Multimodal language use in Indonesian: Recurrent gestures associated with negation

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Abstract

This paper presents research findings on manual gestures associated with negation in Indonesian, utilizing data sourced from talk shows available on YouTube. The study reveals that Indonesian speakers employ six recurrent negation gestures, which have been observed in various languages worldwide. This suggests that gestures exhibiting a stable form-meaning relationship and recurring frequently in relation to negation are prevalent around the globe, although their distribution may differ across cultures and languages. Furthermore, the paper demonstrates that negation gestures are not strictly tied to verbal negation. Overall, the aim of this paper is to contribute to a deeper understanding of the conventional usage and cross-linguistic distribution of recurrent gestures.

Keywords: recurrent gestures, negation, Indonesian

1. Introduction

Gesture research has recently witnessed a growing interest in the investigation of recurrent gestures associated with refusal, denial, and negation. Recurrent gestures are characterized by a stable relationship between their form and meaning, occurring consistently across diverse usage contexts and among different speakers (Ladewig 2011). These gestures possess a conventional nature (Ladewig 2014) and are also referred to as pragmatic gestures (Kendon 1995, 2004) due to their potential pragmatic function. They can be differentiated into "speech-performatives," which indicate the speaker's communicative intention, and "performatives," which influence the actions of others (Teßendorf 2014: 1544). Furthermore, recurrent gestures can serve a referential function, visually illustrating concrete or abstract elements discussed in speech (Bressem and Müller 2017).

Recurrent gestures can also form the so-called gesture families. A gesture family refers to a grouping of gestures that share one or more formational features and are connected by a common semantic theme (Kendon 2004: 227). In line with this analysis, Bressem and Müller (2014b) propose the 'Away' gesture family, comprising four recurrent gestures: sweeping away, holding away, throwing away, and brushing away. They have a common formational quality characterized by a predominantly straight movement away from the body. Their motivation stems from a semantic association with various manual actions that involve clearing the surrounding space of undesirable objects. The gestures within this family collectively embody semantic themes related to negation, refusal, and negative assessments (Bressem and Müller 2014b: 1595).

Scholars have recently discovered the presence of various types of gestures, including the Away gestures, conveying negation across different languages. Examples include Italian (Kendon 2004: 248–264), English (Harrison 2010), French (Calbris 2011), German (Bressem and Müller 2014b), Savosavo (Bressem et al. 2017), and Israeli Hebrew (Inbar and Shor 2019). These studies indicate that such patterns represent a shared type of gesture that transcends cultural boundaries, suggesting a potentially widespread distribution across languages and cultures.

The present paper offers an initial analysis of gestures employed to express denial, refusal, rejection, and negation in spoken Indonesian. Drawing on the methodologies outlined in Kendon (2004), Bressem et al. (2013), and Ladewig and Bressem (2013b), the paper investigates six recurrent gestures used in Indonesian to convey negation: sweeping away, holding away, brushing away, throwing away, index-finger wag, and 5-handshape wag. Consequently, the paper contributes to the study of recurrent gestures within an Austronesian language, enriching our understanding of both conventional gestures in general and gestures associated with negation in particular (cf. Cooperrider 2019).

2. Data and method

The present study is based on a corpus of talk shows in Indonesian, consisting of approximately five hours and fifteen minutes of video material. The corpus was sourced from YouTube and encompasses recordings from the years 2017 to 2020. In total, the corpus features 32 speakers, including 13 females and 19 males. It is worth noting that all speakers participating in these talk shows are above the age of 20. Throughout the recordings, speakers were captured on camera from the waist up; however, there are instances where they move around, revealing their entire bodies.

For the identification of gestures, we followed a three-step procedure based on Kendon (1980) and Ladewig and Bressem (2013a) containing three steps. Firstly, the gestural form analysis involved sifting through the data without sound (sound off) to identify gestural patterns associated with negation that have been documented in the literature mentioned earlier. We annotated and coded the different phases of the gestures, particularly the strokes, using the annotation program ELAN (Brugman and Russel 2004). Secondly, the gestural meaning analysis focused on examining the semantic content conveyed solely through the gestural form. Gestures may either repeat information already expressed verbally or provide additional or new information. Thirdly, the gestural form-meaning analysis involved analyzing the relationship between gestural forms and

their meanings. We identified similar gestures associated with negation in the literature, which can occur in contexts with or without any verbal markers of grammatical negation in Indonesian, and examined the context in which they were used.

