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GESTURAL WAYS OF DEPICTING METAPHORS AND ABSTRACT CONCEPTS

Abstract. The aim of the article is to present ways in which gestures combine with the verbal layer of an utterance, thus reflecting embodied thinking and the rooting of abstract concepts in human bodily experience. The article discusses two different ways in which gestures, described in the literature as metaphoric, illustrate both linguistically expressed metaphors and abstract concepts that are not verbally expressed as metaphors. The data analyzed in this paper have been taken from speeches of politicians and other public figures.

Keywords: metaphoric gestures, iconic gestures, metaphor, gesticulation, conversation, thinking-for-speaking.

1. Introduction

David McNeill (1992) distinguishes four categories of gestures accompanying speech: metaphoric, iconic, deictic, and baton or beat gestures. The paper will focus on metaphoric gestures, which are interesting primarily because they depict abstract concepts. As Langacker notes, “[t]he form and application of metaphoric gestures give palpable indication of a basic claim of cognitive semantics, namely the embodied nature of meaning and the grounding of abstract conceptions in perceptual and motor experience” (Langacker 2008: 249). Therefore, it is worth examining what types of gestures can be called metaphoric, how they are implemented in conversation, and how they reveal embodied conceptualizations of abstract concepts. Despite the rich literature on the subject of metaphoric gestures¹ (e.g. McNeill 1992, 2005, 2016; Gibbs 2008, selected works included in the volume *Metaphor and Gesture* or selected works included in the volumes *Body – Language – Communication*, vol. 1. 2013, vol. 2. 2014), it seems that due to the qualitative nature of many such studies (cf. Müller 2008: 224–225,

also, among others, Cienki 2013, McNeill 2005, 2014, Streeck 2009), it is still necessary to broaden the scope of data to observe word-gesture interactions in various contexts. This holds particularly true for the data analyses in Polish gesture studies: they are not numerous and do not have a systemic character (e.g. Antas 2013, Antas, Gembalczyk 2018, Jarmołowicz-Nowikow 2019, Jarmołowicz-Nowikow, Karpiński 2023, Jelec, Fabiszak 2019, Jelec, Kraśnicka 2022, Karpiński 2007, Kraśnicka 2021, 2023, Załazińska 2001).

Possible relations between speech and gestures that accompany it are discussed, for example, in the works of Cienki (2013), and Cienki & Müller (2008, 2009). Cienki & Müller (2008: 487–492) distinguish the following verbal-gestural relations: the same metaphor can be expressed verbally and gesturally; the metaphor can only be expressed in gestures and is absent in speech; gestures and speech can express metaphors differently, and a metaphor expressed in gestures can be different from the one expressed verbally. The subject of interest here will be the first two types of relations that illustrate the co-creation of the statement's meaning. The first concerns a situation in which a metaphoric gesture accompanies figurative language and realizes the same metaphor, while the other concerns a situation in which a metaphoric gesture specifies the conceptualization of an abstract concept and accompanies a non-metaphorical utterance. The examples discussed later in the article draw attention to two important aspects of metaphoric gestures. First, they provide exemplifications that support the claim that metaphoricity is modality-independent (Müller 2008). Secondly, they illustrate the iconic aspect of metaphoricity, thus showing its various dimensions. As Cienki pointed out, metaphoricity is not a feature that is either present or absent in gestures; instead, one can talk about the “quality” of metaphoricity (Cienki 2016: 133, also Cienki 2013).

2. Why are metaphoric gestures interesting?

Ways of combining gestures with speech and the semantics of these multimodal wholes are related to McNeill's concept of Growth Point. This is understood as a “(...) *minimal* psychological unit; that is, the smallest unit (...) [in Vygotsky's analysis] that retains the essential properties of a whole, in our case the whole of an image and a linguistically codified meaning category, such as we see in the speech-gesture window” (McNeill & Duncan 2000: 144). According to the researchers, even if gestures are iconic, they do not simply reduplicate the meanings expressed in speech,

but they modify them and, together with speech, create significant wholes by using different semiotic modes (McNeill 2013: 137). If gestures iconically illustrate an action, as for example writing, they profile specific aspects of this action, expressing the idea of a given action rather than actually imitating it (cf. Calbris 2011: 289). McNeill uses the term ‘co-expressive’ for such a relationship, which refers to the semantic co-expression of ideas and is also related to the temporal and semantic synchrony between words and gesture: “The term ‘co-expressive’ means that speech and gesture cover the same idea unit. Co-expressiveness is distinct from ‘mismatch’ or ‘supplement’, where speech and gesture cover distinct meanings” (McNeill 2013: 139). As McNeill & Duncan also claim, “by looking at the speech and gesture jointly, we are able to infer characteristics of this underlying idea unit that may not be obvious from the speech alone” (2000: 142–143).

