

Dress, sensory assemblages, and identity in the early first millennium BCE at Hasanlu, Iran

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Introduction

This chapter examines the durable goods relating to dress discovered in the nearly 100 Period IVb burials at Hasanlu, Iran, as aesthetic, sensorial assemblages, and as agential phenomena in an era of crisis at the site. In particular, I focus on a distinctive, elite, suite of dress items found in five wealthy women's burials excavated at the site. These dress assemblages include up to three long, sharp, heavy copper-alloy or iron garment pins, ordinary garment pins, metal finger- (and in two instances, toe-) rings, beaded jewellery on the head, neck, and shoulders, and noisy, tinnabular clusters of tubes and beads attached to flat copper-alloy armour scales worn on the upper chest. While such an ensemble would certainly have provided a visual spectacle, its sensory impact and potential for affectivity is not limited to its visibility. At the nexus of bodies, vibrant materials, environment, and society, this dress suite is constituted through myriad transcorporeal encounters. Not only would these suites of objects have impressed themselves on the senses of observers, but they would have provided dynamic synaesthetic, kinaesthetic, and cognitive feedback to the wearers. Framing dress as sensorial assemblages (Hamilakis 2017) and understanding them through the lens of agential realism (Barad 2007) sheds light on the role of the sensorium in the dynamic, deliberate generation of politically charged identities at Hasanlu.

Hasanlu in Period IVb (1050–800 BCE)

Located in the Lake Urmia Basin in northwestern Iran, Hasanlu was excavated between 1956 and 1977 by the Joint Expedition of the University of Pennsylvania Museum, the Archaeological Service of Iran, and the Metropolitan Museum of Art (Muscarella 2006; Danti 2013b; Cifarelli 2019b).¹ This site is perhaps best known for the horrific destruction of its citadel during the early Iron Age in c. 800 BCE. Under attack by a marauding army, hundreds of residents of this town gathered in and around the monumental buildings on the citadel, where they died with their attackers, trapped as burning buildings collapsed and crushed their bodies.

Occupation at Hasanlu began in the Neolithic period and continued with breaks through the early Medieval period. The site features a High Mound, or citadel, and the Low Mound, which was the site of burials, industry, and some domestic architecture (Figure 7.1a–b). From the start of Penn’s excavations through the 1990s, the site was widely regarded as playing a unique and powerful role in regional and interregional power structures, particularly with respect to the historical entities of Mannea and Assyria. At the time of Hasanlu’s excavations in the 1950s through the 1990s, few sites in its immediate region were known through excavation, although the number is now steadily increasing due to the continuous work of the Iranian Archaeological Service (Amelirad et al. 2002; 2017; Amelirad and Azizi 2019). Dozens more are known through survey, including four similarly sized mounds along the Gadar River valley (Danti 2013a). The evidence for Assyrian contact and sway at the site has now been re-evaluated (Danti and Cifarelli 2016; Cifarelli 2018a), suggesting that Assyria did not loom as large as previously thought, and the proposed identification of Hasanlu with the historical Mannean kingdom is no longer believed to be geographically or chronologically tenable (Cifarelli 2019b), although Mannean cultural links are possible. Hasanlu was in fact one of many sites in the region, all of which were engaged in dynamic interplay with expanding Mesopotamian and south Caucasian polities to the west and north, and neighbours to the south and east. Writing was not used at the site, although a few cuneiform-inscribed objects seem to have been collected as precious curiosities, and the ancient name and ethno-linguistic character of its residents are not known.²

In the beginning of the first millennium BCE, Hasanlu’s location in the Gadar River valley was precarious (Figure 7.2). At a crossroads between a region of economic interest to the Assyrian Empire and directly in the path of the growing kingdom of Urartu from the north, the fertile Gadar River valley was an appealing landscape to hungry armies on the march. Fortresses dotted the routes along the river valleys and mountain passes linking Hasanlu to regions east along the shores of the Caspian Sea and north to the new capital of Urartu on the shores of Lake Van in eastern Anatolia. Epigraphic and archaeological evidence indicates Urartian control of fortresses near Hasanlu by around 820 BCE (Salvini 2005; Kroll 2005; 2010; 2013; Cifarelli 2019a). The destruction of Hasanlu, dated archaeologically to c. 800 BCE (Dyson and Muscarella 1989), coincides with Urartian expansion, and Michael Danti (2014) has persuasively argued that the men crushed as they looted Hasanlu’s most famous artefact—the Gold Bowl—were Urartian combatants or mercenaries in Urartian employ.

Caught between the agendas of Assyria and Urartu, Hasanlu and its neighbours were potential military targets during the latter part of Period IVb. And indeed, there is evidence at Hasanlu for two site-wide destructions—a massive fire towards the end of Period IVc (c. 1250–1050 BCE) and the catastrophic attack, fire, and collapse that ended occupation at the site in the Iron II period (c. 800 BCE). These catastrophic events delimit Period IVb (1050–800 BCE) at Hasanlu, and the looming risk of destruction had a significant impact on the material development of the built, material, and social environments at the site (Cifarelli 2017a). While hindsight is inherent to archaeological processes, and our awareness of the catastrophic destruction at the end of Period IVb no doubt throws the existential threat which the site was under into sharper relief, the archaeological record is clear regarding the impact of precarity at the site. Fuelled perhaps by recent memories of the heat of the fires burning the citadel, the smell of their aftermath, the heart-pounding chaos and confusion of rescuing precious objects from temple treasuries and storehouses, and in anticipation of hearing the frightening clamour of enemy forces moving towards the site, with their gleaming armour and belled horses, the residents of Hasanlu altered access to, and the layout of, the citadel. New internal fortified gateways guarded areas of the citadel, and defensive shifts to the monumental buildings placed entrances in a protected courtyard, safeguarding the approach to critical buildings. The introduction of the practice of