In this study on Indonesian gestures associated with negation, we focused solely on manual gestures. We did not investigate headshake, which is commonly observed alongside verbal negation and occasionally accompanies manual gestures as well (Inbar and Shor 2019). The synchronization between gestural and verbal negation shows some variation. Often, the gestural stroke aligns with the verbal negator, but in certain instances, the negative gesture occurs before or after the verbal negator.



Figure 1. Six gestures associated with negation in Indonesian.

3. Negative gestures used by Indonesian speakers

In this section, we introduce six types of gestures commonly used by Indonesian speakers, which bear similarities to gestures associated with negation found in other languages and documented in the literature. Four of these gestures belong to the family of Away gestures (Bressem and Müller 2014b): sweeping away, holding away, brushing away, and throwing away. Additionally, two other conventional gestures associated with negation are identified: index-finger wag and 5-handshape wag (Mesh and Hou 2018).

We applied a linguistic analysis of forms and meanings to each gesture. The gestural stroke is highlighted in bold text in the spoken utterance. Furthermore, we recognized the significance of the non-linguistic context, including the cultural and political background of Indonesia, in comprehending the speech and gestures (cf. Bressem et al. 2017).

3.1. Sweeping away gesture

The sweeping away gesture, also known as the "Open Hand Prone" or "horizontal palm ZP" according to Kendon (2004: 255) and "palm down horizontal across body gesture" or "PDacross" as described by Harrison (2010: 31) is a recurrent gesture where the open palm faces downward and is horizontally and laterally moved outward, typically with a determined quality to the movement (Bressem and Müller 2014b). This gesture has been observed in other languages and serves a similar pragmatic function as a manual expression of negation (Bressem and Müller 2014b: 1597). The gesture can also be performed with both hands initially positioned at the center of the body and then moved away from the body towards the periphery.

Sweeping away gesture (Figure 1a)

(1)		<i>ambil</i> take		<i>pintas,</i> short.cut
	dia 3sg	<i>nyelundup</i> , smuggle		
	dia 3sg	menghindar avoid	<i>dari</i> from	<i>cukai</i> tax
	dan and	sebagainya. so.forth		
		took a shortcut, s/he smuggled, avoided customs and all.		

In our data, FH is shown using his right hand to perform the sweeping away gesture (Figure 1a). Prior to this gesture, FH says *Dia liat nih, pasar nggak bisa nih kalo kita musti nyetor ke negara* 'So s/he saw (the) market, (it) won't be possible if we had to pay (tax and other production costs) to the state'. In this utterance, FH uses the gender-neutral singular pronoun *dia* to refer to corporations as a single concept, see (1). Along with the utterance, FH positions both hands with the "Palm Lateral Towards Center orientation" (Ladewig and Bressem 2013a: 214–215) in the periphery center of the gesture space, creating a horizontal plane in front of his body (Calbris 2003).

After that, FH positions his right hand in the central gesture space with the palm down, while the left hand remains in the PLTC orientation described earlier. Then, the speaker utters the sentence mentioned in (1) and performs the sweeping away gesture four times. FH sweeps away the imaginary horizontal plane he created in front of him with both hands. He repeats the sweeping away gesture while listing descriptions of the behavior of corporations that smuggled lobster larvae to Vietnam in 2020, expressing his disapproval. The strokes are synchronized with the utterances: jalan pintas 'short cut', nyelundup 'smuggle', cukai 'tax', and dan sebagainya 'and so forth', clearing the previously created horizontal plane from unwanted objects that are expressed verbally (Bressem and Müller 2014b). The sentence in (1) does not contain overt grammatical negation, but the strokes of the sweeping away gesture co-occur with these words or phrases, indicating that the speaker gives them a negative evaluation (Inbar and Shor 2019). The repetition of the sweeping away gesture in (1) bears a striking resemblance to Harrison's example in English, in which the speaker enumerates the topics he dislikes (qualities of television programs) and repeats the sweeping away gesture for each negated topic (Harrison 2014: 126–127).

The sweeping away gesture used by FH corroborates the view that the speaker deploys a gesture to depict events or situations for which "he is not the author" (Kendon 2004: 263). With the sweeping away gesture, FH rejects the topics of talk (Bressem and Müller 2014b), i.e. actions done by other people.

