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Emblems: Meaning at the interface of language and gesture

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Emblems—the THUMBS UP, the HEAD SHAKE, the PEACE SIGN, the SHHH—are communicative gestures that have a conventional form and conventional meaning within a particular community. This makes them more "word-like" than other gestures and gives them a distinctive position at the interface between language and gesture. Here we provide an overview of emblems as a recurring feature of the human communicative toolkit. We first discuss the major defining features of these gestures, and their points of commonality and difference with neighbouring communicative phenomena. Next, we review efforts to document emblems around the world. Our survey highlights the patchiness of global coverage, as well as strengths and limitations of approaches used to date. Finally, we consider a handful of open questions about emblems, including how they mean, how they are learned, and why they exist in the first place. Addressing these questions will require collaboration among linguists, lexicographers, anthropologists, cognitive scientists, and others. It will also deepen our understanding of human semiotic systems and how they interface with each other.

1 Introduction

In March 2022, the NBA basketball player Taurean Prince was fined $15,000(USD) for extending a finger. He had presented the "bird"—a raised middle digit—to another player during a minor altercation.[1] Prince is hardly the only sports figure to receive such a fine: in April 2022 Kyrie Irving, another NBA player, was fined $50,000(USD) for directing the same gesture at the crowd; and in September 2002 Premier League soccer coach John Achterberg was fined £7,000(GBP) for using unspecified "abusive and/or insulting gestures". Nor is the practice of fining people for their gestures restricted to sports. In 2017 Greek authorities announced plans to fine taxi drivers who used the "moutza", an offensive gesture that involves presenting a full hand, fingers spread, toward someone.[2] The majority of gestures that people make when they communicate would never attract such fines—and not only because most gestures are inoffensive. Gestures are very often imprecise in form and convey meanings that are dependent on the accompanying speech (e.g., McNeill 1992); it can even be unclear whether the gesturer intended to produce them. But certain gestures—including the "bird", the "moutza", and many others, both insulting and benign—have a clear meaning that an observer can readily pick out, and leave no doubt about whether they were intended. These gestures belong to a special class—often called *emblems*—that are the focus of this paper.

Emblems are those gestures that have a conventional form paired with a conventional meaning. They are often known by name—e.g., the THUMBS UP, the HEAD SHAKE, the PEACE SIGN, the SHHH[3] —and are frequently used in the absence of speech. Examples of this class, some of which may look familiar, are illustrated in **Figure 1**. The FINGER HEART gesture involves crossing the thumb and index finger at the top knuckle, oriented upward, with the tops of the two fingers representing the top of a stylised heart; its origins lie in Korean pop culture, but it

[1] Prince: http://nba.nbcsports.com/2022/03/27/timberwolves-prince-fined-15000-for-making-an-obscene-gesture-on-court/ visited 10/10/2022.
Irving: http://www.cbc.ca/sports/basketball/nba/kyrie-irving-fine-obscene-gesture-celtics-fans-1.6423729 visited 10/10/2022.
Achterberg: http://www.bbc.com/sport/football/62920409 visited 10/10/2022.

[2] http://www.chicagotribune.com/columns/john-kass/ct-met-moutza-november-kass-1206-story.html visited 10/10/2022.

[3] The THUMBS UP is the thumb extended and pointing upward with the other fingers curled into the palm; it is used to convey affirmation across a range of Western cultures. The HEAD SHAKE is the lateral rotation of the head used to convey negation in a range of different cultures. The PEACE SIGN is the index and middle finger extended upward and splayed with the rest of the fingers curled into the palm, which is presented away from the speaker; originally associated with the post-World War Two counterculture movement, it is now used as a playful pose gesture. The SHHH is the index finger extended and placed in front of the lips; it is sometimes accompanied by an extended palatal fricative /ʃː/ and is used to request quiet. Here, when we do not indicate the cultural relevance of a particular gesture, we are discussing an emblem with broad recognition in Western culture, often transmitted to an even wider global awareness through Western/English media.

We use a convention of using small caps for the labels of emblems, similar to the practice of 'ID-glosses' in transcription of signed language data (Johnston 2010). This serves to distinguish the label for discussion and research from the more multifaceted meaning for users.

now has global reach. The AIR QUOTES gesture involves the splayed extension of the middle and index finger on both hands, pointing upwards and facing palm out, with the fingers curled down repeatedly to mimic quotation marks (Lampert 2013, Cirillo 2019, Shor & Marmorstein 2022). The CLEVER gesture is performed with the little finger, index finger, and thumb all extended, and the ring and middles curled into palm; it is used to mean "I see you", but also 'clever', 'streetwise', and associated ideas for young people in a South African town (Brookes 2001). The THREE FINGERS gesture involves the extension of the ring, middle, and index fingers with the palm facing outwards. It was originally used in the Hunger Games books and films but has since been adopted in pro-democracy protests in a number of Asian countries (Freestone & Kruk & Gawne 2023).

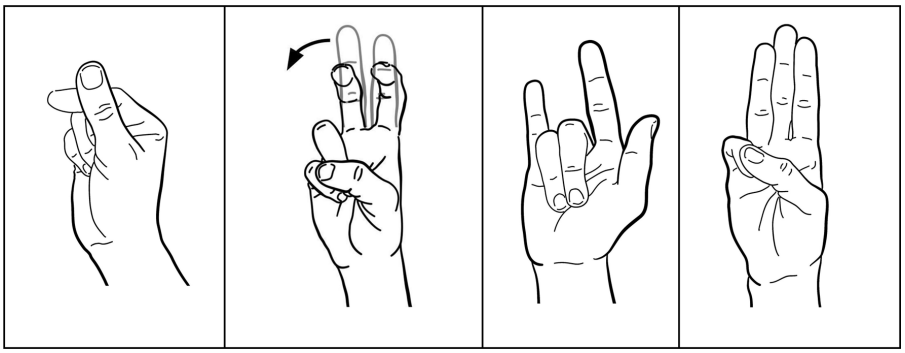

Figure 1: Four examples of emblems. From left: FINGER HEART, AIR QUOTES, CLEVER, THREE FINGERS.

Emblems contrast with other categories of gesture commonly distinguished in gesture studies (e.g., McNeill 1992; Kendon 2004). These include: *deictic gestures* used to locate a referent in space; *iconic gestures* used to depict concrete aspects of a referent, such as motion, size, or shape; *metaphoric gestures* used to depict an abstract referent as having concrete aspects; *beat gestures* used to emphasize particular segments of the speech stream; and *pragmatic* (or *recurrent*) *gestures* used to express the speaker's attitude toward their utterances and manage interaction. (More detail on emblems and other gesture categories in §2.2.1). What all of these categories of gesture have in common is that they are somewhat flexible in form and fuzzy in meaning, and they are typically produced along with speech rather than on their own. Again, emblems by contrast have a clear form and meaning and often occur in the absence of speech.

Owing to their conventional nature, emblems are stable semiotic units, and act more like words than other types of gestures. This property gives them a special position at the interface between language and gesture in several ways. First, they sit between gesture and the lexicon: They are visible bodily acts but nonetheless belong to one's stable repertoire of communicative acts. Second, despite being gestural acts they are readily glossed verbally and sometimes given conventional labels. Third, though not usually accompanied by speech, they are integrated

seamlessly into spoken discourse. Fourth, and finally, emblems share the visual-gestural modality with signed languages, and are often assimilated into them, and so exist in the repertoires of both speakers and signers. For all these reasons, emblems also occupy the interface between fields: Understanding them requires perspectives from linguistics, lexicography, anthropology, cognitive science, and beyond.

In this article we provide an overview of this recurring feature of the human communicative toolkit. We begin by considering in more detail the defining characteristics of emblems, and how they relate to other communicative phenomena (§2). We then survey the landscape of emblem studies, identifying strengths and limitations in existing methods and approaches (§3). We next discuss some major outstanding questions—including how emblems mean, how they are learned and transmitted, and why we use them in the first place (§4). As will become clear, progress on these questions will require a concerted interdisciplinary approach.

2 Emblems: Defining features

Emblems are a class of communicative gestures. As such, they are (a) visible movements of the body that are (b) produced as part of a person's effort to communicate, whether as components of utterances or as entire utterances in themselves (Kendon 2004). The fact that emblems use the visual-gestural modality may seem to go without saying, but some commentators have grouped them with phenomena in the auditory-vocal modality (e.g., de Jorio [1832/2000] on whistles; Matusmoto & Hwang [2013] on "vocalic emblems"). Most treatments focus on emblems made with the hands. The hands are particularly good tools for producing a variety of distinctive shapes, and so most communities have a rich variety of manual emblems. But also common are emblems made with the head (HEAD NOD: repeated vertical motion for affirmative; HEAD SHAKE: repeated lateral motion for negative), eyes (WINK: briefly closing a single eye in acknowledgement; BUG EYE: bulging both eyes open as backchannel, as in parts of Papua New Guinea), and mouth (POKE OUT TONGUE: protrusion of the tongue to convey playful cheekiness; POUT: a bunching of the lips in petulant disappointment). Whether manual or non-manual, emblems may combine with supplementary actions in other channels. Some manual emblems are produced along with facial actions, such as the downturned lips with raised upward rotated forearms and hands in the SHRUG (though research suggests that, in such cases, the hands do most of the semiotic work, e.g. Calbris 1990). Other emblems are produced with acoustic elements, such as the pronounced bilabial click in the CHEF'S KISS (fingers of one hand bunched near the lips and then released, to convey appreciation) or the unvoiced palatal fricative with the index finger over the lips produced with the SHHH (Meo-Zilio 1987).

