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118. Recurrent gestures

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Abstract

Recurrent gestures have often been investigated under the label of pragmatic or interactive gestures (Bavelas et al. 1992; Kendon 1995). However, when having a closer look at gestures allocated to this group, it turns out that they seem to have been identified on the basis of their conventional character rather than on their pragmatic functions. Given these observations, the following chapter pleads for an introduction of the term “recurrent gestures” into the field of gesture studies. By giving reasons for the implementation of this term, the chapter focuses on methodological and theoretical aspects, properties of recurrent

gestures such as their relation to speech as well as semiotic and linguistic characteristics, and their “potential for language” (Müller 2009). The chapter closes by approaching the question of demarcating recurrent gestures from other gesture types.

1. What are recurrent gestures?

Recurrent gestures arouse interest of gesture scholars very early although they were first addressed from the point of view of rhetoric (e.g., Quintilian 1969) or of the education of actors (e.g., Mosher 1916; Ott 1902). One reason for the engagement with this gesture type is probably the fact that recurrent gestures are conventionalized to a certain degree, are culturally shared, and thus can be identified clearly within the stream of manual movements. Another important reason may also be the observation that recurrent gestures often work on the level of speech, fulfilling pragmatic functions. Therefore, they have often been referred to as “pragmatic gestures” (Kendon 1995; Streeck 2005, 2009; Teßendorf this volume) (for an overview see Payrató and Teßendorf [this volume]), “gestures with pragmatic function” (Kendon 1995, 2004b), “interactive gestures” (Bavelas et al. 1992, 1995), or “speech handling” gestures (Streeck 2009), to name but the most widespread terms.

Like emblems, recurrent gestures show a stable form meaning relation and can be distinguished from “singular gestures” (Müller 2010b) or “iconic” and “metaphoric gestures” (McNeill 1992) due to their conventional character. Singular gestures have been described as spontaneous creations, which are used co-expressively with a certain speech segment and, as such, are part of the propositional content of an utterance. Recurrent gestures often fulfill performative functions, act upon speech, and form a repertoire of gestures that is shared within a culture.

The following gives an overview of what is known about recurrent gestures till now. First, the introduction of the term “recurrent gestures” will be explained. Then the chapter turns to methodological as well as theoretical issues challenged by an analysis of this gesture type. Afterwards properties of recurrent gestures will be elucidated such as their relation to speech or their semiotic and linguistic characteristics. The chapter closes with some considerations of the linguistic potential of recurrent gestures and the question of demarcating them from other gesture types.

2. Why introduce the notion of “recurrent gestures”?

As mentioned above, recurrent gestures have been referred to as pragmatic or interactive gestures highlighting the pragmatic function this gesture type often fulfills. Why then introduce a new term? This is done for three reasons: First of all, referring only to the pragmatic function of this gesture type does not provide the full picture of the phenomenon and even reduces the functional range of these gestures. Second, particular characteristics such as their conventional character or their linguistic properties are captured with this term. In doing so, other aspects than their pragmatic function are brought to the fore, which, third, rather embrace the semiotic nature of this gesture type.

The conventional character of recurrent gestures is the main argument for introducing a new term to the field of gesture studies. Recurrence here refers to the building of a formational core that correlates with a semantic core. This stable form-meaning unit recurs in different contexts of use over different speakers in a particular speech com-

munity. However, although recurrent gestures have undergone processes of conventionalization they cannot be considered as emblems since their meaning is schematic rather than word-like (see also Kendon 2004a; Ladewig 2010; Müller 2010b). Furthermore, the relation between the formational and the semantic core can be conceived as motivated that is the meaning of a recurrent gesture is derived from its form. This motivational link of form and meaning is still transparent which means that the semiotic base a gestural form is being derived from, as for instance an instrumental action, contributes to the meaning of a gesture (Ladewig 2010, 2011, this volume b; Müller 2010b; Müller, Ladewig, and Bressem volume 1). This aspect differentiates recurrent gestures from emblems, amongst other things, as the link between form and meaning in emblems can in many cases not be reconstructed anymore and is very often considered to be opaque.

