

Against Nature: Tree-Shaking Action in Minoan Glyptic Art as Agonistic Behaviour

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Abstract *Minoan gold signet-rings are well-known for their depiction of ritual events. Thirty-one ring images depict ritual scenes in which human figures interact with trees. The majority of figures approach the trees in a calm and seemingly reverential manner; however, eight examples depict the ritual participant clasping and vigorously shaking the tree. These appear on gold rings from Knossos, Archanes, Kalyvia, and Poros on Crete (LM IB–III); Vapheio and Mycenae on mainland Greece (LH II–III); as well as an unprovenanced stone seal in New York. The figures all display a particular body posture: standing with bent knees, sometimes bearing their weight on one leg at the front, while their back leg is both extended and supplying thrust, or kicked back and upwards. The pose is suggestive of active movement and is also seen in glyptic depictions of agonistic scenes such as warrior combat, boxing, weapon use, men in combat with real and supernatural animals, bull-leaping, running, men striding with captured women in tow, and hybrid figures such as minotaurs, bird-men and -women. These iconographic parallels suggest that the tree-shaking pose indicates a coercive or even violent activity. These scenes may depict the attempt to ritually control the natural world through aggression and domination, and to promote the idea that the elite owners of the rings were supremely capable of establishing and maintaining order.*

Tree-shaking ritual is a sub-category of Minoan tree cult, an aspect of Late Bronze Age Cretan religion known primarily from glyptic iconography. This paper argues that images of tree-shaking evident in Minoan cult scenes depict ritual participants undergoing an altered state of consciousness during which they perform coercive dendromancy. In order to support this contention, the paper begins by explaining Minoan tree cult, and the sub-category of tree-shaking. It then examines the tree-shaking pose itself and comparative examples in order to determine what the pose signifies, and establishes that the comparanda all depict agonistic activities performed by males. Examination of the types of agonistic behaviours evident is followed by analysis of the ritual action within tree-shaking scenes. Previous scholars' interpretations of such scenes are considered next, and then the tree-shaking pose is suggested to be an expression of an ecstatic state. Oracular trees from the Levant and Greece are subsequently examined as ethnographic analogies to Minoan tree-shaking scenes, and the altered states of consciousness proposed to have been undergone by the cult personnel are interpreted as shamanistic. The presence of females along with males in Minoan tree-shaking scenes is then interpreted in light of Near Eastern comparanda, and the agonistic pose of the figures is shown to be characteristic of an animistic ontology. The paper concludes that tree-shaking figures adopted agonistic poses in order to compel auditory transactions with numinous trees and that therefore the human-tree relationship in these scenes was characterised by human domination.

Tree Cult

Minoan-style gold signet-rings are well-known for their depiction of ritual events. Of the 340 examples of ring iconography, 31 depict cult scenes in which human figures interact with trees (11%). In addition to sphragistic jewellery and its impressions on clay sealings, evidence of what

for convenience I will call ‘tree cult’ also appears on other media including stone vases, fresco painting, carved ivory and a bronze plaque. The apparently sacred trees in these scenes are depicted in four main ways: growing within the natural landscape; behind the walls of open-air sanctuaries; in conjunction with cult structures such as columnar shrines and stepped altars; and in the vicinity of boats and the sea (Tully 2018). The glyptic images depict the enactment of salutatory or adoration gestures, dance performance, offering of sacrificial animals, and communication with figures identified here as resident nymphs.

Tree-Shaking

The majority of human figures in the scenes approach the trees in a calm and apparently reverential manner; however, eight examples appearing on seven objects, six rings and one seal-stone (22% or almost a quarter of the 31 glyptic images of tree cult), depict the ritual participant clasp- ing and vigorously shaking the tree. These appear on gold rings from Knossos, Archanes, Kalyvia, and Poros on Crete (LM IB–III); Vapheio and Mycenae on mainland Greece (LH II–III); as well as an unprovenanced stone seal in New York (see Catalogue).

Characteristics

In these images the tree-shaking pose involves the human figure using either one or two hands to grasp the tree (one hand: Figs. 1, 5; two hands: Figs. 2–4, 6–7), and their leg positions, which are all in profile, range from an apparent lunge where one leg is bent, taking the weight of the figure, while the other leg is straighter and supplies thrust or balance (Figs. 1, 5), to bent legs (Figs. 1, 3, 6), bent legs spaced widely apart (Fig. 4), and bent legs with one leg kicked up and back (Figs. 2, 7).



Fig. 1: Gold ring HM 1700 from Knossos (Photo by Jebulon; courtesy of the Heraklion Archaeological Museum – Hellenic Ministry of Culture and Sports – Archaeological Receipts Fund).

So how should we understand the tree-shaking pose(s)? Firstly, are the figures shaking the tree or pulling it? All tree shakers grasp and pull the tree or branch down toward themselves, rather than just reaching up to it. In Figures 1 and 5 the lunging figures use one hand to grasp the tree and appear to be pulling it, while in Figures 2–4 and 6–7 they use two hands (or at least a second arm is not visible) and appear to be exerting more force upon it and thus shaking it. What about the leg positions? Do they depict motion, and different degrees of motion? Where else do we see lunging, bent legs, bent legs spaced widely apart, and bent legs with one leg kicked back and up?



Fig. 2: Gold ring HM 989 from Archanes (Photo by I. Pini; courtesy E. Sapouna-Sakellaraki).



Fig. 3: Gold ring from Kalyvia (CMS II 3, no. 114; courtesy of the CMS Heidelberg).