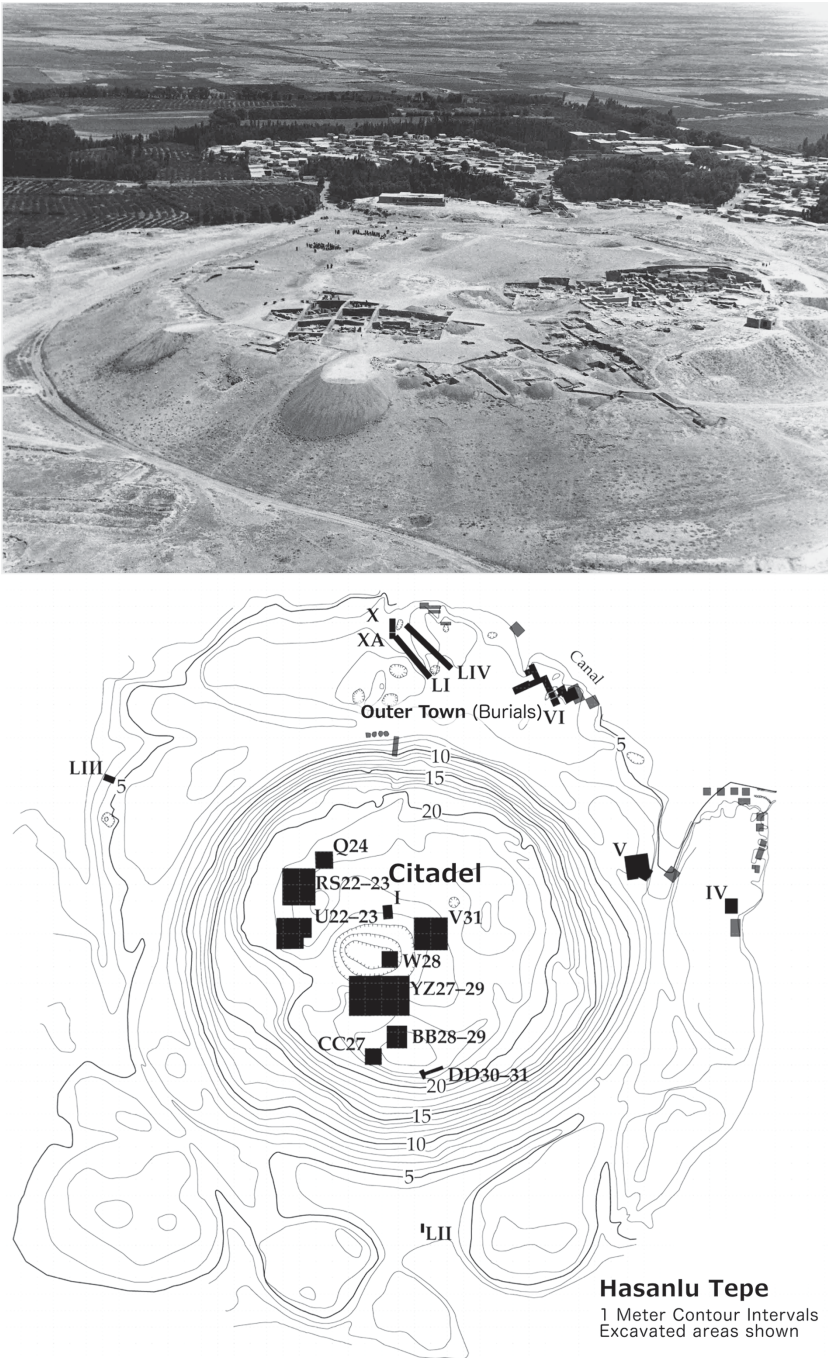


Figure 7.1a–b Excavation photograph and contour plan (showing excavation areas) of Hasanlu, Iran.

Source: Courtesy of the Penn Museum.



Figure 7.2 Map of the ancient Near East showing location of Hasanlu.

Source: Base map, Wikimedia Commons.

sealing, using stamp and cylinder seals for doors and containers, heightened the control of access to goods and areas within monumental buildings (Marcus 1989; 1996). Finally, the contents of the nearly 100 burial assemblages dating to Period IVb evince a clear heightening of social distinctions and intensification of local hierarchies relative to earlier periods (Cifarelli 2016; 2017a; 2017b; 2018c).

Comparison of the Period IVb burials on the lower mound at Hasanlu to earlier burials at the site show many common features that demonstrate the site's cultural continuity over the *longue durée*. Burials are generally modest, and dress items therein demonstrate the site's engagement with broad local and regional networks of interaction, from the Mediterranean and Mesopotamia in the west, to southern and western Iran, to goods paralleled closely in burials from the South Caucasus (Danti 2013a; Cifarelli 2013; 2014). Ceramics show a continuous indigenous development, as does the material evidence of elite drinking practices (Danti and Cifarelli 2015). In pre-Period IVb burials the range of wealth is quite narrow and the only persistent distinction between burials bioarchaeologically identified as male and those identified as female (Selinsky 2009; Monge and McCarthy 2011) is the wearing by women of garments fastened at the shoulder or breast by metal pins.

Materials and artefact types appearing for the first time in Period IVb burials manifest intensive social distinctions amongst the burials, separating the burials of men from women, strongly South Caucasian inflected from local, and rich from poor. In contrast to the earlier assemblages in which the only sex-specific artefact class appears to have been garment pins, several newly introduced dress items show strong correlation to bioarchaeologically determined sex: these include weapons and armoured belts on male-identified bodies, and armour scales and long pins on female-identified bodies (Figure 7.3).³

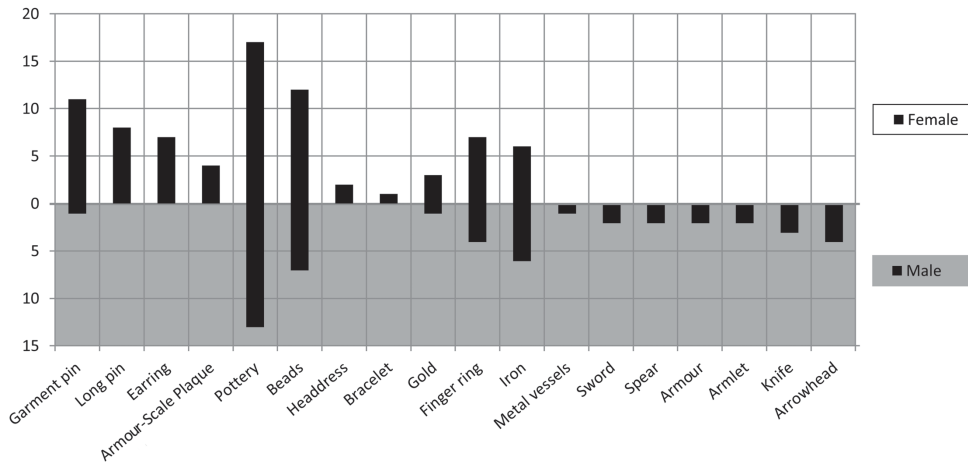


Figure 7.3 Graph showing the relationship between female and male identified burials and classes of artefacts and materials in Period IVb burials at Hasanlu.

While there is no such thing as a “typical” female-identified burial at Hasanlu, in Period IVb the burials of women are generally better furnished than those of men (Figure 7.4), with a wider variety and larger quantities of grave goods, particularly dress items. More modestly accoutred women were buried with one or two ordinary dress pins, plain copper-alloy finger-rings, and beaded jewellery, usually around the neck (Cifarelli 2017b). A very small number of women, however, are conspicuously, even radiantly well dressed. In fact, three of the four persons buried with jewellery made of gold—a rarity in burials at Hasanlu—are identified as women (Cifarelli 2018c), and their elite panoply of dress items is the subject of this chapter.

A very small group of highly militarised, male-identified burials are the wealthiest Period IVb burials at Hasanlu in terms of the sheer quantities of bronze and iron, and significantly, their armour (sheet-metal belts) and weaponry are strongly linked to South Caucasian material culture (Rubinson 2012a; 2012b; Danti and Cifarelli 2015; Cifarelli 2016). The most lavishly furnished burial of Period IVb is that of SK493a, a young man who was accompanied by pottery, metal drinking vessels, swords, spearheads, a mace head, personal ornaments, and an elegantly decorated copper-alloy belt (Danti and Cifarelli 2015; Cifarelli et al. 2018) (Figure 7.5). Certainly, this masculine assemblage is sensorially and semantically rich, a topic for another time. Less wealthy, male-identified, burials also include weapons (arrowheads) and blades of less ostentatious, probably locally manufactured types. And while a small number of men are distinguished by their wealth and noticeably militarised dress, across the board men are far more likely than women, or even children, to be buried with very few or no grave goods (Figure 7.4). External tensions at Hasanlu, as well as internal strains that may have included migration to the site of warriors from the South Caucasus, perturbed the social fabric, yielding this increased gap between the male-identified haves and have-nots, between expressions of local and northern militarisation, and the heightened distinction between masculine and feminine accoutrement, and it is significant that the types of artefacts introduced to men’s and women’s burials during this period relate to military status, physical protection, and group affiliation (Cifarelli 2017a; 2017b; 2018b; 2018c; Cifarelli et al. 2018).

