from this sign type that is a part of the “Advanced Linear Class A” (Fig. 9)³⁵. The analogy with the signs from Figures 7 and 8 escapes me for the most part, but with some imagination one could see a resemblance (to a certain degree) between the derivative sign and the two clay document impressions, in the sense that there

²⁷ See footnote 25, and Younger 1998, Cat. No. 64.

²⁸ Vorreiter 1976a, 60, Fig. 1a.

²⁹ Vorreiter 1976a, 59–60.

³⁰ Vorreiter 1976a, 59.

³¹ Both signs appear in the Synopsis of Signs of Advanced Linear Class A; see Evans 1909, 192–193; Evans 1921–1936, Vol. 1, 642, Fig. 476, No. 21, 40c.

³² Evans 1921–1936, Vol. 2/2, 834–835, Fig. 550c–d; Aign 1963, 37, Object II/6, Fig. 10; Object II/7, Fig. 11; Anderson 1994, 6, Fig. 3c.

³³ Evans 1921–1936, Vol. 2/2, 834.

³⁴ Aign 1963, 37.

³⁵ Evans (1921–1936, Vol. 2/2, 834) refers in Note 3 to his previous study (Evans 1921–1936, Vol. 1, 642, Fig. 476, Object No. 78).

is a 'base', a set of 'strings' fanning out, and a broken 'yoke' across the strings at the top.

Although few details are discernible on Figures 7 and 8, Aign considers them "einwandfrei" ('without doubt') as an abstract representation of a lyre – a supposition which seems mostly to be based on the resemblance in form to other well known lyre types³⁶. This supposition is certainly not impossible and can even be supported to a certain degree by older prototypes. For example, two illustrations of asymmetric box lyres from Syria can be compared, both of which date from the 3rd millennium B.C. The first illustration (Fig. 10), now in the Arndt Collection in Munich, is a cylinder seal, probably originating from northern Syria³⁷. The instrument has a more or less rectangular soundbox across which probably three or four parallel strings were strung. Especially striking is the outwards pointing bulge in the left yoke arm. Is this perhaps a clearer representation of the bulging in the left arm of the hieroglyphic sign in Fig. 7? A second cylinder seal found at Karkami (?) (Fig. 11)³⁸ is somewhat similar to the other hieroglyphic sign from Knossos (Fig. 8): note especially the more or less rectangular form.

Although the form of the Minoan lyres does indeed have certain similarities to the older box lyres from Syria, Aign's conclusion that there may be 'persuading' evidence for a Minoan lyre seems to me far too exaggerated. All he doubts is the origin of the hieroglyphic lyre sign as a portrayal of a Minoan instrument: "Es ist aber unter Umständen mit der Möglichkeit zu rechnen, daß die hieroglyphischen Leierzeichen aus Kreta sich überhaupt nicht auf kretische Musikinstrumente zurückführen lassen"³⁹. But in my opinion we cannot come to the same conclusion for the hieroglyphic signs, due to their lack of details, especially because in contrast to the Syrian cylinder seals there are no players here. As a result there is always the possibility that the hieroglyphic signs could represent an object different than a lyre. This is also possible for the three impressions on clay tablets from Knossos (Figs. 12–13), which date to ca. 1700–1650 B.C. (Middle Minoan II–IIIA period)⁴⁰.

There are also other aspects, such as the shape of the soundbox and the number of strings, which are different. It should also not be forgotten that there is a time difference of about one thousand years between the creation of the Minoan signs on clay documents and the cylinder seals of Syria. The form of the Minoan lyre is also remarkably different from the cylinder seals: The Minoan lyre has a symmetrically construction, and its soundbox was probably made out of wood with a bottom that was slightly curved.

On the other hand, this type of box lyre might have been known in Crete, because the island had

many trade contacts with Egypt, a land where many box lyres have been found. But there is no evidence of clear equivalents for box lyres in the Aegean region or on the mainland of Greece.

