# Overt and Covert Bodily Communication in Bronze Age Crete

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**Abstract**   *Aegean studies of gestures, stance, movement and bodily comportment have mostly examined, thus far: a) certain classes of bodily depictions; b) whole bodies; c) bodily communication in specific eras or genres. While these approaches have produced useful insights, they could be augmented, thus enhancing our understanding of bodily communication in the Aegean Bronze Age.*

*This paper draws upon material from Bronze Age Crete. Firstly, I advocate combining and contextualising types of data which have largely been kept separate from a methodological point of view, but which, when combined, indicate overt and (hitherto mostly undervalued) covert bodily communication. To achieve this, the paper utilises a diachronic, inter-site database which the author has been compiling over a number of years, and which includes data across archaeological categories.*

*Secondly, through this combination of data, my approach identifies several phenomena. These include the diverse employment of body partibility, the deliberately choreographed ergonomy and even the corporeally palimpsestic nature of some finds. This enables me to argue that perceptible shifts in the variety and audiences of overt and covert bodily communication are perhaps symptomatic of developments in wider social and political contexts. Thus, this paper also advocates that such a 'synthetic' approach can shed light onto not only ontological discourses about, but also deliberate instrumentalisation of, the human body in Minoan Crete.*

## Background to Bodily Communication

Studies of bodily communication in Bronze Age (Minoan) Crete have been numerous in the last century or so. They have used several interconnected methods, even if most of them have tended to emphasise visual (and mostly art-historical) aspects of such communication – and have been overwhelmingly based on specific presuppositions. For example, the majority of studies of bodily communication are premised on the presumed (original) prevalence or importance of whole, artefactual bodies (even if we only mostly find their fragments). This is understandable, because these are the most immediate sources of how Bronze Age Cretans depicted the human form. Specialising further, several studies explore bodily communication in specific eras (*e.g.* the Neopalatial period, Tsangaraki 2010), or genres (*e.g.* frescoes, Jones 2007), but also in certain classes (*e.g.* elite, Steinmann 2014), and therefore audiences. Funerary assemblages have also been used to extrapolate bodily communication: from the early 20th century CE interpretative use of skeletons as almost an addendum to the goods associated with them (*e.g.* Hawes et al. 2014), to the bioarchaeological breakthroughs of the early 21st century CE, which examine osseous material in its own right (*e.g.* Triantaphyllou 2018; Triantaphyllou et al. 2019).

All these extremely useful approaches have developed from different archaeological, art historical, medical-anthropological and ethnographic paradigms, and some continue to reflect their disciplinary history. There are also notable advances which combine some of these approaches (*e.g.* Blakolmer 2010), which problematise the lingering reign of visuality over embodiment (*e.g.* Hamilakis 2013; *cf.* Thomas 2009), and which situate our results of primary approaches into broader archaeological theory (*e.g.* Panagiotopoulos 2012). It is within this group of 'synthetic' studies that this paper and the research behind it sit.
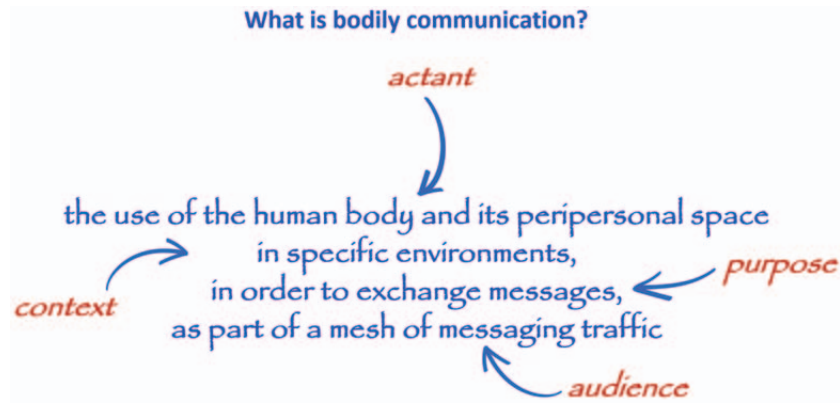
*Fig. 1: Conceptualisation of bodily communication (composition by and copyright of the author 2022).*

We need specialist tools with which to examine our finds, but we also ought to augment our understanding by combining data from different sources, even sources not immediately connected to visible artefactual and physical (whole) bodies. If we take a wider look at bodily communication based on interdisciplinary bibliography, in the fields of *e.g.* human communication and social psychology (*e.g.* Knapp and Hall 2010), anthropology and epistemological reflection (*cf.* Latimer and Strathern 2019), research on embodiment (*e.g.* Dornan-Fish 2012) and on entanglement (*e.g.* Ingold 2010a, 2010b; Antczak and Beaudry 2019; Hodder 2012; Latimer and Strathern 2019 etc.), we can work with a simple definition for the purposes of this paper.

Bodily communication is defined here as *the use of the human body and its peripersonal space in order to convey and interpret messages, as part of a mesh of messaging traffic* (Fig. 1). This definition encapsulates several important aspects:
- The first one is that the human body and its peripersonal space are the *actant,* in other words, the initiator of this action (that is not to say that it is the centre of agency in the communication, but rather the source of intent).
- The multisensorial environments are the *context.*
- The exchange of messages is the *purpose* of the communication.
- The mesh of messaging traffic is the *entangled audience* (human, non-human), to which the actant is inextricably linked (and who/which are also actants of their own communication, intentionally or not).

Therefore, aspects such as gestures or the manipulation of corpses are manifestations of bodily communication deserving their own specialised studies, but they can also be conceptualised as parts of a wider 'meshwork' of bodily communication.