The characteristic of conventionality leads to the second reason for arguing in terms of recurrence rather than in terms of pragmatic functions. When taking a closer look at interactive or pragmatic gestures, it appears, that these gestures were not primarily identified on the basis of their pragmatic function, but rather on the stable unit of form and meaning they build, and which comes with particular pragmatic functions – these are all aspects that recur. Bavelas et al. (1992; 1995), for instance, identified the “palm up open hand” (Müller 2004; see also Kendon 2004b), the “holding away gesture” (Bressem and Müller this volume a; Müller, Bressem, and Ladewig volume 1), or the “cyclic gesture” (Ladewig 2010, 2011, this volume b) as interactive gestures which clearly show a stable form meaning relation. Kendon characterizes the *mano a borsa* ‘purse hand’ (Kendon 1995) as pragmatic gesture which he later determines as a variant of the “G-family” (Kendon 2004b). Likewise, in his data Streeck (2009) identifies gestures that show a stable form meaning relation such as the palm up open hand, or negation gestures like “moving things aside” and “throwing back”. Although referring to this gesture type as pragmatic gestures, Streeck (1993) also observed the conventional character of these movements and stated that “certain recurrent functions of gesture are fulfilled by different *conventional forms* in different communities” (Streeck 1993: 281, emphasis in the original).

On another line of thought, applying the pragmatic function of gestures as a criterion for establishing a certain gesture type is a bit misleading as it implies that only a particular type of gestures can fulfill certain, in this case, pragmatic functions. However, many scholars of gestures have observed that gestures are multifunctional. Iconic or metaphorical gestures, for instance, can also be used with a referential and a pragmatic function simultaneously but they were not allocated to the group of interactive or pragmatic gestures. An iconic gesture can, for instance, convey complementary meaning to the proposition of an utterance and mark particular ideas as prominent, directing attention to it, as was shown for repetitive gestures (Bressem 2012, this volume). When used in syntactic gaps of interrupted utterances an iconic gesture can complete the spoken utterance by adding semantic content to it but it can, at the same time, work as a turn holding device regulating the interaction between the participants of a conversation (Ladewig 2012, this volume a).

Last but not least, a further observation should be mentioned that qualifies for the introduction of the term “recurrent gestures”. Gestures that have been allocated to the group of pragmatic or interactive gestures show gestural variants serving a referential function. The brushing aside gesture, for instance, which is “most often used to ‘brush aside’ discursive objects, or the behavior of others” and to express “a negative stance towards the objects in question” (Payrató and Teßendorf this volume: 1536) can also be

deployed to depict how concrete objects are brushed away to empty the speaker's personal space. Likewise the sweeping away gesture, used to reject topics or objects of talk "by (rapidly) moving the palm away from the center to the periphery" (Müller, Bressem, and Ladewig volume 1: 720) can illustrate a period of time or the action of smoothing a plane (Bressem and Müller this volume a). The cyclic gesture used with referential function can depict an ongoing action or mental process such as scooping or thinking. The exclusion of a variant with referential function from a particular group or class of gestures does not seem reasonable since they show a) the same form and b) the same meaning like the gestural variants serving pragmatic functions in the first place. They are *variants* of the *same* gesture. Furthermore, gestural variants with a referential function often reflect the semiotic origin of a recurrent gesture, which becomes more and more abstract when a gesture undergoes processes of conventionalization (see sections 5 and 6). In fact, studies have demonstrated that the investigation of variants with a referential function gives insights into the emergence and development of a particular recurrent gesture (Brookes 2001, 2004; Ladewig 2010, 2011; Teßendorf this volume).

These arguments qualify for an extension of the notion of interactive or pragmatic gestures to an inclusion of other gestural variants sharing the same semiotic base, form, and meaning (as is the case with variants serving a referential function). Even more so, these arguments suggest applying the term "recurrent gestures" to this group of gestures reflecting the nature of this gesture type more clearly than a term encompassing only functional properties.

3. Methodological and theoretical aspects

The analysis of recurrent gestures has been enhanced over the last 20 years. Methodological steps in the analysis of emblematic as well as of recurrent gestures have been brought together and systematized in order to offer an analytical grid for a detailed investigation of a recurrent gestural form and its occurrences. The analytical approach presented in the following was influenced mainly by works conducted by Bressem (volume 1); Brookes (2001, 2004, 2005); Kendon (1995, 2004b); Ladewig and Bressem (2013); Müller (2004, 2010b); Sherzer (1991); Sparhawk (1978).