Another point of conjecture is the number of strings. The number four, or a multiple of four, occurs remarkably often. This applies not only to the lyre illustrations in Syria, but also to those on the seals in Crete. The two hieroglyphic signs on clay tablets are exceptions, having only three strings (Figs. 7–8); and if two stringed objects on clay tablets (Figs. 12a–b) are also considered lyres, there are four. But it is questionable whether we are dealing with a real number of strings. There was very little space for reproducing details on the usually small illustrations. Yet even if there was enough space it is disputable whether the makers of these hieroglyphic signs and seal illustrations really meant to depict an instrument with as many details as possible. Was the global indication of a stringed instrument perhaps enough to give meaning to the image? This method has been used in several contexts throughout history for a number of musical instruments⁴¹. The illustrations of Cretan lyres from Hagia Triada give the impression that when there is more space for the drawing, the number of strings increase. On the other hand, later written sources repeatedly point out that the number of strings on a *kithara* was originally four⁴². It is not unlikely that this number is connected to the Greek love of archetypal numbers (1, 2, 3, 4), which many centuries later was incorporated in the Pythagorean *tetraktys*, the 'system of four numbers'⁴³.

³⁶ Aign 1963, 38. His opinion is shared by Anderson (1994, 6).

³⁷ Cylinder seal from the Arndt Collection in the Staatliche Münzsammlung in Munich, Inv. No. unknown, Early Dynastic III period. Aign 1963, 131, Object S/2, Fig. 79; Norborg 1995, 32–37, Fig. 12.

³⁸ Cylinder seal from Istanbul, Museum of the Ancient Orient, Inv. No. 6934, Early Dynastic III period. Aign 1963, 131, Object S/1, Fig. 78; Norborg 1995, 32–37, Fig. 11.

³⁹ Aign 1963, 138.

⁴⁰ Figs. 12–13 belong to the Heraklion, Archaeological Museum, pottery collection, Inv. No. 1296; CHIC Object No. 53; Younger (1998, Cat. No. 67, Pl. 25.2a–b): "The simple harp". Bibliographical references at these signs by Younger are partly incorrect. Fig. 14 belongs to the Heraklion, Archaeological Museum, pottery collection, Inv. No. 1301; CHIC 1996, Object No. 55; Younger 1998, Cat. 68, Pl. 25.3.

⁴¹ See for instance Schaik (2005, 62–90): "The Delta Harp".

⁴² See Strabo, *Geography* 13, 2.4 (C 618); Plutarch, *Moralia* 238C; and Nicomachus, *Harmonikon Encheiridion* (ed. Jan 1962, 244). According to ancient Greek writers Terpandros of Lesbos (ca. 712–650?) was credited with having introduced the addition of three extra strings to the lyre, which before his time had only four; see Schaik 2004, 313–328.

⁴³ Münxelhaus 1976, 185–191.

The number of four strings can also be found on two impressions on a baked clay seal which was once a clasp on a wicker basket (Fig. 14a). The seal comes from room XI of the House of Tiles in Lerna and is dated in the Helladic II period (ca. 2200–2100 B.C.)⁴⁴; it is now part of the collection of the Museum of Argos, Inv. No. L 4.387.

The two objects on this seal, which probably depict stringed instruments, are in several respects similar to the Cycladic harp (cf. Figs. 14b and 15). They have a relatively broad soundbox. The curved frame seems to be attached to the soundbox by a post. The strings are strung between the frame and the soundbox, if we assume that the broader part is the depiction of a soundbox. Both stringed instruments are geometrically arranged in the form of a circle between geometric patterns of two triskelion signs and four designs in the form of a T depicted as a cross. The ‘stringed instruments’ are arranged radially and symmetrically. But the connection between the instruments and the other signs is again not clear here.

This is all of the iconographic material that I wish to discuss in this comparative study. There are of course some more illustrations of seals, which are described as a stringed instrument in literature. However the forms of these are so different from that of a lyre or harp that I am of the opinion that it is very difficult to define these as stringed instruments at all, and therefore have left them out of this discussion⁴⁵.

3 IS THE HARP-LYRE TRANSFORMATION A REAL OPTION?

Summing up we can come to the following conclusions. The two cylindrical seal impressions (Figs. 10–11) that originate from the border area of northern Syria, even though they have superficial characteristics similar to Cretan hieroglyphics, are difficult to link to each other due to space and time.