For someone who studies bodily communication in a contemporaneous context, the inseparable combination of *e.g.* body language and behaviour, as well as words (*e.g.* Knapp and Hall 2010, 10) can be directly observed, leading to an understanding of the purpose, and to knowledge of the audience of this bodily communication (*cf.* Piccini 2015; Fuchs and De Jaegher 2009). However, in our case, some of this original 'package' is missing, and so we are presented with several challenges. One of those is that we cannot be (entirely) sure of the context, the purpose or even the audience. A gesture might be directed at other artefactual and biological humans, such as in the case of a complex of related figurines (such as the Palaikastro dancers, Dimopoulou-Rethemiotaki 2005, 183, bottom); to the divine, in the case of presumed divine invocation (Warren 1988; Morris 2001); or even to oneself, in the possibility of self-induced hallucinations (*e.g.* Morris and Peatfield 2002, 2004). Another challenge is that the same tropes of bodily communication, like a particular gesture, might change according to actor, environment, or occasion. As Knapp and Hall (2010, 11) put it, "the same nonverbal behavior performed in
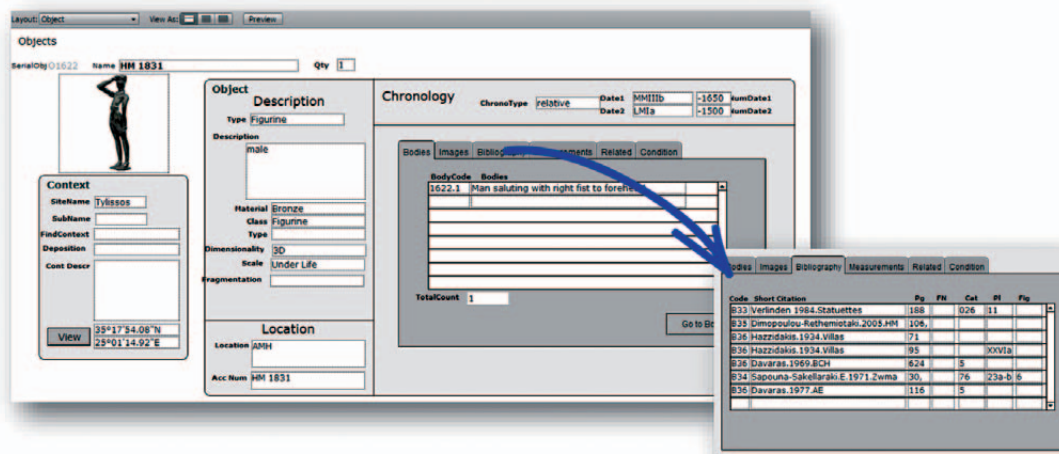
*Fig. 2: Snapshot of the* Minoan Body *database (images and composition by and copyright of the author 2022).*

different contexts may, like words, receive different attributions of meaning". And, as Jones (2014) has masterfully shown, the same simple gesture, in his case the smile in 18th century CE Paris, can have complex and powerful social, economic and political fluctuations within the space of a few years.

In addition, we often forget that *almost no* human bodies, physical or artefactual, which we retrieve, are primary sources responsible for their own bodily communication. In other words, every figurine and almost all retrieved human remains only represent the bodily communication of separate actants, whose physical bodies shaped and manipulated the ones we do find, for their own purposes and within their own audiences. And, of course, we cannot retrieve, but only partly reconstruct, the bodily communication of those absent bodies. So, we think we know who the actant is, but in reality we usually conflate the communication of *e.g.* the preserved body (a figurine, a skeleton) and the actant behind it (the person[s] who made and/or deposited these). The only exceptions to this observation are perhaps the three of the four skeletons excavated at the temple at Anemospilia (with the exception of the 'victim'); their deposition was the accident which entrapped them all and preserved their last self-guided reactions (Sakellarakis and Sapouna-Sakellaraki 1997: I, 228, 294–311).

Archaeologically speaking, we have been successful in collectively trying to 'reconstitute', as Evans would say, bodily communication. One of the ways we do this is by correlation: we ensure that the bodily communication which we retrieve might be interpreted not just through our own cultural perceptions, which tend to assign certain meanings based on our situatedness, but also through a series of meticulous extrapolations based on Minoan material itself (*e.g.* Hallager 1985; Hitchcock 1997; Wedde 1999; Younger 2020). Another slightly different but related way in which we can interpret surviving parts of a bodily communication meshwork is contextualisation and network mapping. A recent very good example is Günkel-Maschek's work (2020), which plotted known Neopalatial epiphany occurrences, something which this author has also had an interest in (Simandiraki-Grimshaw 2010c, 127). Other excellent examples of this approach include the work of Panagiotopoulos on viewing syntax, in which he rightly reminds us that we should consider "not the isolated image but the complex social interaction among image, viewers and context" as "the only adequate approach, since the dominant meaning emerges from this social interaction" (Panagiotopoulos 2012, 63). Yet another way to explore this meshwork is consideration of corporeality, as has been done by Hamilakis's pioneering work for Aegean archaeology on the senses (Hamilakis 2013, esp. 115–117, 129–203) and on personhood (Hamilakis 2018), as well as insightful work on gesture by Morris, Peatfield, Goodison (Morris 2001; Morris and Peatfield 2002; *cf.* Morris and Goodison 2022), McGowan (2006) and others.

## Current Methodology

The methodology and research behind the present paper is a subset of a larger project, entitled *Conceptualising the Minoan Human Body* (*cf.* some of the resulting publications: Simandiraki 2008; Simandiraki-Grimshaw 2010a, 2010b, 2010c, 2013, 2015, 2017, 2018a, 2018b, 2020a, 2020b). For this project, premised on the cataloguing of humans in Bronze Age Crete, the *Minoan Body* database (Fig. 2; Simandiraki-Grimshaw 2010c, 127) has been populated since 2009. It incorporates diverse data: skeletal remains, artefactual bodies (*e.g.* glyptic, frescoes, figurines), but also data from epigraphic records, fingerprints, palmprints and others. The lemmata contain several details, including findspots, bibliographies, photographic records, bodily categorisations, as well as correlations, wherever possible. There are several challenges and limitations regarding the *Minoan Body* database more generally, some more practical, such as funding, some more ontological, such as developing methodologies which encompass disparate types of data. The fact that much relevant excavated material is not yet fully published and the differential publication of the material which has been published (*e.g.* several Mesara tholoi) are also contributing factors to these challenges.