Fig. 4: Gold ring HM 1629 from Poros (after Rethemiotakis 2017, fig. 8).



Fig. 5: Gold ring from Vapheio (CMS I, no. 219; courtesy of the CMS Heidelberg).



Fig. 6: Gold ring from Mycenae (CMS I, no. 126; courtesy of the CMS Heidelberg).



Fig. 7: Steatite seal, unknown provenance (CMS XII, no. 264; courtesy of the CMS Heidelberg).

Comparanda

Agonistic scenes

Although there are female figures as well as males in tree-shaking scenes, all comparative images depict men, and all are agonistic scenes. The Greek ‘agon’ means a struggle destined to produce a winner and a loser (Liddell and Scott 1955, 10). In Aegean art agonistic scenes include images of warfare, armed and unarmed combat, humans fighting, hunting and engaging in sport with animals, behaving aggressively toward nature, and animals hunting prey. While such scenes may have had a basis in reality, the fact that they were primarily depicted on elite artworks suggests that they functioned as ideology. Traditionally agonistic imagery has been associated with Mycenaean rather than Minoan art, but agonistic scenes are prevalent in Minoan art, with images of fighting increasing in popularity from the late MM onwards and there are more combat scenes from Crete during LM I–II than from the mainland (Krzyszowska 2005, 139). Agonistic scenes in Aegean art can be classified as: armed combat, unarmed combat, hunting, and combat with nature.

Armed combat – warfare

Images of armed combat appear in an array of media including seals and sealings, wall paintings, precious metal, grave stelae and painted ceramics. The combatants are mainly depicted as generic Aegean people and, except for the Combat Agate and the wall painting depicting Mycenaean battling opponents wearing skins, both from Pylos, there is little variation to indicate regional differences. The warriors all possess generally the same weaponry and attire but the winner is identified by his dominant pose and central placement (Blakolmer 2013, 62). Aegean fighting scenes probably did not depict historical events, but rather were generic battle scenes designed to express political hegemony through martial conquest (Blakolmer 2013, 61–64).

In view of that, what leg postures do we see in scenes of armed combat? Images of armed combat include the lunge, as seen on an LH I Mycenaean gold ring from Shaft Grave IV in Grave Circle A at Mycenae (CMS I, no. 16) depicting two sword-wielding figures in close combat while another figure holds a long javelin and shelters behind a tower shield, and a fourth sits wounded on the ground; the lunge and bent legs are evident in the gold cushion seal from Shaft Grave III (CMS I, no. 11) and the amygdaloid seal from Mycenae (CMS I, no. 12) in which sword-wielding warriors strike their opponents with downward thrusts over the top of figure-of-eight shields; the pose consisting of bent legs spaced widely apart is seen on the ring impression from Knossos (CMS II 8, no. 279) depicting an armed warrior and hunting dogs chasing a fleeing human victim; the lunge and bent legs with one leg kicked back and up are evident in a ring impression from Agia Triada (CMS II 6, no. 17) depicting two warriors armed with spears preparing to throw them at one another while a third figure lies wounded or dead on the ground, and two warriors in close combat with spears aimed at each other in a ring impression from Zakros (CMS II 7, no. 20); while straight legs and immobile bent legs are seen on a lentoid seal from Milos

(*CMS* I, no. 263) that portrays a figure stabbing another in the back with a short spear while another figure lies dead behind him.

Unarmed combat – sport

Many examples of competitive sporting activities such as boxing, bull-leaping, running and acrobatics are evident in Aegean art from the 3rd millennium BC to LM III C. The majority are fragmentary, however, restricting a full understanding of the wider context of the activities (Rutter 2014, 36). Leg positions evident in unarmed combat scenes include: the lunge as seen in a ring impression from the Temple Repositories at Knossos (*CMS* II 8, no. 280) depicting a three-quarter back view of a boxer in motion with a pillar or flagstaff to his right, perhaps suggesting that the location is a villa or palace (Krzyszowska 2005, 140); bent legs spaced widely apart are evident on another ring impression in the National Museum of Athens (*CMS* I, no. 306) depicting combatants using their legs as well as fists in what may be kick boxing; bent legs as well as the lunge are depicted on the Boxer Rhyton from Agia Triada; the young boys engaged in boxing depicted in the wall painting from Room Beta 1 at Thera have bent legs with the figure on the right in a slight lunge; and bent legs as well as the one leg kicked back and up pose are seen in all phases of bull-leaping from the initial grappling of the horns, to the flinging of the leaper over the bull's back, and the landing at the rear of the bull (*CMS* II 6, no. 55; III, no. 362; V Suppl. 3, no. 395).

Hunting

Hunting scenes include bulls being netted and speared, male figures spearing lions, boars and deer; being injured in a boar-hunt; shooting arrows at deer from chariots; and hunting dogs chasing boars. Human figures in hunting scenes are depicted with bent legs and straight legs (*CMS* I, nos. 227, 294).

Combat with 'nature'

In scenes of one-on-one combat between humans and animals where male figures attack lions, bulls, boars and deer we see the lunge, bent legs, bent legs kicked up and back, and straight legs (*CMS* I, nos. 112, 199, 290, 307). The minotaur, a composite of human legs and the upper bodies of bulls, lions, deer, goats or dogs, which may be an amalgamation of the idea of the male figure in combat with animals, is depicted with bent legs, bent legs kicked back and up, and straight legs (*CMS* II 3, no. 331; III, no. 363; XI, no. 127).