Apparently the three- and four-sided prism seals were often used for the representation of hieroglyphic formulas⁴⁶. In the Minoan pictography the hieroglyphic signs are often represented in a highly stylized manner. This is necessary, because the objects on which the signs are drawn are very small (Fig. 14a for example has a diameter of 26 mm). They do not allow a comprehensive or detailed representation, and it is almost inevitable that many signs lack some precision. Then there is also the fact that another much used material, clay, is not usually the material that would have lent itself to the representation of precise nuances. The results of these limiting factors become visible when we look at these depictions in detail. In Fig-

ure 4, for example, the string length from the middle to the side of the instrument increases first and then decreases. For harps this is, to put it mildly, an unusual way of stringing, even in Antiquity. Certain types of lyres such as the Cretan lyre appear to have the outermost strings as the longest (cf. Figs. 2–3). It is also doubtful whether the representation in Figure 4 should be seen as a reflection of reality. It seems rather that this representation is more an abstraction of the lyre than the artificial interpretation of what would be an organologically unique “double harp”, such as put forward by Younger.

Almost all of the seal illustrations show a drawing that is neither a real harp nor unmistakably a lyre⁴⁷. But there are a number of seal illustrations, in which there is an organological link between the instruments. Figures 7 and 8 are as regards form closer to the prototype of a lyre than a harp, if we at least disregard the limiting factors concerning space and time. The objects in Figure 14a have, on the other hand, remarkable similarities with the harp in the Cyclades: a curved frame and a seemingly separate vaulted post that connects the frame with the soundbox. The closeness to reality is increased by the four strings of increasing length. In line with the universal stringing of the harp it is logical to assume that the shortest strings would be placed nearest to the player. How close the similarities may be, the limiting factors – like in case of the lyre – are interpreted in one direction. Thus the harp illustrations are seen from an angle, in which the imaginary soundbox is placed horizontally (below) and the pillar vertically. It is questionable whether this 21st century perspective is correct.

The ‘stringed instruments’ in Figures 4, 5 and 6b also seem to be somewhat similar to each other as regards their form. But one cannot say much concerning the origin and development history of these instruments with any certainty. Nevertheless in literature a link is made with the lyre types from the Orient especially to those from Syria and Mesopotamia⁴⁸. It would be obvious to think of these instruments in terms of an evolved box lyre. The development of such an instrument would

⁴⁴ CMS 1975, 87, Object No. 110. See also Heath 1958, 89, Cat. No. 30; 111, Object No. S56, Pl. 22 (the seal is imprecisely drawn), 28; Boardman 1970, 23, Fig. 9; Younger 1998, Cat. No. 62, Pl. 24.4.

⁴⁵ Cf. e.g. Younger 1998, Cat. No. 66, 69–72, Pl. 25.1; 25.4–25.6.

⁴⁶ Evans 1921–1936, Vol. 1, 276.

⁴⁷ However, Evans (1921–1936, Vol. 2/2, 834) denotes all depictions in our Figs. 6–9 as “Hieroglyphic ‘lyre’ signs”; Aign (1963, 40) only regards our Figs. 7–8 as a three-stringed lyre; Fig. 6c he considers as doubtful.

⁴⁸ Aign 1963, 130.

then consist of a modification of the frame and the placing of the strings. Concerning the resulting consequences of this for the method of playing the instrument, Aign says, “es ist hierbei gleichgültig, ob die orientalischen Leiern in horizontaler oder vertikaler Haltung gespielt wurden; denn die Spielweise könnte sich im Falle einer Übernahme in das minoische Instrumentarium ohnehin geändert haben”⁴⁹. A vertical way of playing is possible by the way in which the instruments are portrayed, but this can hardly be proven because either the context is missing, or when there is more than one instrument portrayed the link between the instruments is unclear. A good example of this is Figure 5, where the stringed instrument seems to stand upside down in relation to the other signs. Aign, who is well aware of the limitations of hieroglyphic signs, interprets the illustration however as a ‘harp’ without any further explanation⁵⁰.

