

The Function of Minoan Cheironomy

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Abstract *The arms and hands are the main body parts in a non-verbal form of communication which follows a semiotic code of meaning in a specific context. Minoan hand gesture or ‘cheironomy’ is in line with this principle. Minoan cheironomy features a significant variety of schemata, i.e. distinct configurations of arms and hands, each one intended to convey specific meaning(s) in specific context(s). These schemata, either contextualised or depicted individually in a two- or three-dimensional representation, can be classified into two major categories, according to the outwards or inwards orientation, position and/or placement of arms, hands and palms: firstly, the open schemata with outwards configurations, which portray the figure in an extroverted, inter-connectedness/communication state and, secondly, the closed ones with inwards configurations that render the figure in an introverted, self-connectedness state. The arms and hands may also function as conduits of energy. In the former case, the energy is transmitted to or received by the external agent and, in the latter, internally reserved or processed. A combination of both attitudes, displayed by the same figure, is also possible. Furthermore, the schemata may constitute different phases of the same cheironomy, or can be entirely independent and autonomous cheironomies in terms of schema and content, which can also be performed in a sequence. Specimens exemplifying such processes and states are discussed in thematic groups. Ultimately and irrespectively of the interpretation we may assign to each schema and its iconographical or archaeological context, this primary distinction is a common denominator for the function of Minoan cheironomy.*

Introductory Remarks

Minoan cheironomy constitutes a significant occurrence in the representation of two-dimensional and three-dimensional anthropomorphic figures of Minoan art. This study intends to discuss a main aspect of its function and certain of its basic underlying principles.¹ The term ‘cheironomy’ (= hand gesture) does not only refer to the gesture of the arms and hands. According to its Greek etymology (= νόμοι της χειρός), it also carries connotations of the social norms and customs governing the conduct of arms and hands, which may consciously convey symbolic meanings to the recipient or observer.²

The arms and hands are the most informative body parts in a non-verbal form of communication (Argyle 1988, 188) which follows a semiotic code of meaning in a specific context of occurrence within the structure of a distinct situation (Argyle 1988, 294–295; Feyereisen and de Lannoy 1991, 57–58, 111). The notion of gesture is traditionally linked with “conventional and voluntary expression” (Kendon 1981, 28). The usage and meaning of a gesture are also associated with the context of a society, creating thus cultural variations (Argyle 1988, 52–57, 191; Kendon 2004; Kita 2009 with reasons why cultural variations exist). In Argyle’s words (1988, 191), gesture “is the non-verbal signal that is most affected by socialisation and by cultural history”. Among the different systems of classification proposed and implemented in the relevant fields of research we can discern that of ‘emblems’, a term variously used to distinguish conscious and co-

¹ This study utilises and expands on perceptions developed and presented in my Ph.D. dissertation, “*Cheironomy of the Female Figure in Minoan Art*”, 2008.

² I first employed ‘cheironomy’ in my Ph.D. diss. following Eleni Mantzourani, my associate supervisor’s, kind suggestion on the basis of the term’s connotations.



Fig. 1.1: Sealing, Palace at Knossos (CMS II 8, no. 256; courtesy of D. Panagiotopoulos, CMS Heidelberg). – Fig. 1.2: Figurine, Tylissos (after Dimopoulou-Rethemiotaki 2005, 106; Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development [HOCRED], Heraklion Archaeological Museum; by permission). – Fig. 2.1: Figure, Kannia (after Rethemiotakis 1988, pl. 26: γ–δ, no. 140; by permission). – Fig. 2.2: Figure, Gazi (after Rethemiotakis 1988, pls. 42–43, no. 25; by permission). – Fig. 2.3: Figure, Gazi (after Rethemiotakis 1988, pl. 40, no. 24; by permission). – Fig. 2.4: Figure, Gournia (after Rethemiotakis 1988, pls. 30–31, no. 6; by permission). – Fig. 2.5: Figure, Gazi (after Rethemiotakis 1988, pls. 44–45, no. 26; by permission). – Fig. 2.6: Figure, Karphi (after Rethemiotakis 1988, pls. 48–49, no. 19; by permission). – Fig. 2.7: Figurine, Palace at Knossos (after Rethemiotakis 1988, fig. 28, no. 42; by permission). – Fig. 2.8: Three-sided prism, Heraklion (?) (CMS VI, no. 92a; by permission). – Fig. 2.9: Sealing, Agia Triada (CMS II 6, no. 3; by permission). – Fig. 3.1: Ring, Poros (after Dimopoulou and Rethemiotakis 2000, fig. 4c; by permission). – Fig. 3.2: Ring, Elateia (CMS V Suppl. 2, no. 106; by permission). – Fig. 3.3: Sealing, Agia Triada (CMS II 6, no. 6; by permission). – Fig. 3.4: Ring, Harbour Town of Knossos (?) (CMS VI, no. 280; by permission). – Fig. 3.5a: Ring, Isopata (CMS II 3, no. 51; by permission). – Fig. 3.5b: Ring, Isopata (after Dimopoulou-Rethemiotaki 2005, 126; Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development [HOCRED], Heraklion Archaeological Museum; by permission). – Fig. 4.1: Sealing, Chania (CMS V Suppl. 1A, no. 177; by permission). – Fig. 4.2: Ring, Poros (after Rethemiotakis 2016–2017, fig. 2; by permission). – Fig. 4.3: Sealing, Knossos (CMS II 8, no. 268; by permission).

dified symbolic hand movements that are speech-autonomous, can be translated into words, and can be ethnicity- and culture-dependent (various aspects and applications of the term in Efron 1941; Argyle 1988, 52–57; Morris 2001, 247; Murphy 2018, 14–15).