The combination of gestures and speech to express an idea unit is in line with Slobin’s (1987) thinking-for-speaking concept – both gestures and speech are ways of thinking about concepts and their conceptualization, with gestures, as McNeill claims, being material carriers of meaning, and together with speech forming a “joint embodiment” of the thinking process (see also McNeill 2005). If the gestures accompanying speech, especially metaphoric and iconic gestures, co-create the utterance’s meaning, it seems reasonable to ask which aspects of it will be illustrated by gestures and how. Müller, examining metaphoric gestures, discusses an example in which the speaker uses the phrase *somehow it sparked* for expressing ‘the idea of falling in love’ (Müller 2008: 226) and performs a gesture called “precision grip” (Antas 2013: 66) – the thumb and index finger joined together as if holding a small object. She concludes that in this case “metaphoricity is [...] present in two modalities at a time, proving indeed that metaphor is more than a phenomenon of language [...]” (Müller 2008: 227). This approach, which is in line with Conceptual Metaphor Theory (Lakoff & Johnson 1980), clearly shows that gestures, especially those accompanying speech, express the speaker’s ways of conceptualizing concepts. Returning to Müller’s example, the so-called metaphoric gesture accompanies a statement that is also metaphorical in nature, revealing the conceptualization of the notion of falling in love as a spark. The gesture itself is called metaphoric because of the referent, which in this case is an abstract concept. The form of the gesture is iconic: the spark, regardless of whether it refers to actual fire or emotional fire, can be illustrated in the same way. It can therefore be said that the metaphorical nature of the gesture has an iconic dimension. As McNeill points out, metaphoric gestures are more holistic in their nature because they contain both an iconic element and a reference to an abstract

concept (McNeill 1992: 80, 2005: 39–40). On the other hand, a slightly different dimension of metaphoricity is presented by gestures that accompany non-metaphorical utterances. Like those discussed below, they illustrate the source domain of a metaphor, which is only conceptual because it has not been verbalized in the utterance. It is the gesture that reveals the way in which the idea is conceptualized. This is, therefore, an expression not only of the thinking-for-speaking process, but more broadly – thinking-for-speaking-and-gesturing: the speaker’s thoughts can be expressed not only by linguistic forms but also gestures (Müller, Cienki 2009). This, in my opinion, is one of the most important reasons why metaphoric gestures are worth continued research attention.

3. Gesture-speech relation

In order to show what meanings are expressed by verbal-gestural wholes, it is important to identify ways in which gestures are combined with speech, taking into account the fact that they are co-expressive in relation to speech, as stated above. My earlier observations showed that there may be several kinds of relations between metaphoric gestures and speech (e.g. Kraśnicka 2020, 2021; Jelec, Kraśnicka 2022); however, there are two of them that I find particularly interesting: in one case a metaphor occurs in speech and the gesture illustrates the source domain of the metaphor; in the other, the utterance is not metaphorical and the conceptualization of the abstract concept is expressed only by the gesture. In both cases, the meaning is created by two complementary semiotic modes, and in the examples listed in the second column of Table 2 below (discussed later in the article), we are dealing with the emergence of a conceptualization that was not present in words (the process of thinking-for-speaking-and-gesturing). Mittelberg calls these types of metaphors the *metaphor icon*² (Mittelberg 2014). Discussing examples of gestures performed by teachers while explaining grammar points, for example the concept of the main verb, she notes that they reveal a metaphorical interpretation absent in speech (in Mittelberg’s example it is categories are containers, 2014: 1726). In this case, according to the researcher, the metaphorical interpretation of the concept of a linguistic category is expressed monomodally, because speech is not metaphorical (see also Mittelberg and Waugh 2009: 336–342). It is worth noting, however, that due to a close connection between speech and gestures in the process of producing meaning, metaphors will still be expressed multimodally, even if the way of expression is only a gesture, because gestures must be accom-

panied by words³. Hence, we are dealing here with two types of semiotic modes (cf. McNeill *semiosis continuum* 2005: 10).