A possible clue is the assumed decoration of the head of a water bird in Figures 4 and 5. On the basis of the visual representation of harps and lyres in Antiquity, the head of a water bird is to be seen as a frontal ornament on the front side or on the upper side of the instrument. This can be considered as a socio-cultural aspect. When we project this assumption on hieroglyphic signs, there are three possible options in which the harp could be transformed into a lyre.

On the basis of our well-known types of instruments Figures 4 and 5 in the first option could possibly be a transformation of the Cycladic harp (Fig. 16a). This alteration, however, suggested by Warren Anderson is rather complicated⁵¹. The instrument would have been tilted 90 degrees backward (Fig. 16b). In that case the frame would have been altered a lot as would the placing of the strings (cf. Fig. 16c–d). In spite of this Anderson thinks that there is little doubt about such a transformation, as he states, “beyond question, it is a transitional sequence, ending with something very like a lyre”⁵².

In the second option the type of instrument of Figure 16a could possibly have transformed directly into Figure 16c. But here as well the frame and the soundbox would have to be altered to transform into a Minoan lyre. However, an important difference to the view illustrated in Figure 16b is that the instrument would not have to be turned 90 degrees backward and could remain in its original position. Thus the sealstone depiction (Fig. 16c) seems to be closer to a lyre, as we know it from the late Minoan period (Fig. 16d) than the Cycladic harp (Fig. 16a).

In Figure 17a reconstruction has been made of the possible development in construction of both types of instruments based on the lyres from the Cretan villa Hagia Triada (Figs. 2–3). But again it is

not a proven alteration, but just a more likely implication.

Parallels with musical instruments from the Levant or Near East cannot easily be used as evidence⁵³, especially because it is not known whether – or when – the lyre was acquired by the Minoans. Moreover, they may also have developed own Minoan instrument features without any harp-lyre transformation. This is the third possible option.

Certain aspects of west Semitic lyres however, do resemble Cretan hieroglyphics, for example, the curved yoke arms, its relatively small size and the number of strings. On larger illustrations, such as Figures 2 and 3 there is not just a larger number of strings visible, but also another type of lyre. It is also not known whether the seal illustrations had already been modified, before they came to be used as script signs. The foundation of the hypothesis concerning the type of lyre from the Near East is furthermore made more difficult by the fact that although there were evident contacts between Crete and Egypt in the 2nd millennium B.C., the lyre became an import item (as far as is known) only on illustrations from the 15th century B.C. onwards⁵⁴. It is therefore difficult to reconstruct a possible acquisition by the Minoans chronologically.

The gap in time between the disappearance of the Cycladic harp at the end of the 3rd millennium B.C. and the new appearance of harps in Greece and southern Italy since the beginning of the 5th century B.C. cannot be bridged by the present state of material evidence of seals⁵⁵. On the other

⁴⁹ Aign 1963, 130.

⁵⁰ Aign 1963, 38–40 regards our Figs. 4–5a–b as an eight-stringed harp and Fig. 6b as a developed harp type of this.

⁵¹ Anderson (1994, 5): “A pair of seal carvings show eight-stringed harps, each with two distinct sets of four parallel strings and with each set differently angled. [...] They have shifted to a central position, as if the Cycladic harp had been tilted 90 degrees backward. After this they disappear, to be seen again centuries later on the Late Minoan concert lyre.”

⁵² Anderson 1994, 5.

⁵³ This is also the case with the drawing of a lyre on a Syrian steatite cylinder seal impression from Tarsus (Inv. No. 999-S7) by Piet de Jong, dating from ca. 1800 B.C. (see Franklin 2006, 396, Pl. 2). Lawergren 1998, 47 has pointed out that the depiction may not be precise enough to identify this instrument as round-bottomed and Aegean.

⁵⁴ Hickmann 1960, cols. 523–526; Stauder 1961, 34–35.

