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A COGNITIVE SEMIOTIC PERSPECTIVE ON GESTURAL MEANING-MAKING: PHENOMENOLOGICAL TRIANGULATION, EMBODIMENT, AND CONSCIOUSNESS

Abstract. The paper presents a cognitive semiotic perspective on *spontaneous gesturing* (or *singular gestures*), understood as spontaneous co-speech embodied activity, devoid of linguistic properties, and not conforming to social conventions. In line with the cognitive-semiotic attitude, the paper addresses the so far underexplored methodological issue of complementing third-person methods of gesture studies with first- and second-person perspectives on speech and gesturing in line with phenomenological triangulation. Merleau-Ponty's ideas presented in *Phenomenology of Perception* are the starting point for the exploration of aspects of a phenomenological view of gestural meaning-making. Gesturing, as a meaning-making activity, is analyzed in terms of embodied *accomplishment of meaning*. Gestural bodily activity is subsequently analyzed in terms of pre-reflective self-consciousness and reflective self-consciousness. The paper is intended as a contribution to studies on the phenomenology of gesturing, with perspectives for further research sketched in the concluding section.

Keywords: cognitive semiotics, spontaneous gesturing, phenomenology, Merleau-Ponty, embodiment, pre-reflective self-consciousness, phenomenological triangulation.

1. Introduction: A cognitive semiotic perspective on gesturing

Cognitive semiotics focuses on the phenomenon of meaning: emergent meaning structures and meaning-making processes (Zlatev, 2015). In its transdisciplinary attitude, cognitive semiotics goes beyond purely linguistic or semiotic (in the narrow sense) analyses. Instead, it combines methods and insights from cognitive science, semiotics, and linguistics. On the one hand, this combination was intended to overcome the limitations of each of these three disciplines (Sonesson, 2006, p. 135). On the other hand, it allows for

the significant broadening of the scope of the meaning-making phenomena under consideration. Phenomenology provides an important background for cognitive-semiotic studies. In a recent formulation, Jordan Zlatev characterized cognitive semiotics as a combination of these concepts and methods *under the influence of phenomenology.*

Cognitive semiotics focuses on various ways of meaning-making: by means of language, gestures, depictions, music – to name just the main semiotic systems discussed (see Zlatev, Żywiczyński & Wacewicz, 2020; Louhema et al., 2019). In the present paper, I adopt a cognitive semiotic view of *spontaneous gesturing* (also known as *co-speech gestures* or *singular gestures*) as an instance of a meaning-making activity. There are at least four aspects of spontaneous gesturing which make it worth cognitive-semiotic study: meaning dynamism, embodiment, phenomenological triangulation, and polysemiotic nature (Zlatev, 2015; Mendoza-Collazos & Zlatev, 2022). First, the gesture (or rather gesturing) is considered a meaning-making *activity*; in other words, the dynamic nature of meaning-making by means of gesturing is emphasized.[1] Second, gesturing is a paradigm example of *embodied* communication or *embodied* meaning-making. It is the human body which is active in the process of expressing meaning in communicative interactions. Third, cognitive semiotics enriches the methodological aspect of gesture studies, stressing the complementarity of first-, second-, and third-person perspectives on gestures – in line with the so-called phenomenological triangulation postulate. Finally, cognitive semiotics tends to go beyond unisemiotic, e.g., purely gestural or purely linguistic analyses, providing a framework for polysemiotic accounts of combinations of spoken or signed language and gesturing (Stampoulidis, Bolognesi & Zlatev, 2019). The latter aspect, however, is not addressed in the present paper – the issue of polysemiotic communication and gesturing-language orchestration deserves a separate, detailed treatment.

As phenomenological triangulation acknowledges the epistemological priority of first- and second-person methods in the study of meaning and meaning-making (Zlatev, 2012), cognitive semiotics significantly relies on phenomenology as an approach delivering crucial notions for studies on meanings (experience, embodiment, intentionality, intersubjectivity, among others) and providing tools for analyses of meaningful phenomena. Consequently, the paper focuses on the role of a phenomenological approach to gestural meaning-making, stressing two aspects: the embodiment of gestural meaning-making and the kinds of consciousness involved in spontaneous gesturing. I also argue that contemporary gesture studies – focusing primarily on third-person phenomena (Quaeghebeur et al., 2014; see also Gull-

berg, 2010) – miss an important aspect of polysemiotic communication. A complete cognitive semiotic account of the phenomenon of spontaneous gesturing involves a phenomenological participatory perspective with an emphasis on lived experience and embodied interactions, but it also requires reflective analyses (Zlatev et al., 2010) of the kind presented in section 5.

