

TAVANTA

PROCEEDINGS OF THE
DUTCH ARCHAEOLOGICAL AND HISTORICAL SOCIETY
VOLUME XLIV (2012)

Editor:

Angelos Papadopoulos

2013

MUSICO-CULTURAL AMALGAMATIONS
IN THE EASTERN MEDITERRANEAN:
A PERCUSSIVE VIEW FROM THE AEGEAN

Katerina Kolotourou

The earliest allusions to the performance of tympana (frame drums) in the Aegean are found on Crete: on the well known 8th century BC bronze votive sheet from the Idaean Cave, often referred to as 'tympanon' in scholarship, and on two late 7th century BC female terracotta figurines from Praisos. The iconography of both sets of objects demonstrates a multiplicity of musical references from the Assyrian and Neo-Hittite kingdoms of Anatolia to the Cypro-Levantine experiences of drumming. Both Cretan artefacts, however, exploit in an unparalleled manner a visual and notional conflation between a shield and a tympanon, evoking a culture-specific theogonic and initiatory framework for the regenerating and protective qualities of tympanon-playing. Focusing on one of the most striking examples of musico-cultural amalgamation in the Aegean, this paper argues that the process of incorporating foreign musical elements into one's culture is closely related with internal social negotiations and dynamics, and proposes a shift in the way we qualify musical exchanges.

Why music matters? A preliminary note on music, identity, and exchange

Scholars have been unravelling the multifarious web of Mediterranean cultural connections through the examination of material culture, poetry and myth, religious beliefs, and social practices for many decades now. An inquiry into the nature of musical interaction in the Eastern Mediterranean is well placed in the context of such endeavours. Music making is a human activity conditioned by a remarkable intersection of material-technological, intellectual-aesthetic, religious, and social parameters. Whether performed privately, like the lullabies mothers sing to their children, or publicly in the context of broader social events, music is a thoroughly integrated part of a given culture, past or present (Herndon/McLeod 1982; Seeger 1987).

In general, the performance of music is coordinated with other activities in the course of organised events that are important for the preservation, stability, and solidarity of the community. But this is not to say that music, in its conception,

creation, and consumption, ‘happens’ in society as a mere offshoot of other meaningful actions. Rather, musical activity constitutes in itself a meaningful *chaîne opératoire*, from the handicraft of instrument-making to the aural, visual, and material parameters of the performance, with each link of the chain bearing conceptual, intellectual, and social connotations. In recent years, the focus of musicological, ethnomusicological, anthropological, and, to a great extent, ancient music studies has shifted towards this multidimensional ‘process’ of musical performance that takes place within a broad natural and cultural environment (Van Keer 2010, 226; Cook 2001; Restani 2006; Murray/Wilson 2004).

By the same token, it would be unwise to assume that music events passively refer to underlying cultural and social patterns, simply reflecting the *modus operandi* of a society. Taking into account approaches and findings from psychology, anthropology, and sociology, current musicological research views the process of the performance as the locus where hierarchical relationships, social boundaries, and notions of difference and identity not only become tangible, but also can be negotiated and modified (Stokes 1994, 3-24). The agency of performance in moulding social spheres and relationships is particularly interesting when considering past cultures where such experiences could not be replicated and broadcasted *en masse* like in the modern era, but required constant personal involvement and investment in both the private and the public spheres. In recent years, studies on Greek *mousikē* have shown individual or group agendas to be deeply entangled with their performances¹, thus reinforcing the claim put forward by the ethnomusicologist Anthony Seeger that society as a totality “can be usefully conceived as something which happens ‘in music’ ”².

Understanding the processes involved in the making and employment of music can thus inform our understanding of the internal structures and dynamics of a given culture, past or present, in multiple ways. The musical features of a specific culture are forged gradually together with the physical, ideological, intellectual, and historical parameters that shape and exemplify a particular community of people. As such, music embodies valuable intellectual and cosmological concepts, social perceptions, and aesthetic predilections of a given culture. Musical events systematise collective memories, evoking past and present experiences of physical settings, social activities, and communicated meanings. Like language, burial customs, modes of representation, or technologies, a people’s music is what makes them different from other people – it informs their sense of where they belong in physical and in other conceptual terms (social, religious, ethnic etc.). Through the agency of performance the members of a community identify themselves in relation to each other, and in relation to other communities; the

¹ Representative works include Shapiro 1993; Murray/Wilson 2004; Kowalzig 2008; Martinelli 2009.

² Cf. Stokes 1994, 2. With his seminal, ‘musical anthropological’ study of the *Suyá* peoples in Brazil, Seeger (1987) paved the way from a study of music ‘in’ society to a study of music ‘as culture’.

process of musical activity is amalgamated with the creation of their sense of 'place'³.

Musical activity, thus, serves as a communication device through which different kinds of identity become embodied and celebrated, or rejected and transformed⁴. Musical images and sounds do not just reflect knowledge of social 'places', they also perform them in significant ways: social hierarchies and group affiliations can be negotiated by manipulating the musical vocabulary. I would like to propose that it is precisely this function of music that allows for foreign musical elements and traditions to be considered, incorporated, and adapted within an established socio-cultural environment. The music of the 'other' embodies knowledge and notions that one cultural group already has about another. Through this 'otherness' the musical sound constructs a novel sense of 'place' which can be used to enhance or challenge previous perceptions of identity. Once they negotiate successfully local relationships, foreign musical idioms and practices become part of the receiving culture. Just like foreign styles and imagery may be adopted and adapted in communicating meaning through visual means, so can music carry foreign influences in conveying formidably local messages.

Within this theoretical framework, the musical affinities that the peoples of the Aegean may have developed with the neighbouring Eastern Mediterranean cultures can provide interesting insights into the processes of forging social hierarchies and cultural identities during the late second and early first millennia BC. Winnington-Ingram (1936, vii) unequivocally acknowledged this link when he maintained in his 1936 authoritative *Mode in Ancient Greek Music* that "in all probability Greek music was closely related to that of the contemporary Orient". The alleged musical debt of the Greeks to the urban cultures of Mesopotamia, Anatolia, and the Levant has now become a firm notion in the flourishing discussions on cultural links between the Aegean and the East (see for instance West 1997, 31-32). Surely, in the light of the well established connection between Greek poetic traditions and West Semitic and Mesopotamian literature as well as the numerous influences on other arts and sciences⁵, it is justified to presume that musical expression and performance in the Aegean were also affected by this elaborate web of cultural interaction. After all, the Greeks themselves recounted, albeit haphazardly, the eastern associations of certain musical instruments and styles⁶. Without doubt there would have been ample opportunity for the peoples

³ For the concept of 'place' as a locus shaped by social influences and distinct from 'space' see Stokes 1994, 3-5.

⁴ For this double functioning of music, its ability on the one hand to increase affiliation with social groups and on the other hand to foster group competition and social division, see Brown 2006.

⁵ Morris 1992; Burkert 1992; 2004; Penglase 1994; West 1997.

⁶ See Farmer 1957, 250-254 for later Greek *testimonia* on east-west musical contact. More often than not, such *testimonia* present rather contradictory stories about musical origins, the historical validity of which dwindles in view of their mythical manipulation of tradition. Compare, for instance, the parallel attribution of the *tympanon* to the Phrygians and to the Cretan *Kouretes* in Euripides *Bacchae* 120-156.

of the Aegean to become exposed to Mesopotamian, Levantine/West-Semitic, Anatolian, and Egyptian musical traditions at various occasions throughout the Bronze and Iron Ages in the course of such organised overseas enterprises as trading activities, diplomatic missions, and warfare. Such encounters would have included song, dance, and instrumental performance.

Yet, musical exchanges entail far more complex processes than a straightforward 'transmission' or 'diffusion' of practices through immigrants or itinerary musicians, as envisaged for instance by Walter Burkert and other scholars. Rather than a generalised wave of foreign musical influences sweeping through the Aegean, we should envisage instead that there would have been several machinations that prompted the sharing of musical traditions by different groups at different timeframes. Deconstructing even a fraction of such a matrix can only be a challenging enterprise, especially due to the fact that we do not have direct experience of Aegean performances, their musical rhythms⁷, and melodies that would exemplify external influences (that is, the kind of data that ethnomusicologists consider when investigating musical influences and exchanges in present-day cultures), at least for the timeframe under consideration. In the absence of such information, the present discussion will utilise organological and iconographic parameters of the archaeomusicological evidence as qualitative data. In the next section I will consider social strategies that may have endorsed the adoption of Eastern Mediterranean musical idioms in the Aegean, and I will bring to the fore the playing of percussion that has long been considered as a practice with eastern origins.