⁵⁵ Maas/Snyder 1989, 147–164. Also a female harpist on a red-figured oinochoe (ca. 340 B.C.) from southern Italy in the Allard Pierson Museum, Amsterdam Inv. No. 14.396. More representations of harps by Herbig (1929) and by Wegner (1949, 203–205). Here the discussion concerning the kind of the instrument on the Late Geometric bowl-painting dating from 750–700 B.C. (Athens, National Archaeological Museum, Inv. No. 784) is left aside; see Schaik 1998b, 52.

hand it is difficult to imagine the harp being introduced suddenly at a late stage of its development without any prehistory. A 'second entrance' in both Greek fine art and in the literature of the 1st millennium cannot definitely be excluded⁵⁶, but finding the cause of this remains guesswork for the moment. Was the harp perhaps less popular than the lyre? Or did the Minoans consider the harp as a relic from an obsolete culture, which was not their own and therefore not used on Crete? Or had the functional role that the harp on the Cyclades played lost its meaning or had it become forgotten? Or perhaps there was a combination of reasons?

The chances that a real harp will ever be found in excavations are remote. The material from which the instrument was made (wood) is too perishable a substance. For the information passed down to us about the function and use of stringed instruments we have to rely mostly on archaeological and iconographical materials and objects such as marble harp statuettes and seal depictions. The absence of information concerning the use and the meaning of musical instruments from the same period makes it necessary to look for parallels that are not directly linked to music. And they can be found. A good example is the decoration of the head of the water bird on harps and lyres. This has survived throughout the ages, albeit in a continuously evolving socio-cultural context⁵⁷. The symbolic and ritual meaning of a musical instrument in several periods and places and in several contexts would also have played a role in the choice of illustrating this instrument. This is reflected in the continuously changing, multifaceted combination of social, cultural, religious, economic, political and artistic factors⁵⁸. It is my opinion that this could be an important reason for the absence of harp illustrations in the Cyclades, Crete and the Greek mainland during a long period of time. We come across a comparable situation in Western Europe, as due to moral objections of the Church Fathers in the first centuries against the use of musical

instruments in the Roman culture, the harp was not depicted anymore until the frame harp in the Utrecht Psalter, ca. A.D. 850⁵⁹. After that the stringed instrument became an important Christian symbol for centuries. We may envisage a comparable situation in Antiquity. Although in ancient Greece the harp never achieved the status of the lyre, this does not exclude the possibility that the harp could have been latently present for centuries before the instrument became the focus of attention once again and gained new meaning.

ACKNOWLEDGEMENTS

I would like to thank Dr. Stelios Psaroudakes (Faculty of Music Studies, University of Athens) for his thought-provoking comment on a lot of topics considered in the article. I am also very grateful to Mrs. Alexandra Karetsou, Director of the Archaeological Museum of Heraklion, Crete, for her kind advice and help in solving a number of inventory problems regarding Minoan seals. I am also most grateful to Dr. Elizabeth A. Hendrix (Laboratory Supervisor and Research Scientist DMSE of the Massachusetts Institute of Technology, Cambridge, MA, U.S.A.) for making available her research observations on the 'Metropolitan harp player'. Finally, I would like to thank Prof. Bo Lawergren (Hunter College, City University of New York) for focusing my attention on new and most interesting material regarding the authenticity of the 'Metropolitan harp player'.

⁵⁶ Maas/Snyder 1989, 147.

⁵⁷ Schaik 2002.

⁵⁸ Mertens (1998, 20): "The ingredients, as we are beginning to see, were an extraordinarily complex combination of survivals and innovations introduced by new populations and Eastern influences".

⁵⁹ Utrecht, University Library, MS 32, fols. 83r and 91v. Utrecht Psalter (Hautvillers near Reims), ca. 820–850.

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Fig. 1 Marble harp player from Keros, Early Cycladic II, ca. 2600–2500 B.C. (Athens, National Archaeological Museum, 3908).

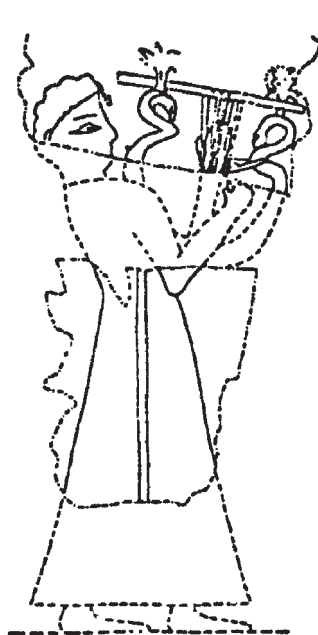


Fig. 2 Fragment of a Minoan lyre on a fresco from Hagia Triada, Crete, 1580–1510 B.C. (Heraklion, Archaeological Museum; after Anderson 1994, 8, Fig. 5).