3.2. Holding away gesture

The holding away gesture is referred to as "Open Hand Prone ('vertical palm' VP)" by Kendon (2004: 251–255), "Palm(s) Forwards" by Calbris (2011: 164–166) and "Vertical Palm" by Harrison (2018: 77–79). It involves flat hands with palms held vertically and facing away from the speaker in front of the body (Bressem and Müller 2014b: 1597). This gesture is also observed among speakers of other languages, as mentioned in Section 1. The holding away gesture can be performed with one or both hands.

Holding away gesture (Figure 1b)

	<i>hasilnya</i>	<i>agak</i>	<i>kontradiktif.</i>
	result	rather	contradictory
	<i>kita</i> 1.pl.incl	<i>ajukan,</i> propose	itu DEM
(2)	Beberapa	pertanyaan	<i>yang</i>
	some	question	REL

Some of the questions we ask, the results are somewhat **contradictory**. (cina ZAC-GU 009)

In our data, ZAC uses both hands to perform the holding away gesture in (2). Through this gesture, ZAC creates a frontal plane in front of her body (Calbris 2011: 164) and indicates that she is halting a current line of action that she assumes her interlocutor is engaged in (Kendon 2004: 251). Before (2), ZAC advises her interlocutor to exercise caution when interpreting the results of the intolerance survey conducted by her institution, The Wahid Institute. The survey reveals that approximately 60% of young people in Indonesia either believe in or desire the establishment of a caliphate in Indonesia. Following (2), ZAC mentions that the survey also indicates that when asked about their preferred leader, most young Indonesians still prefer a fair non-Muslim leader over a corrupt Muslim leader. With the holding away gesture, the speaker conveys the concept of halting or stopping the assumption made by her interlocutor, who finds the survey results alarming due to the explicit desire for a caliphate expressed not only by university students but also high school students in Indonesia.

The act of performing the holding away gesture confirms the involvement of the actor in a representative action of preventing or withholding something (Kendon 2004: 263). By using the holding away gesture, speaker ZAC ensures that the immediate vicinity of her body remains free from unwanted objects by keeping them at a distance (Bressem and Müller 2014b).

As with the sweeping away gesture, the holding away gesture in (2) accompanies a sentence that lacks overt grammatical negation. However, the holding away gesture is used alongside the word *kontradiktif* 'contradictory' and aligns with the covert negative meaning of the word with which it cooccurs (Inbar and Shor 2019).

3.3. Brushing away gesture

The brushing away gesture, also referred to as brushing aside by Teßendorf (2014), is performed by extending a lax flat hand with the palm facing towards the body of the speaker, and then moving it outward with a quick twist of the wrist (Bressem and Müller 2014b: 1598). This gesture is rooted in the physical action of moving aside small disruptive objects, such as crumbs, mosquitoes, or dust, and the characteristics of this action are metaphorically applied to the verbal domain as a way of dismissing or disregarding verbal subjects or someone else's behavior (Teßendorf 2014). The brushing away gesture has also been observed among speakers of German (Bressem and Müller 2014b) and Spanish (Teßendorf 2014).

Brushing away gesture (Figure 1c)

(3)	Penyelundupan smuggling	ada EXIST	dua, two
	saya 1sG	lihat. see	Penyelundupan smuggling
	yang REL	<i>eh</i> uh	informal, informal
	yang REL	<i>kultural</i> , cultural	yang REL
	<i>biasa</i> commonly	<i>terjadi</i> happen	dengan with
	penyelundupan smuggling	formal.	

There are two kinds of smuggling, I see. The smuggling which is uh ... informal, **cultural**, which **commonly** happens and the formal smuggling. (lobster DM-GU 004)

The example of the brushing away gesture in our corpus in (3) is performed twice by speaker DM with his right hand. Similar to example (1), the context revolves around the smuggling of lobster larvae to Vietnam in 2020, where the export of such larvae had been prohibited since 2016. In 2020, the Minister of Maritime Affairs and Fisheries revoked the export regulation and granted export licenses to several corporations, despite objections from various parties, including the speaker, who serves as the Deputy Chairman of a Commission of the House of Representatives. These corporations engaged in falsifying export documents and shipped more larvae than they declared. The talk show took place after the arrest of the minister, who was allegedly involved in bribery.

Speaker DM states that he can identify two types of corruption in Indonesia: corruption that is common and has become ingrained in Indonesian culture, and "formal corruption". The corruption related to lobster larvae mentioned above falls into the second category since it had the support of the government. DM deploys the brushing away gesture twice while using the words *kultural* 'cultural' and *biasa* 'common' to express his assessment of this second type of corruption, which he considers less severe or significant compared to the topic being discussed in the talk show. Consequently, he believes there is no need to spend much time discussing this kind of "common" or "cultural" corruption. Through the strokes

of his brushing away gesture, the speaker dismisses or removes this unimportant topic from his speech.