4. Data and method

The data for the analysis were taken from television programmes in which it is possible to observe people in natural conversation performing spontaneous gestures. It is obvious that in the case of politicians we may be dealing with greater communication awareness, and thus with greater awareness of the importance of gestures. However, it does not change the fact that every speaker has many adaptors in their repertoire, and even experienced speakers find it difficult to control them. This is evidence, among others, that full control of non-verbal behaviour is not possible.

Table 1 below shows the titles of the programmes and their total duration. On the basis of video stills, drawings were made by the author on a graphic tablet (Figures 1–9 in Section 5).

Table 1

Video materials used in article

TV programme's title	Video duration	Total duration of videos
<i>Bóg w wielkim mieście</i> (<i>God and the City</i>) (Szymon Hołownia, Wojciech Cejrowski) (14.02.2012)	00:22:00	
<i>Tomasz Lis na żywo</i> (<i>Tomasz Lis Live</i>) (Tomasz Lis, Donald Tusk)	00:49:54	
<i>Tak czy nie</i> (<i>Yes or No</i>) (Agnieszka Gozdyra, Daniel Olbrychski, Piotr Gliński)	00:25:36	
<i>Rozmowa Rymanowskiego</i> (<i>Rymanowski's Talk</i>) (Bogdan Rymanowski, Janusz Palikot, Tomasz Terlikowski)	00:22:57	
<i>Rozmowa poranna Roberta Mazurka</i> (<i>Robert Mazurek's Morning Talk</i>)	approx. 00:24:00	
		approx. 02:24:27

Source: author's own data; recordings in author's archive

The examples of metaphoric gestures were divided into two groups (see Table 2 below). Distinguishing two types of gesture-speech relations is aimed at their precise description and, for the sake of clarity, I will analyse them fol-

lowing this division. Nevertheless, as mentioned above, due to the dynamic and ambiguous nature of the gestural mode itself, ways of expressing meanings may have different dimensions, not always being dichotomous (see also: Cienki 2008).

Table 2
Types of gestures in the examples discussed

Iconic representation of a metaphor’s source domain; metaphor is expressed verbally	Conceptualization of an abstract concept – metaphor is expressed in gestures
Examples:	Examples:
1. <i>uchylić kapelusza</i> (<i>hats off</i>)	6. <i>polityczny nadzór</i> (<i>political supervision</i>)
2. <i>dystansować się od</i> (<i>to distance oneself from</i>)	7. <i>protekcja</i> (<i>protection</i>)
3. <i>trzeba pokazać pięść</i> (<i>you’ve got to shake your fist</i>)	8. <i>oszczędzać</i> (<i>to save money</i>)
4. <i>za bardzo nie pofrunie</i> (<i>will not fly away too far</i>)	9. <i>rozum, racjonalność</i> (<i>reason, rationality</i>)
5. <i>dogrzebać się</i> (<i>dig up</i>)	

Source: author’s own data

It should be noted that with this kind of data source, gestures are not always sufficiently visible, because the shots are often framed in such a way that the lower part of the speaker’s body or their hands cannot be seen well enough. Although gestures that are not fully visible should not be taken into consideration, I made one exception (see Example 7 and Figure 7 in Section 5.2), because in this particular case it is obvious what type of gesture the speaker is preforming.

5. Discussion of the examples

5.1. Iconic representation of a metaphor’s source domain; metaphor is verbally expressed

Example 1

In the first example the speaker says: ...*then I’ll take my hat off and I’ll say OK (...to uchylę kapelusza i powiem OK...)*. He uses a Polish idiom whose literal translation is ‘to take off a hat’ (semantically close to the French idiom *chapeau bas*), which means ‘to show respect’, and in the case discussed

– ‘to show acceptance’. The accompanying gesture illustrates the activity of taking off a hat, but what is profiled here is only the direction of the movement that imitates taking off a hat. The direction of the movement is downwards, which is an important element of the idiom’s meaning. Taking off one’s hat to show respect to someone is like a metonymic bow. Thus we are dealing with the metaphor *TO SHOW RESPECT IS TO LIFT A HAT*, which can be extracted from the meaning of the Polish idiom and which is highly conventionalized and culture specific. The gesture is a direct illustration of the speaker’s words (the idiom), although it only shows some aspects essential to the whole expression – a downward movement as a sign of respect. The gesture iconically illustrates a concrete activity, but is metaphoric because it refers to an abstract concept – *RESPECT, ACCEPTANCE* (cf. the structure of a metaphoric gesture, McNeill 1992).