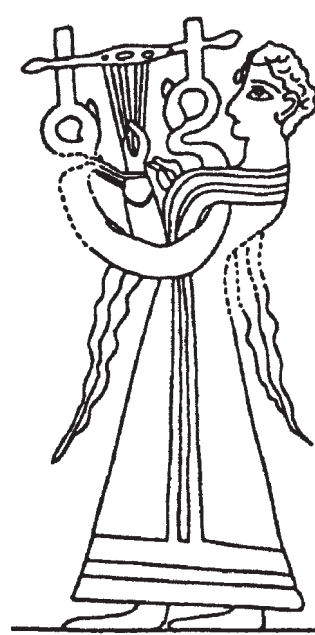


Fig. 3 Painted Minoan lyre player on a stone sarcophagus from the vicinity of Hagia Triada, Crete, 1450–1400 B.C. (Heraklion, Archaeological Museum; after Anderson 1994, 9, Fig. 6).



a



Fig. 4 Sealstone from Malia, Crete, ca. 1850–1750 B.C. (Heraklion, Archaeological Museum, 1748).



b

Fig. 5 a: Sealstone from the Heraklion district, Crete, ca. 1850–1700 B.C. (Oxford, Ashmolean Museum, 1938.793); b: top-down.

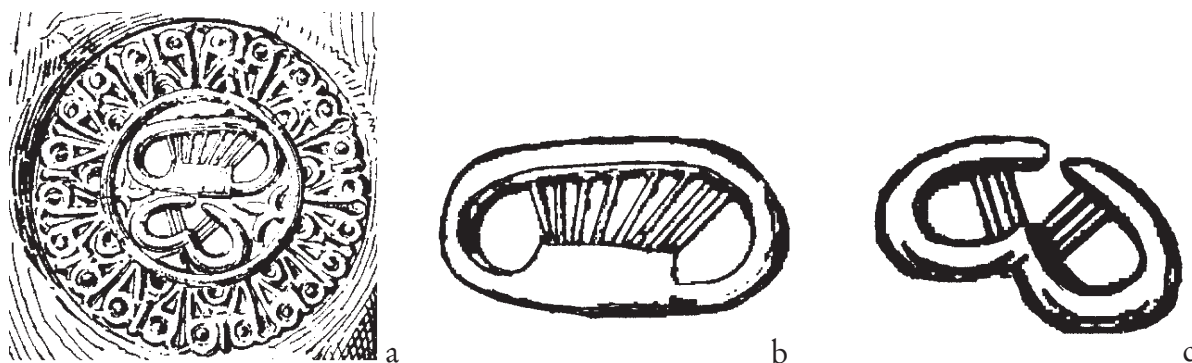


Fig. 6 a: Signet seal from Knossos, Crete, 1775–1700 B.C. (Heraklion, Archaeological Museum 172a; after Evans 1928, Vol. 2/2, Fig. 551); b: upper part of the centre (detail); c: lower part of the centre (detail).



Fig. 7 Hieroglyphic sign on a clay document from Knossos, Crete, ca. 1775–1700 B.C. (Present location unknown; after Evans 1928, 834, Fig. 550c).



Fig. 8 Hieroglyphic sign on a clay document from Knossos, Crete, ca. 1775–1700 B.C. (Present location unknown; after Evans 1928, 834, Fig. 550d).

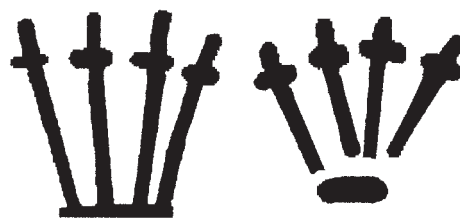


Fig. 9 Derivative sign type of Figs. 7–8 (after Evans 1921, Vol. 1, 642, Fig. 476, No. 78).