Regarding the present paper, there are some additional limitations. There is a need to restrict ourselves to cases where certain bodily communication 'data' are discernible. For example, we cannot directly compare bodies in scenes of gold rings with commingled skeletal bodies or extremely fragmented figurines, but we can nevertheless extrapolate a so-called 'thick description' of phenomena (*cf.* Geertz 1973, ch. 1). Similarly, we have fluctuations of types of data in different eras and media (also see below). In addition, the patterns identified from the database material need contextualisation within their broader meshworks. Nevertheless, the current paper is intended as an example of how important (and possible) it is to 'query' such a collective corpus of human presence. Consequently, through the combination of data which, thus far, have been kept separate, a discussion of overt and an exploration of (hitherto mostly undervalued) covert bodily communication is possible and is attempted here for selected examples. These were chosen on their merits of comparability and contextualisation.

## Possible Groupings of Bodily Communication

There are several ways in which we might systematise our understanding of the available types of data, without necessarily taking a structuralist approach. Firstly, the author assumes that all extant or detectable bodily data from Minoan Crete carry some sort of communicative agency, however random, intended or fragmentary their nature. Every figurine, skeleton, tablet, fresco, seal and fingerprint was once an inextricable part of communicative meshworks, even if fleeting or limited in their scope. If we accept this premise, then the next methodological step is to try and discern which of these data were meant as overt bodily communication, in which the actants and their communications were deliberately and conspicuously employed, and which of these data might be categorised as covert bodily communication, whose effects do not necessarily manifest in direct, conspicuous representation, but in patterns of behaviour, in the manipulation of bodies or even in the in-between space of "common intercorporality" (Fuchs and De Jaegher 2009, 465, 470, 475, also discussing Merleau-Ponty). As Marilyn Strathern puts it (in her case talking about the construction of personhood), "[a] person is a social configuration. It's always a relational construct" (Strathern in Latimer and Strathern 2019).

### *Overt bodily communication*

In the archaeological record of Bronze Age Crete, there are several examples which we can categorise as overt bodily communication: instances where the depiction or treatment of the human body seems to us to lend itself to more immediate interpretation. We can perhaps discern physical bodies (commingled or distinct), and representations (two-dimensional, like frescoes; three-dimensional, like figurines; and containers, like anthropomorphic vessels) as being the overall

categories which provide the most data. One could argue that these groups of data communicate how people wanted to represent themselves and others, through rendition, manipulation and other ways. Epigraphic and sphragistic means of communication should perhaps be considered as separate categories of overt bodily communication, despite the overlap between ring scenes and frescoes or other depictions. This separation is suggested here because such data were distinctly different, and much more limited, in their audiences and purposes. Finally, bodily occurrences such as amulets and fingerprints can perhaps be seen as yet another separate category, with its own further customisable complex messaging roles.

Within these types of overt bodily communication, we have several instances apparently referencing the intentional exceptionalism of a body. An interesting example is a group of rare articulated burials in (the area of) House Tomb 2, at the cemetery of Petras, Siteia. It is important that several 45+ year-old males from five different phases (between EM II and MM II B) were primary, full-bodied, contained interments, in a cemetery where almost every other body was in secondary burial and deliberately disarticulated (including within the same tomb, Tsipopoulou and Rupp 2019; Relaki 2020), a practice which lasted several centuries at Petras. These bodies were associated with incredibly rich and often internationally connected grave goods for their period (from bronze and silver implements to hieroglyphic seals). These bodies and their peripersonal space, therefore, can be argued as being a clear case of overt bodily communication within the wider context of conspicuous performance of (embodied) wealth – and its probable facilitation of cultural memory and social constructs in the political/social lead-up to the palace of Petras being built nearby (in MM II A, see Tsipopoulou and Rupp 2019, 92), especially given potential factional competition detected by Tsipopoulou and Rupp (2019).

We also have cases whereby depictions render bodies in overtly communicated physical states, such as tension and affliction. The tense arms of the Palaikastro Kouros (Musgrave 2000) and similar contemporary parallels from Knossos (such as the low relief fresco fragments of arms or even the legs of the 'Priest-King', Evans 1928, 780 and esp. discussion in 783, figs. 508, 510–511) are meant to convey a particular, in this case transient, condition of the muscles. They are not necessarily tokenistic renditions of what toned limbs might have looked like, if we compare them to other contemporary depictions of such limbs in relatively relaxed states (*cf.* the left arm of the Rhyton Bearer in the homonymous fresco from Knossos, Dimopoulou-Rethemiotaki 2005, 185). Similarly, affliction can most clearly be discerned as a communicative intention in the well-known example of a seated female figurine from Traostalos (Dimopoulou-Rethemiotaki 2005, 95), whose legs are purposefully modelled as disproportionate.

Furthermore, we have numerous depictions of bodily interaction, including presenting procedure, such as in the case of the MM III so-called 'ancestor worship' model from Kamilari (Rethemiotakis 2001, fig. 123), or hierarchy, as in the case of the LM I Chieftain Cup from Agia Triada (Dimopoulou-Rethemiotaki 2005, 154–155). Conversely, there are rare but memorable occasions of overt bodily communication which conveys the subversion of procedure. As was highlighted by several conference participants and as the author has argued previously (Simandiraki-Grimshaw 2010 b, 325–326), the seemingly slapstick vignette from the Harvesters Vase composition, where a man falls down during the procession and the man in front of him turns back, likely in surprise (Dimopoulou-Rethemiotaki 2005, 188), is probably the only clear reaction-inducing (humorous? commemorative? instructive?) scene in Minoan iconography – and serves exactly this purpose of disruption.