Cheironomies in Minoan art are in line with the above principles. They are intentional emblematic/symbolic non-verbal signals or signs, which are well-orchestrated in order to convey specific encoded meanings in specific contexts, namely the iconographical or functional contexts in the framework of Minoan culture in general, and the culture of parts of Minoan society in particular (Wedde 1999, 912), that is of certain social groups behind their creation and implementation.

Schemata-related Observations and Methodology

Minoan cheironomy features a significant variety of schemata (term after Neumann 1965 and McNiven 1989), in other words specific configurations of arms and hands, each intended to convey specific meaning(s) in a given context. The classification of the schemata is based on the movement of the arm, forearm and hand, *i.e.* the kinesics of the upper limbs.

Time span

Certain schemata are more persistent, such as the long-lived one of one arm upraised towards the forehead with palm turned to and placed upon the forehead (Fig. 1.1: sealing from the Palace at Knossos, possibly executed by the male figure in the scene; Fig. 1.2: distinctly performed by the male figurine from Tyllissos; see Verlinden 1984, pl. 11, no. 26; Sapouna-Sakellarakis 1995, pl. 7, no. 101). The sideways and frontally upraised arms schemata also cover a long time span (Figs. 2.1–2.9). Others are more limited in duration, such as the Neopalatial LM I schema of one arm bent with hand near or touching the same shoulder (central female figure in Fig. 5.2; see Sakellarakis and Sapouna-Sakellarakis 1997, 654–660, fig. 722). There are also schemata with unique specimens, as the one of the clay female figurine from Myrsine (dated to LM II or early LM IIIA by Rethemiotakis 1998, 64; 2001, fig. 74), exhibiting arms bent and upraised with joined palms at chest level, a gesture reminiscent of prayer.

Significance of each arm in a cheironomy

In certain schemata the movement of both arms is executed in a symmetrical manner, so both arms may have equal bearing, such as the above-noted sideways and frontally upraised arms cheironomy (Figs. 2.1–2.6, 2.8–2.9). In a number of non-symmetrical schemata we can discern one arm and hand executing the main movement and the other arm and hand performing a complementary, of equal bearing or secondary significance movement that can take different forms in certain cheironomies, thus creating variations and, in certain cases, sequences of the same cheironomy as will be argued below in selected themes. The criterion for this distinction emerges from the comparative examination of the material, especially where we have a sufficient number of three- and/or two-dimensional specimens. The latter type of specimens provide the utmost important iconographical context of the cheironomy. A complementary, yet of equal bearing, arms/hands schema in a cheironomy will be discussed further down in the gestural combination of one hand on chest or heart with the other upraised towards another agent (performed by female figures in Figs. 3.1–3.2, 4.3); both hand configurations convey significant meanings and have appeared autonomously in two-dimensional iconography. A cheironomy which appears to have one arm/hand bearing the main message is the previously mentioned cheironomy of one arm upraised towards the forehead with palm turned to and placed upon the forehead (Fig. 1.2), with the other arm exhibiting various schemata of secondary significance, also pertaining to possible sequences of arm movements: the outstretched or slightly bent arm can be extended along the body (common for bronze male and female figurines, Fig. 1.2) or can be bent and placed near or upon the body in various positions, as exemplified by glyptic examples.³ In this connection it

³ Cf. a seal of unknown origin: *CMS* VI, no. 286; the Makrygialos seal: *CMS* V Suppl. 1A, no. 55; the seal in a

ought to be mentioned that Céline Murphy has discussed the significance of what she has termed as ‘Arm B’ and has considered it to be ‘the gesture’s classificatory feature’. In her examination of the ‘Fist on Chest’ gesture, she has argued that this arm helps define the ‘attitude’ of the gesticulating figure during communication and that “Arm B sets the scene while Arm A represents the action” (Murphy 2018, esp. 9–10, 14).

Extroversion, inter-connectedness vs introversion, self-connectedness and the energy management factor

In each schema the orientation, direction, and level or placement of the palm or palms is the most crucial factor. The whole bodily comportment and stance are also significant. The figures are open and extroverted through cheironomy, as well as unreserved body posture: they open outwards and may also target an external agent (‘target’ and ‘targeting’ after Wedde 1999, 912). On the other hand, the figures are closed when they are self-contained, internalised/introverted through cheironomy and reserved body posture. It is worth noting that the clenched fist, a characteristic feature of mainly male figures that adds to the intensity and introversion while also bearing gender-specific connotations, is also important to take into account. However, in a considerable number of specimens, particularly the glyptic ones, we are not in a position to ascertain the attitude of the palms, as these are either unstructured or not manifesting their orientation.

Therefore, these cheironomy schemata, either contextualised along with other agents or depicted individually in a two- or three-dimensional representation respectively, can be classified into two major categories, according to the outwards or inwards orientation, position and/or placement of arms, hands and palms: the open and closed ones (a distinction also considered by Peatfield and Morris 2012, 239–242). The open ones with outwards configurations portray the figure in a state of *extroversion* and *inter-connectedness*, *i.e.* in a process of connecting, communicating and/or interacting with another entity, be it a living and animate or inanimate agent (which may also be in the course of becoming animate; with respect to Minoan animism, see Day 2012; Tully, Crooks, and Hitchcock 2016; Tully 2016, 2018, 2021; and Herva 2006 for the ‘ecological perspective’). The closed schemata with inwards configurations render the figure in a state of *introversion* and *self-connectedness* (a term that I introduce and employ here to juxtapose it with and contrast it to the term ‘inter-connectedness’), *i.e.* in a non-communicative state which can be one of internalising and/or connecting inwardly with the body and self. Furthermore, there can be a combination of both attitudes exhibited by the same figure with related results.