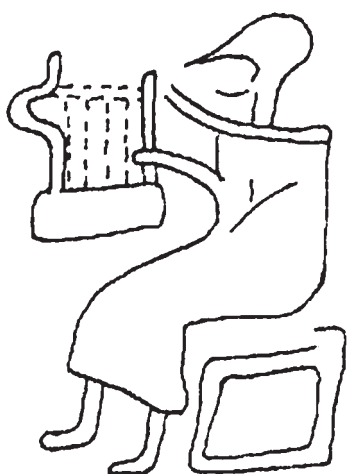


Fig. 10 Box lyre from Syria, 3rd millennium B.C. (Munich, Staatliche Münzsammlung, Arndt Collection; after Norborg 1995, 32–37, Fig. 12).



Fig. 11 Box lyre from Syria, 3rd millennium B.C. (Istanbul, Museum of the Ancient Orient 6934; after Norborg 1995, 32–37, Fig. 11).



Fig. 12 a-b: Impressions on clay tablets from Knossos, ca. 1700–1650 B.C. (Heraklion, Archaeological Museum, pottery collection 1296).

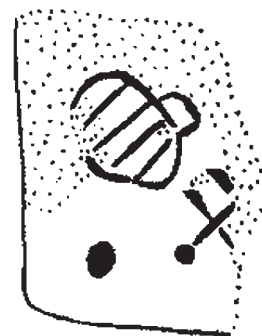


Fig. 13 Impressions on a clay tablet from Knossos, ca. 1700–1650 B.C. (Heraklion, Archaeological Museum, pottery collection 1301).

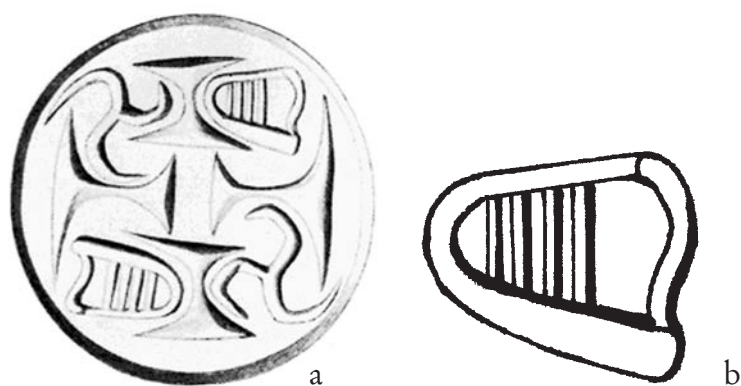


Fig. 14 a: A seal from clay from the House of Tiles in Lerna, ca. 2200–2100 B.C. (Argos, Museum L 4.387). b: detail.



Fig. 15 Cycladic harp, ca. 2600–2500 B.C. (based on Athens, National Archaeological Museum 3908). Drawing: M. van Schaik.

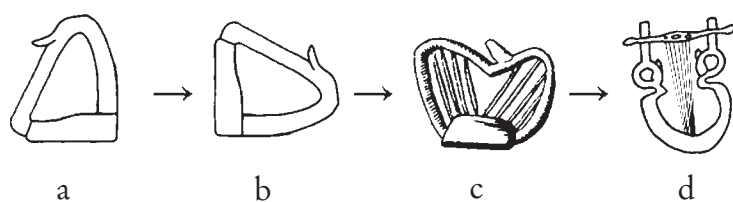


Fig. 16 a-d Hypothetical transformation of the Cycladic harp into the Minoan lyre according to Anderson. Drawing: M. van Schaik.

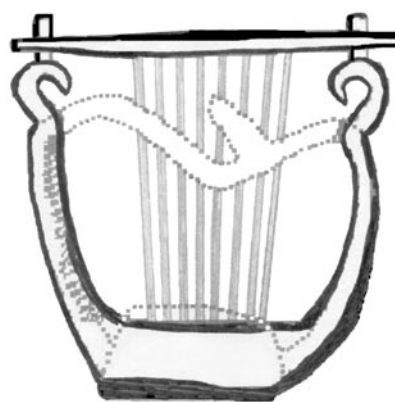


Fig. 17 Optional transformation of the instrument on the sealstone from the Heraklion district (Fig. 5b) into the Minoan lyre. Drawing: M. van Schaik.