By combining data of different types (*e.g.* figurines, osseous material, glyptic etc.), we can perhaps also better plot certain overt patterns and traits, including gesture (*cf.* Simandiraki-Grimshaw 2015). This is more immediately achievable for depictions, such as comparisons between figurines and glyptic, even across presumed classes of artefacts. For example, a Neopalatial figurine from Piskokephalo (Dimopoulou-Rethemiotaki 2005, 98, left) has been widely cited and reproduced in Minoan bibliography, but the connection of its gesture with the gesture of a Neopalatial figurine of different quality (and perhaps class) from Gortys has not been widely ac-

knowledged (Rethemiotakis 2001, fig. 101, also see discussion of the gesture as spanning the Protopalatial to Postpalatial periods in p. 83). This kind of comparison can also be made between different genres of material culture (such as between the groups of women with upraised hands in an MM II model from Agia Triada [La Rosa 2010, 193, fig. 18.4; Cucuzza 2013, 197 and fig. 44] and on the LM I Isopata Ring [*CMS* II 3, no. 51]) or between artefactual and physical bodies (*cf.* Kiorpe, this volume).

In such cases of overt bodily communication, it is perhaps marginally easier to reconstruct the role of the body as an actant in artistic, ceremonial and social contexts and audiences for the purposes of instruction, example, reverence, pleading or amusement. I suggest that one reason for which we may find this kind of interpretation easier is perhaps because of its visuality. Another may be that we expect to see whole bodies, especially bodies interacting either in group scenes or in assemblages of similar bodies (at a cemetery, a peak sanctuary and so on).

*Covert bodily communication*
A closer look at the human body throughout the Cretan Bronze Age, especially before the Neopalatial period, reveals that its most frequently represented, but covert, bodily concepts are not necessarily of an indivisible entity, but of a body as the sum of its parts (*cf.* Simandiraki-Grimshaw 2015, 273), which could be – and were – dispersed and frequently mixed. As has been argued elsewhere (Simandiraki-Grimshaw 2010a), a prime example were animal-human hybrid depictions, which communicated the conceptual and ontological dissolution and admixture of human bodies. Even in cases where we have an apparently single, complete body, created as one piece, such as a well-known LM I figurine from Tylissos (Dimopoulou-Rethemiotaki 2005, 106, right), the positioning of its necklace, bracelets and anklets denotes a real-life physical, or at least depicted and notional, subdivision of limbs, perhaps a lingering 'hangover' of earlier times. Murphy (2018), Morris, O'Neill, and Peatfield (2019) have shown experimentally that the technology behind the making of even complete figurine bodies requires particular multimodal, multisensorial and multitemporal engagement in making the body parts and then assembling them. It is, therefore, not surprising to find figurines that only consist of limbs, mainly from peak sanctuaries, and particular limbs at that, overwhelmingly legs, arms and heads (famously from Petsophas, Myres 1902/3, pl. XII). It is also not surprising to find that other isolated limbs were being used at the time, such as the similarly dated foot amulets, sometimes sphragistic and sometimes even defined as left or right (*CMS* II 1, no. 407) or Cretan Hieroglyph signs that depict human limbs (CHIC 005, 'eye', on MM II *CMS* II 2, no. 316 d, *cf.* Olivier and Godard 1996, 276–277, #295 [4] CR S (4/4) 02, side δ, and pl. 387, #295.δ; *cf.* Simandiraki-Grimshaw 2010b, 324; and 2015, 273–274 on partibility; also see Karnava's point about partibility in human representations in Cretan Hieroglyphs, 2015, 142–143, 146–149, 153–154). One could also argue that the few but important renditions of half bodies (*cf.* an example from Petsophas, Dimopoulou-Rethemiotaki 2005, 95, top right) took this notion of parts as bodies even further ontologically. In these cases, limb figurines or incomplete or divided bodies may be attributed to aesthetic traditions, manufacturing techniques or even some theoretical concept that the Minoans had about the importance of certain limbs in certain contexts. But if we contextualise these artefactual limbs in the overall archaeological record, we can find several contemporary instances of the manipulation and circulation of the physical equivalents of these limbs, especially crania, hands, arms and legs, sometimes even examples of semi-articulated, *i.e.* partially and not fully decomposed limbs having been 'circulated' and deposited. This has been shown to be the case recently at the cemeteries of Petras (Fig. 3, with partially decomposed limbs circled; *cf.* Triantaphyllou 2016; Triantaphyllou et al. 2017, fig. 1b; 2019; Relaki 2020, 325, 328–330) and Sissi (*cf.* Crevecoeur and Schmitt 2009, esp. fig. 4.24). As Hamilakis (2018) has also commented, we can utilise a combination of data towards a broader understanding of social and perhaps conceptual changes through the creation, dissolution or altering of bodies across physical and material culture remains. What is being communicated seems to be a fluctuating notion of the dividual body (and perhaps the sometimes indistinct boundaries of
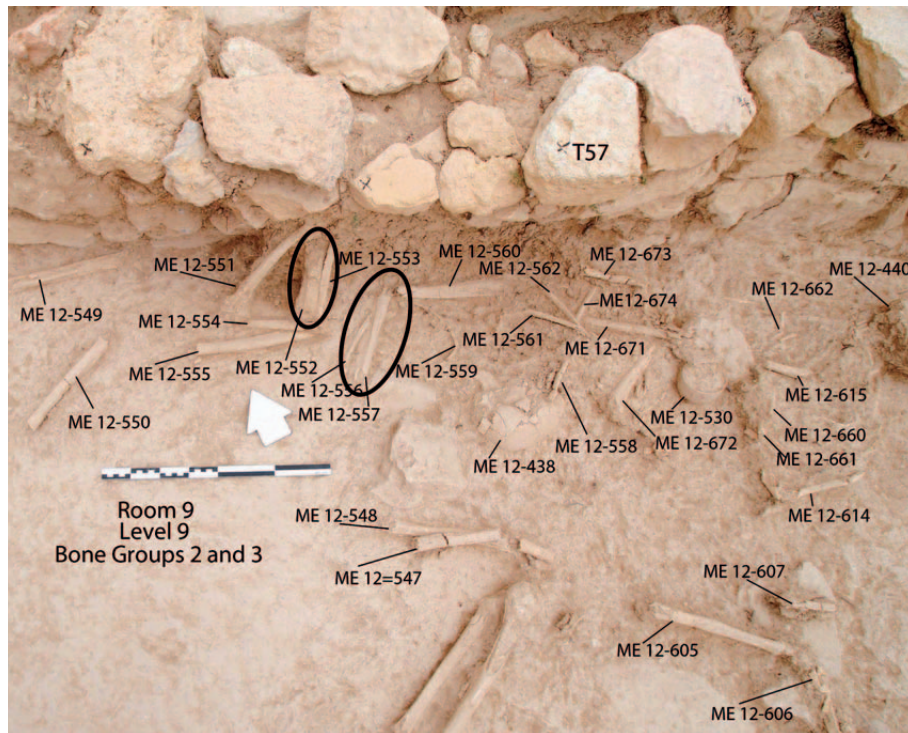
*Fig. 3: Partially decomposed limb manipulation at Petras (after Triantaphyllou et al. 2017, fig. 1 b; image copyright Petras excavations archive, reproduced here with kind permission from M. Tsipopoulou).*