2.1 Features of emblems

Like other categories of gesture—and other communicative phenomena more generally—the category of emblems has fuzzy edges. It's not possible to come up with a list of rigid inclusion

criteria; membership in the category is graded rather than all or nothing, and some emblems seem more typical than others (for discussion, see Hanna 1996; Payrató & Clemente 2020). Here we review five features widely ascribed to emblems that serve to set them apart from other classes of gestures. It bears emphasizing that not all gestures that may be considered emblems exhibit these properties to the same degree, or on every occasion of use.

2.1.1 Conventional form

A first defining feature of emblems is that they involve a specific form readily recognized by the community in which they are used. Several form parameters may be involved. The CRAZY gesture, with the index finger extended, held horizontal and rotated, needs to be articulated in relation to the head, specifically the temple. The PEACE SIGN needs to be produced with the palm facing away from the producer—at least in the United Kingdom—which helps distinguish it from an insulting gesture that involves the palm facing toward the producer. As this last example shows, some emblems have a minimal articulatory pair (see also the affirmative THUMBS UP vs the negative THUMBS DOWN), but, unlike in signed language phonology, there are usually not enough emblems for sustained paradigmatic relationships. In addition to handshape, place of articulation, and palm orientation, other form parameters are crucial in certain emblems. Consider for instance, the movement dynamics involved in the vertical movement of the HEAD NOD or in the HANG LOOSE gesture, which involves rotating the hand, with the pinky and thumb extended and held upward.

Emblems are often said to have "standards of well-formedness" (McNeill 1992: 53) in the sense that community members will not tolerate—or even recognize—gestures that deviate from the conventional form. However, it remains unclear just how strict these standards really are (Parrill 2008), and some emblems appear to be somewhat flexible in form. Consider the SHRUG: Maximally it involves an upward lift of the shoulders, pronation of the forearms with the fingers splayed open, a head tilt, and downturned lips. But it can also be performed with just the shoulders, just one shoulder, or even just the forearms and hands (Debras 2017). Thus, conventionality of form, like all defining features of emblems, appears to be a graded property of the class.

2.1.2 Conventional meaning

Emblems pair a conventional form with a conventional meaning.[4] These form-meaning pairings are established and maintained within communities, and so naturally vary from one group to the next. Prototypically, the meaning of an emblem is relatively narrow, and users can readily verbalize it. However, even in such narrow-seeming cases there may be a range of different uses

[4] Some researchers (e.g., Morris et al. 1979) seem to consider the form on its own to constitute the emblem. Here, when we refer to an emblem, we are referring to a *pairing* of a specific form and specific meaning. Thus, different emblems may involve the very same form.

for the gesture (Payrató & Clemente 2020: 48–50). A classic illustration is the THUMBS UP. In his study of this emblem in Brazil, Sherzer (1991) shows how it has a range of functions, all relating to some acknowledgement that a social obligation has been met.

The relationship between an emblem's form and meaning is often described as arbitrary (Ekman & Friesen 1969: 65). But in terms of their deeper origins, emblems are usually iconically and/or indexically motivated, at least in certain features. The SHHH indexes the mouth. The THUMBS UP and DOWN draw on the metaphoric schemas of 'up' being 'good' and 'down' being 'bad' (Lakoff & Johnson 1980). In other cases, the motivation for an emblem may be more veiled. An example is negative head gestures, which are strikingly widespread and may be grounded in basic feeding actions (Darwin 1872; Bross 2020). Sometimes the motivation for an emblem almost certainly exists but remains unclear. For instance, the "palm-up" form is associated with absence of knowledge (and related meanings) in a range of culturally-unrelated languages (Cooperrider & Abner & Goldin-Meadow 2018), but it emerges in different guises. One such guise is the multi-faceted and flexible SHRUG discussed above; another is the rotated palm gesture used to convey uncertainty across India and Nepal (Gawne 2018), which has a much more conventionalized handshape with thumb and index finger extended.

In varying from community to community, emblems do not necessarily respect linguistic or national boundaries (Creider 1977; Morris et al. 1979). (Of course, this does not prevent one from using contextual clues to infer that, for example, someone is gesturing an obscenity at you). At first blush this may seem surprising, given their word-like nature. But the fact that emblems are often used independent of speech (see below) means they can be readily used and transmitted across linguistic barriers. The precise geographic range of a given emblem has rarely been the subject of close study. An exception is Morris et al.'s (1979) examination of two head gestures used in southern Italy for negation: the HEAD SHAKE, familiar in many parts of the world, and the HEAD TOSS (a single backward movement), used in parts of the Mediterranean. The researchers reported an "isogloss" separating these two options. Emblems also circulate in communities smaller than the national level, such as the THREE FINGERS gesture used in reference to HIV in parts of South Africa (Brookes 2011) (which is unrelated to the THREE FINGERS discussed earlier and involves a different handshape). New communities are also transmitting emblems in ways that cross-cut traditional cultural/linguistic groups. For instance, the FINGER HEART spread rapidly online from its origins in Korean pop culture (**Figure 1**).

2.1.3 Capacity to be autonomous from speech

Because of their conventional form-meaning relationship, emblems can be used on their own, and can be readily understood without accompanying speech. Given the right context, many types of gestures can be used "autonomously" like this (Cooperrider 2017), but emblems are the only class that regularly are. At the same time, nothing prevents emblems from being used

alongside linguistic content to create more complex utterances. In at least one case, a widely recognized emblem—AIR QUOTES (**Figure 1**)—seems to *require* associated speech (Cirillo 2019).

The capacity to be used independently of speech—and to replace speech on occasions—certainly contributes to the "word-like" status of emblems. Other evidence supports this idea. One study found that emblems activate canonically "linguistic" areas of the brain, suggesting that these may not be language processing areas *per se* but a "modality-independent semiotic system" (Xu et al. 2009: 20664). Another study reported a brain region that responds more strongly to spoken words and gestural emblems than to pantomime gestures—that is, nonce imitations of actions—which may be readily interpretable but lack conventional form or meaning (Papeo & Agostini & Lingnau 2019). Behavioural studies have also linked emblems and words. Taboo emblems behave like taboo words in increasing pain threshold when participants are asked to leave their hand submerged in cold water (Hostetter & Rascon-Powell 2022). It bears emphasis, however, that emblems largely lack structural features of language and thus cannot completely replace speech. More specifically, they are "extra-grammatical" in that they lack morphological complexity and syntactic structure—that is, unless they are grammaticalized into signed languages.

2.1.4 Glossability and namability

Emblems often have meanings that people find easy to put into words. According to Ekman & Friesen (1969: 63), they usually have a "direct verbal translation… usually consisting of a word or two, or perhaps a phrase". Many of the gestures considered so far have meanings that can be rendered in this way—a SHRUG as "I don't know", a CRAZY gesture as a statement that someone is insane, a FINGER HEART as an expression of love. Glossability is a graded feature, however. It may be straightforward to gloss a HEAD NOD as yes, but it can be harder to pin down the precise meaning conveyed by a WINK or AIR QUOTES.

In addition to being "glossable" in this way, emblems may be known by a conventional label. Certain emblems are named for their physical form (the EYE ROLL, where the gaze is moved upward to indicate annoyance or irritation), others for their communicative function (the OK, palm outward with the thumb and index held together in a ring and other three fingers extended and splayed). In such cases, the label of the gesture may be identical to the gloss it is most likely to be given. Offensive gestures may have euphemistic names, such as the BIRD (the middle finger extended and pointed upward, with the palm inward) or the FIG (the hand in a fist and the thumb placed between the index and middle finger, common in the Mediterranean and central Europe). Even when given a functional label, this label may not reflect the gesture's full range of interactional uses (Hanna 1996: 334). An important additional consideration is whether the label is *emic* (used by users of the gesture) or *etic* (used only by scholars of the gesture). If emic, further questions arise, such as how conventional the label really is and whether it might vary

regionally or across different demographic groups. For some emblems, particularly those used in art or ritual, such as the Mudras found in Hinduism, Jainism and Buddhism (Saunders 1985), the emic label may be widely known and core to the understanding of the gesture. In research on emblems to date, labelling issues have not been foregrounded but, as we discuss below, this could be remedied in future documentation efforts.

2.1.5 Intended to be communicative

A final widely noted feature of emblems is that they seem to be produced with clear communicative intent (Ekman & Friesen 1969). That is, the producer of an emblem has a specific message they want to overtly convey to someone else. This property would seem to set emblems apart from other gestures that are produced spontaneously as half-intended accompaniments to speech and sometimes grouped together as "gesticulation" (McNeill 1992; see Cooperrider 2017 for discussion). The idea that emblems are produced with greater communicative intent than other gestures is intuitive and plausible, but it bears noting that there is not yet systematic data—such as from studies manipulating gestural visibility (e.g., Bavelas et al. 2002)—to support it.