Given these characteristics, the paper makes two claims: first, spontaneous gesturing understood in terms of McNeill's continuum of gestures is a phenomenon (as a meaning-making activity) deserving of particular attention. Second, first- and second-person perspectives are indispensable for distinguishing and characterizing spontaneous gesturing as a meaning-making activity.

2. Gestural meaning-making

In the 1980s, gesture studies began to emerge as an independent interdisciplinary field of research. In particular, works by Adam Kendon (1980; 2004) and David McNeill (1992; 2005) gave momentum to studies on embodied, extralinguistic communication. The term *gesture*, however, is equivocal. It is not just the case that this term is used in various, differing ways; various researchers classify and distinguish gestures differently. Kendon, one of the pioneers of gesture studies, for instance, uses the term in reference to a broad spectrum of "visible bodily actions" (Kendon, 2014, p. 13), including spontaneous gesticulation, emblems, and signs (understood as elements of signed languages). He used the term *gesture* as "a label for actions that have the features of manifest deliberate expressiveness" (Kendon, 2004, p. 15). McNeill, on the other hand, uses the term *gesture* primarily in reference to gesticulation (in Kendon's terms) or spontaneous gesturing, i.e., "to the leftmost end of the spectrum" (McNeill, 1992, p. 37) of embodied communicative actions. The authors differ also in respect of relationships between various kinds of manual activities. Kendon stresses the continuity of various elements of the spectrum: gesturing, pantomime, emblems, and signs. McNeill stresses the presence of a "cataclysmic break" between spontaneous gesturing and socially regulated gestures (McNeill, 1992, p. 36; Goldin-Meadow & Brentari, 2017; see also Müller, 2018).

McNeill's spectrum consists of four elements of the gesture-sign continuum, namely gesticulation (or spontaneous gesturing), pantomime, emblems, and sign language. McNeill considers four aspects of each of the enumerated manual activities: presence or absence of speech, presence or

absence of linguistic properties, conventionalization, and the relevant way of thinking (global and synthetic vs. segmented and analytic). I focus on one of the elements of McNeill's spectrum of gestures, namely on *spontaneous gesticulation* (McNeill, 1992) or *singular gestures* (Müller, 2018), i.e., gestures that are spontaneously created, that are global-synthetic, holistic (McNeill, 1992), and which are not explicitly planned or monitored. In terms of these aspects of gestures, singular gestures occur only in the presence of speech; they have no linguistic properties, they do not conform to social conventions, and they reflect global and synthetic thinking. Cornelia Müller characterizes them as gestures that "are created on the spot" and their "specific realizations in a given context are rather free and spontaneous." (Müller, 2018, p. 2). Distinguishing spontaneous gesturing as an embodied meaning-making phenomenon does not mean accepting there being sharp boundaries between elements of McNeill's spectrum of gestures. Rather, singular gestures are understood in line with Müller's view, according to which various kinds of gestures (singular, recurrent, and emblematic) can be seen as prototype categories, stressing the dynamicity of the relations between them. The "cataclysmic break" separates these kinds of gestures and fully conventionalized signs of signed languages.[2]