personhood) earlier in the Cretan Bronze Age, towards more clearly defined body ontologies of individuals later on (see discussion below).

We can further and more holistically examine the remnants of actions of dividuality, including violence and fragmentation, on physical and artefactual bodies. Artefact fragmentation has been noted for a number of figurines, only seriously recognised as a deliberate practice recently, before (Rehak 1995), but also largely in the wake of the work by Chapman and Gaydarska (2007; Chapman 2015; also see Vavouranakis and Bourbou 2015). In the case of Minoan Crete, some figurines were even made with the purpose of being broken – perhaps two matching but separate legs from Petsophas illustrate this, as Rutkowski suggests (1991, 103, no. 3.4.5), if their mode of breakage and preservation is not accidentally indicative of this (Rutkowski 1991, pl. XLIV, no. 11). However, deliberate fragmentation, *i.e.* intended partibility as an enacted phenomenon, can also be detected in cases where specific areas of previously integral bodies were targeted, such as faces, necks and waists. For example, aggressive bodily communication of the (literal) defacing of the Palaikastro Kouros has been interpreted as the result of potential frustration against a divine or political authority (Moak 2000, 83; Driessen 2000, 94–95). We should also not preclude the possibility that such aggressive treatment fits into a more general pattern of detectable violence against both artefactual and physical bodies. A closer look at similarly affected bodies (across categories) reveals that other heads were also defaced (like an LM I ivory bull leaper from Knossos, Dimopoulou-Rethemiotaki 2005, 190), were attacked (like a skull from the Agios Charalambos cave, McGeorge in Betancourt et al. 2008, fig. 35), were separated or removed (like the sparse crania and fragmented bodies at the Petras cemetery, see Triantaphyllou 2016). Where is the face of the Palaikastro Kouros and especially the head and left arm of the small Snake Goddess from the Knossos Temple Repositories, the latter found in a closed context (*cf.* Simandiraki-Grimshaw and Stevens 2013)? Why deface, decapitate or mutilate a figurine, if not because it was treated as a proxy for a physical human being who would be – and was – subjected to similar or identical treatment?
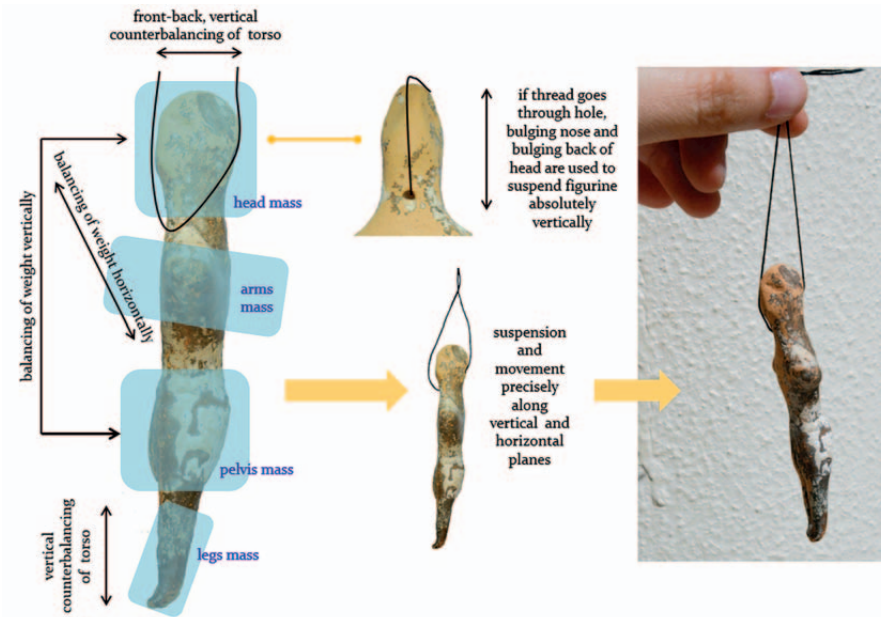
*Fig. 4: Ergonomy of two Petras figurines (after Simandiraki-Grimshaw 2020 b, fig. 7; all photography, graphics and composition by and copyright of the author 2020; images reproduced with the kind permission of M. Tsipopoulou).*

A careful consideration of the agency of artefactual bodies can also help us identify covert bodily communication potential which is usually overlooked in contemporary archaeological-museological contexts, especially in static museum displays and two-dimensional publications (resulting in what Thomas [2009, 8] calls the Western "disaggregation of the senses"). Because we as researchers and as museum visitors do not normally handle or experiment with original artefacts, our lack of engagement with their changeable somatic agency obscures significant portions of their communicative potential. In several cases, this agency is often a deliberate part of the remnants of a multisensory messaging mesh, which includes not only the extant artefactual bodies, but also the long-gone physical bodies which would have used them and for which the body of the researcher can be a proxy.