The emergent and diverse assemblages in Period IVb burials are not simply displays of status or wealth. In and out of mortuary contexts, dress, defined expansively by Mary Ellen Roach-Higgins and Joanne Eicher (1992: 7) as “an assemblage of modifications of the body and/or



Figure 7.4 Hasanlu Period IVb burials showing distribution by sex/age categories and relative wealth.

supplements to the body” participates in the construction and negotiation of social categories, or identities (Sørensen 1997; 2007; Entwistle 2000; Joyce 2001; Diaz-Andreu 2005). It is not always possible to ascertain the extent to which these patterns of mortuary dress align with dress for the living. For many years, the exceptionally long pins found in predominantly adult, female-identified burials at Hasanlu had been referred to as “shroud pins” based on their size, placement, and on the understanding that excavators only found them in graves and not among the tens of thousands of objects on the citadel (Marcus 1994) (Figure 7.6; Figure 7.7: a, b, d–m). An examination of excavation records, however, shows that excavators found nearly a dozen of these long pins in the citadel destruction, suggesting that their use was not exclusively funerary.⁴ While excavation records are incomplete and the placement of individual objects within burials and with respect to bodies is not always documented, photographs and drawings place these pins in the same positions on the body as regular, shorter garment pins: generally near the shoulders. This positioning can be compared to one of the very few images of dressed women in the visual culture of Hasanlu and elsewhere in Iran. As was the case for a figurine from Susa, the evidently female figures on the famous Gold Bowl wear garments fastened with pins crossing the clavicle near each shoulder (Figure 7.8). With allowances for post-depositional shifting of materials in the processes of decomposition and excavation, it appears that these long pins simply fasten garments at the shoulders. And so, while it is possible to conclude with Marcus that these adult women were *buried* differently from all other residents of Hasanlu—wearing a shroud closed by enormous pins—a simpler explanation for the appearance of these objects in the burials of adolescent to mature women, one supported by the archaeological record, is that they *dressed* differently, distinctively, and in a fashion with implications for sensory amplification (Cifarelli 2017b; 2018c).

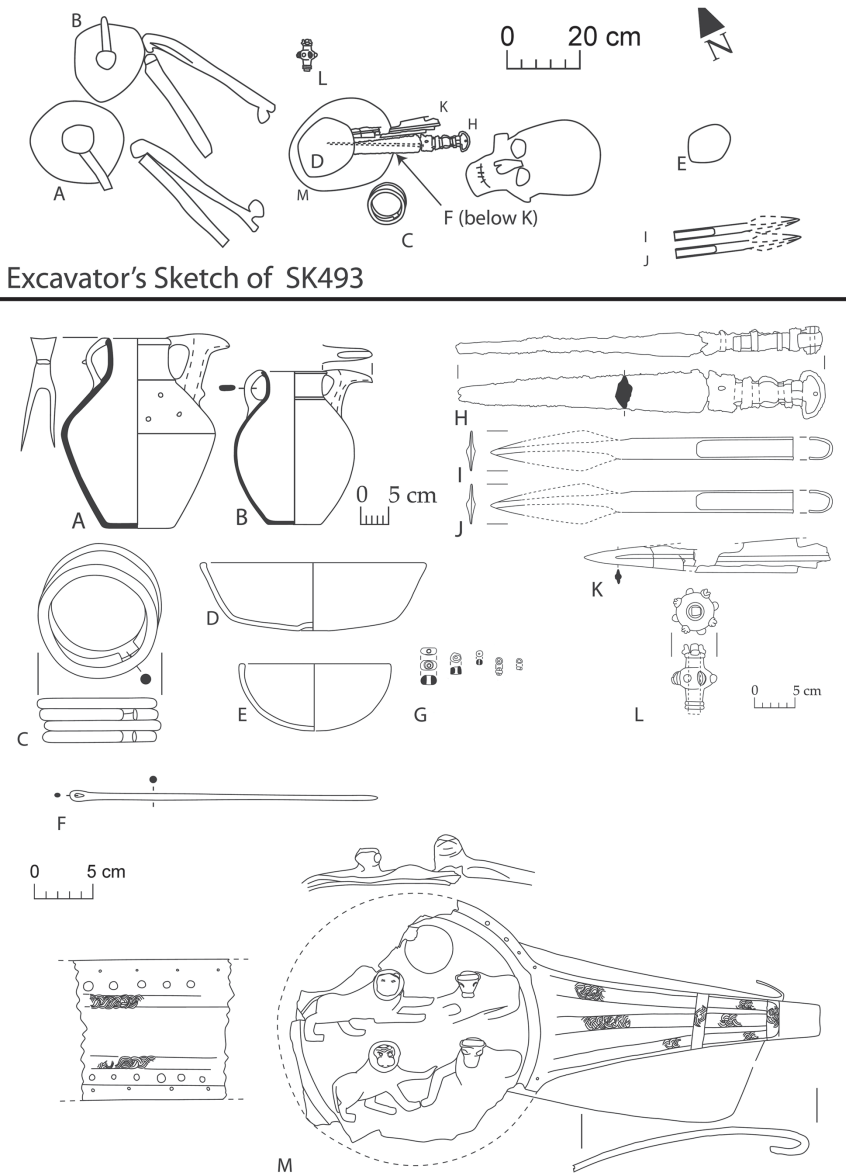


Figure 7.5 Excavator's drawing of Burial SK493a.

Source: Courtesy of the Penn Museum.

Assemblages and phenomena

Archaeologists and art historians are inclined to think about the role of assemblages like these suites of dress items by *en-visioning* them in ocular terms, as what Martin Wobst (1977) termed “stylistic behavior” that can be read visually for clues about identity. Indeed, the long pins and accompanying items would have contributed to a *spectacular* display on the bodies of these



Figure 7.6 Excavation photograph of Burial SK448.

Source: Courtesy of the Penn Museum.

women, but when considering the human experiences of such objects, visibility is only one of many components of their sensory effects and potential affectivity. Yannis Hamilakis explores the notion of a *sensorial assemblage* as a means of contemplating embodied human experience in the past and the links between bodies, senses, memories, and materials in the past and present (Hamilakis 2013a: 410). The word *assemblage* has long been applied to collections of objects recovered from a defined archaeological context (Hamilakis and Jones 2017).⁵ In the case of a suite of dress items in a burial, we can consider the context an indication of human acts of deposition, and the ensuing assemblage as residue of events or processes at the time of deposition, including human actors placing things in relation to one another. Amongst a group of burials, patterns of deposition may suggest intentionality as well as aesthetic values at work (Joyce and Pollard 2010: 292–303) (see also Chapters 18 and 19, this volume).

Assemblage theory, however, goes beyond the understanding of the *context* of deposition as the sole framework in which meaning emerges and is codified, to assert that context is one of many active participants in the creation of meanings (Alberti and Jones 2013: 30–31). Assemblage

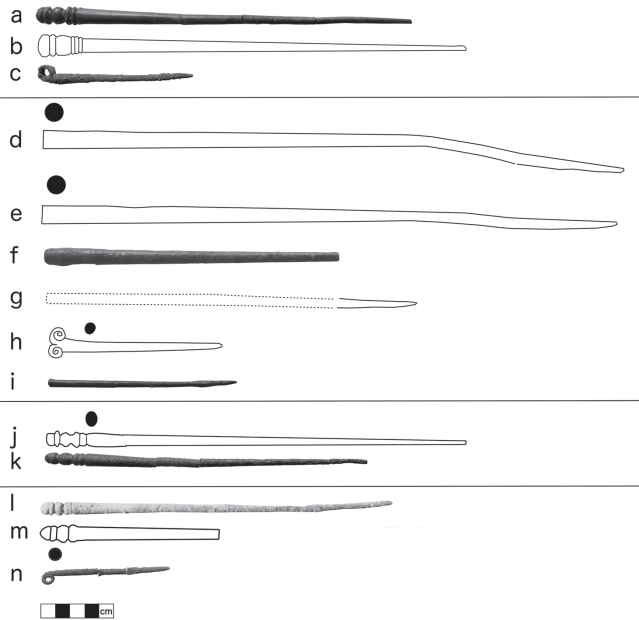


Figure 7.7 Examples of the long and ordinary copper-alloy garment pins from elite women's burials at Hasanlu (a, b, d–m). From Burial SK448: a. HAS 64-351 (UM 63-31-125); b. HAS 64-351 (unknown); c. HAS 64-349 (UM 63-15-116). From Burial SK481: d. HAS 64-195 (unknown); e. HAS 64-194b (UM 65-31-118); f. HAS 64-194 (UM 65-31-118); g. (iron) HAS 64-199 (UM 65-31-215); h. HAS 64-198 (unknown); i. HAS 64-194a (UM65-31-72). From Burial SK503: j. HAS 64-575 (unknown); k. HAS 64-573 (UM65-31-406). From Burial SK59: l. HAS 59-097 (Tehran 10967); m. HAS 59-112 (unknown); n. HAS 59-102b (UM60-20-164).