Summary

Consequently, in regard to the leg poses seen in tree-shaking scenes: lunging also appears in scenes of armed combat (warfare; Fig. 8), unarmed combat or sport (boxing; Fig. 9), and men fighting animals (Fig. 10). The lunge pose appears to signify a phase within a forceful forward movement. Bent legs are evident in scenes depicting unarmed combat, running, bull-leaping, bull-wrestling, minotaurs, dancing, performing as and/or transforming into other creatures, and crouching (Fig. 11). These also seem to be images of motion, except perhaps for an example of an archer (*CMS* II 6, no. 21). This is in contrast to immobile bent legs, depicted front on in fantastic images like the Zakros sealings, and in profile on seated figures and dead figures. Bent legs spaced widely apart are seen in images depicting, striding, running and boxing (Fig. 12). These convey swift movement. Bent legs with one leg kicked back and up appear in images depicting armed combat, human combat with animals, bull-leaping, minotaurs, and human defeat (Fig. 8 on left and Fig. 13). This pose suggests motion, speed, vigorous action, and perhaps also flailing.

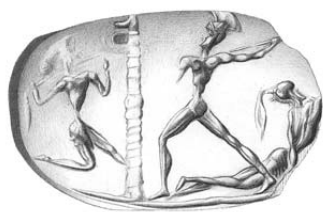


Fig. 8: Ring impression from Agia Triada (CMS II 6, no. 17; courtesy of the CMS Heidelberg).



Fig. 9: Ring impression from the Temple Repositories at Knossos (CMS II 8, no. 280; courtesy of the CMS Heidelberg).



Fig. 10: Amethyst seal from Pylos (CMS I, no. 290; courtesy of the CMS Heidelberg).

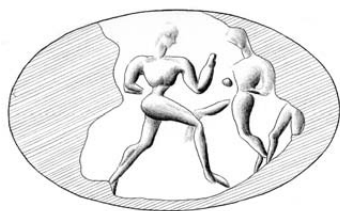


Fig. 11: Ring impression in the National Archaeological Museum of Athens (CMS I, no. 306; courtesy of the CMS Heidelberg).

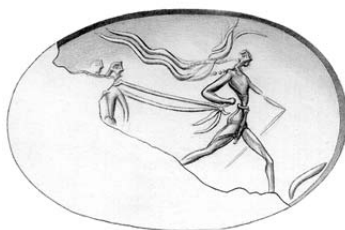


Fig. 12: Ring impression (CMS V Suppl. 1A, no. 133; courtesy of the CMS Heidelberg).



Fig. 13: Agate lentoid seal in the Ashmolean Museum (CMS VI, no. 342; courtesy of the CMS Heidelberg).

What are the Tree-shaking Figures Doing?

If all these images, in which we see comparative examples of the leg positions of the tree-shakers, are scenes of human aggression, then can we consider images of tree-shaking and -pulling to also be examples of human aggression, but towards vegetation? The iconographic parallels suggest that the tree-shaking pose indicates a coercive or even violent activity. Are tree-shakers in combat with trees? And what do we make of the presence of women performing this activity, considering that all the comparanda depict men?

The tree-shaking figures occur within cult scenes; all of which feature both men and women, except Figure 7 in which only a female is depicted. In five of the images (Figs. 1–2, 4–6) males shake the tree and in three of them females do (Figs. 1, 3, 7). The trees themselves are situated within a tripartite shrine (Fig. 2), a columnar shrine made of piers (Figs. 6–7), a columnar shrine made of wood (Fig. 1), on a stepped ashlar altar (Fig. 1), on a flat ashlar altar (Fig. 4), and in rocky ground (Fig. 5). It is not possible to identify the tree species due to the small size of glyptic art.¹ In five examples the trees do not have fruit (Figs. 1–3, 7) while in two, possibly three, they do (Figs. 4–6). The tree-shaking scene includes a baetyl in four examples (Figs. 1–3, 6) and no baetyl in three (Figs. 4–5, 7). In regard to the action: two examples (Figs. 2, 6) fea-

¹ Arthur Evans' suggestion that trees with broad leaves signify fig trees and that those with small leaves are olive trees has been prevalent in glyptic studies, but is not really accurate. Foliage apparently consisting of globules and leaves surrounded by dots are suggested to be fruit, and have also been claimed to indicate flowers (Crowley 2014, 130). Such dots have also been interpreted as silk moths (Van Damme 2012) and fig wasps (Dabney 2014). The only type of tree able to be identified in glyptic is the

palm tree, because it is very distinctive. Jennifer Moody (2017) rightly notes that most Minoan iconographic representations of trees can be divided – at best – into “palms and not-palms”. While none of the trees in the tree-shaking scenes are palms, even so, there are obviously different types of trees depicted and these may signify particular variations of cult (Marinatos 1989, 136; Sourvinou-Inwood 1991, 199–243).

ture a male tree-shaker, a central female figure possibly dancing and a baetyl-hugger (1 male, 1 female); one example (Fig. 5) depicts a male tree-shaker and a central female; one example (Fig. 1) features two tree-shakers (a female and a male) and a seated female; one example (Fig. 3) features a female tree-shaker and a male baetyl-hugger; one (Fig. 4) depicts a male tree-shaker and a male figure saluting a female figure; and one (Fig. 7) features a female tree-shaker alone.