The choice of spontaneous gesturing as a distinguished meaning-making activity is not arbitrary. It is motivated by at least three arguments. First, psychological studies suggest singular gestures play a special role in cognitive functioning. Specifically, Susan Goldin-Meadow and Diane Brentari argue for the role of spontaneous gesturing in cognitive activities, in particular, gesturing is "essential to predict certain types of learning" (Goldin-Meadow & Brentari, 2017, p. 1; see also Goldin-Meadow, 2014; Müller, 2018). The special status of spontaneous gesturing is also supported by neuropsychological studies: among them is the case of Ian Waterman, who suffered deafferentiation of his body from the neck down. Secondly, spontaneous gesturing seems to be a particularly interesting case for phenomenological studies on meaning-making. The role of consciousness in the process of gesturing, the explicitly and nontrivially embodied nature of singular gestures, and the intentionalities involved in this activity deserve proper phenomenological analysis. Finally, spontaneous gesturing can be considered one of the components of a polysemiotic communication system consisting of natural language (spoken or signed) and singular gestures. As Müller (2018) notes, the relationship between gestures and signs (understood as elements of a system of sign languages) is a central topic for gesture studies. Due to the limitations of this paper, I focus on the phenomenological aspects of spontaneous gesturing as a kind of meaning-making.

3. Perspectives on gesturing: Phenomenological triangulation

Since the very beginning, cognitive semiotics has stressed the special role of first- and second-person perspectives on meaning-making phenomena. Methodological triangulation, understood as the postulate to combine first-person, second-person, and third-person methods with the priority of the first-person method (Zlatev, 2015; Konderak, 2018), became a widely accepted landmark of research in cognitive semiotics. Recently, the term was replaced by *phenomenological triangulation*, characterized as "the primacy of first-person methods (e.g., intuition-based analyses) and at the same time triangulation with second person methods (e.g., interviews) and third-person methods (e.g., experiments). The first-person access to knowledge is grounded in Husserlian phenomenology" (Mendoza-Collazos, 2022, p. 19). Phenomenological triangulation stresses focus on *perspectives* on meaning-making rather than on *methods*. Göran Sonesson (2022) notes that there are two "dimensions" of phenomenological triangulation, which are often conflated: ontological and epistemological. The former refers to studied phenomena (first-person data, third-person data), the latter to phenomena as they appear for an experiencing subject (first-person) as they emerge in interactions between subjects (second person) or as they appear for a detached observer (third-person). The present paper highlights the relevance of the first-person perspective in the epistemological sense as the starting point for subsequent second-person and third-person studies.

The development of gesture studies follows mainly third-person, observation-based methodology. Marianne Gullberg, in her paper *Methodological reflections on gesture analysis in SLA and bilingualism*, summarizes it in the following way:

> gestures can be structurally described in terms of articulators (e.g., the hand, the head) and their configurations (e.g., hand shapes), the place of articulation (e.g., where in gesture space), and the form and direction of the movement (cf. descriptions of Sign Language, Stokoe, 1980). The movement itself can also be analysed into movement phases (preparations, strokes or nucleus phases, retractions, and holds). (Gullberg, 2010, p. 5)

These characteristics, prevalent in gesture studies, clearly reflect the third-person perspective on gesturing. Cognitive semiotics – with its phenomenological triangulation postulate – would stress the necessity of complementing, or even preceding, these studies with first- and second-person perspectives. The results of empirical, third-person studies are certainly valuable and impressive. The question asked by phenomenologists and for-

mulated in this paper is whether studies of gestural activity can be reduced just to empirical-scientific approaches. Does the third-person approach deliver a complete picture of gestural meaning-making? The case of Ian Waterman's dual gesturing – in the form of "throw-aways" and "construeds" – suggests that the story is much more complicated. Studies on his gesturing result in a similar observation: "IW summarizes the whole point about the impossibility for third-person empirical-scientific approaches to fully capture the nature of gesture" (Quaeghebeur et al., 2014).

4. Gesturing impaired: Ian Waterman's case

Ian Waterman ("IW," Cole 1995; Gallagher & Cole, 1995; Quaeghebeur et al., 2014) suffered aproprioception; i.e., he lost sense of touch as well as sense of his bodily movements and body position. He was not able to initiate movements in parts of his body. He was not able to control the results of these movements. Waterman's problem consisted in initiating and controlling movements, not in his motor system – he was not paralyzed. After a "marathon" (Cole, 1995) of 30 years of training and practicing, he managed to learn to control his bodily movements relying on visual kinaesthesia and visual perception of bodily movements. Regaining control over his body required huge cognitive effort: constant visual control, planning, and movement monitoring. As a result, he managed to perform movements which were "truly indistinguishable from normal" (Quaeghebeur et al., 2014, p. 2049), but each case of temporal loss of visual feedback and conscious control immediately resulted in loss of awareness of his own movements and the location of his hands. Obviously, IW's impairment has a huge impact on his capacity to produce various kinds of gestures. There was, however, one significant exception: what Waterman himself calls "throw-aways", a counterpart of McNeill's spontaneous gestures.