Source: Courtesy of the Penn Museum.

and Actor Network theories transcend and build on the traditional conception of contextual assemblages, recognising assemblages as relational and dynamic complexes of diverse components.⁶ This wide-ranging body of theoretical literature suggests that contextual assemblages—like the mortuary dress found in burials at Hasanlu—are not simply groups of inert objects that featured in or resulted from a past event, waiting in the ground for archaeologists to uncover and employ to decode the “real” practices and/or beliefs of past peoples. Rather, assemblages are broader and more dynamic, and in the case of mortuary dress include not just the human-created objects, materials, and technologies empirically detectable in the grave itself, but the personhood of the deceased, the people who created the grave and dressed the corpse, the plants, animals, ideas, beliefs, and natural processes that participate in creating the assemblage, as well as the archaeologists, archaeological ideas, practices, and publications, and so forth, that attend its discovery and study. These dress assemblages are not fixed in time at the moment of deposition as the community mends or acknowledges the tear in the social fabric caused by death, or at the moment of excavation and recording as the archaeologist “interprets” them, but are continually reconfiguring in relation to their human, material, sensory, temporal, and cognitive components (Robb and Harris 2013; Crellin 2017; Fowler 2017). These dynamic reconfigurations allow for layers of understanding of the burials at Hasanlu.

And at a more elementary level, assemblages are open-ended and ever changing because matter itself is characterised by a quality Jane Bennett (2010) termed “vibrancy” that operates

at every possible scale, from atoms to organisations to nation-states. Matter is not inert—it acts and is acted upon. Vibrancy gives matter the ability to change and to enact change (or exert agency) with respect to other things.⁷ It is the relational force that configures and reconfigures components and assemblages: organic materials decay, dress items shift, metal corrodes, animals burrow, later pits intrude, excavation processes disrupt, recording strategies represent, conservation alters, scientific analysis codifies and categorises materials into typologies. And each component in an assemblage is *itself* an assemblage that was brought into being through intra-action of materials, people, ideas, senses, and so on, an infinitely recursive relationality that stretches over time and space.

This dynamic reconfiguration of components moves us away from the Cartesian domains of matter/exterior/object (an external reality with stable properties that can be observed) and idea/interior/subject (human-generated representations of, or ideation about, that reality) which lie at the heart of attempts by archaeologists to understand what “really” happened in the past, for example to produce a neat “interpretation” of the identity of an individual in an excavated burial. Instead, the “reality” of these assemblages is relational, as “these interconnections are always changing; they are immanent and in a constant process of becoming” (Jones and Alberti 2013: 21–22). This accords with Karen Barad’s posthumanist formulation of agential realism, which probes the reality and representation of matter. Agential reasoning elaborates upon the work of Niels Bohr (Petersen 1985), Judith Butler (1990a; 1990b; 1993), and Joseph Rouse (1996), among others. Bohr had demonstrated that observation of matter *produces*, rather than *identifies*, the properties observed—for example, that matter has the property of being composed of particles and of waves (but not at the same time), depending on the observational apparatus employed. Barad broadens this by arguing a theory of agential realism according to which there is no observable, stable reality, no subjects and objects, no interior and exterior. Instead there are *phenomena* which “mark the epistemological inseparability of ‘observer’ and ‘observed’” and manifest the “ontological inseparability of agentially intra-acting ‘components’” (Barad 2003: 815). *Phenomena* are effectively assemblages: they are fluid, ephemeral, immanent, coming into being through the intra-actions among matter, discourse, and practice (Barad 2003; 2007). When we look at the world, we are not observing stable entities outside of us as they “really” are, but instead are producing phenomena through the act of observing a fleeting tangle of materials, ideas, actions, and beliefs. The *agency* of agential reasoning is the *dynamism* that drives these intra-actions and reconfigurations (Barad 2003: 823), a notion akin to Bennett’s characterisation of restless matter as vibrant. Agential realism thus collapses positivist distinctions between observing self and observed other, interior and exterior, “reality” and our apprehension of it. For this discussion, this suggests that archaeologists do not look at a stable, fixed-in-the-past mortuary assemblage, observe its properties, and deduce *meaning* with objectivity. We are hopelessly entangled and implicated in our observations and understandings.

Sensorial assemblages and intersubjectivity

Hamilakis (2017: 172) productively complicates the notion of an *assemblage* (or *phenomena*)—the “temporary and deliberate heterogenous arrangement of material and immaterial elements,” to include “the affective/sensorial, mnemonic/temporal, and the political.” He frames sensoriality as “the transcorporeal mingling of bodies, materials and their environment” (Hamilakis 2013a: 417), an assemblage of dynamic, experiential encounters with materials and moments in time. The output of these sensorial encounters is not simply a relay of information about our environment or objects in the world, but the generation of emotions and relationships: senses activate and “enable affectivity ... [and] establish [the] affective connections” by which we encounter, engage,

and experience the world. Just as Barad's agential realism erases the distinction between interiority and exteriority, minds and bodies, the notion of a transcorporeal encounter emphasises that senses are not confined to individual bodies or objects. Senses operate "in-between, between bodies, things, substances, elements, the atmosphere" (Hamilakis 2017: 173), and our ability to sense is not confined to our bodies. Lambros Malafouris (2008; 2010) argues that a sword held in a warrior's hand, like the stick in the hand of a visually impaired person, becomes a sensing organ, providing feedback, expanding the boundaries of a person beyond the skin, and connecting the interior to the exterior.

As scholars, a critical component of the investigation of the sensorium in other contexts is awareness of one's own "sensory and sensuous stratigraphy" (Hamilakis 2013b), acknowledging the Western privileging of vision (e.g., the evidential weight of *eyewitness* testimony), and the role of senses in class, racial (Geurts 2002), and gender hierarchies (Benay and Rafanelli 2015). Framing the sensorium as the aggregation of transcorporeal encounters is useful in that it firmly moves the discussion away from the Western, Aristotelian, five-exteroceptive-sense-sensorium, and the understanding of human senses as separable, fixed entities with knowable properties, by which our bodies process outside stimuli (e.g., Geurts 2002; Howes 2019). Sensorial experience is far broader than the Western sensorium, it is always and infinitely "mingled and synesthetic" (Hamilakis 2013a: 413). It encompasses movement—habitual and novel, real and imagined—and kinaesthesia of our own and others' bodies (Streeck 2015: 420–421).

I will point out that this differs from a phenomenological approach, which is predicated on notions of embodiment, of interiority and exteriority, of self and the outside world, as a framework for understanding human experience (e.g., Thomason 2019). This is not to negate the utility of a phenomenological approach to the dressed bodies in burials at Hasanlu, but we cannot assume, in the absence of evidence, the existence of archaeological selves who take in the world and make meaning of it through their individual bodies.⁸ Framing the dressed body as a *sensorial assemblage* or Baradian *phenomenon* structures personhood and embodied subjectivity in a way that does not assume "that the body, self, and individual are necessarily coincident," a useful distinction when dealing with a non-literate, proto-historical society like that at Hasanlu (Bulger and Joyce 2013: 72–73). More broadly, the idea that personhood itself is "not tied to a single human body" and can be *relationally constituted* (Harrison-Buck and Hendon 2018: 9) is supported by the work of cognitive neuroscientists studying the role of social, intersubjective, and bodily engagement in the construction of identity (Pina-Cabral 2016).