The fact that emblems are seen as fully intentional means that they make different contributions to interaction than do other gestures. Recently, linguists have begun to explore the semantic contributions made by gestures compared to those made by words, sounds, and pictures (e.g., Schlenker 2018; Tieu & Schlenker & Chemla 2019; Pasternak & Tieu 2022). One finding within this line of work is that gestures that occur without speech (or "pro-speech gestures," in the terms of Schlenker 2018) can make different and more substantive contributions than co-speech gestures. As discussed above, emblems regularly occur without speech: they can serve as entire utterances in themselves, as when a question is posed with a tentative THUMBS UP or one is answered with a SHRUG or HEAD NOD. In such cases, emblems are seen as part of the explicit record of an interaction in the way that a co-speech iconic gesture—or for that matter, a deep sigh—might not be. This is, of course, part of what makes them "finable." This quality of "on record-ness" is itself a graded feature of communicative phenomena (see Dingemanse 2020 for discussion), and while emblems typically stake out a position close to speech on this spectrum they are not necessarily assumed to be *as* intentional as spoken words. They may be "on-record," in other words, but their presence in that record is still somehow murky. On airplanes, flight attendants debrief passengers sitting in exit rows on evacuation procedures, and then specifically require a "verbal 'yes'" (rather than 'just' a nod) as an acknowledgement. Part of the reason for this apparent "murkiness" is that, unless performed with effort and precision, emblems may be mistaken for non-communicative actions. Indeed, gesturers sometimes take advantage of the confusability of emblems with other actions—or at least *seem* to. Cases of

allegedly furtive insulting gestures, for instance, sometimes cause a stir (see Bergen 2016: 52).[5] Gestures in general seem to retain a certain plausible deniability that spoken language does not (e.g., Hall & Goldstein & Ingram 2016), and emblems—despite being "word-like" in many ways—are no exception.

2.1.6 Summary of features

These five features of emblems are interrelated and mutually reinforcing. Because emblems have standard forms with standard meanings, speakers can use them independently of speech, with full confidence that observers in the community will recognize them; the fact that speakers often use emblems independent of speech reinforces the sense that they are intended to communicate; the fact that emblems are seen to be fully intended to communicate and thus part of the explicit record of an interaction clears the way for them to be glossed and labelled. Importantly, the fact that these features reinforce each other means that, even if a gesture fails to exhibit one of these properties—in general or on some occasions—it may still be considered an emblem. By listing out the distinctive features of emblems, we hope to provide a clear framework for how emblems are discussed, particularly when a gesture may have some uses that are more typically emblem-like and others that are less so (as in recurrent gestures, discussed in §2.2.1). We revisit the question of how emblems mean in §4.1.

2.2 Relationship to other phenomena

As noted, the features of emblems are graded rather than all-or-nothing; the category has blurry boundaries. Emblems thus overlap in some of their key features with other phenomena, gestural and otherwise. Here we discuss these overlaps (summarized in **Table 1**). Contextualizing emblems in this way helps sharpen our understanding of how they fit into broader communicative repertoires and, ultimately, why we use them.

2.2.1 Relationship to other gesture categories

Perhaps the nearest neighbour of emblems is the category of *recurrent* (or *pragmatic*) gestures. These gestures are also conventionalized in form and meaning, that is, they "recur". Typically they convey things about the interaction and the discourse—such the speaker's attitude—rather than about the propositional content of that discourse (Kendon 2004: 225–247; Müller 2017); but, unlike emblems, recurrent gestures are most often used alongside speech and vary somewhat in form. Examples include the CYCLIC gesture, in which the hand rotates forward vertically to

[5] E.g., Barak Obama appearing to use the BIRD while referring to Hillary Clinton: http://www.latimes.com/archives/blogs/top-of-the-ticket/story/2008-04-17/opinion-barack-obama-makes-a-one-fingered-gesture-while-speaking-of-hillary-clinton visited 10/10/2022.

indicate cyclic continuity (Ladewig 2011) and the SWEEPING AWAY gesture, with the palm held downward and moved outward to indicate dismissal or negation (Bressem & Stein & Wegener 2017; Gawne 2021). Owing to the proximity of these categories, certain conventional gestures get variously categorized, sometimes considered an emblem, sometimes a recurrent gesture. This reflects the fact that some gestures (e.g., the "palm-up open hand") can be used in a more "emblem-like" way—with a standard meaning, in a standard form, without speech, and in an intentional manner—or in a more "recurrent-like" way—that is, with a broader range of forms and meanings, with speech, and in a way that this less obviously intentional (e.g., Gawne 2018).[6] Another way that recurrent gestures resemble emblems is that they sometimes have conventional names. For instance, the gesture of bunching the fingers together, palm facing upward, and moved vertically is known in Italy as the MANO A BURSA or GRAPPOLO, but seems to usually be used alongside speech for emphasis and does not have a readily glossable meaning (Kendon 2004).

Other gesture types overlap with emblems as well. Pointing gestures often have a conventional form—the extended index finger in many societies (but perhaps not all; see Wilkins 2003). But pointing can also be done in more *ad hoc* ways: even if one's culture does not conventionally point with the feet, one could certainly do so and be understood in the right context. Some pointing gestures are so widely used—pointing to the chest for 'I' or 'me', pointing to the ground for 'here' or 'now'—that they are sometimes included in emblem inventories (see, e.g., Matsumoto & Hwang 2013; Payrató & Clemente 2020 on "deictic emblems"). Pointing is often also incorporated into conventional *gestural practices* (Cooperrider 2019: 216) for conveying aspects of the world like time of day (e.g., Floyd 2016) or distance (e.g., Mesh 2021).

Iconic and metaphoric gestures—usually produced with speech, idiosyncratic in form and meaning, and unlabelled—would seem to be quite removed from emblems, but occasionally show interesting overlaps. Young children produce what are sometimes called "gestural names" such as miming brushing the hair (to signify 'brush'), or bringing a cup to the mouth (to signify 'drink') (Bates & Dick 2002).[7] Though not often labelled as such, gestural names function like emblems within a child's miniature community to the extent that they involve a consistent form and meaning. In adults, gestures depicting size are often conventionalized along certain form

[6] This of course raises the question of what it means to be an emblem—that is, if emblem-hood is a stable property of certain conventional gestures or is simply a way that one can use a conventional gesture. While recognizing that certain emblems can be used in a more "recurrent-like" way, we consider a gesture an emblem if it is regularly used in an "emblem-like" way. Note that most gestures that are classified as "recurrent" are rarely if ever used independently of speech, and may not have a crisp prototypical form.

[7] 'Gestural names' are not to be confused with what might be called 'name gestures'. These gestures are analogous to 'name signs' and often pick out a person's distinctive feature for iconic representation. For example, Fidel Castro was invoked in Cuba by the stroke of a beard (https://www.nytimes.com/2016/11/26/world/americas/fidel-castro-dies.html visited 04/01/2023).

parameters (Nyst 2016; Cooperrider 2019: 222–223). Counting gestures are often made with more or less iconic configurations of the fingers and hands, but show culture-specific forms and quirks (Bender & Beller 2012; Brookes & Nyst 2014 for the Sub-Saharan region), and so are sometimes included in discussions of emblems. And metaphoric gestures related to time—such as a single finger hopping forward once for 'tomorrow' or twice for 'day after tomorrow' (Calbris 1990)—may become more or less "emblematized" in certain groups.

2.2.2 Relationship to other communicative phenomena

Emblems also share commonalities with other communicative phenomena. One interesting case is that of so-called "verbal gestures" (Grenoble & Martinović & Baglini 2014; Pillion et al. 2019). These are vocalizations that are "extra-grammatical" (that is, they lack morphological complexity and syntactic structure) and "extra-phonemic" (that is, they use elements outside a language's phonemic inventory). But, like emblems, they are still part of one's repertoire of discrete, stable communicative acts—what we might think of as the "extended lexicon"—and form part of the record of an interaction. Examples from Wolof include vocalizations used to affirm, express dislike, or tell someone to watch out (Grenoble & Martinović & Baglini 2014). (Note that similar phenomena are sometimes treated as "interjections" [Dingemanse 2022]). Emblems and verbal gestures are what we might think of as communicative "cousins": they have similar functions, can be used as standalone utterances, and seem to lie at the interface of semiotic systems. Indeed, the key difference between these cousins may be merely one of modality, with those modalities having different communicative affordances (e.g. emblems can be used simultaneously with speech, while verbal gestures cannot; verbal gestures can be used without visibility, while emblems cannot).