Towards a paradigm of a Bronze Age musical *koine*

Scholars have long advocated, somewhat intuitively, the presence of a Greco-Mesopotamian theoretical and harmonic musical connection. Former vague speculations have at long last turned into tangible hypotheses after the discovery in the 1960s of a small but important corpus of cuneiform tablets recording hymns with musical notation and practical tuning instructions in Old Babylonian and Akkadian⁸. The tablets come from Ur, Nippur, Ugarit, and Assur, and date from the 18th century to the 4th-3rd centuries BC, although Sumerian elements in their vocabulary indicate that the musical system they capture goes back to the 3rd millennium BC. The tablets demonstrate that the diatonic system (that is, the cyclical system of interconnected heptatonic scales that also constituted the theoretical basis of the Classical Greek 'Perfect System' documented by Aristoxenus in

⁷ Musical rhythm and poetic metre are not one and the same thing. Musical rhythm is less rigid and it embraces the whole musical praxis and not just poetry. The prescribed metrical ratios of short and long notes would fluctuate in song and dance performance, and thus are not precisely measurable; see West 1992, 135 n. 16; Mathiesen 1999, 339-340.

⁸ The scholarship on the musical system and tuning(s) of the cuneiform tablets is extensive and cannot be exhausted here. Key analyses include Kilmer 1960, 1971, 1994 and 2000; Gurney 1968 and 1994; West 1993/1994; Krispijn 1990; Hagel 2005.

the mid 4th century BC)⁹ was already known in the Near East since the early 2nd millennium BC, if not earlier¹⁰. The geographical and chronological distribution of the cuneiform musical tablets suggests that the diatonic system was passed on from Sumer and Babylon to Assyria. In a series of recent articles, Franklin makes a strong case for the system being recognised by the different peoples of the Babylonian and Assyrian sphere of influence as far as the Syro-Palestinian coast and even beyond, to Cyprus and the Aegean¹¹. He claims: “The system of diatonic music documented by the tablets would be easily exportable across national boundaries. Consistent over fifteen hundred years or more, the standardized Mesopotamian vocabulary indicates a formal tradition of music – we may call it a classical practice – which, while doubtless growing and changing over the centuries, retained certain essential and identifiable features across the continually changing political map of second and first millennia Mesopotamia. Such an art-form, being less idiomatic and culture-specific than regional folk traditions, could serve as a musical lingua franca, jumping easily from court to court as a mark of high culture” (Franklin 2002a, 443-444).

Franklin postulates that diatonic music was cultivated primarily in the Near Eastern courts and constituted a Bronze Age musical *koine* that thrived alongside other regional musical styles. As a general system of music theory and praxis based on the alternation of consonant fifths and fourths, this *koine* would provide a shared musical vocabulary that transcended regional idioms, thus facilitating the mobility of musicians at court level in the context of diplomatic missions and exchanges¹². When musicians of fame are sent to perform and please masters of foreign lands, their fine artistry becomes another court music. Within the courts,

⁹ His ‘Elements of Harmony’ (*Elementa harmonica*) survives incompletely, as well as some fragments from the second book of the *Elementa rhythmica*, concerning rhythm and meter, in a mediaeval manuscript. There also is a five-column fragment of this treatise on meter: *P.Oxy.* 1.9 recto/*P.Oxy.* 34.2687, which Grenfell and Hunt (*The Oxyrhynchus Papyri*, vol. 1 (London, 1898), 14-21) and J.R. Rea (*The Oxyrhynchus Papyri*, vol. 34 (London, 1968)), the latter more doubtful, believe to have been part of Aristoxenus’ *Elementa rhythmica*. See Gibson 2005.

¹⁰ Whether the Classical Greek and the Mesopotamian systems can be directly related is still very much a matter of conjecture. Duchesne-Guillemin 1967 argues for specific correlation between the two systems and their string arrangement; West 1993-94, 162 voices a pessimistic view. Franklin 2002a and 2002b discusses further the ‘rediscovery’ of heptatony by Terpander in the 7th century BC.

¹¹ Franklin 2002a; 2002b; 2006a with further bibliography.

¹² The mobility of court craftsmen, including musicians, is well attested in the Near East; see Zaccagnini 1983; Pruzsinszky 2009-2010 for the transfer of singers and musicians from Ur; Malamat 1999 and Ziegler 2011 for court musicians sent to and from the court at Mari. Green 1992 for Mittanian musicians sent to the court of Akhenaten. A duet of lyre players (dual *ru-ra-ta* < *lyra*) was enlisted amongst the formal palace personnel in a Linear B tablet from Thebes (TH Av 106.7); see Aravantinos 1996; Younger 1998, 18 n. 42; Aravantinos/Godart/Sacconi 2001, 29 f., 176–178. For a possible Cypriot musician/priest at Pylos see Franklin forthcoming, n. 96.



Fig. 1. Lyre player on a *pyxis* from Chania (Kalami cemetery), Crete. Chania Archaeological Museum, inv. no. Π2308 (source: author).

the fine artistry of music making becomes a precious commodity, circulated much like luxury goods in reciprocal patterns of exchange. The common understanding of the diatonic system would allow both the visiting musicians and the receiving audiences to perform and to appreciate foreign compositions respectively. The tradition of diatonic music can thus be envisaged as a transnational elite symbol, recognised throughout the Eastern Mediterranean as an art form performed primarily by palace musicians and employed in the context of aristocratic and diplomatic contacts. In support of this historical narrative comes the intellectual value and social standing of the diatonic system, which were manifested during the Bronze Age with the deification of instruments that could exemplify the diatonic tuning, namely elaborate stringed court instruments such as lyres and harps. Such instruments are mentioned as recipients of offerings already in Sumerian and Ugaritic texts, and are linked with the notion of kingship and the supernatural powers of a king/priest¹³.

In comparison, a distinctive typological local variety of sizable stringed instru-

¹³ Franklin 2006a, 2006b, and forthcoming; Mikrakis 2012. For offerings to the Mesopotamian lyres see Franklin 2006a, 40 n. 6, 43, 50 with further references. For Mesopotamian lyre and harp representations, many of which are depicted as having seven or more strings, see Rashid 1983.

ments predominates in the surviving Late Bronze Age palatial iconography from Crete and the Mainland¹⁴. These include representations of impressive lyres with seven strings from both locales dating from the 14th-13th centuries BC, all of which were found in funerary contexts¹⁵. One such example, from the cemetery at Kalami Apokoronou (tomb 1) near Chania on Western Crete, is shown here (Fig. 1). The lyre dominates the scene with its imposing size that exceeds the height of the musician, while the horns of consecration, double axes, and the presence of birds suggest that the lyre player had a position of leadership or ritual office, or both. It is a working hypothesis that such elaborate and even seven-stringed chordophones may reflect a special effort on behalf of the Minoan/Mycenaean elite groups of the Late Bronze Age, if not earlier¹⁶, to emulate the performance practices of the Eastern Mediterranean courts by virtue of a comparable heptatonic tonal system. The Aegean ruling class may thus appear eager to appropriate a musical style which had strong associations with other powerful ruling authorities from remote places – places that, nevertheless, had supreme importance for the economy of the Mycenaean states. Performance in a widely recognised heptatonic tonal style could thus be understood as a strategy by which Aegean groups communicated their coalition to other proprietors of this highly refined musical system¹⁷. By advertising their knowledge and understanding of a musical style that was prominent among their eastern peers, members of the Aegean elite were constructing and performing their desired sense of ‘place’ in the social map of the Eastern Mediterranean. Through performance they sought to reinforce their connections with foreign parties abroad, as well as propagate their elevated social standing at home. Although it cannot be ascertained to what degree Minoan/Mycenaean political authority replicated the model of the eastern dual character of the king/priest¹⁸, it is not far-fetched to expect that the Aegean rulers, like their eastern counterparts, would also seek to imbue their esteemed

¹⁴ For representations of the Minoan/Mycenaean stringed instruments and detailed discussions of their morphology see Maas/Snyder 1989; Younger 1998; Mikrakis 2006.