A group of recently discovered and published MM II figurines from the cemetery of Petras (Simandiraki-Grimshaw 2020 b) illustrates that, far from being static objects, their bodies were specifically designed for suspension and movement in complete balance (Fig. 4). Here, the shape of each figurine and its suspension hole were also communicative stimuli eliciting experimentation, which, in turn, led to an enhanced understanding of the agency and purpose of these figurines' bodies. Similarly, the EM II B 'Myrtos Goddess' anthropomorphic vessel elicits a specific way of being held, cradled and handled in order to be efficiently functional, as its ergonomy indicates (Fig. 5; Simandiraki-Grimshaw 2013, fig. 4, right). The author (2018 a, 2020 a) has also explored how the specific physical manipulation of artefacts, such as an epiphany ring (Simandiraki-Grimshaw 2020 a, fig. 13.6, *CMS* VI, no. 278), can create meaningful illusions, presumably activating particular messaging. In another recent example, Günkel-Maschek (2020)



*Fig. 5: Ergonomic manipulation of the 'Myrtos Goddess' (after Simandiraki-Grimshaw 2013, fig. 4; photography by and copyright of the author 2013; image reproduction permission by the Antiquities Ephorate of Lasithi; artefact under the jurisdiction of the Antiquities Ephorate of Lasithi, copyright of the Hellenic Ministry of Culture and Sports (N. 3028/ 2002), Archaeological Resources Fund).*

Fig. 6: Linear B tablet Kn Ap 639 as a palimpsest of overt and covert bodily communication; detail of AN1910.218 (image copyright Ashmolean Museum, University of Oxford; permission to reproduce this detail provided by the Ashmolean Museum, Oxford; image detail selection, graphics and composition by and copyright of the author 2022).

theorised how the physical human body would have interacted in a now lost messaging mesh, of which the Dancing Lady Fresco from Knossos would have been a part. In all these cases, the ergonomy of finds was deliberately designed to choreograph movements of artefactual and biological bodies – and we can explore this by recognising how they elicited specific manipulations and reactions by their users, including us.

A related aspect of bodily communication in preserved Minoan material is somatic action as instruction. Forms of this kind of communication vary, from gestures (as Hitchcock 1997 and Morris 2001 have explored) and processions, especially near life-size ones (which Hamilakis [2013, esp. 187–188] has discussed as sensorially performative) to depicted or even accidental handling of artefacts, which left extant remaining traces (*e.g.* Simandiraki-Grimshaw 2018b). But these were also forms of covert bodily instruction: "here is how we do it". The LM I Rhyton Bearer vignette from Knossos (Dimopoulou-Rethemiotaki 2005, 185), mentioned above, does not only overtly communicate messages regarding ritual, politics, culture, class, gender and wealth. This figure also serves as a covert embodied example of how to comport the body, how and where to process, how to carry a rhyton, how to wear a seal. Similarly, the manufacture of certain artefacts 'instructs' the user on appropriate handling gestures. Accidental fingerprints on an MM III clay disc from the palace of Galatas do not only communicate (to another potter, the user) a possible problem that the potter had while moving this disc, but can also be used as a (forever imprinted) instruction on how to handle the disc (Simandiraki-Grimshaw 2018b, fig. 3q–s).

These communicative phenomena regarding how to do or handle something or someone, whether facilitated through ergonomy and the item's agency or through visual or other instruction, can also potentially affect different physical motor skills, and, in fact, different areas of the human brain. As Miller et al. (2019, esp. fig. 4) have shown, there are different affordances on the brain regarding touch which involves *e.g.* a forearm or a tool (*cf.* Hamilakis 2013, 193, regarding "things as sensorial prosthetics"; see also Malafouris 2008; Fuchs and De Jaegher 2009, 472–473). What this means for us is that whenever we analyse the bodily communication of an actant (such as the potter), we ought to consider not only the conscious reactions which this might have elicited in the other actants of the messaging mesh, but also their physiological affordances.

Consequently, when trying to identify covert bodily communication, we may discern phenomena such as partible bodies, representation of bodily diversity and fragmentation in both artefactual and physical bodies, as well as similar remnants of violence across these bodies. We can

group these under the modes of heterogeneity and interchangeability (of limbs and bodies), as well as the meaningful and deliberate processes of dissolution of these bodies (*e.g.* through fragmentation). We also saw how covert bodily communication could and would have been effected through the ergonomic design of several artefacts (including design which assumes a physical actant to complete the scene), and ergonomy as instruction. I would argue that the common denominator of these phenomena is a *communicative choreography*, a strategy of ensuring that messages are trafficked by way of orchestrating physical and artefactual bodies to act and communicate in specific ways. Unwittingly, we too become parts of this strategy when we handle, correlate and interpret, as best we can, this messaging traffic.