Regarding the cheironomies that exhibit introversion and self-connectedness, there are schemata in which both palms and/or arms or one palm and/or arm are upon specific parts of the body, near or in front of specific parts of the body: positioning sideways towards the head (Figs. 2.4, 2.7), before or upon the head and forehead (one hand on forehead: Fig. 1.2 and possibly in Fig. 1.1), mouth and/or nose, neck, upon the opposite shoulder, near or on the same shoulder for female figures (Fig. 5.2), chest for the male and female figures (one hand on chest in Figs. 3.1–3.3, 4.1, 4.3, 5.3–5.4, 6.5; both arms sideways on chest in Figs. 3.1–3.2), specifically breasts for the female figures (we may also have placements above, around and below the breasts); pulling the V-shaped bodice opening (the ‘revelation of breast’ act according to Platon 2014, 71–77); placement upon possibly heart (Figs. 3.1–3.3, 4.1, 4.3, 6.5), stomach or abdomen, and with both hands on or near the hips (Fig. 4.2) or waist. The practice seems to be associated with the significance these body parts had for the Minoans or the significance several of these have universally on the basis of human physiology and functions – and I am noting this without undermining Minoan cultural distinctiveness.

private collection: CMS V Suppl. 1A, no. 75 – in the drawing the hand is placed on the forehead but the palm appears to be turned outwards; the Sacred Mansion gold

ring from Poros: Rethemiotakis and Dimopoulou 2003, col. pl. I, pls. 1–4, fig. 1, which also appears to belong to this cheironomy schema.