To a great extent, the ways that humans process sensory inputs to generate perceptions and feelings are culturally determined—not universal, natural, or pre-cultural—and challenging to understand from the outside. While the affective impressions afforded by sensorial assemblages in literate societies can be gauged in part through analysis of texts and language that deal with visibility, aurality, and other aspects of the sensorium (Winter 2007; Thomason 2019; Howes 2019; Rendu Loisel 2019), the impact of sensory experiences in non-literate, proto-historic sites like Hasanlu is less accessible. A useful avenue of inquiry into sensory experiences, including aesthetic experiences, is provided by neuroscientific studies that cut across cultural dimensions to illuminate the way the human brain processes sensory stimuli.

In the eighteenth century, the German philosopher Alexander Baumgarten first used the term "aesthetics" to describe the ways in which sensory stimuli are integrated in the mind to generate *perceptions* (Seeley 2006: 195) (see also Chapter 25, this volume). Nearly three centuries later, scholars in a wide range of fields investigate the same nexus of sensory and cognitive aspects to our understanding of the impact and integration of sensory information on human experience. According to the philosopher Henri Bergson (1991), perception "is never a mere contact of the mind with the object presented; it is impregnated with memory-images which

complete it” (quoted in Hamilakis 2013a: 413). Hamilakis emphasises the reciprocal relationship between “*sensorial intensity and affective weight*” and memory, both individual and collective, suggesting that while memories mediate the experience of sensory inputs, our senses also modulate remembering and forgetting: “every recollection generated through sensorial experience reshapes these memories, casts them anew in a continuous and dynamic process” (Hamilakis 2013a: 413–414).

In our brains, sensory information is linked with other components—motor imagery, semantic information—to generate *mental imagery* that ultimately plays a role in personhood and identity (Starr 2013). This mental imagery, according to cognitive psychologist Donald Hoffman, is produced as our brains dynamically process sensory inputs through a network of memories, associations, and emotions (Mark et al. 2010). Counter to a perceptual model that is representational or *veridical*—that our perceptions apprehend true properties of objects in the world, Hoffman argues for an “interface theory of perception” by which our perceptions act as a simplifying interface between ourselves and the complexities of the world. Natural selection, he has shown, has favoured perceptual processes that produce *useful* images, not necessarily accurate ones (Hoffman 2016), and the “reality” that we perceive through our senses is one of our own construction. Functional studies of the brain by Gabrielle Starr show that the processing of the aesthetic and sensory inputs that generate these beneficial mental images of “reality” take place in an integrated brain centre called the “default mode network,” a brain area which has been associated with self-awareness, identity, theory of mind (the ability to attribute mental states to oneself and others), and social awareness (Starr 2013: 35).

Neuroscientific research also demonstrates the way kinaesthetic senses connect us intersubjectively to others. The overlap between perceptual systems and motor systems in the brain causes our motor control systems (as well as our emotions) to react when we see others, or even images of others, moving in ways that are familiar to us (Freedberg and Gallese 2007). The so-called “mirror neurons” which fire in rhesus monkeys when they either perform an action *or* watch another perform it are not organs of sense or perception, but indices (memories? images?) of shared experiences (Streeck 2015: 44). Memories, shared experiences, and social awareness all connect to the way our sensory experiences generate images which are “historically and culturally embedded, humanly embodied, imaginatively structured ... the meaning of which is always tied to a particular community” (Pongratz-Leisten and Sonik 2015: 5–6). Below, I will detail the ways the dress assemblage from Hasanlu might have, by engaging the senses, generated the kinds of meaningful aesthetic experiences that forge collective memories and identities.

Senses and power dynamics

Sensorial assemblages, while not necessarily intentional, are *deliberate*, and their existence manifests the agency of the social entities involved. Because of their affective potential to shape experience and memory, selected components can produce political and social effects, and taken as a whole a sensory assemblage “can enable certain futures to emerge and others to disappear” (Hamilakis 2017: 175). Direction and control of sensory experiences is a form of political power enacted through control and manipulation of natural and built environments, a notion fully exploited by the Assyrian Empire in the construction and decoration of monumental temples and palaces in the heart of its capitals (e.g., Thomason 2016; Neumann 2018; 2019), as well as in the constitution of the Achaemenid king and empire through sensory manipulation and slippage at the Apadana in Persepolis (McFerrin 2017; 2019). In her study of the Peruvian site of Chavín de Huantar, Mary Weismantel shows how this pilgrimage site—a deliberately unpredictable pathway—impeded sightlines to sculpted decoration and repeated sculpted forms, resulting

in intentionally “frustrating partial glimpses of complex designs.” Weismantel argues that this theatrical manipulation of the sensory experiences of visitors participated in what she calls the “manufacture of wonder.” Those experiencing the visual interruptions, spatial unpredictability, and repetition would “be left with a lifetime of memories” to process and assemble into a coherent and meaningful whole (Weismantel 2013: 130–131). The space and its decoration were not designed to be easily parsed but were purposefully made complicated to immerse visitors in a difficult, confusing sensory entanglement that was so striking as to require cognitive effort on the part of visitors to generate indelible memories. In much the same way that elaborated spaces entangle the senses, provide shared aesthetic experiences, and impress themselves on the mental imagery and memories of a community, I will explore the ways that the dress assemblages in the burials in question directed and controlled the sensory experiences at Hasanlu.

Accumulated magnificence

To return to the elite dress assemblages in the burials of five women at Hasanlu, like Hamilakis’ (2017: 169) well-known example of feasting as a politically effective sensorial assemblage, this “temporary and deliberate heterogeneous arrangement of material and immaterial elements” explodes beyond the paradigm of the five Aristotelian senses with infinite, interacting sensorial modalities encompassing vision, smell, aurality, touch, and also movement, comfort, the passage of time, memories, pleasure, proximity to others, bodily awareness, restriction, and pain (Hamilakis 2013a; 2013b; 2017; Thomason 2019). The burials include three young (20–34 years) adult women and two mature (35–49) adult women.⁹ In addition to the long pins and garment pins discussed above, this sensorial dress assemblage features copper-alloy and iron finger- and toe-rings, beaded jewellery at the head, neck, shoulders, and chest, and a type of “very peculiar ornament” (Stein and Andrews 1940: 398) at the shoulder or chest featuring a triangular, rounded sheet-metal object to which were attached various items, including beads, pins, rings, and metal tubes (see Marcus 1996: x). These classes of objects will be discussed below as elements in a sensorial assemblage that integrates individual and shared memories about the acquisition of each item (and perhaps their givers or previous owners), the bodies to which they are affixed, and the community within which these women moved and lived and died.

Pins

Above, I argued that the long (up to 37 centimetres), heavy, sharp, potentially dangerous, metal pins found near the shoulders in these burials are not exclusively funerary dress, but fastened a garment at the shoulders in exactly the same fashion as the shorter, ordinary garment pins they were found alongside. These pins are made of copper-alloy and (more rarely) iron. The iron pins are poorly preserved with no discernible decoration. The copper-alloy examples have decoration of varying complexity. One has a flat head and plain shaft (HAS 64-195B), another has a flat head and geometric incised decoration on the upper shaft (HAS 64-194), and the remainder have domed heads and cast bead and reel decoration on their shafts (Figure 7.8). Excavation records indicate these pins are associated with bodies of women of childbearing age (as opposed to children and the elderly), suggesting a connection with that particular stage in the life-course. These pins may have carried with them and reified the memories of the events and persons that occasioned their acquisition, as well as the transition from one social role to another.