### Palimpsests of bodily communication

Having explored examples of overt and covert bodily communication, we can conclude this section with a brief discussion of how certain finds can be interpreted as corporeal *palimpsests*. A Linear B tablet from Knossos, Kn Ap 639 (Fig. 6, detail of lines .5 and .6; LiBER; Palaima 2011, 47, fig. 12.10; Melena 2019, 21) is such an example. At first glance, it is a typical tablet, a 'page' of clay shaped and initially partially dried. While still not completely dry (*cf.* Pape et al. 2014; Judson 2023; the author also conducted experimentation in 2011, hitherto unpublished), it was subsequently inscribed with lists of personnel associated with cloth production, before drying and being stored at the palace. It was eventually 'baked' in the LM III A2 (ca. 1375 BC) destruction of W. Magazine XV and excavated in 1901 (Evans 1900/1, 43). But the tablet, in addition to being an accounting instrument referring to artefacts and bodies beyond itself, also works on many levels as a means of bodily communication. Firstly, it was hand-made and then inscribed and even erased or corrected by hand in parts (*e.g.* line .13, Pape et al. 2014, 182), and so it bears several dry fingerprints of a biological body or bodies (which indicate to us and probably to the makers and users the state of dryness before inscription). The gap in line .6, for example, contains a clearly visible 'dry' fingerprint. Secondly, in line .5, there is reference to '*e-ra-ja*', a woman from '*e-ra*': this word communicates linguistically a *type* of actual situated physical body (there are also personal names elsewhere on the tablet). Thirdly, the word itself, as the rest of the tablet text, was inscribed by one, different, physical body, the scribe we have codified as no. 103 (who wrote at least 207 other documents), using a particular handwriting (see Firth and Melena 2016, 262–270, esp. 268; Melena 2019, 460–461). In addition, in this part of the tablet there is an ideogram, a token female body, *i.e.* an abstraction of a woman and not a depiction of an actual one, next to which is a numerical representation of seven real-life physical female bodies. Finally, the tablet was excavated by physical hands in the beginning of the 20th century CE and was preserved as important because, among other reasons, it communicated to a modern audience, even in its undeciphered form at the time, its list of bodies and performative inscribing (Evans 1900/1, 43; 1909, 48, fig. 25; 1935, 706–708; 1952, 2; see discussion in Palaima 2011, 46–47). It maintained, therefore, its communicative actant properties even in messaging meshworks completely different to its original one(s).

This is a *palimpsest* of bodies and bodily communication (in addition to being an actual epigraphic palimpsest), because a number of bodies were involved in its production and use through different communicative actions: the physical handling and inscribing of the tablet by at least one, if not more, bodies; the linguistic inscribing of a geographic type of body; the ideographic convention for gender and age; the numerical calculation of physical bodies; the enduring potential for visual, if not linguistic bodily communication. In addition, we also have our own cognitive understanding of the bodies on the tablet by referring to a 'third party' deciphering rubric, our 'bird's eye view' (*i.e.* corpus) knowledge of (the now deciphered) Linear B, acquired through cognitive and physical motor skills, which both the LM III A2 users, and to some extent we, had access to. Thus, in this case, we have overt bodily communication (text referring to people, depiction, fingerprints, handwriting), covert communication (cataloguing, administrative instruction), and implied motor skills of communication (visual recognition and cognitive de-

cipherment of Linear B, not to mention the oral linguistic skills of the scribe, to extrapolate the corporeal information to be recorded in the first place).

## Discussion

In the previous sections, we examined how a synthesis of different epistemological categories of data can help us in identifying overt and covert types and strategies of bodily communication. Let us now turn to their trajectory over the course of the Cretan Bronze Age. Space does not allow for a longitudinal analysis here. It is nevertheless possible to draw some meaningful conclusions. There are marked changes towards the beginning of the Protopalatial period, another discernible shift at the beginning of the Neopalatial period, and a less obvious, but still perceptible differentiation at the beginning of the Postpalatial period.

More specifically, commingled osseous material comprises the overwhelming majority of (overt) bodily communication data during the Prepalatial period, with some figurines, anthropomorphic vessels, seal/sealing depictions and amulets making up the rest (the minority) of such evidence. Inevitably, the bodily communication means from this period (whether deliberate or due to archaeological contingency) are mostly biological and less so artefactual. In terms of communicative strategies, in this period we have what I class as heterogeneity, interchangeability and dissolution, when the diversity and fragmentation of bodies seem to proliferate. In other words, up until the beginning of the Protopalatial period, the types of overt bodily communication are fewer and more extensive in their body-related finds, with larger audiences – *e.g.* think of the potential congregations in cemeteries, tholos tombs and peak sanctuaries. In fact, we ought to consider that possibly the dominant corporeal communicative strategy in the Prepalatial and (to some extent) the Protopalatial periods is *transcorporeality* (Hamilakis 2018, 325–326, 328), *i.e.* a "corporeal fluidity" (Hamilakis 2018, 325) which enabled physical and artefactual bodies to become nodes in shifting networks (see also Relaki 2020).

In the Protopalatial period, while anthropomorphic vessels diminish in number, figurines nearly catch up with osseous material in popularity, as the osseous record also gradually transforms in frequency and 'quality' (different types of burial, perhaps gradually individualised; see nuanced discussion in Hamilakis 2018; *cf.* Tsipopoulou and Rupp 2019). We should also consider here the different contexts and audiences: broadly speaking, osseous material and figurines operated in different arenas (in this case cemeteries and peak sanctuaries respectively). This might indicate the development of different communicative techniques in different social interaction meshworks. In this period, other types of data also appear, such as limbs in Cretan Hieroglyphs, and there is an increased frequency of seal/sealing depictions of humans. Partibility and fragmentation continue more evidently in this period, now even more discernible archaeologically. Whereas *e.g.* the fragmentary nature of Prepalatial-Protopalatial group burials might have been taken for granted as a by-product of successive and intense taphonomic processes, the (often deliberate and intended) fragmentation and partibility of artefactual bodies is a more conspicuous reason to reconsider bodily dissolution more generally as a persistent practice, particularly evident until this period, then slowly diminishing.