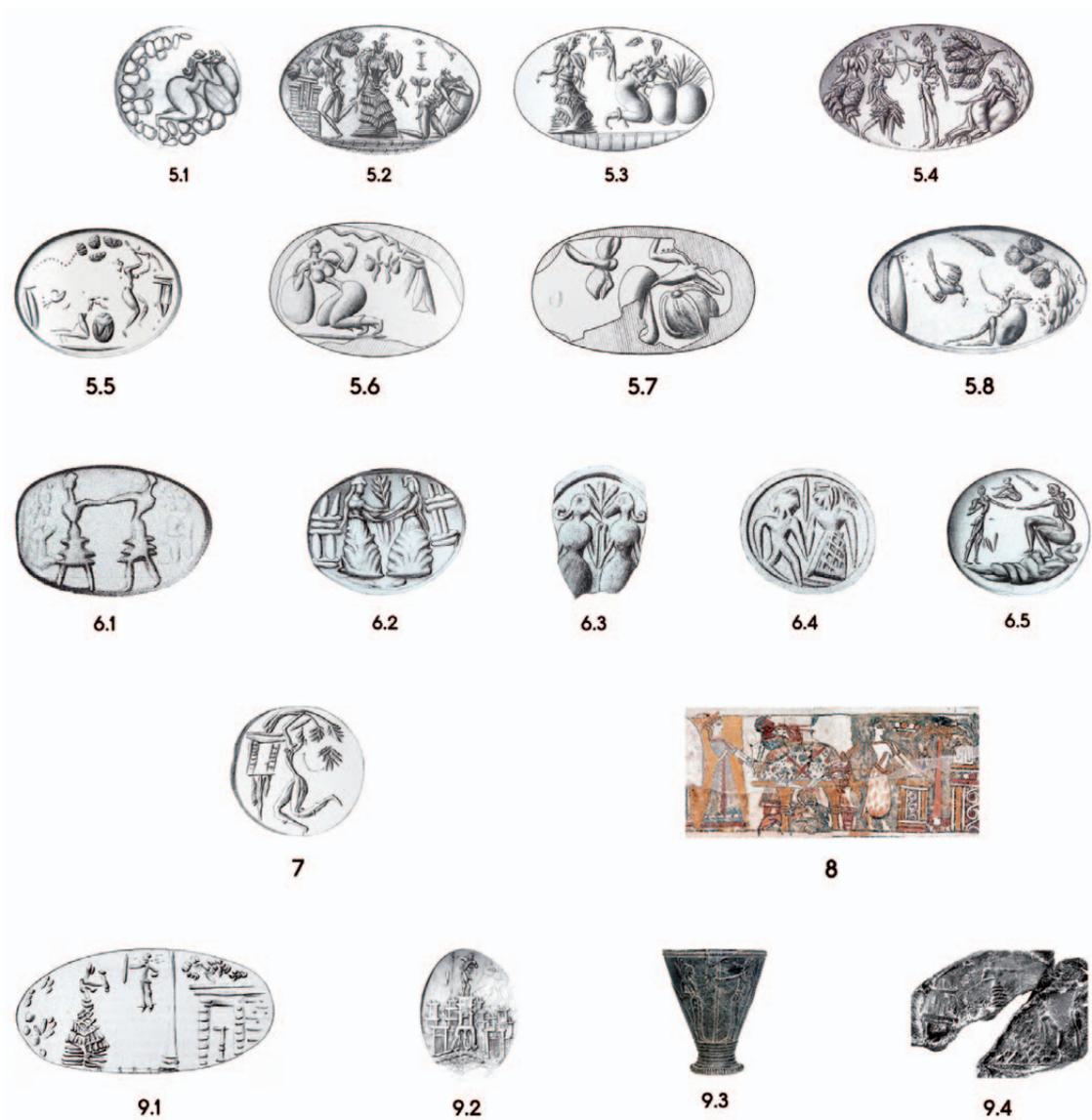


Fig. 5.1: Seal, Knossos (after Warren 1990, fig. 14; by permission). – Fig. 5.2: Ring, Archanes (after Marinatos 2010, fig. 7.6a; by permission of N. Marinatos and CMS Heidelberg). – Fig. 5.3: Ring, uncertain provenance (CMS VI, no. 278; by permission). – Fig. 5.4: Ring, unknown provenance (CMS XI, no. 29; by permission). – Fig. 5.5: Ring, Kalyvia (CMS II 3, no. 114; by permission). – Fig. 5.6: Sealing, Agia Triada (CMS II 6, no. 4; by permission). – Fig. 5.7: Sealing, Zakros (CMS II 7, no. 6; by permission). – Fig. 5.8: Ring, Sellopoulo (after Marinatos 2010, fig. 7.9b; by permission of N. Marinatos and CMS Heidelberg). – Fig. 6.1: Ring, Isopata (CMS II 3, no. 56; by permission). – Fig. 6.2: Sealing, Chania (CMS V Suppl. 1A, no. 178; by permission). – Fig. 6.3: Sealing, Phaistos (CMS II 5, no. 323; by permission). – Fig. 6.4: Sealing, Phaistos (CMS II 5, no. 324; by permission). – Fig. 6.5: Seal, unknown provenance (CMS X, no. 261; by permission). – Fig. 7: Seal, unknown provenance (CMS XII, no. 264; by permission). – Fig. 8: Sarcophagus, Agia Triada, side B, detail (after Dimopoulou-Rethemiotaki 2005, 180–181; Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development [HOCRED], Heraklion Archaeological Museum, by permission). – Fig. 9.1: Ring, Knossos (?) (CMS VI, no. 281; by permission). – Fig. 9.2: Sealing, Chania (CMS V Suppl. 1A, no. 142; by permission). – Fig. 9.3: The Chieftain Cup, Agia Triada (after Dimopoulou-Rethemiotaki 2005, 154; Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development [HOCRED], Heraklion Archaeological Museum, by permission). – Fig. 9.4: Sealings, Palace at Knossos (CMS II 8, no. 256; courtesy of the CMS Heidelberg).

In addition, there is a second level of approach. This paper proposes a working hypothesis which employs the concept of an *energy management factor* that may have contributed to the function of Minoan cheironomy in acts and contexts where certain effects were meant to be produced, such as ones that have been traditionally perceived as ‘gaining access to a sacred entity or deity’, ‘healing’, ‘protection’, ‘blessing’, ‘prosperity’, ‘procreation’, ‘regeneration’, and so forth. The purpose of this paper is not to examine the specific nature of these effects but, in tandem with the extroversion/inter-connectedness and introversion/self-connectedness aspect of the cheironomy, to also take into consideration the alternative point of view that hands can function as *conduits of energy*.

Energy can be defined as “the capacity to produce an effect” (McCraty et al. [1998] 2018, 1). “Technically energy is a scalar quantity associated with the state (or condition) of one or more objects” (Walker et al. 2014, 149). As a general rule, energy cannot be perceived and observed directly but can only be experienced or induced, and is a force that has an effect on physical entities (Liu 2018, 30, 32). A property of our universe is that “energy can be transformed from one type to another and transferred from one object to another” (Walker et al. 2014, 149). The concept of energy transfer does not mean that “anything material flows into and out of the object ... it is like the electronic transfer of money between two accounts” (Walker et al. 2014, 151). Furthermore, energy obeys the law of conservation, meaning that its total amount is always the same but can change form and transfer externally from and internally within a system (Walker et al. 2014, 149, 195–197).

The belief in energy transfer and exchange through the hands is a universal one. As a healing practice, it is employed in the Eastern and Western Medicine systems, now often called by the generic term ‘Energy Medicine’; according to these systems, however, healing does not only occur by hands (McCraty et al. [1998] 2018, 1). It is described in sacred texts of Judaism and Christianity, namely the Hebrew Bible and Greek Old Testament, the New Testament and Acts – mainly in conferring a blessing, wisdom or authority (for instance, *Deuteronomy* 34: 9, *Numbers* 29:15–23 and *Acts* 6: 6, 8:14–19), and in healing by Jesus (for instance, *Luke* 5: 12–13 and *Mark* 8: 22–26) and the apostles (*Mark* 16:14–18). Moreover, the rod, a symbol of power for the Israelites and thought to be charged with divine energy, is used in conjunction with an appropriate gesture (particularly the one of stretching out of one arm) by Moses and Aaron in order for them to perform miracles (in *Exodus*, for instance by Moses, 10:12–13, 14:16–27, 17: 8–13, and by Aaron 7:19–20).

Significant scientific research has been conducted in this area, as the tools of scientific observation have been growing more sophisticated especially in recent years. Scientific methods have been proposed to verify the existence of a bodily energy system and the energy of particular organs, as well as the flow of energy inside and outside the body, by means of modern scientific technology and modern science theory, methods and applications (see the proposal by Liu 2018). Experiments have verified, measured and generated the parameters of the electromagnetic energy, which is produced by the heart, and its transmission and exchange between individuals when they touch, hold hands or are in proximity (see the research by McCraty et al. [1998] 2018). It has been demonstrated that the human hand is a natural and powerless infrared (IR) light source emitting infrared radiation, a form of electromagnetic radiation, sufficient to power various devices, and that each finger can serve as an independent light source; it has also been proposed that the data derived from the various gestures composed of different fingers be implemented in the field of sign languages (see the research and proposal by An et al. 2021). Moreover, research has expanded to encompass other kinds of living organisms, such as trees and plants, attempting to convert their energy into electricity (see Meder et al. 2018).