There is no question that such pins worn in concert with shorter garment pins would have presented logistical difficulties for the wearer. They are heavy and would have pulled at and weighed down the relatively lightweight fabric that characterises most textile production at



Figure 7.8 Garment fastening using two pins at shoulders. From left, mid-second-millennium figurine from Susa (after Amiet 1966: fig. 146), drawings and photo of female figures from the Hasanlu Gold Bowl (beaker), HAS 58-469 (Tehran 10712).

Source: Courtesy of the Penn Museum.

Hasanlu (Love 2011), requiring the wearer to constantly adjust and interact with her garments. They are sharp, and unlike a sheathed sword suspended at the waist, could have posed a danger to wearers and anyone who might come into physical contact with them (Cifarelli 2017b). Wearers would have been constantly vigilant about their posture, the closure of their garments, the location of the sharp points relative to self and to others, and their wearing would therefore have entailed considerable discomfort, if not pain (Cifarelli 2018c; Thomason 2019). In order to avoid injury, their movements were likely slow, deliberate, and as conspicuous as the delicate “lotus” gait of the beautiful women with bound feet heralded in Chinese literature (Ko 2005: 200–203).

Wearing these pins, the daily activities of these young and mature women would have been curtailed—it is difficult to imagine engaging in breastfeeding, childcare, household, industrial, or agricultural activities while wearing these enormous, exposed stiletto-style pins. Heightening the visibility of the closure and impenetrability of garments, these impediments would have been visible to those nearby, and the careful movements of these women would have been apparent. As their bodies moved, multiple pins might have chimed against each other, helping others locate wearers in space (as would the tintinnabular chime ornaments discussed below), and their slower steps might have been easily recognisable to those listening. The haptic response of the wearer would have been mirrored by those who witnessed it (Freedberg and Gallese 2007; Streeck 2015). Observers might have empathetic responses activated, bodies tensing anxiously in reaction to the deliberate movements, wincing and recoiling at the possibility that the wearer could be pierced by a sharp point at any moment. I have argued elsewhere that this negative sensory effect on the wearers and observers is in fact the point, as it were, of wearing these dangerous pins. These pins can be understood as “costly” or honest signals of the special status of these women, signals which are effective in direct proportion to the extent to which they genuinely inconvenience or handicap the signaller (Cifarelli 2017b).

Finger- and toe-rings

The copper-alloy (and in the case of the Stein burial, iron) finger- and toe-rings associated with these burials are of two general types: plain, thick (around 3–4 millimetres) penannular rings with various degrees of lapping, and what the excavators called “archer’s rings”—flat, hammered, sheet-metal bands (lapping) with plain, oval bezels (Figure 7.9).¹⁰ Rings were worn

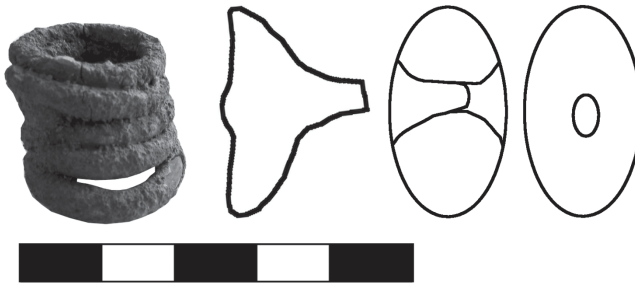


Figure 7.9 Excavation photograph and drawings of finger-rings. From left, stacked penannular rings (SK59; HAS 59-100, UM 60-20-166) and “archer’s ring” (HAS 59-103d, Tehran).

Source: Courtesy of the Penn Museum.

on all fingers without evident preference, including the thumb. These rings were worn singly or stacked, on the first or second joint of the finger, with as many as six on a single finger. While it seems unwieldy, at times these rings were corroded together in such a way that it appears that the bezelled rings were worn on the same fingers as simple coils. One of the women was wearing 25 rings on her hands, her fingers so encrusted that it is hard to imagine these were worn in daily life. However, at least five of the bodies crushed in the wreckage of the citadel were wearing similar stacks of finger-rings at the time of their death, indicating that this was indeed the practice.

While rings are relatively common (50 per cent) on the hands of both men and women in Period IVb burials, toe-rings are extremely rare, known from only two instances (SK481, HAS 64-196, UM 65-31-143, and Stein burial). SK481 wore a stack of three plain, rigid, thick (under 5 millimetres), copper-alloy penannular rings on the big toe of her right foot. Remarkably, the Stein burial featured what appears to be a large iron “archer’s” ring on the toe of one foot (Stein and Andrews 1940: 399).

Metal rings, particularly when worn by the dozen, would have provided considerable sensory feedback to the wearer and to the observer. Humans use their hands to facilitate communication; in fact primate studies suggest that hand gestures may have preceded vocalisations in the evolution of human language (Cartmill et al. 2012). The rings, and the hands bearing them, were intended to be noticed, drawing attention to and amplifying the communicative potential of the moving hands. While these rings might not have prevented their wearers from engaging in daily tasks (witness the thousands of videos on YouTube demonstrating the remarkable dexterity of hands with extremely long and delicately manicured fingernails), they were entangled with the senses of their wearers due to the affordances of their materials. The accumulated heft of stacks of metal finger-rings would have heightened awareness of gestures. Their thermal conductivity would have made them cool to the touch when put on, then warmer as they adjust to the temperature of the skin. Their bulk would force separation of the fingers and contact between rings on adjacent fingers would press the rings into the flesh. Many of the rings are round in section and therefore potentially mobile on the fingers. Manipulating them would provide tactile stimulation (or calming), and even pleasure, like fingering the beads on *komboloi* (worry beads). A gentle clacking would accompany hands in motion as rings touch each other from side to side and slide up and down the moving fingers. The vibrant and reactive matter of copper and skin subtly alter each other—oil, salt, and acid from the skin change the colour

and sheen of the metal surface, as oxidation stains the skin green, brown-red-orange, or black where it contacts metal.

Hands do not just move and feel, they reach out to the world where they touch and are touched by others. In this reaching out, the armature of rings could serve as a rigid barrier to, and a conduit of, sensory stimuli. Warmed by the wearer, the rings transmit that heat from one body to another without skin ever touching skin. And it is not hard to imagine a small child delighted and mesmerised by sliding the rings on their mother's fingers like beads on the wire frame of a toy.

Head, neck, and body beads

The recording of beaded jewellery by the excavators at Hasanlu is truly lamentable in its lack of precision regarding bead placement and number. Except in exceptionally rare instances (e.g., where photographs document beaded jewellery or the construction is otherwise evident) it is impossible to reconstruct the manner in which beads were worn at the neck, chest, shoulders, or on the head, at Hasanlu. Beads of an enormous range of materials, colours, sizes, and shapes were found on and immediately adjacent to the bodies of many of those buried during Period IVb. These are most often identified as “necklaces” in the excavation records and were restrung accordingly by excavators, but without any explanation for the reconstructed bead arrangement. While some beads may have been worn at the neck, the findspots sometimes indicate that they were incorporated into other forms of dress, including headdresses (Cifarelli 2018b; 2018c: 100–102).

Materials for beads commonly found in these elite Period IVb burials include carnelian (mostly poor quality and poorly cut), black and white stone, composite and vitreous materials including glass and Egyptian blue, bone, rare shells from the Mediterranean (*Tritia gibbosula*), and more common ones from the Persian Gulf (conus, cowrie, dentalium, and engina). Metal beads include small copper-alloy barrel shaped beads, short copper-alloy tubes, and flat, lentil shaped antimony beads (Figure 7.10). Gold beads are present in two shapes in these burials: gold-foil covered composite spheroid, and three-channel spreader beads in sheet gold (Figure 7.11). Aside



Figure 7.10 Sample bead types from elite women's burials.
Source: Courtesy of the Penn Museum.