Emblems also bear an obvious relationship to the signs used in signed languages in that they are discrete, stable visual-gestural forms. On a widely discussed continuum (McNeill 1992: 37–42), emblems sit next to signs as more language-like than gesticulation (i.e., idiosyncratic, formed-on-the-spot gestures). Emblems do not just *resemble* the signs of primary signed languages, however: they are also regularly assimilated into them and become grammaticalized (van Loon & Pfau & Steinbach 2014; Martins & Morgado & Nyst 2019; Le Guen & Petatillo & Kinil Canché 2020). This is a process of transformation, rather than direct borrowing (Haviland 2015; Mesh & Hou 2018). Emblems also intersect with alternate signed languages, such Plains Indians Sign Language (PISL) (e.g., Farnell 1995) and the signed systems of Indigenous Australian communities (Kendon 1988). Arapaho speakers still use conventional forms from PISL alongside other gestures (Sandoval 2014); and members of Indigenous Australian communities are often bimodally bilingual, commanding a rich inventory of semiotic forms that can be used with or without spoken language (Green & Wilkins 2014). In such contexts, the distinction between an emblem and a sign becomes blurry or even untenable (Green & Wilkins 2015). Finally, alternative

signed systems used in industrial settings (Meissner, Philpott & Philpott 1975; Harrison 2014) involve a repertoire of standardized forms that are emblem-like and that may draw upon the emblem inventories of the surrounding community.

A final communicative phenomenon with connections to emblems are digital emoji. The current set of widely used emoji—formalized in Unicode—includes a number of well-known gestural emblems (OK, EYE ROLL, FINGER HEART) (Gawne & Daniel 2021; Logi & Zappavigna 2021). To date Unicode is skewed towards Japanese and American gestural conventions—reflecting the early adoption of emoji in Japan and subsequent standardization by Western technology companies—but there are efforts underway to expand it to include other cultural areas, such as the inclusion of the Pinched Fingers emoji (Unicode 13.0, 2020),[8] specifically created to evoke the Italian MANO A BORSA emblem and the Hand with Index Finger and Thumb Crossed emoji (Unicode 14.0, 2021),[9] to represent the FINGER HEART emblem that originated in Korea. But even characters that do not depict gestures may have emblem-like properties. For example, within certain communities emoji take on conventional meanings that go beyond literal depiction (e.g., eggplant emoji as a phallus), much as emblems do (Gawne & McCulloch 2019).

phenomenon (perceptual modality-productive modality)	***description***	***commonalities with emblems***	***differences from emblems***
recurrent gestures (visual-gestural)	partly conventionalized gestures that manage interaction or convey a speaker's attitude toward what they are saying	visual-gestural modality; some degree of conventionalization	include a wider set of forms and meanings; tend to co-occur with speech; usually lack an "emic" label
gestural practices (visual-gestural)	partly conventionalized gestures that convey certain graded aspects of the world	visual-gestural modality; some degree of conventionalization	instead of a specific form that conveys a specific meaning, a gradient of forms that convey a gradient of meaning

(Contd.)

[8] https://unicode.org/versions/Unicode13.0.0/ visited 20/08/2023.

[9] https://unicode.org/versions/Unicode14.0.0/ visited 20/08/2023.

phenomenon (perceptual modality-productive modality)	*description*	*commonalities with emblems*	*differences from emblems*
gestural names (visual-gestural)	stylized gestures used by young children (and their caregivers) to refer to actions or objects	visual-gestural modality; some degree of consistency	idiosyncratic rather than developed within communities; used primarily to refer to actions and objects; not stable over long periods of time
signs of alternate signed languages (visual-gestural)	conventional pairings of form and meaning used as part of secondary communication systems	visual-gestural modality; developed within communities	enter into paradigmatic contrasts and morphosyntax; not restricted in range of meanings
verbal gestures and interjections (auditory-vocal)	conventional pairings of sound and meaning that are "extra-grammatical" and "extra-phonemic"	semiotic "outsider" status; often used as entire utterance; used across linguistic boundaries; range of functions similar to that of emblems	auditory-vocal modality
emoji (visual-pictorial)	conventional pictorial characters used in digital communication	visual modality; semiotic "outsider" status; often used as entire utterances; link between form and meaning sometimes obscure	sometimes integrated into morphosyntax to replace speech; not restricted in range of meanings

Table 1: Communicative phenomena related to emblems.

3 Research on emblems across cultures and languages

Cultures around the world differ in their emblem repertoires, but to date this diversity has been unevenly studied. A few cultural areas have received the lion's share of attention, while others remain essentially undocumented (a noted problem across the cognitive sciences; see Blasi et al. 2022). Further, studies of emblems have used different approaches, with different degrees of rigor and transparency. Here, we survey the landscape of existing research. We first consider studies that focus on documenting a single emblem, before turning to the larger literature that documents emblem inventories within particular communities. Our survey serves as a jumping-off point to consider best practices for documenting emblems.

3.1 Brief history of emblem scholarship and terminology

Emblems have been discussed in different genres across millennia, from classical works on oration (Quintilian 1922 [orig. 95 C.E.]), to early Renaissance treatises on human language (Bulwer 1644), to studies of expression across species (Darwin 1872). One of the first in-depth treatments of the class was Andrea de Jorio's (1832/2000) study of gestural communication in Naples, still cited for its insight. Another notable early contribution was David Efron's (1941/1972) documentation of Italian emblems, conducted as part of his research comparing the gestures of immigrant communities in the US. Some consider Efron's study a "before and after" moment in research on emblems (Payrató & Clemente 2020: 20). For a detailed historical overview of the study of emblems, see Payrató and Clemente (2020, especially Chapter 1).

Across key treatments, emblems have been discussed under a range of labels. These include:

- emblematic gestures (Efron 1941/1972)
- emblems (Ekman & Friesen 1969)
- independent gestures (Johnson 1979)
- autonomous gestures (Kendon 1983)
- quotable gestures (Kendon 1984)
- symbolic gestures (Ricci Bitti 1992)

Many of these terms highlight the semiotic properties of emblems ("symbolic", "emblematic"); others highlight their relationship to speech ("independent", "autonomous") or the fact they are conventionalized ("quotable"). These terms were used to help in the literature search for our bibliography of emblem documentation. However, the term that has become most widely used—and the one we use throughout —is "emblem". The success of this term is likely due to its use in McNeill's gesture classification (1992: 38), which has proved dominant in the field.

3.2 Documenting single emblems

Studies exploring the form and function of specific emblems have been conducted in a range of linguistic and cultural contexts. We summarize research on 17 different emblems in Appendix 1. These studies usually involve detailed observations about the emblem, including examples of its use and comments about its cultural significance.

Compared to broader inventories, single emblem studies allow for more detailed documentation and thus highlight the challenges involved in understanding emblems. One key challenge is understanding their historical origins. Though emblems are often thought to persist over long timescales (Morris et al. 1979; Kendon 1981), and so seem to demand historical analysis, they are also ephemeral in the interactive record, and so resist such attempts. There is, however, a wealth

of information about emblem use contained in archives of print and visual media, and while this "corpus" can sometimes be difficult to access and search, several studies have begun to do so. For example, Agwuele (2014) draws on popular film, while Freestone & Kruk & Gawne (2023) draw on newspaper archives. Some scholars have even attempted to leverage such sources to help reconstruct historical trajectories of specific emblems. Krüger (2004) draws on cultural artifacts to trace the history of the HORNS gesture in Southern Europe; Nelson (2017) uses classical Greek and Roman literature to challenge the received history of the taboo raised middle finger (aka the BIRD) as the *digitus impudicus* of Ancient Rome.

In offering detailed observations about the subtleties of single emblems—and in attending to details of method and interpretation—these studies show us that each conventional gesture contains multitudes. They also serve as a reminder that rigorous documentation of a community's entire emblem repertoire is no trivial undertaking.

3.3 Documenting emblem repertoires

Despite the challenges of documenting even single emblems, there is a much larger literature that attempts to catalogue entire emblem repertoires. Here, we aggregate available work across different cultural and linguistic contexts and summarize these in a table (Appendix 2). Of the 113 works included in the table, the majority document emblems within a particular language. However, language is not necessarily the best level at which to document emblems, given they are often shared at cultural levels larger (e.g., nations) or smaller (e.g., subcultures) than linguistic groupings. We report the number of emblems and inclusion of images to give a broad indication of the scope of each study.

We took a deliberately broad and inclusive approach to building this list of resources. We included works that define emblems in ways that differ from our own approach. For example, some include conventionalized touch-based gestures (Lynn 2012), exclamatives (Williams 1998), and whistles (de Jorio 1832/2000). Three existing bibliographies assisted in compiling this appendix (Hayes 1957; Epstein & Raffi 2014; Payrató & Clemente 2020: 83–84), and we also included references found in the other texts. Finally, we searched academic research databases for common names that emblems are given (see §3.1). There are a small number of references in published works that we were unable to track down. We have made note of these in Appendix 3.

There are references that involve emblem-adjacent phenomena that this process has missed, such as domain-specific signs or gestures used in art and ritual that also have emblem use for these communities (e.g., Mudras). We acknowledge there are other references that may be out there, and intend to add these to a subsequent version of the list of resources.

An important observation to emerge from our survey is that emblems in some parts of the world are much better documented than others. **Figure 2** presents a map that includes a

point for each language where there is at least one repertoire study (in some cases, a point indicates a cluster of languages in an areal survey). There are 77 points on the map, with most representing research at the level of national languages (e.g., Israeli, Japanese, American English). 'Large inventories' are those where 30 or more emblems are documented; 'small inventories' have fewer than 30 emblems. In large regions of Asia, Africa, Melanesia, Polynesia, and the Americas there is no recorded research on emblem inventories; there is, for instance, not a single published emblem inventory from the New Guinea region, home to more than a thousand of the world's living languages (Palmer 2018). Note that some of these points on the map represent linguistic/cultural areas that have received sustained attention (e.g., Italy), while others represent a small study involving emblem decoding only (e.g., 10 participants from Burma in Kanayama 1999). Many works also acknowledge their partial or preliminary nature (Olofson 1974; Agwuele 2014), so even those areas with a point are not necessarily well-documented.