In a series of studies, Jonathan Cole, Shaun Gallagher, and University of Chicago researchers (Quaeghebeur et al., 2014) tested IW's gesturing under these two salient conditions – that is, with and without visual control of the movement of his hands. To address the issue of Ian Waterman's gesturing, the researchers identified the following four aspects of his manual activities: *timing* (and synchronization with accompanying speech), *morphokinesis* (hand forms and use of space), *topokinesis* (how hands are located relative to each other), and, finally, the *perspective* of gesture (character viewpoint vs. observer viewpoint). IW's gesturing with vision can be hardly distinguished from the gesturing of unimpaired subjects: all these

features are present; the only difference is in the fewer number of gestures and lack of fluency (gestures tend to be isolated, performed one by one), which can be accounted for by reference to additional controlling processes. These visually controlled, planned, and monitored gestures Waterman called "construeds".

Interesting results can be observed in the case of IW's gesturing without the support of vision. The gestures that were produced spontaneously by IW's hands when he was not able to control his manual activities visually were called "throw-aways". In Ian Waterman's own words, successful throw-aways are "ones that just happen. Sometimes I'll be aware of them because there may be something around me [...] but most are just thrown away." (see Quaeghebeur et al., 2014, p. 2051).[3] This kind of gesture retained some of the discussed features, namely full synchrony between the stroke of a gesture and co-expressive speech, the speed of speech and gesturing in tandem, and morphokinetic accuracy. On the other hand, IW had problems with coordinating two hands (disparity in topokinesis) and did not display a character viewpoint. I treat throw-aways as a clear example of mind embodied in gesturing. Throw-aways cannot be treated as "thoughts" or "ideas" translated into one or another kind of manual action. In particular, they are not a result of reflective consciousness. Rather, they can be treated as bodily activities which are meaningful in themselves. In this sense, IW's "throw-aways" may be seen as an instance of spontaneous gesturing. Simultaneously, I would treat them as products of pre-reflective self-consciousness, as opposed to reflective self-consciousness. The latter seems to result rather in "construeds".

5. A phenomenological contribution

We have recently witnessed impressive developments in gesture studies. The number of experiments, growing number of laboratories, and abundance of publications all speak to that development. Gesturing – as a cognitive phenomenon – seems to be minutely described from the observational, third-person point of view. Is there anything to be added by a cognitive semiotician? Phenomenologists distinguish between the *objective (living) body* and *lived body* (following the Husserlian distinction between *Körper* and *Leib*): this distinction reflects the two ways of experiencing and understanding the body. The former refers to the body as studied from the third-person perspective, as considered from the observer's point of view. The objective body is an object of empirically-oriented gesture studies. The latter refers to the body as it is experienced by an embodied subject. The lived body

requires the first-person perspective of a conscious subject and experiencing agent. It is the latter perspective on gesturing that is currently understudied, and it can be naturally developed within the cognitive-semiotic approach. Additionally, each of these perspectives on the body requires different methods: experimental in the case of the objective body and phenomenological in the case of the lived body. I am convinced that the very decision to distinguish spontaneous gesturing as one of the meaning-making activities can be justified by phenomenological arguments rather than by anatomical, physiological, or neurological (in general, functional) arguments.

Taking the cognitive semiotic perspective, I address the issue of the meaning of singular gestures. A common cognitivist answer in terms of expressions and mental representations is challenged by Merleau-Ponty's (1962) view: gesture does not represent meaning but rather meaning "inhabits" it. In other words, gestures do not represent or externalize meaning but bring meaning to life.

A phenomenological (non-Cartesian) perspective on the mind stresses the embodied and situated nature of the mind and cognition. The idea of embodiment – treated seriously – goes beyond a purely causal or instrumental treatment of the human body. Merleau-Ponty's idea of embodied mind contributes a deeper understanding of (spontaneous) gesturing.