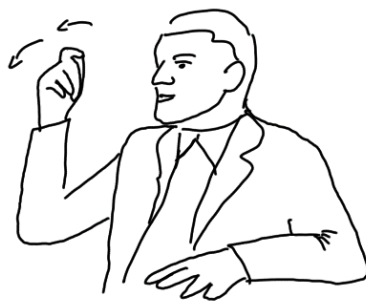


Figure 1. *...then I'll take my hat off and I'll say OK...*
...to uchylę kapelusza i powiem OK...

Example 2

With the words *...he distances himself from his church* (*dystansuje się od własnego kościoła*), the speaker makes a gesture called the Holding Away Gesture⁴ – “flat hand(s), palm vertically away from speaker’s body, moved or held outwards” (Müller 2014: 145). The meaning of this gesture family is “refusal, stopping something from intrusion, stopping from continuation, rejecting a speaker’s or hearer’s topic of talk, and a qualification of the rejected topic as an unwanted one” (Müller 2014: 145). According to Müller, “[...] instrumental actions are turned into metaphorical actions, where the actual objects are transformed into metaphorical objects that are referred to in speech [...]” (2014: 146). Thus, we are dealing here with the metaphor: *MENTAL DISTANCE IS PHYSICAL DISTANCE* (or, more schematically, the realization of Grady’s Primary Metaphor *ABSTRACT IS CONCRETE*), which is expressed both in speech and in gesture. The very process of distancing, which is not separately expressed verbally, is emphasized by the speaker by repeating the gesture.

Figure 2. ...*he distances himself from his church...*
...dystansuje się od własnego kościoła...



Example 3

In the third example, the speaker's utterance: ...*if nothing works* [literally: *helps*], *then you have to show your fist...* (...*jak już nic nie pomaga, trzeba pokazać pięczę...*) is also metaphorical. The accompanying gesture reveals the metaphor that underlies the speaker's words – to show somebody a fist is to express a threat, to threaten somebody. The manner of performing the gesture – a short, strong forward movement and exposing the fist itself – profiles determination and strength. The gesture itself is an act of threatening someone; therefore, apart from the metaphorical meaning of the gesture (and speech): TO EXPRESS A THREAT IS TO SHOW A FIST, this non-verbal behaviour, common in European culture, is symbolic in nature. As Jarząbek notes, “the sign expresses a threat, [...] it replaces or accompanies words denoting a threat” (Jarząbek 2016: 70).

Figure 3. ...*if nothing works you have to show your fist...*
...jak już nic nie pomaga trzeba pokazać pięczę...



Example 4

In another example, in which the speaker's statement concerns a candidate's behaviour during an election campaign, the speaker says: ...*so if one of the candidates does not fly away too far...* (...*więc jeśli któryś z kandydatów za bardzo nie pofrunie...*) and makes a gesture that is directly related to the speech and illustrates the schematic movement of flying away. It is a metaphor for unrealistic promises given to the voters and is the opposite of: to have your feet on the ground. The figurative *flying away* is

related to the metaphorical loss of the ground under one's feet. The direction of the movement is profiled in the gesture – upwards, which is important for the metaphorical meaning of the utterance (speech with gesture) and which contrasts with what is permanent and stable (downwards). The speed of the movement also indicates its connection with rising up. The gesture is metaphorical because it illustrates an abstract concept, i.e. unrealistic promises, *flying away* being the source domain of the metaphor (TO GIVE UNREALISTIC PROMISES IS TO FLY AWAY), and profiles an important element of this multimodal metaphor – the direction and speed of movement.

Figure 4. ...so if one of the candidates
does not fly away too far...
...więc jeśli któryś z kandydatów
za bardzo nie pofrunie...



Example 5

In the last example in this category, the speaker's utterance *...but if you dig deep enough, it turns out that ...* (...no ale jak tak *dobrze się dogrzebać*, to okazuje się, że) is accompanied by a gesture imitating digging. The gesture illustrates the act of digging, which is also expressed linguistically and which is a metaphor for searching the Internet very thoroughly. Information that is difficult to access is *deeply* hidden, so SEARCHING THE INTERNET IS DIGGING⁵. The whole utterance creates a complete idea unit, in which an important element is gestural imaging implying difficulties in reaching information.