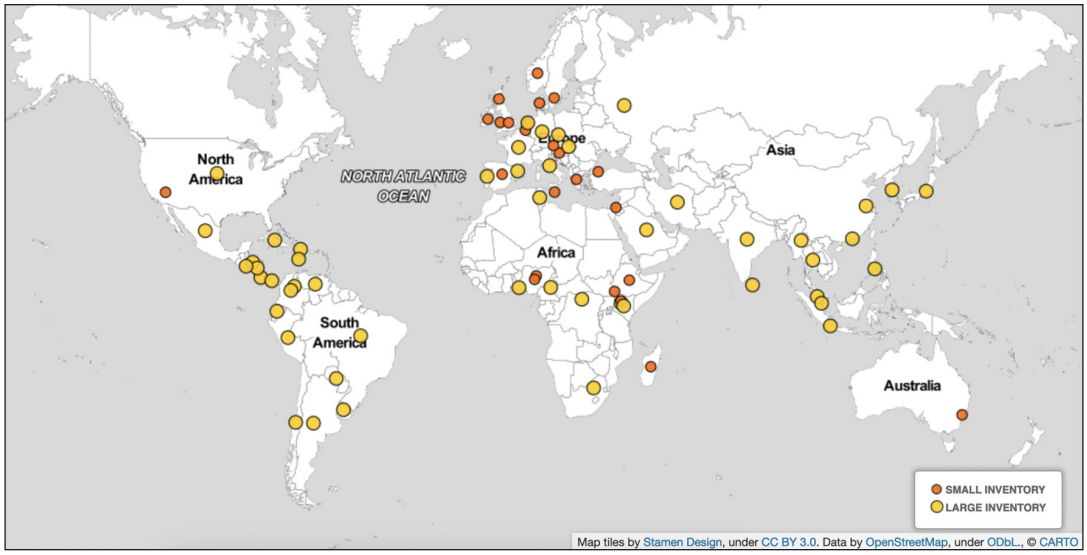

Figure 2: Geographic distribution of published emblem inventories.

Comparative studies account for multiple pins, sometimes including regions that would otherwise be undocumented. Three such publications have an outsized effect in the map: Morris et al. (1979)'s study of gestures across Europe (14 pins); Meo-Zilio & Mejía's (1983) extensive documentation across the Spanish speaking world (15 pins); and Kanayama's (1999) survey of Asia and Europe (13 pins). **Figure 3** shows the same map of surveyed studies but with these three publications removed, further underscoring the thinness of emblem documentation globally.

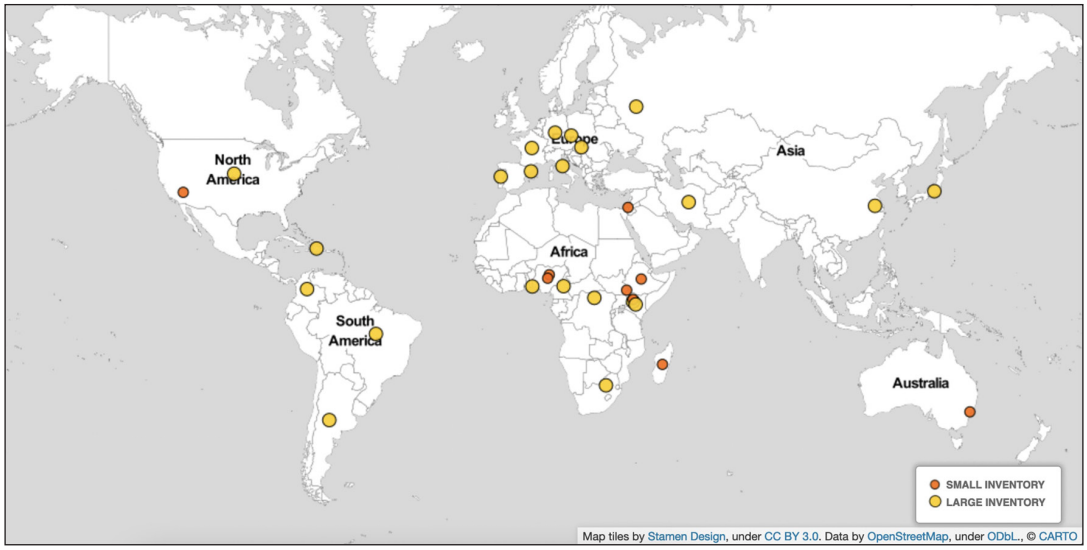

Figure 3: Geographic distribution of published emblem inventories, excluding three large comparative studies.

In what follows, we divide the works from our survey into three broad clusters based on methods—procedural inventories, observational inventories, and emblem dictionaries—and discuss each cluster in turn.

3.3.1 Procedural inventories

The first cluster comprises what we call *procedural inventories* (25 studies in total). These involve a clear, replicable method for the documentation and description of an emblem inventory. One of the most common features of procedural approaches is the use of encoding and/or decoding tasks. These procedures are designed to help separate truly conventional gestures from gestures invented on the spot. An encoding task involves giving participants a contextual prompt or communicative act (e.g., 'greeting', 'thanks', 'good'), and asking them to supply an appropriate gesture. A decoding task involves presenting gestures—usually elicited in an encoding phase—to a different set of participants and asking them to supply the meaning. Some publications use both encoding and decoding tasks (Johnson & Ekman & Friesen 1975; Payrató 1993), while others use only decoding (Olofson 1974; Calbris 1990). No publication surveyed stated that encoding was used without a decoding task. Encoding/decoding has been used to characterize the emblem inventory of particular groups, as well as to compare inventories across groups (e.g., Morris et al. 1979).

An ongoing debate in encoding/decoding studies concerns the level of agreement between speakers that must be reached for a gesture to be considered an emblem. Some advocate a

rate of 70% successful decoding (starting with Johnson & Ekman & Friesen 1975), a threshold that appears to be based on earlier work on facial expressions (Ekman & Friesen 1969). Others recommend a more stringent threshold of 90% (Safadi & Valentine 1988: 327). Beyond the question of setting the threshold for "emblem status", researchers have highlighted other issues with encoding/decoding procedures. One is the challenge of picking a participant pool that corresponds with the cultural area where the gesture is commonly found; if one surveys too broad a group of participants, then even bona fide emblems may not reach a critical threshold. Another issue is that there may be differences in the interpretation of a gesture depending on who is performing it (Sparhawk 1978: 51–52), or between different performances of the same emblem (Matsumoto & Hwang 2013). Others note that gesture production in the context of an encoding task may differ from gesture performance in naturalistic interaction (e.g., Collett 2004).

Further procedures used to investigate emblems include: triad tests with a single gesture and two possible meanings, or vice versa (Kirk & Burton 1976); experimental studies of whether facial actions contribute to the meaning of emblems (Calbris 1981; Ricci Bitti 1992); and systematic reviews of existing literature (Bender & Beller 2012 on counting; Bross 2020 on head shakes).

3.3.2 Observational inventories

The second cluster of studies comprises what we describe as *observational inventories* (54 in total). These characterize an inventory of emblems without using—or at least without describing—any systematic procedure. Such studies range from anecdotal squibs (Devereux 1949; Hamalian 1965) to meticulous and detailed inventories (de Jorio 1832/2000; Harrison 1983; Agwuele 2014). In Appendix 2 we include all such studies regardless of quality, as even the barest treatment may lay important groundwork for future research.[10]

Observational treatments of emblems are an important start in understanding gestural practices for a particular group, but they have limitations. Many do not give information regarding how observations were made, making claims difficult to assess. This lack of methodological transparency also makes it more difficult to use observational studies in comparative work. For example, even if similar emblem forms or meanings are noted across different communities it can be hard to infer anything about how widely recognized or used they may be.

[10] We distinguish a small group of four publications we refer to as *language learning materials* in Appendix 2. Unlike jocular novelty books, these include lesson plans and learning activities for emblems and other non-verbal communicative features of a target language. As these do not describe methods for how the emblems were selected, we group them with observational inventories.

3.3.3 Emblem dictionaries

The last cluster we consider is *emblem dictionaries* (34 in total). As with observational inventories, we included all dictionaries regardless of scope or depth of observation. Some dictionaries draw on earlier scholarly work, whereas others are published as light-hearted "coffee table books" (e.g., Armstrong et al. 2003; Grosse & Reker 2011). Some focus on a specific linguistic and cultural area (e.g., Italian: Munari 1963; French: Calbris & Montredon 1986), whereas others take a comparative approach (e.g., Saitz & Cervenka 1972 comparing English and Colombian Spanish; Williams 1998 comparing English and Japanese). Finally, some publications catalogue examples of emblems from a variety of geographic and linguistic regions (Kanayama 1999).