This list presenting the intertwining of gesture studies and phenomenological investigations is by no means exhaustive. The scope of this paper does not allow for addressing all of the putative phenomenological contributions to gesture studies. To give an example of the possible phenomenological contributions, I discuss two gesture-related issues below: embodiment and its relationship to meaning, and the distinction between pre-reflective and reflective self-consciousness.

5.1. Treating embodiment seriously

Gesturing is treated as a paradigm example of "embodied communication" or, more broadly, as an instance of "embodied cognition". Recently, the embodiment of cognition and communication has been claimed by philosophy of mind, cognitive linguistics, and cognitive semiotics – all of these research perspectives invoke embodiment as an important idea. There are, however, differences in interpretation of the term. Mark Rowlands (2010, pp. 56–58) discusses the following three interpretations: explanation-, dependence-, and constitution-interpretation. The weakest way of interpreting the embodiment thesis is that one cannot *understand or explain* cognitive processes independently of the bodily processes involved in them. To account for stereopsis, for instance, it is necessary to invoke the binocular

organization of the human visual system. The second interpretation asserts the *dependence* of cognitive processes on the body of a cognitive subject. In other words, cognitive processes are designed for, or adjusted in the course of functioning to, certain bodily structures. The strongest interpretation treats bodily structures as *constituting* cognitive processes. According to this interpretation, the body and bodily processes are literal, genuine parts of (at least some) cognitive processes. Cognition (and communication) does not happen exclusively in the head, in the domain of the Cartesian mental, but also in the activity of the body in an environment. I argue that the proper treatment of gesturing requires the strongest interpretation: an act of gesturing is to be treated as a genuine part of cognitive processes. To address the problem of embodied gestural communication, it is necessary to go beyond a methodological or causal understanding of embodiment. I agree with Zlatev's diagnosis:

> most of these authors operate with relatively simplistic accounts of "embodiment", reducing this to neural and/or computational "simulations" of perception and action, or similar constructs that are quite divorced from actual experience. (Zlatev, 2023, p. 43)

It is Merleau-Ponty who addresses the *real* problem of the embodiment of gesturing and language. However, to appreciate Merleau-Ponty's arguments, it is worth starting with some common statement formulated within contemporary gesture studies. Kita and Emorey (2023), for instance, begin their paper on the relationship between gesture, language, and cognition with the following statement: "Humans can communicate an infinite variety of new ideas that come to their minds" (p. 408). The authors continue: "For example, a palm-up open hand can be used to *encode meaning* related to offering or receiving, and pointing to the addressee with palm-up open hand can indicate that the gesturer accepts what the addressee has said" (pp. 410–411, my emphasis). The formulation suggests the standard cognitivist picture: we have thoughts in our minds; these thoughts are encoded (either in the form of a gesture or in the form of a word) and transferred to the recipient. In other words, meanings – which are present in our minds – are translated into some gestural or verbal form to convey information. Consequently, it is understandable that different forms of thinking (or mental representation) require different forms of conveying information: "Language and representational gesture originate from distinct modes of thinking" (p. 411). Understanding the phenomenological perspective on gesturing means rejecting the mind-body dichotomy and the representation-expression model.

Merleau-Ponty dubbed this approach "intellectualism" and offered a different, embodied perspective on gesturing and speech. In *Phenomenology of Perception*, in the chapter entitled *The Body as Expression and Speech*, he writes:

> The meaning of a gesture thus "understood" is not behind it, it is intermingled with the structure of the world outlined by the gesture, and which I take up on my own account. (Merleau-Ponty, 1962, p. 216; see also Zlatev, 2023)

According to Merleau-Ponty, we should not look for putative meanings exclusively behind our gestural activity. Instead, our gesturing in itself is meaningful. Gestures are meanings – as a result of our being in the world and being with others. In other words, pointing to some object is not an external, thought-independent expression of a mental image of an object. The very act of pointing co-constitutes meaning. It is easier to appreciate this stance when mind-body dualism is rejected in favour of an embodied view of the mind and cognition. The mind and our thoughts are not hidden in our heads, our brains, but are also present in the activities of our bodies. The body is not just a tool of a disembodied mind, but something that co-constitutes acts of meaning-making.