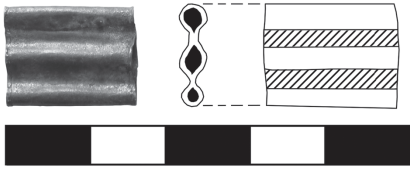


Figure 7.11 Gold spreader bead from Burial SK448 (HAS 64-355, UM 65-31-248).

Source: Courtesy of the Penn Museum.

from these elite women, there is only one other instance of gold jewellery amongst the Hasanlu IVb burials, SK26, see (Cifarelli 2016). These three-channel spreader beads and spreader beads in other materials elsewhere at the site indicate that beaded jewellery sometimes comprised multiple strands. The sizes, shapes, colours, textures, sheens, and materials of the beads clustered in groups were enormously varied, and arguably that was the aesthetic point of these aggregations, or assemblages within assemblages: to dazzle with variety, novelty, and the quasi-divine innovation of the creation of a fragile “whole” from so many fragments (Di Paolo 2018; Pinnock 2018; Roßberger 2018). As for the semantic and symbolic potential of these materials and their combinations, accessible elsewhere through analysis of texts and some images (e.g., Baines 1985; Benzel 2013; Colburn 2019), we simply do not have access to thoughts and beliefs about the affectivity of colours, materials, and their juxtapositions at Hasanlu.

The case of gold, however, presents an exception, and we can argue that visually the gold in these assemblages had great local resonance. While numerous gold objects, including beads, were found in the storerooms and temple treasuries on the citadel, it is exceptionally rare to find bodies dressed in gold amongst the Hasanlu burials. In Mesopotamia, the association between gold and the divine is well documented (Benzel 2015), but we cannot know the extent to which it played the same aesthetic and ideological role at Hasanlu. We can, however, gauge its value to the local community through its protected storage in temples and elite residences. That the aesthetic effect of gold metal was highly esteemed at Hasanlu is attested by the great lengths that local smiths at Hasanlu went to imitate its colour and sheen through a quasi-alchemical manipulation of elements added to copper-alloys (Fleming et al. 2011). The inclusion of even small quantities of gold in the dress ensembles of these women would have distinguished them from others and pulled into their sensory assemblages the knowledge of the seats of power on the citadel and memories of the gold objects stored, and as was likely the case for the famous Hasanlu Gold Bowl, *displayed* there.

In the case of the three younger women (the Stein burial, SK59 and 503), beads found on and behind the heads indicate that they were wearing multi-component beaded headdresses (Figure 7.12). SK59's headdress comprised copper-alloy tubes arranged horizontally in nine groups of six to seven tubes, with frit beads and small copper-alloy hemispherical studs between. The studs have a shallow shank for attaching to a leather or textile substrate, rather than holes for stringing, suggesting that the beads and studs were attached to a fabric headdress. Similarly, the excavators noted hemispherical studs (since discarded) around the head of SK503, and Stein recorded the presence of shell, glass, frit, and silver beads “below the head” of the burial he excavated (Stein and Andrews 1940: 398). The head and face play significant roles in the performance, regulation, and transformation of identity, from veiling, to wreathing victors, to the donning of shamanic masks (Lee 2015; Stein 2019). Beads around the head are exclusive to young women at Hasanlu, perhaps, as was the case in Assyria, demonstrating the aestheticisation of the youthful female face (Gansell 2014; 2018).

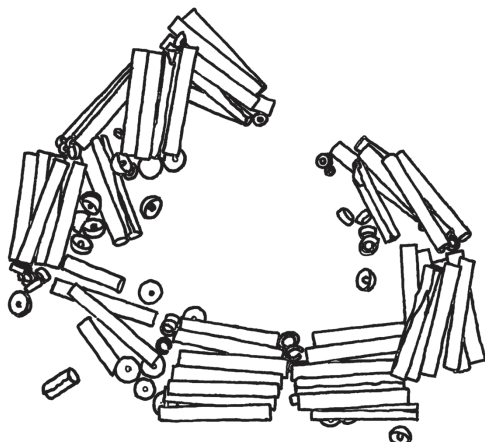


Figure 7.12 Drawing of headdress found under skull of SK59, HAS 59-111 (UM 60-20-183; MMA 60.20.9a-f).

Source: Courtesy of the Penn Museum.

These beaded dress items clothe the body in a dynamically shifting, kaleidoscopic array of shapes, textures, and colours. Beaded dress items are inherently precarious, as fragile as the material that strings the beads together, and require sustained physical engagement for their continued utility and existence (Cifarelli 2018b: 52–54). Like a burial itself, beaded objects gather together the histories and geographies of the elements that compose them, bringing old and new, near and far, private and public, into a new, temporary entity. In motion, beads created a ripple of sound as they shifted on their strings and the strands knocked into each other, and indeed these strings of beads can be classified as a type of rattle (Kolotourou 2007: 80). Parallels across numerous cultures for the social and ritual role of such suspension rattles abound, including necklaces shaken by priestesses of Hathor in Egypt and participants in saffron gathering rituals in the Aegean (Kolotourou 2007; Mikrakis 2011). These visual and aural sensory stimuli would engender an intense sensory experience in observers, linking the wearer to those nearby in a rich transcorporeal encounter. The experience for the wearer would integrate other bodily sensations as well. Beads on the body can be touched and manipulated, their differences in size, shape, and texture explored by the wearer. The weight and contours of beaded items would serve as an unrelenting reminder of their presence and interaction with the body. For those wearing headdresses as they moved through their days, constant kinaesthetic focus would have been needed to keep the head erect enough to balance headdress elements.

Armour scale pectorals

The most puzzling assemblage-object within this dress assemblage is the decorated pectoral—a multi-component artefact found on the upper chest of all five women. These unique artefacts are crafted out of beads (see above), dense clusters of copper-alloy tubes ranging in length from 2 to 10 centimetres, copper-alloy rings, pins, and flat, rounded triangles of sheet copper-alloy or iron measuring between 7 and 15 centimetres (Figure 7.13). At one time referred to as phallic “plaque pins,” based on the misreading of their central rib and hemispherical, riveted studs as an erect phallus (Marcus 1996), there can be no doubt that they are elements of scale armour.¹¹ It



Figure 7.13 Composite photograph of HAS 64-193 (UM 65-31-113) including armour and some of the associated beads, based on photos of artefacts in situ.

Source: Composed by author, courtesy of Penn Museum.

does not appear that scale armour was used at Hasanlu, although it is common throughout the ancient Near East from the Late Bronze Age forward (Hulit 2002). Outside of these women's burials, most examples of scale armour at Hasanlu are fragmented: individual armour scales were found as votives in a treasury associated with the Temple BBII, and there were a few others scattered throughout the site (Cifarelli et al. 2018). These scales are not locally made or used, instead they are paralleled in Late Bronze and Early Iron Age burials in the Caucasus and along the Caspian coast (Morgan 1896: 47, 103; 1905, 296; Schaeffer 1948: fig. 233.21, 30; Cifarelli 2018b). In these few elite burials, an imported, intentionally fragmented element of male military equipment is transformed into an element of a women's dress. Perhaps, as Joseph Maran has argued is the case for single armour scales used as votives in the eastern Mediterranean, these scales function synecdochally, "conveying the protective properties of the complete corselet" (Maran 2004: 24–25).