Dictionaries are usually light on methods. Overwhelmingly, entries are presented without observations of contexts of use or discussion of how the "emblem-hood" of the gesture was determined. Grigor′eva et al.'s (2001) dictionary of Russian gestures is a notable exception, as it includes detailed essays on the structure of the dictionary, methodology, and the relationship between speech and gesture. A rigorous emblem dictionary is no small task (see Payrató 2006 for discussion). There have been decades of mentions of forthcoming emblem dictionaries—including projects on German (see Serenari 2003), Italian (see Poggi 2007: 17–23), Japanese (see Tohyama 1991)—that have not (yet) been published.

Given the word-like status of emblems, some researchers have expressly adopted a lexicographic approach to documenting them. This involves clear verbal formulation of the meaning(s) of the gesture (including connotations), discussion of frequency of use, and inclusion of evidential sources (Lynn 2012; Epstein & Raffi 2014; Payrató & Clemente 2020). Notably, Grigor′eva et al. (2001: 21) provide information about 15 different parameters for each emblem entry, including a direct semantic equivalent in speech, context of use, cultural information, and related gestures and words. Lastly, some have advocated a move to digital, dynamic databases over static dictionaries in keeping with modern lexicographic best practice (e.g., Kreydlin 2010), but we are only aware of one example (Gaviño Rodríguez 2012, for Spanish).

3.4 Approaches to emblem documentation: Limitations, cross-cutting issues, and prospects

When surveying the different approaches to emblem documentation, certain key issues regarding data collection and presentation come into focus.

Existing data collection methods have limitations. Encoding/decoding studies may miss nuances in use and are subject to distortions because they rely entirely on speakers' metacommunicative judgments. Decoding-only studies—often used in large-scale comparative

projects (e.g., Morris et al. 1979; Kanayama 1999)—allow for informative comparisons but not for the discovery of previously unstudied local emblems. Observational approaches allow for richer characterization, but do not always allow for confident generalizations about the distribution of emblems across cultural, geographic, or demographic boundaries. Gesture dictionaries are useful as panoramic overviews, but the entries are usually too brief to capture subtleties of meaning. Moreover, there is currently no consistent application of lexicographic perspectives in this genre (Grigor′eva et al. 2001: 11). In many cases one's specific research question will strongly dictate a particular approach. But in cases where the basic goal is emblem documentation, the use of complementary approaches is a valuable strategy (see discussion in Collett, 2004). Notable in this regard is Brookes's (2004) exploration of emblem use in a community in South Africa, which drew on recordings of naturalistic conversation, interviews with speakers, and decoding tasks.

Alongside lexicographic and anthropological methods, techniques from the documentation of signed languages can also enrich the way emblems are documented and studied. We make use of the ID-gloss approach to naming emblems in this paper (see Johnston 2010 and footnote 4), but signed language researchers also have traditions of corpus annotation (Cormier & Fenlon 2014), ways of discussing variation in presentation of manual forms (Mesh & Hou 2018 provide an elegant example), and use of computer vision processing in management of video data (Cormier et al. 2019). All these practices might be fruitfully incorporated into emblem documentation.

With regard to the presentation of data, images can be an important way to illustrate emblem repertoires. But images—whether photographs or line drawings—come with limitations. Static images are not well-suited to conveying dynamic information about gesture production, though there are ways to augment them. **Figure 4** shows different ways emblems with movement can be represented in images. We include the representation of the AIR QUOTES gesture from **Figure 1**, as well drawn versions that do not include the start position or motion arrows. We also include a photographic representation of these different presentational options. Editing a photograph to convey movement information is more difficult, and photographs are less abstracted in their representation of an emblem, and more specific in representing an individual (including possibly identifying information regarding age, skin tone, gender, etc.). In the modern publishing era, inclusion of video—whether embedded in the digital version of an article or included as supplementary material—is feasible and should be attempted wherever possible, particularly whenever movement features are relevant. The use of video can entail ethical or privacy concerns, of course, especially in situations where there is a small speaker population (e.g., Green & Woods & Foley 2011), but re-filming with actors, or using motion capture and digital animation provide potential solutions.

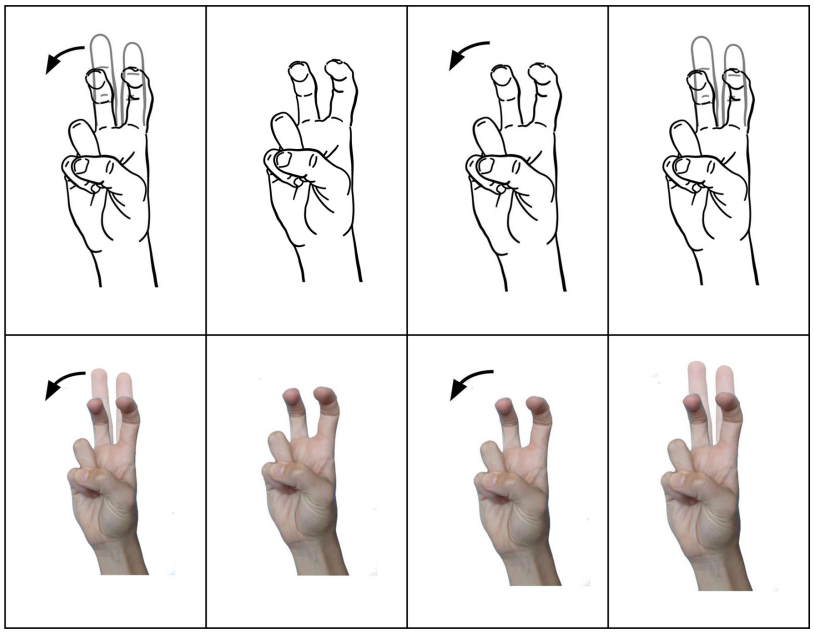

Figure 4: Four different ways of representing AIR QUOTES, both as line drawings and photographs.

A related limitation concerns how emblem inventories are catalogued. Many key research projects in this area were conducted in the mid-20th century, with a lull in publications since. As a result, emblem inventories have not yet made much use of dynamic database methods. Such databases would potentially allow entries to be updated, would enable flexible navigation (e.g., by form or by meaning), and would be reconfigurable to allow for multiple outputs (e.g., an online interface and or a print dictionary). Possible models for improved digital methods may be found in the adjacent field of language documentation (Thieberger & Berez 2012). One example is the Glottobank project, which is building large cross-linguistic databases of lexical, grammatical, and phonetic systems for use in comparative work (List & Greenhill & Gray 2017).[11] Another set of resources that could help with presenting emblem inventories are the signbank dictionaries for signed languages. There are currently signbanks for ASL (Hochgesang & Crasborn & Lillo-Martin 2023), BSL, Auslan and other signed languages, as well as the Global Signbank being built at Radboud University, which currently includes Kata Kolok (Indonesia) and NGT (Dutch Sign Language) (Crasborn et al., 2018).[12] These signbanks integrate video performance of lexical signs

[11] https://glottobank.org visited 04/102022.

[12] ASL Signbank https://aslsignbank.haskins.yale.edu/ visited 15/05/2023.
BSL Signbank https://bslsignbank.ucl.ac.uk/ visited 15/05/2023.
Auslan Signbank https://auslan.org.au/ visited 15/05/2023.
Global Signbank https://signbank.cls.ru.nl/ visited 15/05/2023.

with definitional information and links to related entries in a searchable database. There are, in short, exciting opportunities to present emblem repertoires in ways that are flexible and engaging for different audiences, and that address some of the shortcomings of static dictionaries.

By incorporating methods from adjacent subfields, there is also an opportunity for emblem research to formulate new questions. For example, variationist sociolinguistic methods could inform the study of how emblem repertoires vary between groups. This might entail conducting informational interviews with participants and more closely attending to factors such as a speaker's age, location, and social networks, to better understand emblem isoglosses. Other promising approaches could come from corpus linguistics. This might involve making use of the emoji forms of emblems that accompany text, or leveraging improvements in video image detection to examine emblems in video corpora. Approaches from cultural evolutionary studies of the diffusion and transformation of cultural forms—whether folktales, writing systems, or artistic tropes—could also be adapted to better characterize the birth, spread, and transformation of emblems.

Regardless of which approach—or combination of approaches—is taken to emblems, methodological transparency is paramount. Unfortunately, much of the research to date has presented data in the form of lists, with little reporting of the methods used to arrive at those lists. Future publications should strive for clarity in describing exactly how the gesture data were collected, in keeping with best practices in linguistics and across the social sciences (Berez-Kroeker et al. 2018). Such transparency allows for the cumulative refinement of methods. It also paves the way for better comparative work across regions through replication of existing methods and the gradual adoption of field-wide standards.

4 Open questions in the study of emblems

Emblems have often fallen into the cracks between disciplines. This neglect is perhaps because they are not seen as language-like enough for (speech-centric) linguists, not idiosyncratic enough for (psychologically oriented) gesture researchers, and not culturally rich or revealing enough to be of interest to (many) anthropologists. As a result, basic questions about emblems remain unanswered. Addressing these questions will require a wide range of frameworks—from different subfields of linguistics, but also from developmental psychology, conversation analysis, cultural evolution, and other approaches. It will require, in short, the kind of vigorous interdisciplinary collaboration needed to illuminate phenomena at the interface. Here we discuss several of the outstanding issues.