Previous Interpretations

Within the history of Aegean archaeology, glyptic images of tree-shaking have been interpreted in three main ways: as the harvesting of psychoactive substances; as regular fruit harvesting; or as the attempt to attract the attention of a deity. Arthur Evans (1930, 142), and later Nikolaos Platon (1984, 68), proposed that the figures shaking trees were gathering psychoactive substances to consume in order to enter an ecstatic state characterised by frenzied movement, or to offer to the nearby female figure interpreted as a “goddess” so that she could enter an ecstatic state; an incongruous suggestion for a divinity. Martin Nilsson (1950, 277) agreed that tree-shaking scenes were ecstatic, even orgiastic; celebrations of the life force in contrast to baetyl-hugging which he felt expressed mourning. Jane Ellen Harrison (1921, 165–169, 178), Bogdan Rutkowski (1986, 107) and Lucy Goodison (2010, 14–15) suggested the fruit-gathering theory, while the most popular interpretation of tree-shaking, subscribed to by Axel Persson (1942, 23, 25), Peter Warren (1987, 492), Nota Dimopoulou and Giorgos Rethemiotakis (2000, 44–48; 2004, 16), Konstantinos Galanakis (2005, 89, 93–94), John Younger (2009, 49) and Nanno Marinatos (1993, 187, 190–192), is that its purpose was to attract a deity. Marinatos has also proposed that tree-shaking images depict aspects of initiation rituals, as well as the final phase in a seasonal cycle whereby the shaking of the tree was undertaken in order to bend, break, and ultimately destroy it. More recently Marinatos has interpreted tree and baetyl cult in light of Near Eastern texts that describe frenzied prophets, seeing the central elite female figures in such images as queens enacting ritual designed to lead to an ecstatic prophetic state (Marinatos 1990, 85; 1993, 187–188; 2009).

My Interpretation

I propose that tree-shaking scenes can be classified with the ‘combat with nature’ images mentioned above (Nikolaidou and Kokkinidou 1997); and that tree-shaking or -pulling may be an attempt to ritually control the natural world through aggression and violence – which need not be considered incompatible with the Minoans’ renowned fondness for the natural world, or indicate malevolence (Evely 1996, 65). I also suggest that because these are ritual scenes that they may be images of coercive dendromancy in which the human figures physically interact with the trees in order to produce sound from the rustling of their leaves for the purpose of divination and that the various bent leg poses indicate that the figures are in an ecstatic state (Tully 2021).

Altered states of consciousness can be achieved through physical activities such as fasting, sensory deprivation or concentration, sound, rhythmic movement, energetic dancing and physical gestures, as well as the cultivation of specific mental states with or without the use of drugs. Christine Morris and Alan Peatfield, and Erin McGowan, have proposed that particular gestures, evident in Minoan clay and bronze figurines from peak, rural and cave sanctuaries and in depictions of cult scenes in glyptic, can facilitate trance states (Morris and Peatfield 2002, 2004; Morris 2004; McGowan 2006; Peatfield and Morris 2012). This idea is based on the work of anthropologist, Felicitas Goodman, who experimented with various restrictive body postures derived from ethnographic examples of shamanic rituals and depictions of humans in ancient art which, in combination with “sonic driving” (the repetitive application of sound), produced altered states of consciousness (Goodman 1986, 1988, 1990). According to this technique physical action can affect emotional and psychological states and therefore be used to access altered states of consciousness.

Cross-Cultural Comparanda

But why should we interpret tree-shaking or -pulling activity within cult scenes as depictions of dendromancy? In order to answer the question we need to turn to comparative ethnographic analogies. Marinatos (2009, 2010) postulates that tree-shaking, along with baetyl-hugging, can be interpreted through cross-cultural comparison with Near Eastern ritual because there was a ‘koine’ or common language of religious ritual spanning the central and eastern Mediterranean during the Bronze and Iron Ages. In particular she refers to textual evidence including an oracular formula in the Ugaritic *Epic of Ba'al* (KTU 1.7.1), the Hebrew *Bible* (*Gen* 28.10–13; 1 *Sam* 10.9, 21.15–16; 2 *Kings* 3.16, 9.11; *Jer* 29.26; *Hos* 9.7), and Hesiod’s *Theogony* (line 35) in support of her interpretation of Minoan tree and stone cult in general as prophecy ritual (Marinatos 2009). I have argued elsewhere that east Mediterranean iconographic and archaeological evidence dating to the Middle Bronze Age and textual evidence dating from the Late Bronze and Iron Age indicates the existence of a female tree deity as well as cult sites where this deity may have been worshipped as a literal tree (Tully 2018, 123–141). Evidence from Mari, Ugarit and Egypt attests that the Minoans were in contact with these cultures through maritime trade during the Middle and Late Bronze Age.

Speaking Trees

In regard to Levantine textual evidence, the relevant section of the *Epic of Ba'al* is as follows: “For I have a word that I would say to you, a message that I would repeat to you: a word of tree and a whisper of stone, a word unknown to men, and which multitudes of the earth do not understand: the coupling of the heavens with the earth, of the deeps with the stars. I understand the lightning which the heavens do not know: come, and I shall reveal it in the midst of my divine mountain Saphon, in the sanctuary, in the rock of my inheritance” (KTU 1.7.1; Wyatt 2007, 181).