In order to give an encompassing account of a recurrent gesture, three different aspects are investigated in detail, namely the form, the meaning, and the function. These aspects are examined on a qualitative as well as on a quantitative level. The determination of the *formational core/kinetic core* of a recurrent gesture is central to the whole analysis of a recurrent gesture. Not only are occurrences of a gesture identified in the data on the basis of their form but the formational core also builds the foundation for the reconstruction of the meaning and function of a gesture (see section 2). It is usually restricted to one or two form parameters such as the movement or the configuration of the hand. Based on the gestural form, the action, or the movement pattern a gesture is derived from – its semiotic base – can be reconstructed. Most of the recurrent gestures identified so far build on mundane actions such as the "palm up open hand" gesture (Müller 2004) or "the brushing aside gesture" (Payrató and Teßendorf this volume; Teßendorf this volume). Only a small group of gestures is based on the representation of movements as in the case of the "cyclic gesture" (Ladewig 2010, 2011, this volume b). Since the gestural form is the key to analyzing the meaning of a gesture, this analytical step should ideally be conducted without paying attention to the concomitant speech, i.e. with the video sound turned off. This procedure assures to avoid a possible influence coming from the spoken utterance.

Based on the analysis of a gestural form its meaning, i.e. the *semantic core* (“semantic theme” Kendon 2004b), can be reconstructed. The “gestural modes of representation” (Müller 1998, 2010a), the underlying actions as well as “image schemas” (Johnson 1987) and motor patterns contribute to the meaning that is inherent to a gestural form. This basic meaning is reflected in all instances of a recurrent gesture but also varies according to its usage that is the *local context* and the *context of use* in which a gesture is placed (Ladewig 2007, 2010; Müller 2010b).

Local context refers to the interactive environment of a recurrent gesture in a particular video example. It is informed by sequential, syntactic, semantic, as well as pragmatic information given by speech but also by semantic and pragmatic information conveyed by adjacent gestures. It contributes to the *local meaning* and the *local function* of a particular instance of a recurrent gesture. *Context-of-use* (Kendon 1995; Ladewig 2007, 2010; Müller 2004, 2010b; Schefflen 1973; Sherzer 1991) is understood as the broader discursive situation in which a recurrent gesture occurs. Basically, the speech activity conducted by the speaker while s/he is using a recurrent gesture is identified such as an enumeration, a description, or a request.

The determination of the contexts of use builds the basis for the distributional analysis of a gesture and the identification of gestural variants. In this analytical step the form-based analysis and the context-of-use analysis are combined in order to determine whether context of use and form vary systematically (e.g., Ladewig 2007, 2010; Müller 2010b). Studies have demonstrated that the different *context variants* often correlate with variation of form, meaning, and function. The cyclic gesture used in the context of a word/concept search, for instance, is positioned in the speaker’s central gesture space, in most cases, and represents the ongoing searching process, thereby fulfilling the function of a turn-holding device (Ladewig 2010, 2011). The palm up open hand used with a wide movement on the horizontal plane is used to offer a “wide range of entities” (Müller 2004: 252).

With these different concepts and analytical steps, the forms, meanings, and functions as well as the distribution of a recurrent gesture can be determined (cf. Ladewig 2007, 2010, 2011; Müller 2010b). Moreover, questions of semantization and grammaticalization can be approached (see section 5 and 6).

4. Properties of recurrent gestures

In what follows some characteristics of recurrent gestures will be spelled out. The list of properties is inspired by McNeill’s reflection on the “Gesture Continuum” (formerly known as the “Kendon’s Continuum”, see McNeill volume 1) and takes the relation of speech and gesture as well as linguistic and semiotic properties into account.

4.1. Relation of speech and recurrent gestures

The relation between speech and gesture regards the occurrence of both modalities and their temporal relation. Considerations on the distribution of semantic and pragmatic information contributing to a multimodal utterance are also taken into consideration.

Recurrent gestures or particular variants of them were subsumed under the notion of “conversational gestures” (see Bavelas et al. 1995) or “gesticulatory forms” (Kendon 1995), demonstrating that speech and gestures are tightly linked. Recurrent gestures like other co-verbal gestures interact with speech. However, the strength of the link between speech and gesture varies in the different variants.

When recurrent gestures are used with referential function, that is when they depict objects, actions, and events, they give redundant or, most often, complementary information to the propositional content of an utterance. In these cases, recurrent gestures are co-expressed with a verbal unit, be it a word, a phrase, or a sentence. The object or action depicted is referred to in speech. Examples are rarely given in the literature as often only gestural variants with a pragmatic function are taken into account (but see Bressem and Müller this volume a, b; Ladewig 2007, 2010; Ladewig, Müller, and Teßendorf 2010; Teßendorf this volume).