To these armorial objects were attached shell, stone, bone, glass, and metal beads, as well as tiered bundles of copper-alloy rings and tubes, rendering the scale into a complex, multi-component dress item. For the most part these beads are of the same types appearing in the other beaded jewellery discussed, with one notable exception: SK503's ensemble included a small, flat, bone pendant (HAS 64-985, UM 65-31-213) whose anthropoid shape was described by excavators as a "gingerbread boy." The added beads served as visual elaborations and perhaps they were chosen to create a meaningful array of colours, sheens, and materials. But we cannot neglect that they served as percussive elements that would have sounded against the metal scale and the attached chimes. Of course, the material stringing these elements together is gone, so a precise reconstruction is not possible. The tubular elements do not appear to have been pierced across one end for suspension (as were tubes incorporated into noisy equestrian dress found in the destruction of the citadel), and so they were likely strung longitudinally in multi-strand bundles (Figure 7.13).¹² As Stein and Andrews (1940: 398) observed, "This assortment of thin

tubes and beads, when hanging over the lady's breast, must have vibrated and produced a pleasant musical tinkling whenever she moved." Unlike the rattling strings of beads, the tintinnabular clusters of tubes and rings are musical instruments in their own right (for the distinction see Kolotourou 2007), deliberately attached to dress items to make a musical noise, like the golden bells attached to the hem of the garment worn by the high priest of Israel (Palmer 2019, and Chapter 16, this volume). While it would be difficult to reconstruct the shimmering sounds these body chimes might have emitted, it is easier to imagine their aural effect, the way they would have transformed the sonic environment of their wearers. Whether worn daily or for particular occasions, like bells on cats they would have marked their wearers' locations in time and space, the sound growing and diminishing as a proxy for the shifting physical and temporal distance between bodies in a complex transcorporeal engagement.

Conclusion

Clearly, the exercise of considering each of these dress elements separately is artificial at best, misleading at worst, but it is one way to parse an ensemble that was (intentionally?) overwhelming to contemplate, to experience, or to wear. This panoply of elements transformed these women's bodies into fantastic beings quite out of the ordinary for the site of Hasanlu. Shoulders bristling with pins, fingers enveloped in rings, bodies, necks, and heads garlanded with beads, an armour scale affixed at the breast, these women were not simply a feast for the eyes and the ears, although they were that. The sensory stimuli involved are as temporary and ephemeral as the sound of a note in the air or a glance at a body in motion, the assemblages constantly reconfiguring through performative, iterative intra-action amongst vibrant matter, discourse, and practice. The aesthetic experience of this whirl of synaesthetic and kinaesthetic stimuli, semantic information, memory, social- and self-awareness forged a momentary, peculiar, particular identity for these women, an identity that is not inherent to them as individuals, but which operates among them and in between them and others.

The "elaborate and cumbersome" (Stein and Andrews 1940: 399) sensorial assemblage to which these women and their dress items—metal dress pins, finger- and toe-rings, beaded body and head jewellery, and decorated, musical armour scales worn as pectorals—contributed is not limited to objects and bodies, but includes the existential military threat under which this community lived, the evident rise of a masculine military culture, the history of the site, and the valued objects collected and preserved in its monumental buildings. This particular suite of dress items emerges in a time of crisis, and sensorially sets these women apart from all others at the site. The elite identity constructed through this assemblage involves the weaponisation of dress items through the amplification of ordinary dress pins into sharp stilettos. At the same time, we see the "dressification" of military gear through the fragmentation and transformation of actual protective armour into decorated pectoral ornaments, which were then sensorially magnified through the addition of musical elements. The protective nature of this dress ensemble is activated through the sensory and affective impact of fear- (and empathy-) inducing sharp pins and the apotropaic character ascribed to symbolic armour, colourful, rattling beads, and chiming bells.

Even when death has stilled the living body and it has been interred (as at Hasanlu), when the pins and beads and armour scales cease to clash and the shine of the gold cannot catch the eye, the sensorial affordances of those vibrant objects endure. The intense affectivity of this ensemble, its unrestrained and even uncomfortable sensoriality, ensured its persistence in individual and communal memory at Hasanlu. The absence of the sensory effect of this assemblage

would be as notable as its presence, for the political or social phenomena forged through the accumulated magnificence of this assemblage cannot be understood solely in terms of the sensory experiences of wearers or the perceptions of observers. The defining, affective, transcorporeal encounters that constitute both sensory experience and identity operate in the spaces between self and others; interior and exterior; past, present, and future. And like the distortions built into the Peruvian pilgrimage site of Chavín de Huantar or the elision between the dress of the king and the fabrication of the walls of the Apadana at Persepolis, the goal of this assemblage is the “manufacture of wonder” by overwhelming the senses, and indelibly searing these women into communal memory at the site.

Notes

1. For a bibliography of earlier excavations at the site see Danti 2013a: 10–11.
2. Mirjo Salvini (1984) suggested that Hasanlu was the site of Meshta mentioned in Urartian descriptions, an identification that is possible but by no means established.
3. A study of the human remains stored in the Penn Museum was performed by Paige Selinsky in 2009. However, we must acknowledge that the phenomenon of sex determination is itself material-discursive and is geared towards the reproduction of binary sex. The consequently inherent tautology of scientific sex determination in archaeological and living bodies is well known, see, e.g., Barad 2003, Geller 2009, and Marshall and Alberti 2014, and so I refer to these individuals as “male-identified.”
4. Marcus (1994: 4) argued that the textile impressions on these pins and the order of placement of objects on the bodies, as determined by study of excavation photographs, indicate that these pins fastened fabric that wrapped the bodies of these women. Many metal objects that were not on the bodies, however, show evidence of textile pseudomorphs, almost as if they were individually “shrouded.” Moreover, the excavations were not conducted and recorded carefully enough to provide evidence for the order in which objects were layered on bodies. Pins found on the citadel include: HAS 58-0249 (Tehran 10695), HAS 60-0248 (Tehran), HAS 60-0500 (UM 61-5-274), HAS 60-0878 (UM 61-5-115, MMA 61.100.46), HAS 62-1002 (MMA 63.109.8), HAS 62-1003 (UM 63-5-243), HAS 62-1004 (UM 63-5-244), HAS 70-0498 (UM 71-23-373).
5. Contextual assemblages are distinct from those aggregated according to material, technique, typological, or stylistic qualities, see, e.g., Hamilakis and Jones 2017: 77.
6. The theoretical literature on assemblage and Actor Network Theory is vast and expanding, e.g. Deleuze and Guattari 2005; Crellin 2017; Fowler 2017. There is theoretical overlap between notions of an assemblage as a relational and dynamic complex of diverse components, and networks (DeLanda 2006), meshworks (Ingold 2012), gatherings (Webmoor and Witmore 2008), and entanglements (Hodder 2012; Hodder and Lucas 2017; Lucas 2017).
7. One of the central tenets of posthumanism, New Materialism, and symmetrical archaeology is the critique of human exceptionalism and acknowledgement of non-human, material agency; for the archaeological implications see the review by Julian Thomas 2015.
8. This is in contrast, for example, to Assyria, where there is ample evidence for the coincidence of “body” and “person,” e.g. Thomason 2016; Verderame 2019. See Thomason 2019 for a lucid and convincing argument for the utility of a Merleau-Pontian phenomenological approach to the study of dress in such societies.
9. Young women: Stein excavations burial; SK59 (Op. VIa, B10, UM 60-20-225); SK503 (Op. VIj, B4, UM 65-31-806). Mature adult women: SK448 (Op. VIc, B4, UM 65-31-732); SK481 (Op. VIf, B10, UM 65-31-733/65-31-801). For sex and age determinations of the skeletons from the Penn excavations, see Selinsky 2009; Monge and McCarthy 2011.
10. While the excavators called these rings “archer’s” rings because of their shape, the actual rings used in archery are much later and are worn exclusively on the thumb to protect it when drawing a bowstring.
11. Careful examination of HAS 64-193 (UM 65-31-113) in the Near Eastern Section of the Penn Museum revealed that there were holes for two additional rivets at the narrow end of triangular plaque; see Figure 7.13. With four rivets, any resemblance to a phallus effectively disappears.
12. Similarly, strung copper tubes are found on corded skirts in Bronze Age burials in Denmark, a form of suspension that would have made the tubes audible through movement, see Kristiansen 2013.

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