4.1 How emblems mean

Emblems are generally said to have a standard meaning—one that is clear, precise, and easy to put into words. But, on deeper examination, emblems can mean in different and subtle ways.

Some scholars thus distinguish subclasses of this category: *lexical emblems*, with a meaning that can be translated in a single word; *holophrastic emblems*, with a meaning that can be rendered into a larger phrase or complete utterance; and *concept emblems*, with a set of related meanings organized around a theme or semantic core (Poggi 2002; Kendon 2004). In her studies of emblems in urban South Africa, for instance, Brookes (2004) separates out lexical gestures such as MONEY (hand in fist, thumb and index fingertips rubbed together) and CRY (index and pinky extended and drawn down the face from the eyes, palm inward) from holophrastic emblems like RETURN (index finger down, hand held out from body and rotated at wrist to indicate 'I'm coming back') and BE QUIET (index finger extended and placed against lips) and from concept emblems such as CLEVER. Distinctions between these subclasses are not always easy to draw—and some question their utility (e.g., Payrató & Clemente 2020)—but this three-way division captures the fact that emblems are heterogeneous and may convey a narrower or wider breadth of meanings.

Of particular interest is the wider end of this meaning-breadth continuum—the subclass of concept emblems. Membership in this category is not always obvious, and some argue that it includes even narrow-seeming gestures like the THUMBS UP. Two general approaches have been proposed to account for how meaning is organized in such cases. A first is to consider these gestures as having both *paradigmatic* and *syntagmatic* meanings (Sherzer 1991; Brookes 2001). The paradigmatic (or basic) meaning is the one that sets the emblem apart from other emblems in the same class (e.g., the HEAD SHAKE from the HEAD NOD). The syntagmatic (or situational) meaning is the one the emblem takes on within specific interactional contexts. The paradigmatic meaning of the THUMBS UP gesture, for instance, may be translated as "good," but in context the gesture may be used to answer a yes-no question or to request permission; the paradigmatic meaning of CLEVER is the notion of "seeing" (the handshape is suggestive of two eyes emitting rays of vision; **Figure 1**), but in context it may be used to assert that someone is streetwise, to admonish an observer to watch out, or to greet a passer-by. In the case of CLEVER, these different uses entail slightly different hand movements and orientations, prompting the question of whether concept emblems typically involve a wider range of forms than narrow-breadth emblems.

A second approach is to understand concept emblems as involving a conventionalized network of meanings. Such a network consists of a core meaning and extensions from that core, and in some cases extensions from those extensions (Cooperrider & Núñez 2012; Cooperrider & Abner & Goldin-Meadow 2018). Crucially, in this second approach, the extended meanings are not just emergent in context but are recognized as standard uses of the gesture, much like different senses of a word in the case of linguistic polysemy (for the idea of gestural polysemy, see Sherzer 1973). An example is the palm-up epistemic gesture, which has been argued to have a core meaning of "lack of knowledge", but which is also used in questions, exclamations, and statements of obviousness, among other contexts (Cooperrider & Abner & Goldin-Meadow 2018).

A useful analogy is with the semantics of spoken diminutives. Diminutives have a core meaning of 'small' or 'child' but are often also used to convey endearment, precision, pragmatic hedging, and other meanings (Jurafsky 1996).

In **Figure 5** we illustrate these two frameworks for understanding emblematic meanings—the "syntagmatic-paradigmatic" framework and the "core-and-extensions" framework—using previously discussed examples: the PALM-UP EPISTEMIC (discussed by Cooperrider & Abner & Goldin-Meadow 2018) and the CLEVER gesture (discussed by Brookes 2001). The key difference between the frameworks is that, in the core-and-extensions framework, the non-central meanings are understood to be conventionalized uses of gesture (represented by solid arrows and borders); in the syntagmatic-paradigmatic framework, the non-central meanings are understood to be emergent in context (represented by dashed arrows and borders). Note that only a selection of extended/paradigmatic meanings are represented here. Note also that both these gestures have uses that are more emblem-like (e.g., used without speech), and uses that are less emblem-like.

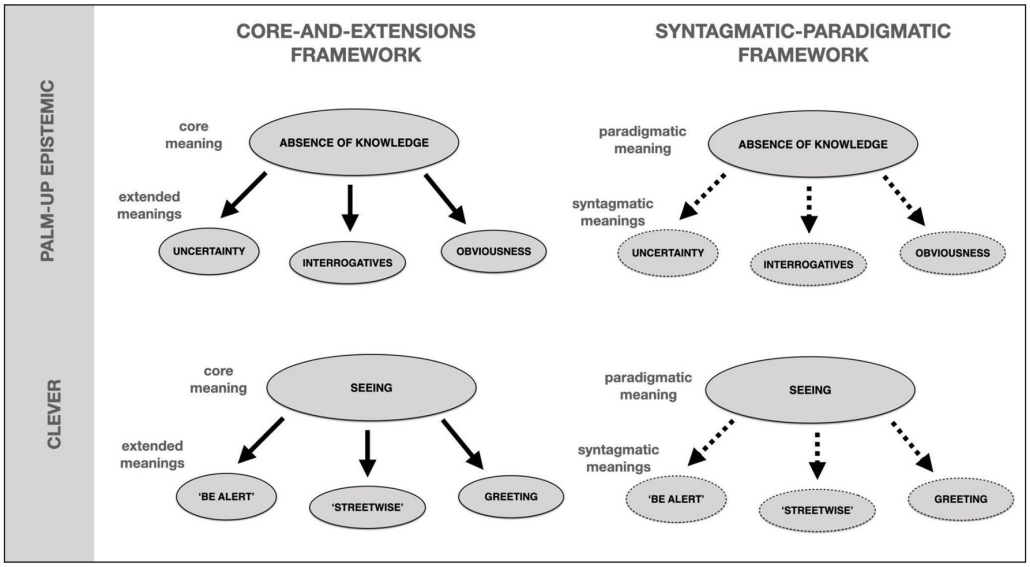

Figure 5: An illustration of two emblems (top row: PALM-UP EPISTEMIC; bottom row: CLEVER) seen through the lenses of the "core-and-extensions" and "syntagmatic-paradigmatic" frameworks.

It is possible, of course, that both approaches are partially correct: Some extended meanings may be stored as conventional uses of an emblem, whereas others may be innovated and interpreted *ad hoc*. This may seem like a relatively abstract question about emblematic meaning, but it bears on broader questions about, for instance, how emblems are processed in the moment, how they are learned by children, and how they are transmitted from community to community. The very existence of the narrow-wide continuum also raises questions about how emblematic

meaning changes over historical timescales. Do emblems tend to accumulate meanings and uses over time? Do emblems for certain types of concepts tend to branch out, while others tend to remain narrow? And so on.

4.2 How emblems are learned

Children begin to acquire conventionalized gestures at a young age. Some of the very first recognizable, stable communicative acts that infants produce are well-known emblems like the HEAD SHAKE or WAVE goodbye. These tend to appear around the child's first birthday, a bit before the better studied milestone of pointing (Frank et al. 2021). Around the same time, children also begin to produce "gestural names" (**Table 1**). There is some evidence, in fact, that children are quicker to acquire gestural symbols of this kind than they are to acquire spoken words (Goodwyn & Acredolo 1993). Children slowly master the emblem inventory of their community as they get older. In one study, 4-year-olds showed better emblem mastery than 3-year-olds—though not yet adult-like mastery—and were better at decoding than encoding at both ages (Kumin & Lazar 1974).

Beyond these basic facts, a number of questions remain about the acquisition of emblems. Do children reliably learn certain emblems before others? If so, why? A plausible hypothesis is that children first deploy those emblems for which communicative need is the greatest. This could account, for instance, for the fact that children often start producing the HEAD SHAKE before the HEAD NOD (Kettner & Carpendale 2013; Frank et al. 2021). A further issue, related to the meaning-breadth continuum, is whether children understand or produce certain subclasses of emblems before others. Zooming in on concept emblems, we might also ask whether children use the core meaning of such gestures before the extended meanings.

Children integrating emblems into their communicative repertoires involves a *vertical* transmission process, with conventional forms passing from one generation to another. This kind of transmission has possible parallels in how emblems are learned in cases of community contact, a *horizontal* transmission process. It has been widely noted that emerging signed languages incorporate and adapt the gestures used by the surrounding speaking community (Haviland 2015; Mesh & Hou 2018; Le Guen & Petatillo & Kinil Canché 2020). Less noted is the fact that the gestures selected for incorporation are invariably emblems (or, in some cases, recurrent gestures or gestural practices). Mesh & Hou (2018), for instance, show that signers in San Juan Quiahije, Mexico have integrated a set of conventional negation gestures into their signing—the WAG (index or all five fingers extended, palm outward, lateral movement from the elbow), TWIST (rotating forearm with all fingers splayed or just the thumb and pinky extended), and PALM-DOWN (palm down hand rapidly moved horizontally away from speaker), among others—while also using some of these in new ways. For example, the TWIST is widely used by speakers to convey absence or non-existence, but signers also use it to express denial. Another

case of horizontal transmission occurs when communities of hearing people who lack a shared spoken language come into contact. Such encounters are rife with gesture (Hewes 1974), and thus potentially ripe for emblem transmission. It may be through such encounters—as well as through sustained interactions along language borders—that certain emblems spread over vast areas. (As discussed below, caution is needed, however: certain gestures may be present in large areas because they have been repeatedly, independently innovated.)