Recurrent gestures that act as “speech performatives” (Teßendorf this volume) are deployed meta-communicatively and operate upon a speaker’s utterance. In doing so, they serve discursive and modal functions. When adopting discursive functions these gestures often operate on the structure of an utterance, marking its topic or comment and bringing specific aspects into the receiver’s attention (e.g., the “ring gesture” [Kendon 2004b; Neumann 2004], the “pistol hand” [Seyfeddinipur 2004], or the *mano a borsa* [Kendon 1995, 2004b; Poggi 1983]). When taking up a modal function they often display an attitude or stance towards something being said or done as in the case of several negation gestures (Bressem and Müller this volume a; Harrison 2009a, 2010; Teßendorf this volume). In the majority of cases, speech performatives co-occur with speech and are tightly connected with the verbal unit they act upon. They might even be constrained by the syntax of a spoken utterance as Harrison (2009b, 2010) could show. He found that the stroke of a gesture may coincide with the “node” of a negation, i.e. the “location of a negation”, and that the subsequent “post-stroke hold” may co-extend with the “scope”, i.e. “the stretch of language to which the negation applies” (Harrison 2010: 29). However, in some cases these variants of recurrent gestures can also be used without speech, in pauses. Some occurrences of the cyclic gesture used in word/concept searches, for instance, were observed in silent pauses. By representing the ongoing searching process, these gestures fulfill the same function as verbal disfluency markers, namely indicating that the speaker is engaged in a searching process. As such, when used without speech these variants of the cyclic gesture replace verbal markers of hesitation and work as a turn-holding device (Ladewig 2010, 2011, this volume b).

Recurrent gestures that work as “performatives”, “aim at a regulation of the behavior of others” (Teßendorf this volume: 1544) and ‘perform’ the illocutionary force of an utterance. These gestural variants are not directed to the speaker but to the interlocutor and act as a type of speech act or “interactional move” (Kendon 1995: 274). They are used co-expressively with a verbal unit but quite often they are also detached from speech. These variants can stand alone and substitute for directive speech acts. The brushing aside gesture used as a performative, for instance, might adopt the function of a whole turn and brush aside the communicative activity of the interlocutor, requesting her/him to finish his turn or action (Teßendorf this volume).

It can thus be concluded that in most usages recurrent gestures co-occur with speech conveying semantic or pragmatic information. Gestures with referential function are closely related to the proposition of the spoken utterance and interact with a verbal lexical unit. Pragmatic variants work on a meta-communicative level of speech. Some variants of recurrent gestures may be used in speech pauses or may be fully detached from speech, working as gestural performative acts which is why they sometimes also have been considered as emblems or as “quotable forms” (Kendon 1995; see also section 6).

4.2. Semiotic and linguistic properties

As outlined above, the notion of recurrent gestures is based on the observation that gestures can build stable units of form and meaning. It is not grounded on functional properties of gestures as is done in many other classifications. Accordingly, when examining the semiotic characteristics of recurrent gestures, one has to be aware of their conventional character. For the analytical process of reconstructing their production and understanding this means that a producer or recipient does not pass all the semiotic processes and stages that were involved in the genesis of a recurrent gesture; at least in the case of gestural variants that show a higher degree of conventionalization (see section 6). Accordingly, the semiotic paths taken when producing or receiving a recurrent gesture have a different point of departure than the paths to be considered when, as an analyst, the origin of a gesture or the motivation of a gestural form is examined (see also Müller 2010b). These different aspects will be elucidated briefly in the following.

4.2.1. Motivation of form

Approaching the issue of the motivation of a gestural sign concerns, in most cases of recurrent gestures, the path taken from a mundane (instrumental) action to a stable form-meaning unit that does not involve the manipulation of concrete objects anymore. Aspects of an action scheme are thereby mapped onto the structure of a communicative action. “However, the motion patterns of these everyday actions are modulated significantly, they are abstracted from the actions in the real world [...]” (Müller Ms). Similar to the differences observable in the relation of gesture and speech, different levels of abstraction can be traced for the different gestural variants of a recurrent gesture.

Gestural variants serving a referential function are the ones which are closest to the every day action they originate from. They may depict actions manipulating concrete or abstract entities. The action and/or object depicted are being referred to in the direct speech environment of a gesture. In the case of the brushing aside gesture, for instance, a speaker acts as if brushing small annoying objects aside but may refer to brushing away an ethnic group out of a city (example taken from Teßendorf this volume). In variants with pragmatic function, the action scheme is transferred to the domain of communication or interaction. As described above, these variants operate on the speaker’s own speech or on the communicative behavior of others. The gesture does not depict an action being referred to in speech but conducts an action on a meta-communicative level. As such, these variants are more abstract than their referential counterparts. The brushing aside gesture with pragmatic functions, for instance, may brush aside arguments or other discursive objects, or even the interlocutor (Payrató and Teßendorf this volume; Teßendorf this volume).