Although Merleau-Ponty is primarily interested in accounting for language (speech, see Zlatev, 2023), we can relate some of his statements to gesturing as well. Consequently, the following statements: "Thus speech, in the speaker, does not translate ready-made thought, but accomplishes it. A fortiori must it be recognized that the listener receives thought from speech itself" (Merleau-Ponty, 1962, p. 207), or "The process of expression brings the meaning into existence" (p. 212) can surely be reformulated in terms of gesturing. In this sense, the gesture is considered an embodiment of meaning in a concrete bodily action or material experience.

In sum, gestures (and acts of gesturing) do not represent mental entities or thoughts, rather they articulate them.[4] Meanings are not behind gestures but (at least partially) in these gestures. That statement particularly applies to spontaneous gesturing, where – according to the above characteristics – there is no explicit planning or monitoring.

To understand these statements properly, it is worth – according to Merleau-Ponty – comparing gesturing as an embodied activity to emotions, another embodied mechanism:

> Modern psychology has demonstrated that the spectator does not look about within himself among his closest experiences for the meaning of the gestures he is witnessing. Faced with an angry or threatening gesture, I have no need,

> in order to understand it, to recall the feelings which I myself experienced when I used these gestures on my own account. [...] I do not see anger or a threatening attitude as a psychic fact hidden behind the gesture, I read anger in it. The gesture does not make me think of anger, it is anger itself. (Merleau-Ponty, 1962, p. 214)

Spontaneous gesturing – gestures which are not planned or monitored, created on the spot with rather free and spontaneous realizations – is a clear example of embodied communication. I would dare to say that in the case of spontaneous gesturing it is my body that speaks. This statement should not be understood as a claim about the body as some kind of semi-autonomous agent, communicating meanings independently of the mind, but in terms of an embodied mind: what we call the mind consists also of bodily activity, so the gesturing body is understood as the gesturing mind.

Ian Waterman's "throw-aways" can be treated as an even clearer example of communication where the body speaks. As the researchers analyzing IW's gesturing describe it: "When IW is unaware of his perfectly synchronized gesturing (when he is producing what he calls "throw-aways"), he is immersed in the first-person point of view, and he engages his whole body-as-subject to convey his intentions. He bodily enacts his cognitive being at that time" (Quaeghebeur et al., 2014, p. 2059).

To close this section, I would like to stress that embodiment – in the phenomenological reading – does not mean a disembodied mind using the body to make its thoughts public. The body co-constitutes the mind, and it is an equal partner in psychological processes. In such a perspective, we, human beings, have a natural need to express by means of our bodies. As Merleau-Ponty states: "the body is a power of natural expression" (Merleau-Ponty, 1962, p. 211).

5.2. Between pre-reflective and reflective consciousness

An answer to the question of our consciousness of spontaneous gesturing requires phenomenological analysis of the notion of consciousness. Usually, when I produce spontaneous gestures, e.g., during my lecture, I am not planning or controlling them. It is often the case that I am even not aware of what kind of bodily activity I am engaged in. Simultaneously, I can, for some reason, direct my attention to such bodily activity and realize that, for instance, I stretched out my arms when discussing, e.g., the broad notion of cognition, or that I pointed to my head when presenting the Cartesian idea of thinking substance. Sometimes, I am even able to recall previous

spontaneous gesturing. So the phenomenon of spontaneous gesturing seems to be particularly interesting when we consider the first-person perspective of a gesturing subject. Similar questions can be addressed in reference to Ian Waterman's case. What is the status of Ian Waterman's throw-aways? Is he conscious (in any sense of the term) of them?