Thus energy can be handled and transmitted to or received by an external agent or source, or it can be inwardly reserved, focused on and/or processed, and can also be associated with specific parts and organs of the body. The arms and palms can function as conduits of energy.

Cheironomy Schemata in a Meaningful Sequence

In this part a selection of possible sequences that seem to take place in order to produce specific effects will be considered. Naturally, sequences are difficult or often impossible to identify due to the fragmentary nature of the extant material and the lack of written sources. In addition, critical is the selection of a particular most meaningful moment in the execution of a cheironomy; as a result, a preferred schema is generated, it becomes conventionalised and established in the repertoire of two- and three-dimensional art (see also Morris 2001, 247). Nevertheless, we may be able to discern a number of sequences and distinguish between two types of sequences. The first type appears to involve the sequence of schemata within what seems to be the same cheironomy framework and the second type incorporates the sequence of different cheironomies within the same subject/framework of action represented in two-dimensional iconography.

Sequence of schemata within what seems to be the same cheironomy framework

In the former type we can observe that, as cheironomies are frozen in time, what may be depicted for a number of schemata are not different cheironomies but different phases of the same cheironomy in symmetrical and non-symmetrical attitudes. From the list of possible cases, we can more safely distinguish the following group. The aid of the three-dimensional material is significant here because it exhibits the schemata explicitly.

In the sideways or frontally upraised arms configurations, a standard attitude appears to be symmetrical and has both palms turned in the same direction. Concerning the Postpalatial clay figures (those of the so-called Goddess with Upraised Arms) and clay and metal figurines, in the sideways schema (*i.e.* arms upraised from the side), both palms are turned either towards the viewer, as attested by figures from Kannia, and Gazi sanctuaries (Figs. 2.1–2.2),⁴ or turned three-quarters to the viewer, as attested by a figure from Gazi sanctuary (Fig. 2.3) and two identical figures from Karphi sanctuary,⁵ or turned towards the head, as attested by a figure from Gournia sanctuary (Fig. 2.4) and a figure from Kavousi sanctuary.⁶ In the frontally upraised arms schema, palms are turned towards each other, as attested by figures from Gazi (Fig. 2.5) and Karphi (Fig. 2.6) sanctuaries – the latter displays hands slightly bent downwards with forearms converging.⁷ However, in the sideways upraised arms cheironomy, we also have one palm turned outwards to the viewer while the other palm is turned to the head, as attested by the clay figurine from the Shrine of the Double Axes (Fig. 2.7), a bronze figurine probably from Eileithyia Cave at Tsoutsouros, and a lead figurine from the Little Palace at Knossos which apparently exhibits the same schema.⁸

These different configurations may signify sequences of outstanding attitudes (from the viewpoint of meaning, as discussed above) performed and depicted as series of ritual acts to cre-

4 Fig. 2.1: Kannia: Rethemiotakis 1998, no. 140, pl. 26: γ–δ (the author dated it to early LM III B: 1988, 70–72 and 2001, 19, 22); for a second figure from Kannia see Rethemiotakis 1998, no. 142, pl. 27 (towards early LM III B: 1998, 70–72 and 2001, 19, 22); Alexiou (1958, 198) dated the Kannia figures to LM III B; Fig. 2.2: Gazi: Rethemiotakis 1998, no. 25, pls. 42–43 (towards early LM III C: 1998, 81); for a second figure from Gazi see Rethemiotakis 1998, no. 23, pls. 37–39 (early LM III C: 1998, 81).

5 Fig. 2.3: Gazi: Rethemiotakis 1998, no. 24, pls. 40–41 (early LM III C: 1998, 81); Karphi: Rethemiotakis 1998, no. 18, pls. 59–63 (the author dated the figures to the Subminoan period, 1998, 87; 2001, 45, 48).

6 Fig. 2.4: Gournia: Rethemiotakis 1998, no. 6, pls.

30–31 (LM III B: 1998, 73; 2001, 25); Kavousi, Vronda: Gesell 2004, fig. 7.2 (shrine in LM III C settlement: 136).

7 Fig. 2.5: Gazi: Rethemiotakis 1998, no. 26, pls. 44–45 (early LM III C: 1998, 81); Karphi: Rethemiotakis 1998, no. 17, pls. 52–53 (mid LM III C: 1998, 84); for a second figure from Karphi see Rethemiotakis 1998, no. 20, pls. 50–51 (towards mid LM III C: 1998, 84); Fig. 2.6: Karphi: Rethemiotakis 1998, no. 19, pls. 48–49 (towards mid LM III C: 1998, 84).

8 Fig. 2.7: Shrine of the Double Axes: Rethemiotakis 1998, no. 42, fig. 28 (LM III A2: 1998, 67–68); Tsoutsouros: Verlinden 1984, no. 183, pl. 75 (end of the Postpalatial period); Little Palace: Verlinden 1984, no. 184, pl. 75 (end of the Postpalatial period) and Gesell 1985, 49 (LM III B).

ate specific results in terms of the extroversion and inter-connectedness and/or introversion and self-connectedness as well as the energy management processes and states. In the non-symmetrical configurations both arms are significant in conveying the meaning of the cheironomy, but it is not feasible to ascertain whether one of the arms bears a more important message.