In all the aforementioned examples of the brushing aside gesture, the action scheme of removing annoying objects from the speaker’s personal space underlies the different gestural variants. However, different aspects of the action scheme are highlighted in these variants which may a) be the cause of an action, i.e. the annoying objects, or b) the effect of an action, i.e. the removal of annoying objects. Metonymic processes are involved in inferring the whole underlying action of a recurrent gesture (“internal and external metonymy”, see Mittelberg 2006, 2010; Mittelberg and Waugh 2009). Metaphoric processes are responsible for extending the action scheme to the abstract domain of communication or interaction. In cases in which gestural variants contribute to the

proposition of an utterance, these cognitive-semiotic processes are still active. In more conventionalized variants (see below) these processes have become entrenched to a certain degree.

4.2.2. Linguistic properties

In the following section, principles of meaning creation are discussed for recurrent gestures. This means that the “simultaneous (variation of formational features and gesture families) and linear structures (combinations within gesture units) of gesture forms” are focused on which have been defined as aspects defining a “grammar of gesture” (Müller, Bressem, and Ladewig volume 1: 707).

4.2.2.1 Simultaneous structures

In the field of gesture studies two different views on how meaning is created in gestures are put forward. One approach favors the idea that gestures are holistic or “global” in nature, i.e., the features of a gesture are determined by the meaning of the whole (e.g., McNeill 1992, 2005; McNeill and Duncan 2000; Parrill 2008; Parrill and Sweetser 2002, 2004). A second approach introduced the notion of compositionality of gestural forms proposing that gestural meanings are composed of isolated features (Calbris 2003, 2011; Kendon 2004b; Webb 1996). (For a discussion see Kendon 2008.)

The idea of decomposing gestures into their meaningful segments was particularly advanced by studies on recurrent gestures. By contrasting gestural forms, relevant form features and their meanings as well as their distribution over particular contexts of use were determined. Selective studies incorporated the four parameters “hand shape”, “orientation of the palm”, “movement”, and “position” in gesture space, introduced for the notation of sign language (Battison 1974; Stokoe 1960, 1972), as a notational grid for discovering structures in gestures. (For a discussion see Ladewig and Bressem 2013.)

Variation of form and meaning has been investigated since Quintilian. Many authors, dealing with the education of the orator were exact observers of gestures in general but of recurrent gestures in particular and offered a list of gestural movements, hand shapes, and their positions in gesture space correlating with different meanings (e.g., Bacon 1884; Mosher 1916; Ott 1902; Potter 1871; Quintilian 1969), which is being continuously extended.

For many cases of recurrent gestures, the configuration of the hand was identified as the formational core. The orientation of the palm, the movement of the hand, or the position in gesture space, were often observed to form variants of a recurrent gesture. The open hand prone gesture with a downward orientation is, for instance, used by the speaker to indicate interrupting some line of action of which the speaker is not the author (Kendon 2004b; see also Calbris 2003; Harrison 2009a, 2009b). The *grappolo* or “finger bunch” held upwards and oscillating on a vertical or horizontal plain towards the speaker is deployed to ask a question or demand an explanation (Kendon 2004b). The “palm up open hand” gesture used with downward movement serves the function of listing offered arguments (Müller 2004: 252). In the analysis of the cyclic gesture, the position in gesture space was systematically taken into account. This gesture was found to be used in the central gesture space when it depicts the speaker’s communicative activity of searching for a word or concept. In the right peripheral gesture space it often refers to abstract ongoing processes or, combined with a large movement size, it serves

the function of a request (Ladewig 2010, 2011, this volume b). For some variants of recurrent gestures, the direction and the size of movement were identified to add a deictic dimension. These formational features were characteristic for cyclic gestures used as “interactive gestures” (e.g., Bavelas et al. 1992). Recurrent gestures showing these variations in form are addressee oriented and fulfill a performative function attempting to regulate the behavior of others (Ladewig 2010; Teßendorf this volume).