Like the two gestures discussed above, the brushing away gesture accompanies a sentence that lacks grammatical negation. Moreover, the two strokes of the brushing away gesture coincide with the words *kultural* 'cultural' and *biasa* 'common,' which modify the noun *penyelundupan* 'smuggling'. These words themselves do not inherently convey grammatical negation. Through the brushing away gesture, the speaker expresses their negative assessment of the concept of 'cultural common smuggling' that is verbally expressed without overt grammatical negation.

As we will see in the next three examples below, there are also recurrent gestures that accompany utterances containing overt verbal grammatical negators. Later, we will also discuss the interaction between negative gestures and overt verbal negation (see section 4).

3.4. Throwing away gesture

The throwing away gesture, also known as Tossing to the ground by Calbris (2011: 201), involves a lax flat hand with the palm facing away from the body, moving downward by bending at the wrist (Bressem and Müller 2014b: 1599). The throwing away gesture is motivated by a similar intention as the brushing away gesture, which is to clear the space around the body and discard disruptive objects (Bressem and Müller 2014b). However, unlike the brushing away gesture that relates to small objects, the throwing away gesture is associated with medium-sized objects that are roundish in shape (Bressem and Müller 2017: 4). It appears to be more commonly used by speakers of German, whereas the brushing away gesture is more widely observed in Spain and Cuba (Bressem and Müller 2014b).

Throwing away gesture (Figure 1d)

Yes, it's okay, (if you are) not promoted to next grade it **doesn't** matter. (sd_DC-GU_033)

Speaker DC is the host of the talk show and invites a group of successful businessmen who never completed primary school. Prior to the talk show, DC recounts a private conversation between himself and his child, expressing that the Indonesian education system places significant pressure on children. He mentions that his child experiences stress whenever they receive homework. DC reassures his child that it does not matter if the homework is left unfinished, if the teacher becomes upset, or if the child does not progress to the next grade.

DC uses the throwing away gesture with his left hand in synchronization with the verbal expression *nggak apa-apa* 'doesn't matter' or 'never mind'. This combination of gesture and verbal expression is analogous to the German modal *egal* which is often accompanied by the throwing away gesture as the second most commonly used modal by German speakers (Bressem and Müller 2017). The verbal expression alone could

be perceived as apathetic or disinterested in the child's academic progress. However, when accompanied by the throwing away gesture, the verbal expression can only be interpreted as the speaker's intention to reassure and motivate his child. Through this gesture, the speaker alleviates the child's fear of not advancing to the next grade. The throwing away gesture conveys a kinesic expression that aims to relieve pressure and reduce the child's school-related stress.

Unlike the three away gestures discussed above, which are used without grammatical negation, the throwing away gesture in our example here is used in synchrony with the colloquial grammatical negation *nggak* 'no, not'.

3.5. Index-finger wag gesture

The index-finger wag gesture is involves wagging a selected index finger back and forth laterally. The wagging movement originates at the elbow joint but may also include oscillation at the wrist (Mesh and Hou 2018: 337). It is also referred to as index up by Streeck (2008) and stretched index finger - moved horizontally by Bressem and Müller (2014b) or finger wag by Inbar and Shor (2019). A sign, formally similar to the index-finger wag gesture, is found in French Sign Language, San Juan Quiahije Chatino Sign Language, and Indonesian Sign Language (Harrison 2018: 184; Mesh and Hou 2018: 337–339; Palfreyman 2019: 254), suggesting that the index-finger wag gesture is conventional and retained by signers (Mesh and Hou 2018).