Nicholas Wyatt (2007, 189–90) proposes that this “word of tree” was the susurration – the sound of the wind in the trees – interpreted as the oracular response of a numinous tree; that the interpretation of the wind would have been an esoteric craft known only to ritual specialists; and that it was a form of prophecy utilised by Ugaritic royalty.² Wyatt also draws our attention to the analogous tradition of oracular trees in the Hebrew *Bible*. The biblical text certainly contains a lot of material on sacred trees, the best-known examples being the mythological “Tree of the Knowledge of Good and Evil” and the “Tree of Life” situated within the Garden of Eden (*Gen.* 1: 29–3: 24). Trees play prominent roles in the narrative of the patriarchs such as Abraham who built an altar to Yahweh at the Oak of Mamre and planted a tamarisk tree near Beer-Sheba (*Gen.* 21: 33; 13: 18), and Moses who spoke to Yahweh in the form of a burning bush (*Exod.* 3: 2–3). Trees or their representatives, artificial trees or pillars, at open-air cult sites are singled out as examples of incorrect – and older – ‘Canaanite’ religious practice in *Exodus*, *Deuteronomy*, *Judges*, 1 and 2 *Kings*, *Chronicles*, *Isaiah*, *Jeremiah*, *Micah*, *Ezekiel*, and *Hosea* (Tully 2018, 124).

Evans (1901, 130–131) suggested that descriptions of “Epiphanies and Visions of the Divine Presence beneath sacred trees and beside holy stones and pillars” mentioned in the biblical text could elucidate scenes of tree cult on Minoan signet-rings. He focussed primarily on examples of numinous trees from, or in the vicinity of which, voices, angels, or deities emerged; in particular the appearance of God to Abraham by the oaks of Mamre (*Gen.* 18: 1), Moses and the Burning Bush (*Exd.* 3: 4), the appearance of the “Angel of the Lord” to Gideon beneath his father’s terebinth (*Jud.* 6: 11), Joshua’s setting up of the Stone of Witness under an oak tree at Shechem (*Josh.* 24: 26), and Deborah sitting under her palm tree (*Judg.* 4: 4). These animate

² One wonders whether the Minoan “Priestess of the Winds” referred to in two Linear B texts from Knossos (Fp 1.10, 13.3) might be the title of an interpreter of the wind in the trees.

trees also emitted oracular sounds and voices (2 *Sam.* 5:24; *Judg.* 4:4–5) and were capable of mobility, as in the example of the trees that went out to choose a king (*Judg.* 9:8) (Evans 1901, 130–132; Tully 2018, 123–124).

In regard to Greek textual evidence, Shawn O’Byrhim (1996), Carolina López-Ruiz (2010), and Lucy Goodison (2009) have all suggested that line 35 in Hesiod’s *Theogony* (“But what is all this to me, the story / of the oak or the boulder?”) may refer to the east Mediterranean tree-and-stone oracle consultation method alluded to in the *Epic of Ba’al*. Earlier (line 30), Hesiod relates that he received a laurel sceptre from the Muses on Mount Helicon along with the gift of prophecy. References to oracular trees, magical branches, wands, staffs and sceptres that provide divine wisdom, knowledge and power also appear in Homer. The Homeric ‘skêptron’ was made from wood studded with gold nails by the god Hephaistos (*Il.* 2.76) (Easterling 1989). In Homeric literature the sceptre has profound religious significance and transmits divine authority to the human sphere (Palaima 1995, 135). This has interesting parallels to examples from the *Bible*, such as the flowering of Aaron’s priestly staff (*Num* 17.20–25), and in *Hosea* 4:12, “My people enquires of its tree / and its rod instructs it.” Several examples of Minoan art depict human figures receiving or holding sceptres, and single branches feature in association with altars and cult equipment (Tully 2018, 70–72).

Concrete evidence for prophetic activity in association with a sacred tree is found at the cult site of Dodona in Epirus in north-western Greece which centred around an oracular oak tree sacred to Zeus Naios (god of the spring below the temenos) and Zeus Bouleus (counsellor). Dodona was the oldest Hellenic oracle, with inscriptional evidence dating to 550–500 BCE and archaeological evidence that dates back to the Late Bronze Age. The oracle was staffed by priests called ‘selloi’ and priestesses called ‘peleïades’ (doves) who, it is believed, interpreted the sound of the rustling leaves of the tree.³ The site may have originally been a sacred grove, but by the late Hellenistic period there was only a single tree present.

Herodotus (2.55) claims that the original priestesses of the oracle came from Thebes in Egypt. He relates that the contemporary Dodonean priestesses, Promeneia, Timarete and Nikandra, told him that the oracle was originally founded by birds: two black doves had come flying from Thebes; one went to Libya where the oracle of Zeus Ammon was founded, and the other to Dodona; the latter settled on an oak tree and spoke in a human voice, proclaiming that a place of divination from Zeus was to be founded there. The people of Dodona recognised that the message had a divine origin and established the oracular shrine. Herodotus interprets this story as an ‘aition’ for the foreign origin of the original priestesses; the black colouring of the doves signifying that they were Egyptian, and their unfamiliar language sounding to the inhabitants of Dodona like the cries of birds (Connelly 2007, 81).

In his 1967 work on Dodona, Herbert Parke (1967, 20) claimed that “the rediscovery of the Minoan civilisation of Crete and the Mycenaean civilisation of the mainland has brought to light many representations, particularly on engraved seals and gems, which indicate some form of tree-cult in the pre-Hellenic period, but there is nothing in them to suggest the oracular consultation of a sacred tree”. In contrast to Parke’s opinion there is, in fact, ample Minoan iconographic evidence that suggests consultation of a sacred tree. In addition to images that depict tiny hovering anthropomorphic beings emerging from trees (e.g. Fig. 1; *CMS* II 6, no. 6; VI, no. 280; an ivory pyxis lid from Mochlos), there are also examples of bird epiphany in association with trees, evoking the doves at Dodona (Fig. 3; HM 1043; *CMS* I, no. 179; a bronze plaque from the Psychro Cave; Agia Triada Sarcophagus Side B). The ‘selloi’ priests at Dodona were said to sleep on the ground; and several examples of Minoan tree cult iconography depict human figures kneeling on the ground, leaning over baetylic rocks and over a table possibly containing a baetyl (Figs. 2–3, 6; HM 1043; *CMS* II 6, no. 4; II 7, no. 6; V, no. 278).⁴

³ A recent suggestion is that the priests and priestesses at Dodona interpreted the sound of bronze objects hanging in the tree that clanged together when the wind blew (Charisis 2017).