Figure 5. ...but if you dig deep enough,
it turns out that...
...no ale jak tak dobrze się dogrzebać,
to okazuje się, że...



5.2. Conceptualization of an abstract concept – metaphor is expressed in gestures

Examples 6 and 7

In this category a metaphoric gesture expresses a conceptualization of the concept but the metaphor is present only in the gestural mode. While uttering the sentence ... *PiS and SLD have political supervision over the public media...* (...*polityczny nadzór nad mediami publicznymi mają PiS i SLD...*), the speaker makes a gesture of holding his hands over something, as shown in Figure 6. This is a realization of Grady's Primary Metaphor: CONTROL IS BEING ABOVE. As Grady states, the motivation for this metaphor is "the correlation between being in a higher physical position and having greater control over objects, people, situations [...]" (Grady 1997: 290). A similar example was discussed by Lhommet and Marsella (2016): the statement that certain cultural customs oppress women was accompanied by a gesture (made with both hands) that imitated pressure from above. The gesture suggested the strength of those who oppress women. However, the words in the statement cited above are not metaphorical, so the concept of control was only expressed gesturally. In this verbal-gestural whole, the gesture additionally expresses the conceptualization of supervision as control *over* something, and the downward movement of the hand is particularly important for this meaning.

A similar example, although the speaker's hands are hardly visible (the exception mentioned above), is shown in Figure 7. With the words ...*a ridiculous man, who has protection over it...* (...*niepoważny człowiek, który jakby protekcję nad tym...*) (the sentence in Polish is incomplete) the speaker spreads his arms wide, with a smooth upward movement. This gesture is the only realization of the metaphor CONTROL IS BEING ABOVE, as the accompanying phrase is not figurative.

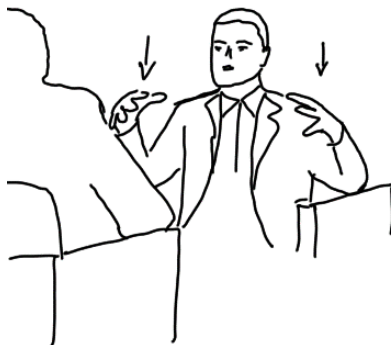


Figure 6. ... *PiS and SLD have political supervision over the public media...*
...*polityczny nadzór nad mediami publicznymi mają PiS i SLD...*

Figure 7. ...a ridiculous man, who has protection over it...
 ...niepoważny człowiek, który
 jakby protekcję nad tym...



Example 8

With the words ... *when we have a crisis and when we have to save (money)*... (...*wtedy kiedy mamy kryzys i kiedy mamy oszczędzać*...) the speaker clenches his hands into fists, illustrating how he understands the concept of saving money. The gesture is very fast, instantaneous, simultaneous with speech. It appears for a moment, when the speaker says *when we have to save*, and then the speaker lowers his hands. The temporal synchronization of gesture and speech (cf. McNeill 2016, McNeill & Duncan 2000: 142–147) indicates that the abstract concept of saving is depicted as literally squeezing an object in the hands. The mechanism of metaphorical projection makes it possible to conceptualise saving as limiting oneself in a specific way, which is expressed by firmly squeezing something in the hands, or clenching one's fists. Although the sense of this verbal-gestural whole can be seen owing to both modes contributing to conveying meaning, it is the gesture that expresses the way of understanding the concept of saving.

Figure 8. ...*when we have a crisis and when we have to save (money)*...
 ...*wtedy kiedy mamy kryzys i kiedy mamy oszczędzać*...



Example 9

In the last example, the utterance ...*reason, rationality, thinking and logical coherence are completely foreign to you*... (...*rozum, racjonalność, myślenie i spójność logiczna są panu całkowicie obce*...) is accompanied by a series of almost identical gestures. With each word the speaker separates his hands from each other. The gestures accompany each word on which the sentence stress falls – *reason, rationality, thinking*. Then the speaker's hands stop,

illustrating *logical coherence*, and the speaker adds a verbal phrase to what has already been depicted gesturally. This example shows very clearly that the conceptualization of the idea that is essential for the statement, namely lack of coherence, is present first in the gesture, as a disconnection, and secondarily in the utterance.