Firstly, we might have a sequence from/to the symmetrical or non-symmetrical attitude of palms. Secondly, we may be dealing with a sequence denoted by the different orientation of the palms. Thirdly, a sequence from a sideways to a frontal raising of arms may be intended. Moreover, certain configurations represented by the above specimens may not comprise of different and autonomous cheironomies, but represent different phases of the same cheironomy. It is worth noting that the cult environment of Gazi, starting from early LM III C, produced different hand schemata for both the sideways upraised arms (with outwards and three-quarters direction of palms) and frontally upraised arms schemata (with palms facing each other); this observation reinforces further the argument.

With regard to communication, we can note that the figures are represented in an open and inter-connected state with both palms facing the spectator, a closed and self-connected state with an external agent with the inwards positioning of both palms, and in both states with the outwards orientation of one palm and the inwards orientation of the other palm. The figures may also exhibit energy connection and manipulation: by focusing and/or processing energy internally (Fig. 2.4), between their hands (Figs. 2.5–2.6), or by directing it to the viewer (Figs. 2.1–2.2), or by both acts (Fig. 2.7; Fig. 2.3 with palms turned three-quarters to the viewer may exhibit an intermediate stage in energy conduct and communication) implemented in a concurrent or sequential manner. Fingers pointing upwards possibly signify communication, as well as energy connection, with the heavenly realm. In the Postpalatial period the creators of the images may have chosen to demonstrate these notions more explicitly in art. The figure from the Shrine of the Double Axes (Fig. 2.7) could be representative of the beginnings of such a tradition.

Moreover, in glyptic the frontally upraised arms cheironomy has yielded much earlier specimens with palms facing outwards thus being in an extroverted state (Fig. 2.8; three-sided prism from Heraklion (?), dated to MM II by Pini, *CMS* VI, no. 51), or turned towards the face thus being in an introverted state of being (Fig. 2.9; sealing from Agia Triada, dated to LM IB by Tsangaraki 2005–2006, 332; in my view, based on their formation, the palms appear to be turned towards the female figure's face, and this may be further supported by her downwards-inclined head). These particular examples do not exhibit the same hand configurations as the figures and figurines; nonetheless they function on the same principle. The energy appears to be flowing inwards-outwards and/or the reverse in the first specimen and outwards-inwards and/or the reverse in the second specimen. In the latter, the Agia Triada scene, if the opposite act and gesture have already taken place, *i.e.* the female figure has already connected through her palms with the agent in a process of exchanging or receiving energy from it, another phase in a sequence of acts and relevant gestures may be represented, that of directing the energy to herself by turning her palms towards her face. The figure stands before a construction of significance (a columnar shrine according to Tully's classification system, 2018, 76–79), decorated with a garland pointing to a special ritual or cult occasion, and surmounted by oblong objects. These shapes are considered sacred and interpreted as 'Kulthörner' possibly (*CMS* II 6, nos. 3, 10), 'horns of consecration' (Tsangaraki 2005–2006, 332), or stalactites in the role of non-anthropomorphic cult objects.⁹ Therefore, what is depicted here seems to be a kind of sacred interaction and energy connection between the agents in the scene: the anthropomorphic figure and the sacred structure and/or specifically the ambiguous but sacred objects – as the figure has her hands at their level and in close proximity to them.

⁹ Marinatos and Hägg 1983, 185; it is noteworthy that in recent years Marinatos has redefined the sacred horns to be the representation of the cosmic sacred mountain, 2010, 103–113.

Different cheironomies within the same framework of action or situation

In the other type of meaningful sequences the figures are apparently executing an autonomous cheironomy and then another within the same framework of action or ‘situation’ (after Kyriakidis 2018). There are three typical examples for this type: the cheironomies of the so-called epiphanic figures, female and male, descending or floating; the ones of seated female figures; the ones of the female and male figures in the act of leaning on an object, commonly identified as a stone. The two-dimensional material is significant in this type of sequences.

Epiphany has been thoroughly researched (see selectively the studies by Hägg 1986, Marinatos 2004, and Tully 2016). It is widely accepted that figures appear to be descending from the sky or hovering at a higher level than the other agents in the scene. In the first group of images, *i.e.* the Sacred Conversation gold ring from Poros (Fig. 3.1; Dimopoulou and Rethemiotakis 2000, figs. 3–4, 6–8; Rethemiotakis 2016–2017, fig. 8), the Ivory Pyxis from Mochlos (Soles 2016, 249–252, pls. LXXXI–LXXXII), and the gold ring from Elateia (Fig. 3.2; the specimen is seemingly either Minoan or of strong Minoan influence), we can observe that, before these descending or floating figures make contact with the earthly plane and its agents, they tend to have both their arms bent, hands held close to their body and sideways at chest level. A figure in this conduct seems self-contained, introverted/self-connected and non-communicative at this stage. In the second group of images, *i.e.* the sealing from Agia Triada (Fig. 3.3), the ‘Amnisos’ gold ring (Fig. 3.4) and the gold ring from Isopata (Fig. 3.5 a–b), the airborne figure is shown in a communicative, an extroverted/inter-connected and/or interactive state and process by its stance, which has one arm extended or stretched forwards. In such specimens we can further discern that these figures target another agent or other agents in the scene through this extended or outstretched arm. In light of these observations, these two groups appear to display a sequence of two different cheironomies which represent two different states. In addition, by targeting another agent, the figures may transmit energy to, or receive energy from, or exchange energy with it. Ute Günkel-Maschek (2020, fig. 1) has recently expanded on Wolf-Dietrich Niemeier’s perception of the so-called Dancing Lady Fresco as being a hovering figure. If the Lady is indeed depicted in such a state, then her outstretched arm seems to be indicative of her extroversion and possibly interaction in the specific framework of being which, unfortunately, is not preserved.