Goodison (2010, 28, 34) has suggested that Greek Panhellenic sanctuaries were influenced by Minoan rural sanctuaries. Marinatos (2009) has proposed that the classical cult of Delphic Apollo and his association with a laurel tree was a survival of Minoan tree ritual. The *Homeric Hymn to Apollo* (393, 396) mentions that the first priests of the god's oracle at Delphi were from Knossos and that the god spoke "from the laurel tree". That trees in general were animate in ancient Greece is evident in the concept of tree nymphs, semi-immortal beings whose life was intertwined with the trees they inhabited (e.g. Alsêids [nymphs of sacred groves], Daphnaiai [of laurel], Dryads [oak], Meliads [ash], Pteleades [elm]). Tree nymphs were also associated with prophecy in the form of divination (Larson 2001, 74). The presence of sentient trees in Greece does not mean that the oracular oak at Dodona necessarily derived from Minoan religion, although it was surely part of the 'koine' of Aegean and eastern Mediterranean religion that recognised sacred trees and stones.

Altered States

It is not known exactly how the prophecies of Zeus were received by the priestly attendants at Dodona. The oak tree was said to 'speak', but it is unclear whether this meant that it spoke in human language, bird language, through the sound of rustling leaves, or in a language or sound only audible to the 'selloi' and 'peleiades' (Parke 1967, 27–29; Marder 2017, 112). We also do not know whether the oracle's attendants only listened to the tree or whether they actively touched it to cause the sound. While many Minoan examples of tree cult depict interaction and communication with numinous trees, the focus here is on the distinctive cluster of tree-shaking scenes, characterised by vigorous, active, haptic interaction with the tree.

The glyptic examples of tree-shaking figures can be arranged so as to show the stages of the movement and hence explain the posture and action: first, the figure lunges toward the tree and grabs hold of it to begin the activity of shaking it (Fig. 1, female figure on left); second, the figure begins shaking the tree, bending their legs for stability (Fig. 1, central male figure; Fig. 3, female on right; Fig. 5, male on left; Fig. 6, male on right); third, increased exertion requires the figure to space their legs more widely (Fig. 4); and fourth, even more effort is required because either their ecstatic state causes them to behave even more vigorously (Figs. 2, 7), or perhaps the tree resists their efforts, which is a kind of defeat for the human figure – both increased effort and the threat of defeat seen in comparative examples of the leg kicked back and up pose.

In the case of the oracle of Dodona, if a tree or bird spoke in human language it would suggest that they had to be in an altered state (different from their normal tree- or bird-state) in order to communicate with humans. Seeing as humans were actively seeking consultation with Zeus through his sacred tree, it would seem more likely that it would be the humans that were required to enter an altered state in order to understand the tree or bird language. In the glyptic examples of tree-shaking, the figures all display an agonistic body posture that expresses movement, that also appears in images depicting physical transformation into animal forms, and which has been interpreted as expressive of ecstatic frenzy which causes or is a result of frenetic movement.

Vigorous movement or dancing is a characteristic of shamanism.⁵ Tae-gon Kim defines shamanism as "a traditional religious phenomenon tied closely to nature and the surrounding world, in which a practitioner endowed with the special ability to enter a state of trance possession, can communicate with supernatural beings ... [and that] ... this transcendental power allows the practitioner, the shaman, to satisfy human cravings for explanation, understanding and prophecy" (Kim 1998, 19; quoted in Nelson 2015, 203–204). Tully and Crooks (2015) argue that

4 One of the categories of prophets at Mari received their revelations in dreams (Huffman and Schmitt 1992, 479).

5 Evans suggested that such activities were analogous to Saami shamanism (Evans 1930, 315). The Saami, whose

traditional territory is northern Scandinavia spanning modern-day Norway, Sweden, Finland and Russia, practice a form of shamanism similar to the canonical Siberian type (Hutton 2001, 137).

the various ecstatic activities, in addition to tree-shaking, that are evident within Minoan religion can be described as “shamanistic,” one of the tropes of which is the adoption of particular body postures.⁶

Gender

The identification of the tree shakers as shamans or ecstatic prophets may explain the presence of females undertaking this activity. Within the wider corpus of images of Minoan tree cult, female figures appear twice as many times as males in the vicinity of trees and tend to predominate in scenes where the tree is touched (Tully 2018, 203–233). In contrast, tree-shaking activity is almost evenly distributed between females and males.⁷ An elite female figure wearing an elaborate flounced Minoan skirt appears in five examples (Figs. 1–2, 4–6), but the tree is never shaken by this type of female figure; only by females wearing Minoan trousers or males wearing Minoan breechcloths. Female figures leaning over baetyls also wear Minoan trousers (*CMS* II 6, no. 4; II 7, no. 6; VI, no. 278; XI, no. 29), and the garment appears in other glyptic scenes featuring female figures carrying elaborate skirts (*CMS* II 3, nos. 8, 145; II 6, no. 26), seated female figures with attendants (*e.g.* *CMS* I, nos. 101, 361; II 6, no. 8; II 7, no. 8; II 8, no. 268; VI, nos. 283, 284; XI, no. 30), or with animals nearby (*CMS* II 3, no. 168; II 6, no. 32), a female archer (*CMS* XI, no. 26), and bird-women and -men (*CMS* II 6, no. 106; II 7, no. 139B). It may have been a more casual garment, an undergarment, or even a cursory attempt by glyptic engravers to depict the Minoan split-front skirt, but is nevertheless distinguishable from the elaborate skirt.