¹⁵ Lyres that explicitly show seven strings are depicted on the Sarcophagus from Hagia Triada (LM IIIA; Herakleion Museum M.H. 396), on a *pyxis* from a the cemetery at Kalami Apokoronou (tomb 1) near Chania (LM IIIB; Chania Museum, inv. no. Π2308) (fig. 1), and on a *krater* fragment from a chamber tomb at Nauplion (LH IIIA2; Nauplion Museum, inv. no. 13 214). See respectively Long 1974; Tzedakis 1970; Dragona-Latsoudi 1977; also Carter 1995, 293, figs. 18.5 and 6; Younger 1998; Kolotourou 2012, 24-25, figs. I.10-12. Duchesne-Guillemin (1989) associated the oversized instrument from Chania with the Mesopotamian gigantic lyres that also make a brief appearance in Egypt during the reign of Amenophis IV (ca. 1379-1362 BC).

¹⁶ A musical reading of tuning by fifths has been suggested for a Linear A graffito from Hagia Triada; if this reading is correct, it would certify the Minoan use of the diatonic system (Stieglitz 1978).

¹⁷ For music as a means of signalling coalition see Hagen/Bryant 2003.

¹⁸ See Palaima 1995 for a critical view; Kristiansen 2001, 97-98.

musical style with symbolic virtues of divine knowledge, political leadership, and even universal harmony¹⁹.

Multi-directionality of percussive encounters and the orientalisising phenomenon

So far we considered how acculturation of a prized Mesopotamian musical tradition might have promoted local aspirations of the Minoan/Mycenaean elite. A different but complimentary set of external references is at work with regard to the performance of percussive music.

Aegean percussion makes its first appearance in the archaeological record in late Prepalatial Crete with an arched clay *seistron* from a child burial at Archanes (Fourni cemetery, MM IA context) (Younger 1998, 64 no. 14; Kolotourou 2012, 26, fig. I.14). Recently five more clay arched *seistra* have been found together with Protopalatial burials at Hagios Charalambos cave (MM II) in east Crete (Betancourt *et alii* 2008, 577). The only bronze *seistron* comes from a bronze hoard from a house at Mochlos (Building C3, LM I context) and is considered by the excavators to be an Egyptian import (Soles/Davaras 2005, 103, pl. 151). The same type of *seistron* is shown in the context of a state-controlled agricultural festival depicted on a black steatite *rhyton* from Hagia Triada, known as the 'Harvester Vase' and dating to the 15th century (Forsdyke 1954; Younger 1998, 6-9, 39, 74 no. 53, pls. 1, 2). In addition to these, a group of three elegant wooden hand-shaped clappers has been found at Akrotiri (Xeste 4, LC I context) (Mikrakis 2007). Although locally made, both the *seistron* and the clappers replicate with remarkable consistency Egyptian typological varieties that were used in the cult of Hathor. The *seistron* was Hathor's cult rattle *par excellence* and it was primarily shaken as a powerful instrument of propitiation that embodied the deity itself. It was exclusively an instrument of the nobles, performed in religious rituals and funerary rites by priestesses, princesses, as well as by the Egyptian king and queen, and it was deposited at Pharaonic burials (Manniche 1991, 24, 63, 85-86). In view of the instrument's strong aristocratic connotations within the culture of its origin, most likely it was also used as a performative symbol of elite identity in Minoan Crete²⁰. From the combination of the burial contexts and the state-controlled agricultural festival where the *seistron* is accommodated, we may surmise that its performance was deemed important in religious rituals with regenerating character. It is thus viable to suggest that through the performance of the *seistron* the elite would seek to legitimise its privileged access to and control of these regenerating forces.

Although the Mycenaeans evidently embraced the Minoan appreciation for

¹⁹ Incidentally, in later Greek sources such symbolic dimensions are projected on mythological lyre-heroes like Orpheus, Amphion, Cadmus, and Linus who could be viewed as surviving echoes of Mycenaean ritual poetics; see Franklin 2006a and 2006b.

²⁰ It is probable that contacts involving the elite were responsible for the organological transmission of the *seistron* already into Pre-Palatial Crete; see also Mikrakis 2000, 164.

stringed performances (Maas/Snyder 1989; Younger 1998), they did not demonstrate the same fondness for Minoan percussion. In fact, Mycenaean evidence for percussion is extremely sparse. Instead of the Minoan elitist and cultic use of the arched *seistron*, the Mycenaean opt for a much less elaborate vessel rattle with handle. The Mycenaean vessel rattle is attested only once, on a representation of a ritual procession depicted on a *rhyton* from Kalavarda in Rhodes, dated at the 14th-13th century, where the central figure wearing a wild boar's mask shakes such a rattle amidst two other such figures with *kylikes* and flying birds (Karatzali 1998, pl. 10a). Morphologically this instrument echoes archetypal vessel rattle forms that surface in the material record of the Levantine coast, Cyprus, Mesopotamia, and Egypt throughout the Bronze Age. These instruments are usually associated with ritual performances (see Dumbrill 1998, pl. 4; Hickmann 1954), yet they lack the prominently aristocratic status of the arched Egyptian *seistron*. From the performance depicted on the Kalavarda *rhyton* we may suggest that in the Mycenaean context rattling was an important ritual device, possibly with shamanistic dimensions. As such it might have endorsed affinity with religious concepts that were relevant to the wider social strata of society.

I have argued elsewhere that the physical and performative dimensions of percussive enactment in Greek ritual are linked to broad cosmological concepts about regeneration, the ordering of the universe, and the structuring of social life through a series of metaphoric associations (Kolotourou 2011). I would propose that the musico-cultural exchanges with the east during the Bronze Age were crucial for the shaping of such metaphors. The above organological analysis and the nature of eastern parallels for the Minoan and Mycenaean rattling instruments indicate that such backdrop of interrelated symbolic concepts with regard to the performance of percussion was already in place during the Late Bronze Age.

Nevertheless, standard works on ancient Greek music adopt a separatist view when it comes to this particular type of performance. They usually describe percussion as a culturally foreign and essentially oriental element that added a taste of exoticism to the Greek musical idiom. This view is partly generated due to the established association of percussive music with the ecstatic nature of the Dionysian ritual and the worship of deities of eastern origin such as Cybele from the Archaic period onwards²¹. At the same time, the material evidence, as it is today, suggests that an increase in the appreciation of percussive music may have been instigated by the intensive cultural interactions with the east from the turn of the first millennium BC, and in particular from the 8th/7th centuries onwards. Indeed, the Minoan/Mycenaean percussive repertoire, attested in the archaeological record, comprise a handful of *seistra*, clappers, and a rattle, to which we may

²¹ Cf. Comotti 1989, 74-75: "Among the Greeks, unlike other ancient peoples, percussion instruments were never widespread nor particularly important. Their use was generally restricted to the rituals of the cults of Dionysos and Kybele, and were always perceived as exotic instruments not connected with the most ancient and genuine traditions of the Greeks". Many other scholars espouse analogous views; see for instance West 1992, 122, 126.

tentatively add a disputable pair of cymbals from Moulia²² dated at 1200-1100 and an equally uncertain Subminoan/Early Protogeometric representation of cymbals from Thronos-Kephala near Hagia Triada in Crete (D'Agata/Karamaliki 2002, 352, fig. 10). This appears to be somewhat limited when compared with the multiplicity of percussion instruments and sounds that characterised the musical expression of contemporary Egypt, Mesopotamia, and the Levant, and which included a wide variety of frame drums, kettle drums, cymbals, rattles, bells, and different types of *seistra* and concussion sticks. It is only after the turn of the first millennium BC, and especially from the 8th century onwards, that a comparable range of rhythmical and percussive devices begins to appear regularly in Greek archaeological contexts and to be represented in art. Such instruments include frame drums, clappers, cymbals, and bells in addition to the Bronze Age types of rattles and *seistra*, and become more or less common in musical scenes from the Archaic period onwards. In some cases we are dealing with actual instruments imported or locally made and deposited mainly at sanctuaries; in other cases we are dealing with musical representations featuring percussion on imported artefacts, or with such representations on objects of Greek manufacture.