Similarly, seated female figures appear self-contained, introverted/self-connected when they do not make contact with another agent through closed cheironomies. In the first group, the sealing from Chania (Fig. 4.1) and the Divine Couple gold ring from Poros (Fig. 4.2; Rethemiotakis 2016–2017, figs. 1–7), the female figures are in a closed stance: in the Chania scene the figure places one hand upon the chest or heart while having the other hand extended downwards and close to her body; in the Divine Couple scene the figure performs a symmetrical gestural schema with both arms bent and hands placed, seemingly, on top of her thighs. In the second group, the sealing from Knossos (Fig. 4.3) and the previously mentioned Sacred Conversation ring (Fig. 3.1), female figures do make contact by extending one arm towards another agent in the scene while keeping the other arm bent and placed on the chest or heart. It is important to note that in the Sacred Conversation case the female figure’s hand appears intentionally aligned with the male figure’s outstretched arm. Moreover, the female figures in the second group are depicted in a state of both introversion/self-connectedness and extroversion/inter-connectedness denoted by their closed and open cheironomies, which seem to be complementary and of equal bearing (as discussed in the ‘Schemata-related observations and methodology’ section). Consequently, when the figures are introverted/self-connected, the energy may be reserved or manipulated inwardly by them and/or focused on the specific part of the body (particularly where the hand is placed upon the chest or heart). When the figures are in both introverted and extroverted states, the energy may be both processed inwardly and extended to the agent through the appropriate hand gestures executed in a simultaneous or successive manner.

In the act of leaning on and hugging the stone, the so-called baetyl (see, selectively on the object and the ritual: Warren 1990; Kyriakidis 2000–2001; Marinatos 2004; 2010, 86–102,

210 n. 5, 211 n. 15; Morris 2004, 37, 40; Herva 2006, 588–589, 591–593; Goodison 2009; Younger 2009; Day 2012, 13–15; Crooks 2013; Tully 2016, 23, 25–29; Crooks, Tully, and Hitchcock 2016; Kyriakidis 2018; Kekes 2021, 858–879), we can distinguish two groups. In the first group, the kneeling figure has their arm(s) and hand(s) upon the object and more or less literally embraces it (Fig. 5.1: seal from Knossos; Warren 1990, 198, 200, figs. 12–14, where the figure also has their hand on the head; Fig. 5.2: the aforementioned gold ring from Archanes; Fig. 5.3: gold ring of uncertain provenance). In the second group the figure extends or outstretches one arm towards another entity, be it anthropomorphic, insect or other, which is intentionally positioned by the artist close to them (Fig. 5.4: gold ring of unknown provenance; Fig. 5.5: gold ring from Kalyvia, with at least one arm extended forwards in the direction of another female figure; Fig. 5.6: sealing from Agia Triada; Fig. 5.7: sealing from Zakros; Fig. 5.8: gold ring from Sellopoulo, Popham 1974, 217 [J 8], 219, fig. 14D, pl. 37a–c). In this group certain figures (with preserved heads) even turn their face away from the stone towards the entity they connect with (Figs. 5.4, 5.6, 5.8). The order (that is, which one comes first and which follows) is debatable, but there seems to be a very credible sequence of two different cheironomies in the same situation and framework of actions. The kneeling figures appear to be in two states regarding their communication and energy conduct: in the first group in an introverted/self-connected state yet at the same time extroverted/inter-connected, interactive and intimate with the object through having their hand(s) upon it, and in the second group, while maintaining the first state, they are also in a communicative and probably an interactive state with other entities in the same context. The object itself may be animate or inanimate (and could become animate at a certain stage during the ritual).

Selected Meaningful Specimens in Specific Extroversion/Inter-connectedness Situations

In this section I will present further two-dimensional examples for the extroversion/inter-connectedness and related energy conduct perspectives that epitomise my thesis.

In glyptic representations we encounter a close and/or intimate connection between an anthropomorphic figure and another anthropomorphic figure or another type of agent. In the first situation figures of the same or opposite gender attain this state by touching hands, as illustrated in the following specimens: gold ring from Isopata (Fig. 6.1); sealing from Chania (Fig. 6.2) – besides touching hands, Tully (2018, 217) also considers the possibility that both figures hold the central tree depicted behind them; two sealings from Phaistos (Figs. 6.3–6.4); seal of unknown provenance (Fig. 6.5). In the second situation, as in the scenes of Figs. 5.2 and 5.7, the figures exoterically and intensely grasp, shake and/or pull a tree (for discussions on the specific ritual act, see selectively: Marinatos 1990, 84, 91; 2004; 2010, 91–92; Morris 2004, 37; Younger 2009; Herva 2006, 591–592; Day 2012, 13–15; Tully 2018, 14–15) and/or esoterically and intensely hug the baetylic object we discussed above (Marinatos [1990, 87; 2004, 27, 32, 36] spoke of antithetical passive and active moods, especially when they are combined in the same scene). It is also possible that these figures are shown in a process of becoming one with the agent. On the Agia Triada Sarcophagus, Side B (Fig. 8: Long 1974; Immerwahr 1990, A. T. no. 2, 180–181; Kontorli-Papadopoulou 1996, Agia Triada no. 36, 50), two female figures are stretching their arms and also appear to be laying their hands upon a sacrificed animal and a ritual small conical cup placed on an altar respectively or they are about to do so (regarding the gestures see Long 1974, 67; Marinatos 1986, 25; 2010, 41; Kekes 2016, 8–13; 2021, 798–806; see Mantzourani 1995, no. 11, 127, concerning the vessel and the altar, and 140–141 on the ceremonial use of vessels during religious occasions and on their depiction in Aegean murals). The meaning of each of these acts has been variously interpreted but the common principle is that all these figures seem to be in a special communion and potentially in a process of energy transmission (or reception and/or exchange) through their hands, with the agents they are connected with (see McCraty et al. [1998] 2018) regarding the energy exchange between people touching hands,