The systematic distribution of form parameters over different contexts of use, correlating with different meanings and functions gave rise to the idea of “gesture families”, i.e. the emergence of “structural islands” within gestures (Müller, Bressem, and Ladewig volume 1: 727). Each family shares a “distinct set of kinesic features but each is also distinct in its semantic themes. The forms within these families, distinguished as they are kinesically, also tend to differ semantically although, within a given family, all forms share in a common semantic theme” (Kendon 2004b: 227). Accordingly, what seems to be crucial for considering a recurrent gesture to be a gesture family is variation. Recurrent gestures can only be referred to as family if they show variation of form, meaning, and context. The variants of a recurrent gesture are defined as members of a gesture family. Gesture families were identified for the “G-family” (*grappolo*), the “R-family” (“ring gesture”), the “Open Hand Prone gesture” (Kendon 2004b), the “Palm Up Open Hand gesture” (Müller 2004), the “cyclic gesture” (Ladewig 2007, 2011) or the family of the “Away gestures” (Bressem and Müller this volume a). The notion of a gesture family is useful in order to group the different variants of a recurrent gesture and reveal that these belong to the same core. It was also linked to the cognitive-linguistic concept of an “idealized cognitive model” (ICM) (Lakoff 1987) in order to account for cognitive processes that might be involved in the meaning-making process of recurrent gestures. In doing so, it was argued that the variants of a recurrent gesture, or the members of a gesture family, are not only related to each other by way of their form, their meaning and their underlying action or motion, but that they are also related on a conceptual level. Cognitive models account for cognitive processes in meaning creation and understanding. As they are shared cultural models providing the basis for mutual understanding, this notion also accounts for the fact that gesture families are known in a cultural community and are, as such, used recurrently by its members (Ladewig 2011, this volume b).

4.2.2.2 Linear structures

When taking linear structures of gestures into account, one can a) refer to the internal structures of gestures, that are gesture phases, and to the formation of higher level units, that are “gesture phrases” and “gesture units” (Kendon 1980, 2004b), or one can b) relate to the combination of gestures and the formation of gesture sequences (Müller, Bressem, and Ladewig volume 1). In the following section, the combination of recurrent gestures will be in focus.

The linear combination of gestures has been observed particularly for recurrent gestures but it has not evolved into a distinct research topic yet. Most examples were given for recurrent gestures that operate on the thematic structure of an utterance, marking its topic and comment. Gesture combinations serving these functions often show an “open-to” structure. Seyfeddinipur (2004) for instance, documented the use of the “ring gesture” being combined with the “pistol hand”: The ring, used to mark the topic of an utterance, is opened to the pistol hand, which then marks the comment of an utterance.

Kendon (1995, 2004b) observed another interesting sequence of topic-comment marking gestures. He could show that the closing of the finger bunch hand shape, i.e. the *grap-polo*, marks the topic of an utterance; the hand opens as the speaker gives a comment. Another combination of recurrent gestures, acting on the argumentative structure of an utterance, was documented by Teßendorf (this volume). She gives an example in which a series of palm up open hand gestures is concluded by a brushing aside gestures: The palm up open hands present a range of reasons supporting a particular argument which is then brushed aside by the speaker. Similarly, the cyclic gesture (Ladewig 2010, 2011) can be combined with the palm up open hand. When deployed in word or concept searches, the communicative activity of searching is embodied by the cyclic gesture, followed by a palm up open hand on which the word or concept searched for is presented. The reverse pattern is found in cases in which the cyclic gesture is used in requests: an idea or a notion is first presented on the open palm which is then supposed to be elaborated by an interlocutor. The cyclic gesture is used here to perform a demand.

The examples given so far, embrace single utterances or short sequence of utterances. However, it was also found that recurrent gestures combine in longer series, spanning larger verbal units. Bressemer (2012) documented the repetitive use of recurrent gestures used with a “prosodic function” embodied by an up and down movement or an enlarged movement size. In her examples, recurrent gestures such as the ring or the index finger are combined and encompass long series of utterances, marking focal points the speaker’s argumentation.

The identification of simultaneous structures and distinctive form features accord with notions of compositionality as well as of contrastivity of gestural meaning (Calbris 1990, 2011; Sparhawk 1978). These notions run contrary to the idea that gestures are holistic or global in nature, meaning that the features of a gesture are determined by the meaning of the whole. The findings of systematic correlations of gestural form and meaning in different contexts of use allow for the conclusion of a “rudimentary morphology” (Müller 2004: 254), observable at least in recurrent gestures.

Likewise, the linear combination of gestures argues against the findings of nonlinearity of gestures (McNeill 1992, 2005). As was found for recurrent but also for iconic or metaphoric gestures, gestures can occur in sequences in which they are not only related to their concomitant speech but also to their gestural neighbors. Thus, the findings show that gestures in general and recurrent gestures in particular are closer to language than has been assumed so far.