In the light of the consistent presence and distribution of imported objects with percussive iconography or use, it is generally assumed that an overarching eastern impact on Greek culture in the course of the orientalising movement was responsible for the general transmission and subsequent popularity of percussive music in the Aegean, with Cyprus playing an important intermediary role in this process. Indeed, the establishment of settlements, *emporía*, and trade routes along the Western Anatolian and Syro-Phoenician coasts and Cyprus, together with the circulation of foreign tradesmen and craftsmen in the Greek environs, would provide extensive scope for repeated exposure to different percussive practices. Yet, the intensity and plurality of external stimuli do not suffice to explain why these foreign performance practices are now deemed important. As it has been argued in the first section of this paper, the process of adopting foreign musical elements into one's culture is closely related with internal social negotiations and dynamics. A shift of perspective is thus required in the qualitative way we analyse this new appreciation for diverse percussive methods from the Early Iron Age on. Since the extended percussive corpus of the Iron Age did not appear as a single monolithic entity, but each variety having its own 'story' in becoming part of the Greek musical life, the question that arises is twofold: a) what specific eastern correlations can we identify for the different types of Greek percussion in the complex performative matrix of the Eastern Mediterranean and, b) what important meanings did these percussive practices communicate within the Greek socio-cultural milieu?

These questions cannot be addressed here in their totality in relation to all the rele-

²² Xanthoudides 1904, 46 ff., fig. 11; Younger 1998, 65 no. 25, pl. 22: 4; Snodgrass (1964, 39 ff. A1-2) interprets them as shield bosses.

vant percussive types that became part of the Greek musical life. Since the scope of this paper is to give an overview of the issues at hand, I will sketch in broad terms one of the most striking examples of musico-cultural amalgamation in the Aegean in the next section: the performance of the frame drum (*tympanon*)²³.

This investigation firstly takes into account the circulation of a musical imagery with a long tradition among the different peoples of Syro-Palestine, Mesopotamia, and the Levant, which depicts a more or less standardised ensemble comprising lyres or harps, wind instruments, and frame drums. The group performs its music in the course of a religious banquet or in the presence of an enthroned figure, presumably a deity. Depictions of this orchestra, often coined as 'the Canaanite orchestra' or 'the Phoenician orchestra', find their way into the Aegean between 900 and 700 BC on imported objects of prestige such as the bronze Cypro-Phoenician bowls, and on amulets/ornamental trinkets from the Syro-Cilician coast, such as the seals of the Lyre-player group that were often dedicated in sanctuaries²⁴. On these objects the musicians often appear to be dancing to their music, and in some instances dancers are also included in the scene. With these eastern imports the frame drum makes its first appearance in the Aegean. In fact, we do not have evidence for any other types of membranophones in the Greek environment prior to these representations, although such instruments have a long tradition in Anatolia and Mesopotamia, where the frame drum in particular is attested since the early 6th (Stockmann 1985; Mellaart 1966, 188, pl. LIV) and the 3rd millennia respectively. By the early first millennium it is a popular instrument of the masses in Canaan-Phoenicia and in Cyprus. In both these locales, the production of a significant corpus of terracotta figurines that are shown playing or holding the frame drum designates a well established performance practice of female as well as male drummers from the Early Iron Age through to the Hellenistic period. In Cyprus such terracottas are found in settlement deposits, burials, sanctuaries, and country shrines throughout the island (Meyers 1991, 20). From the 8th century onward, Cypriote terracottas of frame drummers are dedicated in east Greek sanctuaries of female deities, namely the sanctuary of Hera at Samos, Athena Lindia, and of Kameiros in Rhodes (Kolotourou 2005, 194). This fact clearly demonstrates that the cultic importance

²³ Frame drums have a membrane stretched on a wooden or metal frame. The membrane can either be fixed permanently or tuned by altering the tension. The frame can be circular or rectangular (in our discussion we will consider only circular frame drums). Most frame drums are single headed and are held by the rim or the frame while they are played.

²⁴ Cypro-Phoenician bowls depicting this musical ensemble have been found at Lefkandi, Sparta, and Olympia as well as in Cyprus (Idalion, Kourion, and Salamis); see Markoe 1985. A seal of the Lyre-Player group from the Sanctuary of Ayia Irini in Cyprus shows a frame drummer and a lyre player on each side of an offering table; another such seal depicting the full musical ensemble playing in front of an enthroned figure was dedicated at the Sanctuary of Apollo Daphnephoros at Eretria between 750 and 700 BC; a third seal from Kameiros shows the three musicians in abbreviated form (Boardman 1990, 13 no. 62*quarter* and fig. 17, 15 no. 125 and fig. 12; Boardman/Buchner 1966, 33 no. 103, fig. 36).

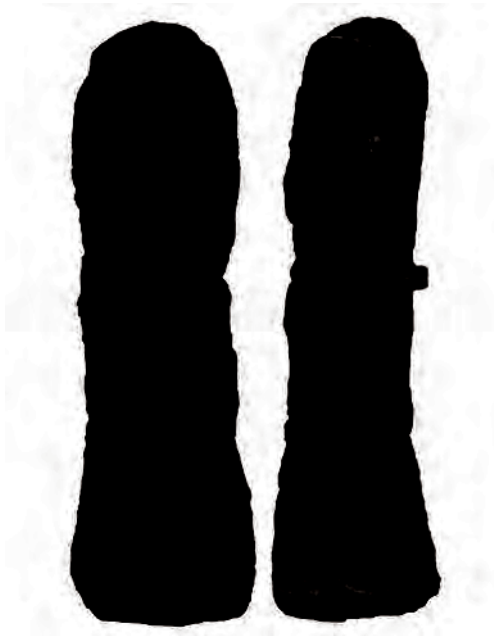


Fig. 2. Female terracotta plaque with frame drum (*tympanon*). Possibly from Praisos. Height: 15.6 cm. British Museum, inv. no. 1955.1223.1 (source: author).



Fig. 3. ↑
Terracotta frame drum player from Amathus Tomb 276. Height: 24.2 cm. Limassol District Museum, inv. no. T276/253 (source: author).

of its music is already accepted in the eastern part of the Aegean in relation with female divinities that encompass both fertility and war-like characteristics. And it seems plausible that this growing appreciation for the music of the frame drum in the eastern part of the Aegean was generated through direct contacts with Cyprus, and possibly secondarily with the Levant²⁵.

Two orientalisising mould-made terracotta plaques from east Crete dating from 620-600 BC illustrate further the Cypro-Levantine influence with regard to the performance of the frame drum. The example shown here (Fig. 2) is exhibited at the British Museum²⁶. A similar plaque from a different mould was found during

²⁵ There are three Cypriot iconographic types of *tympanon* players: a) instrument frontal held/played by both hands, b) instrument perpendicular to the body and played, c) instrument held with one hand on or above the ventral area. The latter is always mould-made, with the figure resting on a shallow frame, often pierced for suspension; the *tympanon* player is usually female, but there are also male examples. The mould-made version is a Cypriote Iron Age trend that becomes widespread, but which had its roots in Old-Babylonian plaques of nude but richly adorned female figures holding a small *tympanon*; see Kolotourou 2005.

²⁶ British Museum Inv. No. 1955.1223.1. The plaque was purchased from Spink & Son Ltd in 1955. In the museum archives there is no mention of its provenance (A. Villing, personal communication, 27 May 2011). Higgins published it as Cretan work but without known provenance (1967, 28, pl. 10A).

the 1894 American excavations at Praisos; it is reported to come from the site of the Vavelloi fountain²⁷. The plaque is now exhibited at the Metropolitan Museum of New York²⁸. Most likely both plaques were associated with the spring sanctuary at Vavelloi, located about 1 km south of the 3rd Acropolis of Praisos. Hundreds of terracotta plaques and figurines have been recovered from this site, including among others orientalising nude females with a *polos* (= headdress worn by a goddess), male votaries, and a warrior with shield abducting a youth²⁹. The plaques depict a female figure in relief, dressed in a long dress; the neck-line and fine folds of the drapery are delineated with care and the feet are seen below the seam of the dress. The hands of the figure reach for a chord by which a large disc is suspended from her neck down to the ventral area. Two concentric circles at the rim of the disc enclose a series of small bullae. The figure's dress and features, with the high cheekbones, thin nose, long hair and the tall, thin silhouette are characteristics that can be found in Cretan works in stone and metal, and stand out from the rest of the coroplastic corpus from Praisos³⁰.