That the elite skirt-wearing women in tree-shaking scenes did not undertake tree-shaking may have been because the activity could not be undertaken while wearing an elaborate skirt, or because the female tree shakers were a different category of person characterised by a distinctive type of garment. The female figure wearing Minoan trousers and/or the male breechcloth-wearing figure may undertake the prophetic activity on behalf of the elite female figure. In regard to the trouser-wearing female figure, according to Near Eastern texts ecstatic prophets were sometimes given gifts of clothing; and/or parts of their own clothing were used in further verification divinations concerning their prophecies (Huffman and Schmitt 1992, 477–482). Other examples of Minoan glyptic images depict trouser-wearing figures carrying elaborate skirts and it is tempting to wonder whether they were given to them as gifts (*CMS* II 3, nos. 8, 145; II 6, no. 26).

Animism

Dendromancy presupposes animism which, as re-theorized by Irving Hallowell (1960), is an ontology that derives from the interdependent relationship of humans with the material world which is assumed to be sentient (Hallowell 1960). As such it can be communicated with in a direct way and incorporated into social relationships. That the Minoans had an animistic world view is evident in iconographic images of human figures in outdoor locations interacting with trees, stones, the sky, hovering epiphanic human figures, birds, insects and objects. While such activities do occur in cultic contexts, it is proposed here that the Minoan figures in these scenes are not actually worshipping the natural world but are expressing their relationship to it. Vivieros de Castro explains that within an animist ontology, “cultivated plants may be conceived as blood relations of the women who tend them, hunters may approach game animals as affines, [and] shamans may relate to animal and plant spirits as associates or enemies” (de Castro 2004, 466).

⁶ Tully 2018, 96. And the other trope is the consumption of psychoactive substances.

⁷ Generally, in the majority of cultic scenes in glyptic and other media the sexes are depicted as participating in

cult separately, except in examples involving trees but only female figures are depicted sitting under trees while males never are (Marinatos 1987, 25–28, 33; 1989, 130, 136; 1993, 18; 1990, 90–91; Rehak 2000, 271–272).

Interspecies Communication

Therefore, I argue that images of tree-shaking and -pulling depict human figures in what we would term an ‘altered state of consciousness’ which they are undergoing in order to understand the language of the numinous tree. If the Minoan figures are actually shaking the tree, which their active pose suggests, then the rustling of the leaves would definitely make an audible sound that may have been considered a type of language that the shamanic practitioner or ecstatic prophet could understand, as per the later example of Dodona. In the majority of examples of Minoan tree cult the tree is either not touched at all, or is touched gently, in contrast to tree-shaking scenes where it seems to be actively grasped and pulled or violently shaken. Unlike a Western Romantic approach, an animistic conception of the natural world, as proposed for Minoan Crete, need not equate with a gentle, reverent attitude toward nature. In animist cultures, the recognition and acceptance of plant personhood and specific kinship co-exists with predatory relationships; some trees may have even been considered to be opponents or adversaries (de Castro 2004, 466). Minoan images of tree-shaking may depict the attempt to ritually coerce, compel or otherwise control the numen of the tree, specific types of vegetation, or the natural world in general through physical dominance (Tully 2018; in press). Tree-shaking may have been a way to make an otherwise apparently reluctant tree speak; an action resorted to when there was no wind to cause the leaves to rustle; or even a post-communicative reaction to the tree – temporality being notoriously hard to discern within Minoan glyptic iconography.⁸

Conclusion

In conclusion, the combination of agonistic postures directed toward sacred trees within cult scenes, the likelihood that the Minoans conceived their world from an animistic perspective, and the evidence for a belief in numinous oracular trees within the wider Eastern Mediterranean and on mainland Greece, provides support for the idea that Minoan tree-shaking images depict ritual participants undergoing an altered state of consciousness during which they perform coercive dendromancy. That the agonistic impulse as depicted within Aegean Bronze Age elite art functioned as an ideological visual tool that promoted the idea of elite male domination and control over other males, females, and the natural world, suggests that despite the presence of females, tree-shaking scenes may express the attempt to control the natural world through aggression and domination, within ritual contexts, and thus promote the idea that the elite owners of the rings were supremely capable of establishing and maintaining order.

Catalogue

HM1700 (Fig. 1). The gold ring from Knossos, known as the ‘Ring of Minos’ and dating to LM IB–II, found on the east slope of the Gypsades Hill near the ‘Temple Tomb’, depicts on its bezel a seascape surrounded by three cult scenes featuring large boulders, cult structures and human figures. In the center of the image a female figure wearing a flounced skirt poles a hippocamp-headed boat (Wedde 1990). On the left a female figure wearing Minoan trousers (Kyriakidis 1997) has placed her left knee upon the lower section of a stepped ashlar altar and with her right arm grasps a tree on top of it. In the upper central area a male figure wearing a Minoan breechcloth (Rehak 1996) and with a bent left leg and outstretched right leg, suggesting a lunging movement, grasps a tree situated on top of a columnar shrine with his right hand, and holds a small object with his left hand which has been variously interpreted as a rhyton, a chrysalis or a sprouting bulb or seed. To the right a female figure wearing an elaborate Minoan skirt