It is a cliché but a necessity to correlate this 'emergence' of more corporeal communicative means and strategies with the emergence of the first palaces. This richness is, firstly, a symptom of the broadening of the manipulation of the human body as a more conspicuous and enduring communicative tool (more diversity in burying and manipulating the dead, more types of bodily representation, use of exotica and hybrids, ergonomic choreography). Secondly, this emergent diversification foreshadows an 'explosion' of both means and strategies in the Neopalatial and Final Palatial periods, which can only be explained as the result of social and perhaps political reconfigurations and antagonisms.

The picture for the Neopalatial and, to some extent, the Final Palatial periods, can be summarised as being corporeally 'messy': it is the 'busiest' of all periods in the variety of communicative means and strategies. In these periods, we have frescoes (lasting for a period shorter than

300 years) that are the most anthropocentric in the whole of the Minoan period (ca. 2000 years). There is a profound increase of sealings and seals with anthropomorphic scenes, also helped by new technologies, such as the creation of metal rings (*cf.* Simandiraki-Grimshaw 2020a). We also have cataloguing of humans, in Linear A first, then especially in Linear B. Osseous material, while proportionately extant in these periods, is now much more articulated and singled out than before, and undergoes a notable diminishment or even *lacunae* in the Neopalatial period. There is a bounty of communicative strategies in these periods, which include distinct gesturing, interaction group scenes, instruction, more evident ergonomic 'choreographies' etc.

But we are often archaeologically seduced by the 'thin description' (*cf.* Geertz 1973) of all this richness of corporeal communication technologies and tropes, a richness which masks the 'thick' description for what is actually being conveyed in the messaging traffic of the Neopalatial (especially) and Final Palatial periods. These periods actually see a significant drop in bodily plurality, and the various strategies of bodily communication can mostly be distilled as somatic choreography and regulation. In other words, we may have more individualised uses of the human body, for example distinct, standardised and integral people in representations, distinct burial kits of articulated bodies, specialised bodily communicators (scribes, seal engravers, fresco painters). But the actants who communicate the majority of this messaging traffic are no longer the diverse populations of the Pre- and Protopalatial periods (from shepherds to aristocrats), but the standardised few who represent a specific (and often palace-dominated or palace-emulated) competitive 'ecosystem'. As Panagiotopoulos reminds us (in his theorisation about visuality in Aegean prehistory more generally, 2012, 66), such modes of expression were class-dependent and numerically restricted in terms of their audiences. Perhaps the 'messiness', the diversity of means, towards the early Late Bronze Age was not only due to new technologies available, but also to the specialisation in bodily communication, in order to provide an 'edge' in social, political and economic competition for limited, antagonistic audiences. This hypothesis would also corroborate previous recognition of such competitive behaviour more generally and diachronically, such as that explored in Hamilakis' work (2002) on factional competition and Driessen's work (2017) on the role of potential 'houses'. Therefore, the proliferation of means and strategies of communicative traffic which we detect might actually reflect the possibility of developments in particular strata of Late Minoan societies.

Let us take the phenomenon of Linear B people records as an example, itself a palatial, time-limited construct. The administration reflected in Linear B further systematised the cataloguing of humans that had started with Linear A. It therefore streamlined notions of the human body as ontology and as tool, at the same time creating indexical, geographically situated representations of embodied labour. This Neopalatial-Final Palatial period shift is significant for us, if we contextualise it within the wider, especially economic and political, landscapes of Late Minoan Crete, where streamlining and standardisation were evident in other material culture, such as architecture, the tightly controlled redistributive economic production, and restrictive elite aesthetics. In other words, new and diverse ways of bodily communication reflected or might even have affected change in social stratification, through specific manipulation of the body in representational (frescoes, scripts, overt) or embodied ways (physical access and exclusion, designed and targeted ergonomy, covert).

By the Postpalatial period, there is disappearance (no anthropocentric frescoes), diminishment (osseous material) or reuse (seals) of several of the already encountered communicative means and strategies, but others emerge (or at least survive), such as larger, gesturing figures. With the dissolution of palatial control and the subordination of Crete to the Mycenaean sphere of influence, as long as that lasts until its own disarray by LM III C / LH III C, there is once more both diversity of messaging traffic and bodily plurality, as communities try to develop communication that is meaningful to them and not necessarily centrally regulated or dictated. Nevertheless, there is resurgence or reinvention of earlier tropes, *e.g.* in the case of the upraised hands gesture (Gaignerot-Driessen 2014).

## Summary

In this paper, I explored ways of tracing and conceptualising bodily communication in Minoan Crete. I broadly categorised the data that we can 'mine', the communicative *means.* Similarly, I grouped technologies (like ergonomy), bodily phenomena (like partibility) and overarching actions (like cataloguing) into communicative *strategies.* I then explored their progression throughout the Cretan Bronze Age. This exploration highlighted the fact that in earlier Minoan periods, especially before and coinciding with the emergence of the First Palaces, one can discern more plurality, as well as transcorporeality, as a widespread *modus operandi* of the communicative bodies. It also highlighted a gradually substantial diminishment of body plurality, driven by a more restricted pool of actants and most evident during the Neopalatial period, despite an apparent increase in both communicative means and strategies. This shift was interpreted here as symptomatic of intense class-based competition. In my attempt to take a macroscopic view of bodily communication, therefore, I argued that such explorations can help us towards understanding, and even sometimes extrapolating, the actants, contexts, purposes and perhaps audiences of the original complex messaging meshworks. Consequently, I hope to have shown that this combined approach offers new insights into wider social, political, economic, aesthetic and other phenomena of Bronze Age Crete and contributes to archaeological method more generally.

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