Halbherr, Forster, Dohan, and Higgins interpreted the disc as a large circular drum; Matz, however, proposed that a shield is represented. On the basis of its rather small size for a shield and its modelling with a thick frame and flat body, it is quite convincing to interpret the object as a large frame drum or *tympanon*³¹. Indeed the modelling of the concentric circles resembles similar Late Bronze and Early Iron Age terracotta representations of such drums from Hazor, Megiddo, and elsewhere in Israel/Palestine³². Furthermore, its size is comparable with the large frame drums depicted on the bronze bowls from Idalion, Salamis, and Kourion³³. A Cypro-Archaic I-II wheel made terracotta figurine from Amathus

²⁷ Halbherr 1901, 391, fig. 21; Forster 1904-05, 247, fig. 4. See also Whitley 1998 and 2006 for the region's topography and sanctuaries.

²⁸ Inv. No. 53.5.22. Matz 1970, 97 no. D11, Pl. 42:d; Dohan 1931, 221, fig. 27. Forster (1904-05, 247 ad (9)) describes the figure as "another common type (...), which is difficult to explain ...". This might indicate that more examples of this type have been found. So far I am aware only of the identical plaque at the British Museum Inv. No. 1955.1223.1.

²⁹ Halbherr 1901, 385; Forster 1901-02, 280-281; Whitley 2008, 241. The deity worshipped at the sanctuary is yet to be ascertained; the first excavators' suggestion that it was dedicated to Demeter has not been ruled out by the recent excavators of the site. Erickson (2009, 383) noted similarities between the Vavelloi deposit and that of Roussa Ekklesia at the border of the territory of Praisos, and suggested that the two sanctuaries operated as doublets, celebrating the same deity or deities near town and at the countryside respectively.

³⁰ See for instance the taut figures seen on bronze bowls from the Idaean Cave (Markoe 1985, Cat. No. Cy.7) and Eleutherna (Stampolidis 1998, 181, fig. 15) that are of oriental artistic inspiration but most likely of local manufacture.

³¹ The modelling of the shields represented on the numerous terracotta plaques of male warriors from Praisos is very different from that of the two female plaques, larger in size and often including a central *omphalos*; see for example Halbherr 1901, 390 fig. 19, 392 fig. 25, pl. XII no. 3; plaque in the British Museum (Inv. No. GR.1907.1-19.60).

³² Hazor: Yadin 1960, pl. CLXIII; Megiddo: Braun 2002, pl. 9. Meyers 1991, 19 is sceptical about the identification of these discs as frame drums.

³³ Markoe 1985, Cat. Nos. Cy.3, Cy.5 and Cy.6.



Fig. 4.
Terracotta plaque with female holding a frame drum.
Possibly from Lapithos.
Height: 19.8 cm. Musée du Louvre, Paris, inv. no. AM
167 (photo courtesy V. Karageorghis).

Tomb 276 (Fig. 3) also plays a similar large frame drum with thick frame; the instrument would have reached over 0.45 m in diameter³⁴. Drums large enough to cover the chest are often represented in Cypriote and Levantine coroplastic, shaped as simple flat discs held and/or played in front of the body (Kolotourou 2005 with previous bibliography). A handful of Late Iron Age (8th-7th centuries BC) pillar figurines from Judah hold even larger discs covering both chest and ventral area; their interpretation as female drummers (mortal or divine) rather than shield bearers has been favoured recently (Kletter/Saarelainen 2011). The positioning of a large instrument in front of the Cretan figures' lower body may also be associated with the mould-made class of nude or dressed female Cypriote terracottas with Egypto-Phoenician stylistic features, which hold the instrument with their hands in front of their ventral area³⁵. An example from Lapithos is shown here (Fig. 4).

The plaques from Praisos may thus indicate that the use of such large frame drums in Cyprus and the Levant was also followed in Crete by the late 7th century³⁶. The Cretan figures seem to be forged with the tradition of the Levantine

³⁴ Karageorghis 1998, 71-72 cat. no. II(xv)33, fig. 34, pl. L:1.

³⁵ Karageorghis 1999, 190-210, cat. nos VI[i]1-VI[iv]51, pls LI-LV. Such terracotta plaques of considerable size, reaching 35 cm in height, are also found in the sanctuaries of the Heraion at Samos, Athena Lindia, and Kameiros at Rhodes (Kolotourou 2005, 194).

³⁶ A later example from Lindos dated at 525-400 presents a large tambourine comparable to that of the Cypriote and Cretan figures, held in front of the body; Blinkenberg 1931, pl. 101: 2215.

and Cypriote terracotta frame drummers in mind. The detail of the instrument's suspension from the neck, however, sets the Cretan figures apart from the standard ways in which comparable frame drums are shown, played, and held in other parts of the Eastern Mediterranean. Such a chord could have facilitated the carrying and playing of a large instrument by keeping it in place. The closest parallel for a percussion instrument suspended from the neck is the giant drum or gong represented on a Neo-Hittite relief from the Processional Entry at Carchemish, on the Euphrates at the Turkish-Syrian border, dated *ca.* 740 BC. This exceptionally large instrument is fixed on carrying straps that hang vertically from the necks of two drummers on either side of it (Woolley 1969, Pl. B.18b). The instrument of the Praisian figures, however, is not so big as to require such straps. It thus presents an ambiguity, as it is very similar to a frame drum, but hangs from the neck much like shields would hang, although not identically. As already mentioned, Matz had proposed that a shield, rather than a *tympanon*, is represented. We would normally expect the shield to hang diagonally from the body. But an Archaic Phokaian sculpture of a warrior from Obulco in Spain, once standing on a tumulus or *heroon* of a local ruler, presents the shield hanging diagonally but at the same time placed frontally so as to cover the lower part of his body³⁷. At the same time, the decoration with bullae that we have seen on the rim of the object is applied to miniature bronze shields as well as on frame drums.

On the basis of the relatively small size of the object for it to be a shield, and the emphasis given on the thick frame, which is not something that we observe on other contemporary Cretan shield representations, and in the light of how well the object compares with other representations of *tympana* in the Eastern Mediterranean, it is quite convincing to interpret it as a large frame drum or *tympanon*. However, I would argue that the visual ambiguity of this object is not a matter of chance, but is deliberate. The same ambiguity characterises the iconography of the bronze votive sheet from the Idaean Cave, dated to the last quarter of the 8th century, a hundred years earlier than the terracottas from Praisos. Rendered in Assyrianizing style, the votive sheet depicts a bearded hero swaying a lion and stepping on a bull, flanked by two winged daemons striking two pairs of large round objects that could be equally interpreted as drums, shields, or gongs (Erickson 2009, 386, fig. 23; Blome 1982, 15-17, pl. 3:3). No exact parallel exists for this particular representation. Although the visual vocabulary is unmistakably near eastern and potentially designed to advertise the dedicator's partaking in an elite world of gift exchange, the iconographic scheme itself cannot be tied to a specific near eastern performance context, while it is very much at home with the Cretan cult of Zeus. Matthäus and others have convincingly argued that the ambivalence of the percussive devices on the sheet from the Idaean Cave replicates formidably the visual and notional conflation between a percussion instru-

³⁷ Blázquez/Navarrete 1985, pl. 9 fig. 1. Even the rendering of the shield, with superimposing concentric circles (most likely layers of hide) could be compared with the three circles that delineate the periphery of the object/instrument held by the terracottas from Praisos.