These systematic documentations of the nature of gesture forms, their motivation, their simultaneous and linear structures is what we term a ‘grammar’ of gestures. [...] Analyzing both the simultaneous and the linear forms of gestures reveals embodied forms and principles of emerging structures that may shed light on processes of grammaticalization in signed languages [...]. (Müller, Bressemer, and Ladewig volume 1: 727)

5. Recurrent gestures on their way to language

Scholars of gesture and sign language observed that gestures may enter a fully-fledged linguistic system as discourse markers or even as lexical or grammatical morphemes. Single form parameters can be isolated, semanticized, and even take over grammatical functions. Such form parameters often constitute the core of recurrent gestures like, for

instance, the hand configuration or the movement of the hand (Bressem 2012; Fricke 2012; Ladewig 2010; Ladewig and Bressem 2013; Pfau and Steinbach 2006; Wilcox 2004, 2005).

The palm up open hand, for instance, used in spoken discourse to express agreement or to seek agreement for the discursive objects presented on the open hand, was observed in many sign languages such as American Sign Language (Conlin, Hagstrom, and Neidle 2003), Danish Sign Language (Engberg-Pedersen 2002), or Turkish Sign Language (Zeshan 2006). (For an overview see van Loon, Pfau, and Steinbach this volume; van Loon 2012.) Since functional similarities between gestures and signs were observed in this case, it seems to be logical that the palm up open hand used as a grammatical marker in sign language has developed from the recurrent palm up open hand gesture deployed in spoken discourse (see, e.g., Pfau and Steinbach 2006).

In order to explain such grammaticalization processes from gesture to sign, Wilcox (2004, 2007) suggested two paths:

- (i) from gesture to a grammatical morpheme via a lexical morpheme, and
- (ii) from gesture to a grammatical morpheme via a marker of intonation/prosody.

Regarding the first route, several examples were given for ASL modal verbs. As sign linguists have shown (Janzen and Shaffer 2002; Wilcox 2004; Wilcox and Shaffer 2006; Wilcox and Wilcox 1995) the marker of possibility ‘can’ in American Sign Language (ASL) has developed from a lexical sign meaning ‘strong’ which has itself emerged from a gesture. In this case, the two fists are moved downwards in the central signing space. Wilcox (2004) concludes that the old ASL sign for ‘strong’ may have developed from an “improvised gesture” enacting upper body strength. Interestingly, he notes that these gestures might have been recurrent gestures: “Although I am calling these ‘improvised’ gestures, I do not mean to suggest that they do not also become standardized, although apparently not to the extent that they become quotable gestures” (Wilcox 2004: 70). In fact, the fist being rapidly moved downwards or vertically away from the speaker’s body has been documented as a recurrent gesture in the repertoire of German speakers. Among other functions, it is used “to put emphasis on the parts of the utterance by directing the listener’s attention and signals emotional involvement and insistence” (Müller, Bressem, and Ladewig volume 1: 721). The formational core of the fist being moved in different directions comes with the semantic core of strength which has been reconstructed for contexts of descriptions, requests, and emotional involvement (Arnecke 2011).

Likewise, sources in recurrent gestures can be identified for the second route of grammaticalization. The cyclic gesture, for instance, which is characterized by a continuous clockwise rotation movement, comes with the semantic core of cyclic continuity. Three different context variants could be identified, namely descriptions, word/concept searches, and requests, which vary in the positions in gesture space and movement size. What is of particular interest with respect to these different variants is that a similar phenomenon has been described for Italian Sign Language (LIS) (Wilcox 2004, 2005, 2007; Wilcox, Rossini, and Pizzuto 2010). The sign IMPOSSIBLE in Italian Sign Language (LIS) which is also performed with a circular movement varies according to size of motion and position in gesture space thereby “indicating various degrees of impossibility” (Wilcox 2004: 60). Wilcox, Rossini, and Pizzuto (2010: 353) argue that both form variations are “analogous to

prosodic stress”. In case of modal verbs in Italian Sign Language however, both form features have achieved a grammatical status, marking morphological alternations of strong and weak forms. Accordingly, different grammaticalization states can be observed for movement size and position in gesture space which might have their origin in gestural expressions of these parameters.

Moreover, Klima and Beluggi (1979) argue that manner of movement is used to mark verb aspect in American Sign Language or Italian Sign Language. A continuous rotational movement can, amongst others, mark durativity or continuation of events (Klima and Bellugi 1979: 293; see also Wilcox 2004: 63). In view of these findings, it can be argued that the core of the cyclic gesture has developed to a marker of aspect in sign languages. Which one of the routes this particular gesture may have followed, however, awaits further detailed investigation.