and Meder et al. 2018 concerning the fact that trees possess energy, both referred to in the ‘Schemata-related observations and methodology’ section).

In pictorial representations male and female figures are holding and displaying a staff (rod) or sceptre in their outstretched arm (Fig. 9.1: the Epiphany Ring; Fig. 9.2: the Master Impression sealing; Fig. 9.3: the Chieftain Cup, *cf.* Marinatos 1993, 134–135, 217–218, figs. 100, 224; Fig. 9.4: the Mountain Mother sealing;¹⁰ the same gesture is performed by a female figure on one of the gold rings from the Griffin Warrior tomb in Pylos that follows a similar Minoan iconographic formula, see Davis and Stocker 2016, 643–645, 647, fig. 11, Ring 3 (a–e); it is also depicted on a seal from a Mycenaean grave in Naxos, *CMS* V2, no. 608, where the object held by a male figure is a spear). The gesture is performed in an imposing and dynamic manner. In this case, first and foremost, the object itself displays insignia and asserts the status and authority of the figure (see thorough analysis in Kekes 2018, 161–169; 2021, 665–680). There have also been arguments in favour of transmission of power and authority through the transference of this object to the human sphere and elite individuals (see discussions in Palaima 1995, 135–136; Krattenmaker 1995, 57; Tully 2018, 70–72). Therefore, the object may be charged with its own energy, proclaimed, asserted, emanated (possibly also bestowed in certain cases), through the appropriate cheironomy, to the recipient agent in the scenes and, when the power-figure is solitary, to its context or cosmos and to the beholder of the image.

A specimen that best exemplifies the use of gestures in the act of inter-connection between agents and potential energy manipulation in a framework of action is the Isopata gold ring (Figs. 3.5a–b), which is also presented above in the epiphanic scenes. Four female figures execute a combination of cheironomies. The female figures, through the open attitude of body and arms, are shown to be communicating and/or interacting. It ought to be stressed that obviously a variety of cheironomies were required to artistically express the parameters of the specific ritual and the kind of inter-connectedness and energy conduct depicted in this scene. Intriguingly, two of the figures perform an identical frontally upraised arms cheironomy; it is possible that either two figures executing the same cheironomy are required to fulfill the specifications of the particular act, or each figure has a different role to enact through this gesture. Moreover, there are ‘floating’ items which are significant in terms of symbolism and position in space (see the treatments of the ‘floating’ objects in iconography by Kyriakidis 2005 and Crowley 2016). In this context, the orientation of arms and hands is crucial. However, we can only speculate but cannot safely discern exactly which of the other agent(s) (figures or floating items) the individual figures target and connect with. In addition, we are unable to determine the sequence of cheironomies and actions, *i.e.* whether they all happen concurrently or in phases (*cf.* Cain 2001, 45–46).

Conclusions

In conclusion, a lens through which we can look at and perceive the function of Minoan cheironomy emerges. On the one hand, Minoans employed cheironomies to represent the human body in different states and/or processes: a. closed, self-contained, introverted/self-connected and non-communicative, b. open, unreserved, extroverted/inter-connected and communicative, c. a combination of both. This is the first approach.

According to the second approach, the energy management factor, it has been argued that arms and hands may have been seen by Minoans as conduits of energy, internally and/or externally. Minoans appear to have perceived their own body as a receiver and transmitter of energy to be handled to serve their needs. Consequently, they seem to have integrated and performed cheironomies to manipulate energy in various ways in their acts and rituals, in order to ulti-

¹⁰ Poole (2020, 14, 80) has recently raised serious concerns over the accuracy of the reconstructed drawing presented in *CMS* II 8, no. 256. *CMS*, with the aid of modern technology, will hopefully resolve this issue in

the near future and provide us with much-needed data. I am grateful to Diamantis Panagiotopoulos for the information on and assistance with this matter.

mately attain a variety of spiritual and material objectives. As regards energy per se, however, there is an open question about how Minoans experienced it to be, what form(s) and name(s) they gave it, or whether they associated it with deities, numina, spirits or other divine and supernatural forces.

In either case, Minoans had to demonstrate the ‘dromena’ and convey them effectively, so they devised a legible system of visual artistic conventions, by laying emphasis on hands as well as posture. Consequently, in alignment with their convictions and rituals, Minoans depicted cheironomies in an elaborate manner in their art.

In closing, the twofold model put forward and outlined may be considered as a common denominator for the function of Minoan cheironomy. This model can be implemented irrespective of the interpretations we assign to cheironomies and to their iconographical and functional/archaeological context.

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