ment and a shield, as this is reflected in the story of the *Kouretes* clashing their shields in order to drown the cries of infant Zeus and protect him from his father Kronos (Braun-Holzinger/Matthäus 2000). The link between *tympanon* and shield becomes even more tangible if we consider that both are made of stretched hide, have similar shape, produce a deep sound and fulfil their purpose (sound/protection/renewal of life) through controlled percussive action. Such conflation may have conveniently served music and dance performances in the course of time-old fertility, (re)generation, and/or coming of age rituals, such as those envisaged by Martin West and others behind the late 4th/3rd centuries BC *Hymn to the Greatest Kouros* from Palaikastro, an invocation to Zeus that narrates the myth of his birth before summoning the god to promote the increase of fields, flocks, cities, ships, new citizens and *themis* (West 1965; Perlman 1995, 161-162, 165, n. 35). Given the mythical connection of percussive enactment with Zeus' birth, childhood and eventual supremacy, such performances may well have played a key role in shaping local civic identities, signalling civic cohesion and celebrating inclusion in the citizen body in the process of *polis* formation. Perlman (1995) has convincingly argued that the Palaikastro *Hymn to the Greatest Kouros* was performed during a festival that served similar functions. It may thus not be accidental that the earliest known drumming representations of indubitable Aegean, and clearly Cretan, style and manufacture have surfaced at Praisos, an Eteocretan (= 'true' native Cretan) community; in other words, a *polis* that by the Classical period had successfully cultivated the image of an identity distinct from that of Achaians and Dorians of mainland descent who inhabited the island. The issue of ethnic identity at Praisos is a complex one, as site deposits have been found both to conform to and to differ from comparable Cretan assemblages (Whitley 1998, 2006; 2008; Erickson 2009). The two female *tympanon* bearers from the Vavelloi deposit, however, clearly present us with an idiosyncratic example of material culture that captures a glimpse of the Praisians' sense of 'place' or identity. The figures evoke in a new visual manner a long history of percussive enactments rooted in Cretan myth, codifying a performative and semantic conflation between *tympanon* and shield. Using a medium that was akin to the trends of the 7th century BC for local sanctuary dedications, the visualisation of the two female terracottas with *tympanon* advertises the Praisian acknowledgement of eastern performance and ritual practices on one hand, while signifying the local character of the performance on the other.

Conclusion

The votive sheet from the Idaean Cave and the Praisian figures are the first Greek examples of drum performance in the Aegean. Our organological analysis demonstrated a multiplicity of musical references from the Assyrian and Neo-Hittite kingdoms of Anatolia to the Cypro-Levantine experiences of drumming. Perhaps the Cretans would have been aware of the ceremonial Canaanite ensembles, or the Syro-Palestinian tradition of female drummers who sang and danced in celebration of the victory of the Israelite warriors and/or God over the enemies

(Meyers 1991, 21-22; *idem* 2005). They certainly knew of the Cypriote drum performances in honour of Aphrodite/Astarte. But their own performances are incorporated into their own tradition of theogonic myths and initiatory dances. The Cretan concept of regeneration is not tied solely to female divine personas, but also to the mythical hiding of Zeus, who is nursed by the *Kouretes* beating their shields, and becomes reborn, leaving the depths of the Dictaeon Cave for the Olympus (West 1965). In this context, the action of beating, and thus drumming by association, acquires explicit regenerating and protective qualities. The performance of playing signified by the terracottas from Praisos and the iconography of the bronze sheet from the Idaean Cave may have been intended to express the double dimension of the percussive action in the course of early civic Cretan rituals. In this light, it is possible that the Cretan female drummers from Praisos had transcended the status of temple musician or devotees, in contrast with the eastern terracotta representations with which they compare³⁸. The solemn and hieratic aspect of the figures would seem to corroborate the view that we are dealing with a deity rather than a mortal, perhaps an image of Cybele/Mother of Gods/Rhea holding and *not* playing the *tympanon*, as is also observed in later representations of the goddess Cybele. If so, this would be the earliest evidence of the goddess depicted with the instrument, which starts to be a regular attribute of Cybele in her representations from the 6th century onwards in the Aegean³⁹.

BIBLIOGRAPHY

- Aravantinos, V.L. 1996: New Archaeological and Archival Discoveries at Mycenaean Thebes, *Bulletin of the Institute of Classical Studies* 41, 135–136.
- Aravantinos, V.L./L. Godart/A. Sacconi 2001: *Thèbes: fouilles de la Cadmée. I: Les tablettes en linéaire B de la Odos Pelopidou*, Pisa.
- Betancourt, P./C. Davaras/E. Stravopodi 2008: Excavations in the Hagios Charalambos Cave, A Preliminary Report, *Hesperia* 77, 539-605.
- Blázquez, J.M./J.G. Navarrete 1985: The Phokaian Sculpture of Obulco in Southern Spain, *American Journal of Archaeology* 89(1), 61-69.
- Blinkenberg, C.S. 1931: *Lindos: Fouilles et recherches, 1902-1914*. Vol. I: *Les petits objets*, 2 parts: part 1, Texte; part 2, Planches, Berlin.
- Blome, P. 1982: *Die figürliche Bildwelt Kretas in der geometrischen und früharchaischen Periode*, Mainz am Rhein.
- Boardman, J. 1990: The Lyre Player Group of Seals, an Encore, *Archäologischer Anzeiger*, 1-17.
- Boardman, J./G. Buchner 1966: Seals from Ischia and the Lyre-Player Group, *Jahrbuch des Deutschen Archäologischen Instituts* 81, 1-62.

³⁸ Braun (2002, 126) considers the terracotta drummers from Israel/Palestine as domestic icons or objects with sacral-secular and perhaps aesthetic significance; Meyers (1991, 19) insists that they are not members of an elite group, royalty, or cultic personnel.

³⁹ See Roller (1999, 136-137) for the earliest depictions of Kybele holding a *tympanon* (frame drum) from Ionia and Thasos. Roller points out that the goddess' percussive attribute was a Greek modification of her Anatolian imagery.

- Braun, J. 2002: *Music in Ancient Israel/Palestine: Archaeological, Written and Comparative Sources*, Grand Rapids, MI/Cambridge.
- Braun-Holzinger, E.A./H. Matthäus 2000: Schutzgenien in Mesopotamien und in den angrenzenden Gebieten: Ihre Übernahme in Zypern, Kreta und Griechenland, in: Uehlinger, C. (ed.), *Images as Media: Sources for the Cultural History of the Near East and the Eastern Mediterranean (1st millennium BCE)*, Göttingen, 282-321.
- Brown, S. 2006: Introduction: 'How Does Music Work?', Towards a Pragmatics of Musical Communication, in: Brown, S./V. Volgesten (eds.), *Music and Manipulation: On the Social Uses and Social Control of Music*, New York, 1-27.
- Burkert, W. 1992: *The Orientalizing Revolution, Near Eastern Influence on Greek Culture in the Archaic Age*, Cambridge, MA (English translation by Margaret E. Pinder and Walter Burkert).
- Burkert, W. 2004: *Babylon, Memphis, Persepolis, Eastern Contexts of Greek Culture*, Cambridge, MA.
- Carter, J.B. 1995: Ancestor Cult and the Occasion of Homeric Performance, in: Carter, J. B./S.P. Morris (eds.), *The Ages of Homer: A Tribute to Emily Townsend Vermeule*, Austin, TX, 285-312.
- Comotti, G. 1989: *Music in Greek and Roman culture*, Baltimore, MD.
- Cook, N. 2001: Between Process and Product: Music and/as Performance, *Music Theory Online* 7 (Available online: <http://www.mtosmt.org/issues/mto.01.7.2.cook.html>], accessed December 2012).
- D'Agata, A.L./N. Karamaliki 2002: Campagna di scavo 2002 a Thronos/Kephala (Creta, Grecia), *Studi Micenei ed Egeo-Anatolici* 44(2), 347-355.
- Dragona-Latsoudi, A. 1977: Μυκηναϊκός κιθαρωδός από την Ναυπλία [A Mycenaean Player of the Kithara from Nauplia], *Αρχαιολογική Εφημερίς* 116, 86-98.
- Dohan, E.H. 1931: Archaic Cretan Terracottas in America, *Metropolitan Museum Studies*, 3(2), 209-228.
- Duchesne-Guillemin, M. 1967: Survivance orientale dans la designation des cordes de la lyre en Grèce?, *Syria* 44, 233-246.
- Duchesne-Guillemin, M. 1989: Sur la lyrekithara géante, in: Meyer, L. de/G. Haernick (eds.), *Archaeologia iranica et orientalis, Miscellanea in honorem Louis Vanden Berghe*, Gent, 128-134.
- Dumbrill, R.J., 1998: *The Musicology and Organology of the Ancient Near East*, London.
- Erickson, B. 2009: Roussa Ekklesia, Part 1: Religion and Politics in East Crete, *American Journal of Archaeology* 113(3), 353-404.
- Farmer, H.G. 1957: The Music of Ancient Mesopotamia, in: Wellesz, E. (ed.), *New Oxford History of Music*, Vol. 1: *Ancient and Oriental Music*, London, 228-254.
- Franklin, J.C. 2002a: Musical Syncretism in the Greek Orientalizing Period, in: Hickmann, E./A.D. Kilmer/R. Eichmann (eds.), *Archäologie früher Klangerzeugung und Tonordnung (Studien zur Musikarchäologie 3)*, Rahden, 441-451.
- Franklin, J.C. 2002b: Diatonic Music in Greece: A Reassessment of its Antiquity, *Mnemosyne* 56(1), 669-702.
- Franklin, J.C. 2006a: Lyre Gods of the Bronze Age Musical Koine, *Journal of Near Eastern Religions* 6, 39-70.
- Franklin, J.C. 2006b: The Wisdom of the Lyre: Soundings in Ancient Greece, Cyprus and the Near East, in: Hickmann, E./A.A. Both/R. Eichmann (eds.), *Musikarchäologie im Kontext (Studien zur Musikarchäologie 5)*, Rahden, 379-397.
- Franklin, J.C. forthcoming: Kinyras and the Musical Stratigraphy of Early Cyprus, in: Bor, J./G. van den Berg/A. van Oostrum/T.J.H. Krispijn (eds.), *Musical Traditions in the Middle East: Reminiscences of a Distant Past. A Conference on Ancient and Modern Middle Eastern Musicology, Leiden University, The Netherlands, 10 December-12 December 2009* (Available online: <http://www.kingmixers.com/FranklinPDFfilesCOPY/Kinyras-Stratigraphy.pdf>], accessed December 2011).