⁸ Rather than destroying the tree, as suggested by Marinatos (1990, 85; 1993, 187–188), when a tree is shaken it actually becomes stronger by growing more and stiffer roots for increased anchorage and thickening the

girth of its trunk, resulting in increased overall resistance to swaying and bending (Haskell 2017, 189–190). Thus, the tree is not simply a passive recipient of human action but has agency (Jones and Cloke 2008).

sits on another stepped ashlar altar and interacts with a hovering epiphanic female figure wearing a similar garment that possibly emerges from the central tree (Evans 1931; 1935, 950; Platon 1984; Pini 1987; Warren 1987; Dimopoulou and Rethemiotakis 2004, 14, 20; Soles 2011; Krzyszkowska 2012, 180).

HM 989 (Fig. 2). The gold ring found in the side tomb of Tholos Tomb A at the cemetery of Phourni Archanes in a larnax burial of a female, dating to LM III A,⁹ depicts, on the right, a tripartite cult structure made from ashlar masonry, on top of which is a tree. A male figure wearing a Minoan breechcloth pulls at the tree with both hands, his bent legs, one of which is kicked back and up, suggesting energetic movement. To the left of this figure and in the centre of the image is a female figure wearing an elaborate Minoan skirt and facing to the left. At the far left of the image a male figure wearing a Minoan breechcloth kneels upon the ground, his head leans upon his left shoulder and his arms encircle a large baetylic stone.¹⁰ Above him hover a dragonfly and butterfly, possible cult stand or Linear A sign (no. 171), an eye and an arrow (Sakellarakis 1967; 1991, 79; Sakellarakis and Sapouna-Sakalleraki 1997, II, 609, 654).

CMS II 3, no. 114 (Fig. 3). A gold ring from Kalyvia, tomb 11 in LM III A2 context, depicts a female figure on the right with bent legs, who seems to be nude, but is probably wearing Minoan trousers (Kyriakidis 1997). She clutches with both hands a tree which is situated within or on top of a columnar shrine on vertical rocks. In the center of the scene a male figure, who also seems to be nude, but is probably wearing a Minoan breechcloth and whose head and forearms are obscured, because of wear and/or the rather minimal and impressionistic rendition of the figure, leans over a large baetylic stone. A bird flies towards him from a pithos to the left of the scene (*CMS II 3*, no. 132).

HM 1629 (Fig. 4). A gold ring found in a large rock-cut tomb of the Neopalatial period cemetery at Poros Heraklion dates to the LM IB. Its bezel depicts on the right side an ashlar structure above which is a tree. A male figure wearing a Minoan breechcloth grasps the tree, his bent knees and widely spaced legs suggesting vigorous movement. Above the male figure in the air are dots and possibly a couple of floating epiphanic objects. In the center of the image is another male figure standing on a small platform. Directly above him in the air are a wing and a small hovering epiphanic female figure. The central male figure extends his right arm in a salute or greeting to a hovering but full size female figure on the left side of the scene. This female figure is in a seated position, and has her arms bent at the elbows as if holding reins (although none are evident), and two birds below her to the left and right may have been intended to be understood as functioning as either vehicles for her or as pulling a vehicle. Below each bird is a clump of flowers (Dimopoulou and Rethemiotakis 2004; Rethemiotakis 2017).

CMS I, no. 219 (Fig. 5). A gold ring from Vapheio, found in a LH II–III A1 tholos tomb, depicts on the left, a pithos with some dots around its upper part, perhaps a garland decoration, above (behind) which are thin, cylindrical rocks with a tree growing out of them. A male figure with a bent right leg and extended left leg stands on globular rocks and pulls at the tree with his right hand. In the center of the scene a female figure wearing an elaborate skirt appears to be dancing. Above and to the right of the female figure are three hovering objects including a rhyton, a shooting star or sprig of wheat, and a double axe with tassels. To the far right of the scene a sacred knot or garment, possibly with a sword, lies upon a figure-eight shield or a rock.

CMS I, no. 126 (Fig. 6). A LH gold ring from Mycenae depicts, on the right side, a male figure with bent legs pulling on a tree situated in a columnar structure that possibly contains a baetyl, whilst looking backward over his shoulder and downwards, toward the central scene where a female figure wearing an elaborate skirt stands with her hands on her hips and looks toward him. On the left another female figure wearing an elaborate skirt leans over another shrine

⁹ The style of this ring suggests a LM IB date. Minoan style rings found in Mycenaean period tombs were probably heirlooms (Tully and Crooks 2019).

¹⁰ Baetyls are natural and worked stones traditionally thought to be aniconic representations of a deity (Crooks 2013), similar to Levantine *masseboth* (Graesser 1972).

structure or table with her arms folded, laying her head on her arms. Below (*i.e.* inside) the table at left are a garlands or a double-stranded necklace above an oval object, perhaps a baetyl. Above her are three jagged vertical marks which may depict hovering epiphanic shooting stars, wheat spikes or branches. Two curved marks at the top of the image may indicate garlands or the sky (*CMS I*, no. 126).

CMS XII, no. 264 (Fig. 7). An unprovenienced grey-green serpentine lentoid seal in LM I iconographic style (Cretan Popular Group) depicts a female figure wearing Minoan trousers, with bent legs, the left one kicked back and up, facing to the left and grasping with both hands a tree on top of a columnar structure which sits on rocks or a flimsy built support (Kenna 1972, 356).

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