By and large, it becomes clear that recurrent gestures can be the point of departure in grammaticalization processes. Their formational and semantic cores can develop into grammatical markers in sign language. However, as was shown for the cyclic gesture, it might also be the case that form parameters constituting gestural variants of a recurrent gesture, enter a linguistic system. This is possible as these additional parameters become free to take over additional functions when a gestural form-meaning unit has emerged.

What can be observed in general for gestures on their way to becoming language is that “[s]emantic information inherent in the gestural modality can be isolated and become entrenched under certain communicative circumstances” (Ladewig and Bressems Ms).

6. The question of a demarcation between recurrent gestures and other gesture types

On a continuum capturing processes of conventionalization in manual semiotic signs, iconic and metaphoric (singular) gestures would mark the starting point and sign language would mark the endpoint. Recurrent and emblematic gestures would capture the space between these points (see Fig. 118.1). However, assigning recurrent gestures a place on the continuum is no easy task since recurrent gestures themselves show variants exhibiting different degrees of conventionalization (Kendon 1995; Ladewig 2010, 2011; Neumann 2004; Seyfeddinipur 2004). Variants of recurrent gestures depicting aspects of concrete or abstract entities or events show a referential function and are least conventionalized (Brookes 2001, 2005; Ladewig 2010, 2011; Teßendorf this volume). Variants used with a speech-replacing function were considered most conventionalized and have been categorized as emblems (Kendon 1995; Neumann 2004; Seyfeddinipur 2004).

Conventionalization here refers to both the formation of a stable form meaning unit and the usage of the gesture in a particular communicative context. Very often it can be observed that the more restricted a gesture is in its fields of use, the more conventionalized it is in its form. The cyclic gesture, for instance, used with a referential function can depict all kinds of continuous events or actions, although it is mostly used to refer to abstract things. It can span single words but also phrases and even sentences. Used in a word/concept search, only four possible sequential positions with respect to disfluency markers and stages of a word/concept search were identified. Both gestural forms were found to be used in particular positions in gesture space, namely in the right periphery in the former and in the central gesture space in the latter variant. The third variant used with performative function (the cyclic gesture in requests) is most restricted in its possibilities of application and it is most convention-

alized in form. This variant can only be used to ask the interlocutor to continue a (communicative) activity and it is performed in the peripheral gesture space with a larger movement size. Furthermore, it is the only variant that can substitute for speech (cf. Kendon 1988, 1995). (For further detail see Ladewig [this volume b].)

Argued from a diachronic perspective, the different degrees of conventionalization observable in one recurrent gesture or one gesture family reflect different stages of conventionalization – from non-conventionalized to conventionalized.

Variation in the range of meanings and speech act functions these gestures fulfil suggests that quotable gestures may begin as spontaneous depictions that are used to fulfil immediate communicative needs. As they are found to fulfil important practical and then social functions offering opportunities to express important conditions and social relations, the meanings and functions of these gestures expand. (Brookes 2001: 182)

In view of these facts, it is proposed to regard a taxonomy of gestures in terms of dimensions rather than in terms of categories (see also McNeill 2005; see Fig. 118.1).

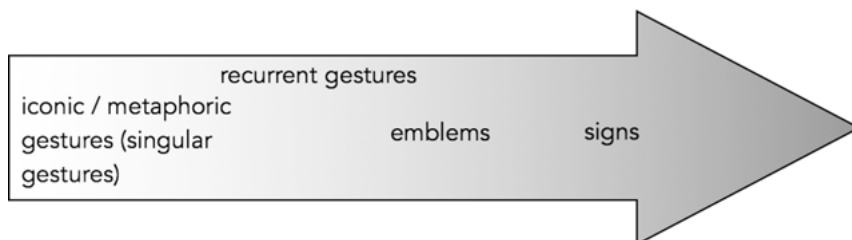


Fig. 118.1: Dimension of gesture types

Accordingly, a more flexible transition from singular gestures to recurrent gestures and from recurrent gestures to emblems should be considered as recurrent gestures show variants exhibiting properties of their adjacent gesture types.

By and large, recurrent gestures provide an interesting field for the investigation of semantization and grammaticalization processes in gestures and thus give insights into the emergence of signed languages. Moreover, identifying and setting up culturally-shared repertoires of recurrent gestures, as has been done for the German speech community (Bressem and Müller this volume b), offers the chance of opening up a multimodal perspective on cross-cultural and cross-linguistic studies.

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