- Forsdyke, J., 1954: The Harvester Vase of Agia Triada, *Journal of the Warburg and Courtauld Institutes* 17(1/2), 1-9.
- Forster, E.S. 1901-02: Praesos: the Terracottas, *Annual of the British School at Athens* 8, 271-281.
- Forster, E.S. 1904-05: Terracotta Plaques from Praesos, East Crete, *Annual of the British School at Athens* 11, 243-257.
- Gibson, S. 2005: *Aristoxenus of Tarentum and the Birth of Musicology*, New York/London.
- Green, L. 1992: Asiatic Musicians and the Court of Akhenaten, in: Harrak, A. (ed.), *Contacts between Cultures I. West Asia and North Africa. Selected Papers from the 33rd International Congress of Asian and North African Studies, Toronto, August 15-25, 1990*, Lewiston, NY, 215-220.
- Gurney, O.R. 1968: An Old Babylonian Treatise on the Tuning of the Harp, *Iraq* 30(2), 229-233.
- Gurney, O.R. 1994: Babylonian Music Again, *Iraq* 56, 101-06.
- Hagel, S. 2005: Is *Nid Qabli* Dorian? Tuning and Modality in Greek and Hurrian Music, *Baghdader Mitteilungen* 36, 287-348.
- Hagen, E./G.A. Bryant 2003: Music and Dance as a Coalition Signalling System, *Human Nature* 14(1), 21-51
- Halbherr, F. 1901: Cretan Expedition XVI. Report on the Researches at Praesos, *American Journal of Archaeology* 5(4), 371-392.
- Herndon, M./N. McLeod (eds.) 1982: *Music as Culture*, Darby, PA.
- Hickmann, H. 1954: Die altägyptische Rassel, *Zeitschrift für ägyptische Sprache und Altertumskunde* 79, 116-129.
- Higgins, R.A. 1967: *Greek Terracottas*, London.
- Karantzali, E. 1998: A New Mycenaean Pictorial Rhyton from Rhodes, in: Karageorghis, V./N.C. Stampolidis (eds.), *Eastern Mediterranean, Cyprus-Dodecanese-Crete 16th-6th cent. B.C. Proceedings of the International Symposium held at Rethymnon – Crete in May 1997*, Athens, 87-103.
- Karageorghis, V. 1998: *The Coroplastic Art of Ancient Cyprus*, Vol. V: *The Cypro-Archaic Period. Small Female Figurines, A: Handmade/Wheelmade Figurines*, Nicosia.
- Karageorghis, J., 1999: *The Coroplastic Art of Ancient Cyprus*, Vol. V: *The Cypro-Archaic Period. Small Female Figurines, B: Figurines Moulées*, Nicosia.
- Kilmer, A.D. 1960: Two New Lists of Key Numbers for Mathematical Operations, *Orientalia* 39, 273-308.
- Kilmer, A.D. 1971: The Discovery of an Ancient Mesopotamian Theory of Music, *Proceedings of the American Philosophical Society* 115, 131-149.
- Kilmer, A.D. 1994: Musik. A. Philologisch, in: *Reallexikon der Assyriologie und vorderasiatischen Archäologie* 8, 463-482.
- Kilmer, A.D. 2000: Continuity and Change in Ancient Mesopotamian Terminology for Music and Musical Instruments, *Studien zur Musikarchäologie: Orient-Archäologie* 7: Rahden, 113-119.
- Kletter, R./Saarelainen, K. 2011: *Judean Drummers*, *Zeitschrift des Deutschen Palästina-Vereins* 127(1), 11-28.
- Kolotourou, K. 2005: Music and Cult: The Significance of Percussion and the Cypriote Connection, in: Karageorghis, V./H. Matthäus/S. Rogge (eds.), *Cyprus: Religion and Society, From the Late Bronze Age to the End of the Archaic Period*, Erlangen, 183-204.
- Kolotourou, K. 2011: Musical Rhythms from the Cradle to the Grave, in: Haysom, M./J. Wallensten (eds.), *Current Approaches to Religion in Ancient Greece*, Stockholm, 159-178.
- Kowalzig, B. 2008: *Singing for the Gods*, Oxford.
- Krispijn, Th.J.H. 1990: Beiträge zur altorientalischen Musikforschung 1, *Akkadica* 70, 1-27.
- Kristiansen, K. 2001: Rulers and Warriors: Symbolic Transmission and Social Transformation in Bronze Age Europe, in: Haas, J. (ed.), *From Leaders to Rulers*, New York, 85-104.
- Long, R.C. 1974: *The Ayia Triada Sarcophagus: A Study of Late Minoan and Mycenaean Funerary Practices and Beliefs*, Göteborg.
- Maas, M./J. McIntosh Snyder 1989: *Stringed Instruments of Ancient Greece*, New Haven, CT/London.