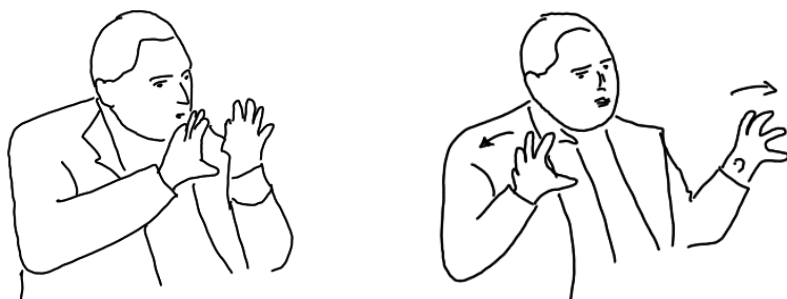


Figure 9. ...*reason, rationality, thinking and logical coherence* are completely foreign to you...
...*rozum, racjonalność, myślenie i spójność logiczna* są panu absolutnie obce...

As Lhommet and Marsella claim, “[c]ontrasting objects over a property relies on the metaphor similarity is proximity, where the distance between objects represents how much they differ regarding this property” (2016: 3). In Grady’s words, “things perceived as similar are ‘near’ each other, while things that are different from each other are further apart” (Grady 1997: 130).

Conclusion

As the above examples have shown, metaphoric gestures can be defined as those which, through an iconic form, realize conceptual metaphors that are not necessarily expressed verbally. The iconicity of metaphoric gestures refers to the source domain, which is related to everyday bodily activities, such as covering something from above, holding objects in one’s hand, or separating them (Examples 6–9). They can be reflected in gestures as realizations of mimetic schemas (Zlatev 2007, 2014, Cienki 2015), i.e. conceptual representations abstracted from concrete physical actions, more detailed than image schemas (Evans 2009: 137, Cienki 2015). Gestures themselves imitate literal human actions, such as pushing something away, squeezing something in the hands, digging up something, and thus

make verbal (and conceptual) metaphors concrete, since they refer directly to bodily and motor experiences. The way in which mimetic schemas are realised in iconic and metaphoric gestures is a topic that requires further research, as it adds to the various dimensions of metaphoricity. This also raises the question of whether there is a limited number of (mimetic) schemas representing abstract concepts, since some gestures refer to the same concept in a similarly schematic way (the example of *protection* and *supervision* above). Johnson, when describing image schemas, mentioned a number of them (1990: 126); however, mimetic schemas may be more numerous due to their higher degree of detail. To confirm this hypothesis, however, in-depth research would be required.

The analysis of the data also showed that metaphoricity is present at the cognitive level, not only linguistic or even gestural. The combination of both semiotic elements allows for the creation of an image reflecting the meaning of the utterance (thinking-for-speaking-and-gesturing). What is essential here is that the content expressed in gestures profiles those elements that are particularly important for the meaning of the utterance as a verbal-gestural whole (e.g. upward movements in the case of the *flying too far* gesture). At the same time, gestures can be combined with the verbal layer in various ways. They may refer directly to figurative words and represent specific, essential aspects of the metaphor's source domain which is expressed verbally. Gestures that refer directly to the speaker's words can also express those conceptualizations which are absent from the utterance (for instance the concept of *saving money* or *protection*). Some of the discussed examples may be a confirmation of what Müller (2008: 226–233) claims about the essence of metaphor – that it is modality-independent. It is the conceptual system that is embodied, structured by metaphors and realized by the non-verbal semiotic mode.

N O T E S

¹ Only selected, relevant works discussing this topic are listed, including monographic approaches.

² As Mittelberg states: “With the help of Peirce’s iconic modes, one may differentiate gestural image icons of metaphoric linguistic expressions from gestural metaphor icons which manifest a metaphoric construal not expressed in speech” (2014: 1725).

³ It should be noted, however, that the question of the multi- or monomodality of messages is still debatable (cf. Müller, Cienki 2009, Libura 2019).

⁴ From the family of the Away Gesture, Müller 2014; Kendon’s Open Hand Prone OHP, Vertical Palm VP, the ‘Palm Down’ family, 2005: 248–264.

⁵ The statement of the person invited to the studio concerned fake news that appeared on the Internet. The fact that the gesture depicts searching the Internet and not any other kind of “searching” is evident from the speaker’s entire statement.

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