The phenomenological distinction between pre-reflective self-consciousness and reflective self-consciousness can be helpful in such cases. First, it is important to note that each conscious experience entails some form of self-consciousness. In other words, each experience has a special, constant feature – being a subject's experience. Rowlands (2010) refers to this feature as experience of *mineness*. As Gallagher and Zahavi elaborate it, the "immediate and first-personal character of experiential phenomena must be accounted for in terms of a 'pre-reflective' self-consciousness" (Gallagher & Zahavi, 2012, p. 52). Any conscious experience is implicitly (and not necessary thematically) self-given. Phenomenologists stress that pre-reflective self-consciousness should not be understood as a kind of second-order mental activity operating on our experience. Rather, the discussed feature, mineness of experience, is an ineliminable feature of any experience. The idea is even more explicitly formulated by Sartre: "This self-consciousness we ought to consider not as a new consciousness, but as the only mode of existence which is possible for a consciousness of something (Sartre, 1956, p. liv). Reflective consciousness, on the other hand is "an explicit, conceptual, and objectifying awareness that takes a lower-order consciousness as its attentional theme" (Gallagher & Zahavi, 2012, p. 69). I can, for instance, decide to attend to my gestural activity during the lecture – my bodily activity becomes the theme of my consideration.

Consequently, when someone performs spontaneous gesturing, he or she is tacitly conscious of their bodily experience in a non-observational and non-objectifying way (see Gallagher & Zahavi, 2012, p. 52). A gesturing subject does not have to attend to bodily actions performed to have an experience of the ownness of the gesturing-experience. Imagine that self-consciousness can be considered as a spectrum-like phenomenon with pre-reflective self-consciousness at one end of the spectrum. In such a case, spontaneous gesturing can be seen as an interplay of various degrees of self-consciousness. When I am presenting my lecture with my awareness occupied with the words I should use to clarify some distinction, my body complements my speech with manual actions of some kind without my awareness of that activity. Noticing students' amusement, I may make my bodily experiences thematic, i.e., I may become reflectively self-conscious.

To clarify these considerations, it is worth noting that pre-reflective self-consciousness should not be confused with the notion of qualia, with a certain phenomenal quality of conscious experience, i.e., to the Nagelian (1974) "what it is like" to experience something. When a gesturer is pointing to something, when she is extending her arms to show the size of an object, or is just raising her hand to better convey the importance of her words, the relevant experiences (of pointing, extending, raising) are different. Simultaneously, they all have something in common: pre-reflective self-consciousness, i.e., the gesturer experiences them as her own.

So, being pre-reflectively self-conscious of my gesturing experience, I am not unconscious of it. Although I am now occupied with my choice of words during the lecture and I do not attend to my gesturing, I can switch my attention and make my experience thematic. In other words, I can become reflectively conscious of my gesturing. This "switch", however, is possible because the experience was already present to me – in a pre-reflective way.

5.3. A short remark on gestures as signs

It is commonly accepted within cognitive semiotics that meaning-making processes are multi-layered phenomena. Specifically, the Semiotic Hierarchy (Zlatev, 2018; Konderak, 2018) is a framework addressing meaning-making processes in terms of five layers. These layers, animation, subjectivity, intersubjectivity, signification, and language (Zlatev & Konderak, 2023), are related by means of the *Fundierung* relationship (Merleau-Ponty, 1962, p. 458): "these [layers] stand in a particular relationship, with 'lower' layers serving as foundations, background and preconditions for 'higher' ones" (Zlatev & Konderak 2023, p. 170). Consequently, sign use (and signitive intentionality) is founded on and emerges out of the lower levels of meaning-making, in particular out of the levels of subjectivity and intersubjectivity (and perceptual and shared intentionality, respectively). It must be stressed, however, that the account of gestural meaning-making in terms of pre-reflective, embodied activity presented in this paper neither precludes nor denies the possibility of approaching gestures as signs. On the contrary – analysis in terms of subjectivity can be considered a foundation of signitive meaning-making. Andrén and Zlatev's (Zlatev & Andrén 2009; Andrén 2010) analysis of gestures in terms of communicative explicitness and representational complexity is one such cognitive semiotic approach. The authors draw on Sonesson's (2012) notion of a sign as an entity consisting of at least two subjectively differentiated elements: expression, which is more directly experienced, and content, which is more in focus. Spontaneous gesturing – as pre-reflectively experienced

– is an instance of a meaning-making process at the level of subjectivity, but it may become an instance of signitive meaning-making – it becomes a sign – when additionally reflected upon. In particular, the act of reflection allows one to differentiate between what is directly perceived (the sign expression in Sonesson's terms) and what is indirectly intended (the content or object). The relationship between an expression and content is in this sense representational.[5] The analysis of spontaneous gesturing as sign use, however, goes beyond the scope of this paper.