- Malamat, A. 1999: Musicians from Hazor Sent to Mari, *Qadmoniot, Journal for the Antiquities of Eretz-Israel and Bible Lands* 32, 43-44.
- Markoe, G. 1985: *Phoenician Bronze and Silver Bowls from Cyprus and the Mediterranean*, Berkeley, CA.
- Martinelli, M.C. (ed.) 2009: *La Musa dimenticata: Aspetti dell'esperienza musicale greca in età ellenistica* (Atti e Eminari delle edizioni della Scuola Normale Pisa), Pisa.
- Mathiesen, T. 1999: *Apollo's Lyre: Greek Music and Music Theory in Antiquity and the Middle Ages*, Lincoln, NE.
- Matz, F. 1970: *Dädalische Kunst auf Kreta im 7 Jahrhundert v.Chr.*, Mainz am Rhein.
- Manniche, L. 1991: *Music in Ancient Egypt*, London.
- Mellaart, J. 1966. Excavations at Çatal Hüyük, 1965: Fourth Preliminary Report, *Anatolian Studies* 11, 165-191.
- Meyers, C.L. 1991: On Drums and Damsels: Women's Performance in Ancient Israel, *The Biblical Archaeologist* 54(1), 16-27.
- Meyers, C.L. 2005: Myriam, Music and Miracles, in: Good, D. (ed.), *Mariam, the Magdalen and the Mother*, Bloomington, IN, 27-40.
- Murray, P./P. Wilson (eds.) 2004: *Music and the Muses*, Oxford.
- Morris, S.P. 1992: *Daidalos and the Origins of Greek Art*, Princeton, NY.
- Mikrakis, M. 2000: Μουσική στην Κρήτη και την Αίγυπτο: Ένα ιδιαίτερο πεδίο ανάπτυξης πολιτισμικών δεσμών [Music in Crete and Egypt: A Special Field of Development of Cultural Ties], in: Karetsou, A. (ed.), Κρήτη - Αίγυπτος. Πολιτισμικοί δεσμοί τριών χιλιετιών, Μελέτες [Crete – Egypt. Cultural Ties of Three Millennia, Studies], Athens, 162–169.
- Mikrakis, M. 2006: *Saiteninstrumente der Bronze- und frühen Eisenzeit in der Ägais und auf Zypern: Musikausübung und Kultur zwischen Kontinuität und Wandel*, PhD. dissertation, University of Heidelberg.
- Mikrakis, M. 2007: Ξύλινα Χειρόμορφα Κρόταλα από το Ακρωτήρι [Wooden Hand-shaped Clappers from Akrotiri], *Αλς* 5, 89-95.
- Mikrakis, M. 2012: The 'Originality of Ancient Cypriot Art' and the Individuality of Performing Practices in Protohistoric Cyprus, in: Iacovou, M. (ed.), *Cyprus and the Aegean in the Early Iron Age, The Legacy of Nicolas Coldstream*, Nicosia, 371-393.
- Palaima, Th.G. 1995: The Nature of the Mycenaean Wanax: Non-Indo-European Origins and Priestly Functions, in: Rehak, P. (ed.), *The Role of the Ruler in Prehistoric Aegean* (Aegeum 11), Liège/Austin, TX, 119-138.
- Penglase, C. 1994: *Greek Myths and Mesopotamia: Parallels and Influence in the Homeric Hymns and Hesiod*, London.
- Perlman, P.J. 1995: Invocatio and Imprecatio: The Hymn to the Greatest Kouros from Palaikastro and the Oath in Ancient Crete, *Journal of Hellenic Studies* 115: 161-167.
- Pruzsinszky, R. 2009-2010: Singers, Musicians and Their Mobility in Ur III Period Cuneiform Texts, in: Dumbrell, R./I. Finkel (eds.), *ICONEA 2009-2010, Proceedings of the International Conference of Near Eastern Archaeomusicology, Université de la Sorbonne, November 2009, and at the Senate House, School of Musical Research, University of London, December 2010*, London, 31-40 (Available at <http://iconea.org/pdf/iconea-20092010colour.pdf>) last accessed November 2012)
- Rashid, S.A. 1984: *Mesopotamien*, Musikgeschichte in Bildern Band 2(2), Leipzig.
- Restani, D. (ed.) 2006: *Etnomusicologia Storica del Mondo Antico, Per Roberto Leydi*, Ravenna.
- Roller, L. 1999: *In Search of God the Mother: The Cult of Anatolian Cybele*, Berkeley, CA.
- Seeger, A. 1987: *Why Suyá Sing, A Musical Anthropology of an Amazonian People*, Cambridge.
- Shapiro, H.A. 1993: Hipparchos and the Rhapsodes, in: Dougherty, C./L. Kurke (eds.), *Cultural Poetics in Archaic Greece*, Cambridge, 92-107.
- Snodgrass, A. 1964: *Early Greek Armour and Weapons*, Edinburgh.

- Soles, J./K. Davaras 2005: Mochlos, in Whitley, J. 'Archaeology in Greece 2004-2005', *Archaeological Reports for 2004-2005*, 102-104.
- Stampolidis, N.C., 1998: Imports and Amalgamata. The Eleutherna Experience, in: Karageorghis, V./N.C. Stampolidis (eds.), *Eastern Mediterranean. Cyprus-Dodecanese-Crete 16th-6th cent. B.C. Proceedings of the International Symposium held at Rethymnon – Crete in May 1997*, Athens, 175-184.
- Stieglitz, R. 1978: Minoan Mathematics or Music?, *Bulletin of the American Society of Papyrologists* 15(1-2) (Studies Presented to Naphtali Lewis), 127-132
- Stockmann, D. 1985: Der Trommler von Çatal Hüyük. Zur Frühgeschichte der Perkussionsinstrumente und ihrer Spielweise, *Beiträge zur Musikwissenschaft* 27(2), 138-160.
- Stokes, M. 1994: Introduction: Ethnicity, Identity and Music, in: Stokes, M. (ed.), *Ethnicity, Identity and Music, The Musical Construction of Place*, Oxford/Providence, RI, 1-28.
- Tzedakis, I. 1970: Μινωϊκός κιθαροδός [A Minoan Minstrel], *Αρχαιολογικά Ανάλεκτα Αθηνών* [Athenian Annals of Archaeology] 3, 111-112.
- Van Keer, E. 2010: Archaeology of Ancient Music: From Reconstructing Instruments to Deconstructing Concepts', in: Eichmann, R./E. Hickmann /L.-C. Koch (eds.), *Studien zur Musikarchäologie* VII, Rahden, 225-233.
- West, M.L. 1965: The Diktaian Hymn to the Kouros, *Journal of Hellenic Studies* 85, 149-159.
- West, M.L. 1992: *Ancient Greek Music*, Oxford.
- West, M.L. 1993-94: The Babylonian Musical Notation and the Hurrian Melodic Texts, *Music and Letters* 75, 161-179.
- West, M.L. 1997: *The East Face of Helicon: West Asiatic Elements in Greek Poetry and Myth*, Oxford.
- Winnington-Ingram, R. P. 1936: *Mode in Ancient Greek Music*, Cambridge.
- Whitley, J. 1998: From Minoans to Eteocretans: The Praisos Region 1200-500 B.C., in: Cavanagh, W.G./M. Curtis/J.N. Coldstream/A.W. Johnston (eds.), *Post-Minoan Crete: Proceedings of the First Colloquium*, London, 27-39.
- Whitley, J. 2006: Praisos: Political Evolution and Ethnic Identity in Eastern Crete, c. 1400-300 B.C., in: Deger-Jalkotzy, S./I. Lemos (eds.), *Ancient Greece from the Mycenaean Palaces to the Age of Homer*, Edinburgh, 597-617.
- Whitley, J. 2008: Identity and Sacred Topography: The Sanctuaries of Praisos in Eastern Crete, in: Rasmussen, A.H./S.W. Rasmussen (eds.), *Religion and Society: Rituals, Resources and Identity in the Ancient Graeco-Roman World: The BOMOS-Conferences 2002-2005* (Analecta Romana Instituti Danici Supplementum 40), Rome, 233-246.
- Woolley, C.L. 1969: *Carchemish: Report on the Excavations at Djerabis on behalf of the British Museum, Conducted by C. Leonard Woolley and T.E. Lawrence*, Part II: *The Town Defences*, London [Photolith. Repr. of 1921 edition].
- Xanthoudides, S.A. 1904: Εκ Κρήτης. Οι τάφοι των Μουλιανών [From Crete. The Tombs of Mouliaia], *Εφημερίς Αρχαιολογική* (37), 1-56.
- Yadin, Y. 1960: *Hazor II. An Account of the Second Season of Excavations*, Jerusalem.
- Younger, J.G. 1998: *Music in the Aegean Bronze Age*, Jonsered.
- Ziegler, N. 2011: Music, the Work of Professionals, in: Radner, K./E. Robson (eds.), *The Oxford Handbook of Cuneiform Culture*, Oxford, 289-312.
- Zaccagnini, C. 1983: Patterns of Mobility Among Ancient Near Eastern Craftsmen, *Journal of Near Eastern Studies* 42, 245-264.

Katerina Kolotourou
 Royal Holloway, University of London
 Egham Hill
 Surrey TW20 0EX
 United Kingdom
 aikaterini.kolotourou@rhul.ac.uk