Better studied are cases of emblem acquisition in second-language learning contexts. To date, this has mostly been studied in the classroom. One study found that explicit teaching of emblems appears to be more effective than implicit (Belío-Apaolaza & Hernández Muñoz 2021). In a large survey, French teachers reported they were aware of the potential for use of emblems in cross-cultural communication but lacked resources for formal instruction (Tellier & Cadet 2013). This suggests emblem documentation has the potential to be adapted as a classroom resource (Adams 1987).

Key questions for further research concern the dynamics of these various emblem transmission processes and how they compare to each other: Are there differences in which emblems get picked up, in which meanings are likely to get picked up, and in how emblems are likely to change through transmission?

4.3 Why do we have emblems?

Perhaps the most fundamental question we can ask about emblems is: Why do we have them at all? What functions do they serve? What communicative niche do they fill? The question becomes particularly puzzling when we consider that, purportedly, many emblems can be given a direct verbal translation. Why not simply use the verbal equivalent?

Part of the answer likely lies in communicative utility of the visual-gestural channel (Kendon 1981: 142–144). Gestures are particularly useful for conveying messages when silence is needed or when environmental noise interferes with speaking. When such situations repeatedly arise—as in hunting (Hindley, 2014) or certain work environments (e.g., sawmills; Meissner, Philpott & Philpott1975)—gestural conventions spontaneously emerge. In other cases, taboos on speech (Brookes 2014)—as during mourning periods (Kendon 1988) or in certain religious orders (Umiker-Sebeok & Sebeok 1987)—pave the way for similar conventions. Such “gesture codes” are not typically described as consisting of emblems—the term “emblem” is usually reserved for everyday, community-wide gestures—but they provide clues about the contexts in which emblems are likely to spring up. For instance, emblems used to request the check at restaurants are specialized for noisy contexts in which speech would be ineffective. A similar explanation might serve for waves and beckoning gestures, which convey messages at a distance or when speech would be disruptive.

Functional considerations like these may shed light, not just on why emblems exist, but also on why emblems seem to cluster around particular uses. Kendon (1981) found that most emblems are geared toward three broad purposes: interpersonal control, announcement of one's state, and the evaluation of a third party. Insult emblems, for instance, seem especially widely attested. On this account, what this class of gesture is *not* particularly geared for is conveying specific lexical concepts. That is, communities rarely develop emblems that encode basic objects (e.g., 'tree' or 'car'), properties (to our knowledge, there are no color emblems attested) or events (e.g., 'jump' or 'read'). Where there are examples of emblems that encode such lexical concepts, they often carry a richer interactional meaning. The Japanese emblem MONEY (formed with the same handshape as in OK) is used to request payment; HUNGRY (rubbing the belly with an open hand) can be described as conveying a property, but is mostly used in interaction to request or offer food. The strength of this observed clustering toward certain functions remains to be investigated more broadly, with several studies suggesting that, contra Kendon's claim, some communities have a relatively rich store of narrow lexical emblems (Sparhawk 1978; Brookes 2004; Le Guen & Petatillo & Kinil Canché 2020). But should the functional clustering in emblems prove robust, a natural further question is what drives it. The fact that so many emblems are used for interpersonal control, and so few are used for object or adjective reference, makes sense when we think of the messages people are likely to send from a distance or in noisy circumstances. The need to insult someone from afar or in a dense crowd likely arises more often than the need to describe the shape or colour of some entity.

Functional considerations may also shed light on why some communities have richer emblem repertoires than others. Kendon (2004) offered such an account of the expansive emblem repertoire reported in southern Italy. He argues that the density and din of Naples, as well as the cultural practice of communicating from balcony to balcony and balcony to street, favoured the development of rich gestural conventions. (Beyond physical aspects of the urban setting, Kendon also noted that Neapolitan culture involves a certain theatricality that could drive emblem use, a need to show off "what sort of 'character' one aspires to play in the drama of everyday life" [Kendon 2004: 354].)

To compare speech and gesture purely in terms of their communicative efficacy would be reductive, however. Other factors no doubt enter in. Another proposal is that people are sometimes motivated to use emblems in part because of a belief—however vague and subconscious—in "word magic" (McNeill 1992: 65; for classic work on "word magic," see Tambiah 1968). On this account, spoken words are understood to have a certain potency and to leave an indelible trace; gestures do not have these same qualities, or, again, at least not to the same degree. Anecdotal evidence for this folk belief has already been noted in the case of flight attendants requiring verbal acknowledgment. As further evidence, consider that communities around the world have long developed speech taboos of various sorts (and, as mentioned, these taboos can often be

skirted by substituting gestures). When people choose a gestural insult over a verbal one, they may be doing so in part to evade the worst consequences of putting such an insult "on record." There could also be a sense in which emblems, by virtue of being visible and less frequent than their spoken counterparts, are seen as more expressive, vivid, or playful (for a related point, see Kendon 2004: 351). Viewed from this perspective, emblems find common cause with ideophones, interjections, clicks, whistles, emoji, and other "outsider" semiotic resources. All these are thought to lie beyond the core of language but make utterances—and, by extension, the person uttering them—seem lively and colourful.

5 Conclusion

Emblems are a robust feature of the human semiotic toolkit. Here, we have defined them as communicative gestures that have a conventional form and conventional meaning within a particular community. Beyond this basic definition, we have highlighted other features that emblems exhibit to differing degrees, or on different occasions of use, and we have highlighted a number of edge cases. Emblems are a rich, multifaceted communicative phenomenon that nonetheless remains understudied, underdocumented, and undertheorized. This inattention may be due in large part to their position at the interface between language and gesture; they sit at the margins of several subfields but are central to none. But this interface status is also precisely what makes emblems so compelling and illuminating—and, we argue, a fruitful candidate for renewed interdisciplinary attention.

Our review has made both conceptual and methodological contributions to the study of emblems. On the conceptual side, a first contribution is that we have emphasized that emblems are a fuzzily-edged category. Though all emblems involve a pairing of conventional form and conventional meaning, other distinctive properties of emblems—use without speech, glossability and namability, and intentional production—are exhibited to different degrees across different emblems and across occasions of use. A second, related contribution has been to highlight commonalities between emblems and other communicative phenomena. Emblems grade into other gesture types—particularly recurrent gestures—and are made of much of the same semiotic stuff as other communicative phenomena—particularly the gestural names of children, the verbal gestures found in many languages, and the signs of signed languages. In highlighting these commonalities, we have made a third contribution by describing emblems as part of the extended lexicon—that is, part of the set of discrete, stable semiotic forms that humans draw on when making meaning. A fourth conceptual contribution has been to draw out several of the biggest open questions about emblems and to frame possible lines of explanation and further inquiry. These include questions about how emblems mean, about how they are acquired, and about why they are used—as well as a number of more tractable subquestions within each.

On the methodological side, a first contribution has been to call attention to the fact that emblem documentation has been very patchy to date. There has been a serious lack of research on emblems outside of Europe and especially within Indigenous contexts. As a result, our best-studied examples of emblems and emblem repertoires—and thus our very understanding of emblems as a semiotic phenomenon—remain unfortunately Eurocentric. A second contribution has been to distinguish procedural and observational approaches to emblem documentation and to underscore the value of using convergent methods. Both experimental approaches and close context-of-use studies are needed to help construct a rich, comparative understanding of emblems. A third contribution has been to point out opportunities for improving current practices of emblem documentation. For instance, labels are an important part of the cultural story of emblems, and these should be documented with careful attention to the difference between emic and etic labels and any eye to variation in emic labels across communities. A fourth methodological contribution has been to highlight possibilities for a new generation of documentation practices, including use of dynamic database methods and more video, and the incorporation of methods from neighboring subfields such as sign language linguistics, lexicography, and corpus linguistics.

To take these conceptual and methodological proposals on board would require concerted collaboration and theorizing from across the language sciences. It would require building out a new interdisciplinary subfield, perhaps akin to the recently reenergized subfield of ideophone studies (e.g., Dingemanse 2018). But such an endeavor would stand to illuminate, not only this one semiotic phenomenon, but also bigger questions about language and communication, culture and meaning. Questions like: How do language users manage and integrate the different semiotic systems that they use? How are different semiotic forms transmitted and learned across time and space? How do different semiotic forms change—or stabilize—over time? How are different semiotic forms adapted to different communicative functions? Guided by larger questions like these—alongside more specific theoretical and descriptive concerns—future work on emblems has the potential to be rich in interdisciplinary collaboration and insight. It is our hope that the present overview has conveyed some of this potential, and that it helps a new generation of researchers appreciate the distinctive place of emblems in human communication.

Additional file

The additional file for this article can be found as follows:

- **Appendices.** Appendix 1 to 3. DOI: https://doi.org/10.16995/glossa.9705.s1

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Competing interests

The authors have no competing interests to declare.

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