6. Concluding remarks

Cognitive semiotics – as a transdisciplinary approach to meaning-making processes and relevant meaning structures – investigates various semiotic systems, including gesturing. In this paper I single out spontaneous gesturing as a phenomenologically distinctive element of McNeill's spectrum of gestures. Taking McNeill's characterization of spontaneous gesturing as a starting point, I identify key features of these gestures, in particular spontaneous creation and lack of explicit planning or monitoring. With the notion of spontaneous gesturing in hand, and with the help of Merleau-Ponty's idea of gestures as activities accomplishing meaning, I consider the relation between spontaneous gesturing and bodily experience. Simultaneously, I argue for a strong interpretation of embodiment, i.e., embodiment as constituting meaning-making and cognition. It seems that research on gesturing as an embodied activity may help in clarifying the notion of embodiment adopted within cognitive semiotics (and cognitive science as well).

In this paper I discuss only selected aspects of the embodied approach to gestural communication and, in this sense, the paper does not exhaust all the possible contributions of the phenomenological perspective to gesture studies. As such, this paper can be considered the first step on my road to the phenomenology of gesturing and cognitive semiotics of gestural, embodied meaning-making. The subsequent steps should include more detailed phenomenological studies, including various intentionalities involved in the process of conscious meaning-making, the notions of agency and ownership in gesturing, and putative structures of experience (e.g., gesturing as a "figure" on some background of (other) bodily activities).

What should be emphasized here is that a more complete account of spontaneous gesturing will require a polysemiotic approach, i.e., such an account should combine spontaneous gesturing and natural language as constituting an orchestrated system. Studies on Ian Waterman's gesturing show

that tight binding between "throw-aways" and speech and their synchrony is preserved – this observation cannot be ignored in attempts to characterize singular gestures.

Detailed analysis of spontaneous gesturing may contribute to the most urgent problem of contemporary philosophy of mind, namely the problem of consciousness. In particular, the distinction between pre-reflective and reflective self-consciousness may benefit the results of studies on singular gestures.

To achieve these goals, actual systematic phenomenologically informed studies are necessary. In other words, we need a method allowing for the identification of structures of experience as well as experiences themselves. IPA, Interpretive Phenomenological Analysis (Smith et al., 2009), seems to be a promising path. IPA involves researchers comprehensively interpreting participants' understanding of their experiences in a structured and systematic manner. This approach allows for the generation of data that may enable researchers to gain insights into gesturers' experiences (see: Larkin, Watts, & Clifton, 2006). IPA allows for the exploration of lived experience – it focuses on how people experience specific events that happen to them (Smith & Nizza 2022, p. 11). IPA has been applied in analyses of experiences of becoming a mother, suffering from Parkinson's disease and Chronic Fatigue Syndrome, experiences of early-career engineers, and organ donation attitudes, among others. In spite of criticism[6], applications of the IPA method up to now make it a promising procedure for exploring first-person experience, even if it requires a second-person (interviewer's) perspective.

NOTES

[1] Such a "dynamic" perspective and focus on process does not preclude the possibility of studying emergent structures. Zlatev (2023), for instance, would stress not just the dynamicity of gesturing or "languaging", but also the sedimentation of structures on the basis of embodied actions.

[2] See, e.g., Müller (2018) for a detailed overview of perspectives.

[3] It must be stressed that these two labels, "throw-aways" and "construeds", were spontaneously coined by Ian Waterman as reflecting his experiences. The way in which researchers make sense of Waterman's reports reflects the second-person perspective on his experience of gesturing. In particular, I suggest that "throw-aways" and "construeds" are not theory-based categories.

[4] The idea in reference to (spoken) language is also elaborated by Zlatev: "A key point is to conceive of language not as *representing* ideas, as in the tradition that goes back to Aristotle, but as articulating them" (Zlatev, 2023, p. 44; original emphasis).

[5] Another interesting cognitive semiotic contribution to studies on gestures as signs is offered by Irene Mittelberg (2013).

[6] Amedeo Giorgi (2010, p. 6) suggests renaming the method to Interpretative Experiential Analysis, as he does not see strong links between IPA and the phenomenological research tradition.

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