Index-finger wag gesture (Figure 1e)

(5)	<i>Aduh</i> ,	<i>tapi</i>	<i>sebenernya</i>
	EXCL	but	actually
	masih	ada	<i>beberapa</i>
	still	EXIST	several
	makanan	<i>yang</i>	sebenernya
	food	REL	actually
	<i>nggak</i>	<i>boleh</i>	<i>kita</i>
	NEG	may	1pl.incl

konsumsi...
consume

Oh, but actually there are some foods that we really shouldn't eat ... (oz_RBA-GU_001)

In our corpus, RBA, a medical physician in a talk show on health and nutrition, performs the index-finger wag gesture while describing how to identify decayed food and determine if it is still safe to eat. This gesture occurs in response to her interlocutor stating that they often consume expired food that still looks and tastes good. The index-finger wag gesture coincides with the entire relative clause sebenernya nggak boleh kita konsumsi 'we really may not eat', conveying a negative imperative similar to instructions or reprimands given to children (Streeck 2008). By using the index-finger wag gesture, RBA emphasizes her disagreement with her interlocutor's habit of taking chances with their health by consuming potentially spoiled food, which could result in food poisoning or other health issues. The index-finger wag gesture in (5) coincides with the colloquial grammatical negation nggak 'no, not' followed by the modal boleh 'may' emphasizing the negation that has already been expressed in speech.

3.6. 5-handshape wag gesture

The 5-handshape wag gesture is performed by laterally wagging a (lax) flat hand in front of the body, with palms vertically facing away from the speaker. This gesture is also referred to as the Vertical Palm gesture with oscillation by Harrison (2018: 94–102).

5-handshape wag gesture (Figure 1f)

(6)	<i>Nggak</i>	<i>mau</i> .	Ada
	NEG	want	EXIST
	<i>yang</i>	<i>nggak</i>	<i>mau</i>
	REL	NEG	want
	<i>pake</i>	<i>kita</i>	Pancasila.
	use	1.pl.incl	Five.Principles
	Karena because	<i>merasa</i> feel	itu DEM
	udah already	That's That's	not not
	<i>me</i> me	<i>gitu</i> . like.that	

(They) do not want. There are those who don't want to use/wear (something in which it is written) we (are the) Five Principles. Because (they) feel it's already (like) ... That's not me like that. (cina_NS-GU_026)

Speaker NS, the host of a talk show taking place in Melbourne, Australia, in July 2019, shortly after the presidential election in May of that year, uses the 5-handshape wag gesture. The reason for hosting the talk show abroad is explained by the host, who mentions that the election has resulted in such strong polarization within Indonesian society that it is no longer safe to openly discuss one's political opinions in Indonesia. Prior to (6), she asks her interlocutor Inget nggak sih, waktu rame-rame kita bikin foto, kita Indonesia, kita Pancasila? 'Do you remember when each of us was using the split profile pictures with the slogan "We are Pancasila" on one side (and our own portrait on the other side)?' Her interlocutor responds affirmatively. Even before asking the question, NS mentions that due to the polarization, the term Pancasila (referring to the official philosophical foundation of the Indonesian state) has taken on a new meaning, representing people belonging to one of the two polarized groups formed by the election. The 5-handshape wag gesture occurs in conjunction with the entire first part of the utterance, Nggak mau. Ada yang nggak mau 'Don't want. There are (those) who don't want'. With the use of the 5-handshape wag gesture, the speaker reinforces her speech, which includes negation.

The 5-handshape wag gesture in (6) used in synchronization with the informal grammatical negation nggak 'no, not' followed by the modal mau 'want', and the rest of the phrase $ada\ yang\ nggak\ mau$ 'there are those who do not want'. Therefore, the 5-handshape wag gesture enhances the intensity of the negation that is already conveyed through speech.

4. Discussion

The paper presents six recurrent gestures in Indonesian associated with refusal, denial, and negation: sweeping away,

holding away, throwing away, brushing away, index-finger wag, and 5-handshape wag. The forms and meanings of these gestures bear similarities to those associated with negation documented in the literature.

As highlighted by Bressem et al. (2017), the findings of this paper indicate that recurrent gestures are pervasive across diverse languages and cultures. This prevalence can be attributed to their origin in instrumental actions (McNeill 2005), which are bodily actions common to all individuals and not limited to specific cultures or languages (cf. Gawne 2021). In everyday life, people encounter various objects that disrupt their activities and they naturally employ hand movements to remove or dismiss them (Bressem and Müller 2014b). These fundamental actions are subsequently incorporated into the realm of communication through gestures.

Comparing the gestures identified in this study with those used by speakers of other languages raises intriguing questions. Why do speakers of certain languages employ specific recurrent gestures while excluding others? For instance, Savosavo speakers are documented to primarily utilize the sweeping away and holding away gestures (Bressem et al. 2017), whereas German speakers tend to employ the throwing away gesture more frequently, and the brushing away gesture is more prevalent in Spain and Cuba (Bressem and Müller 2014b: 1599). Among the six recurrent gestures associated with negation identified in this study, which one is more widely used by Indonesian speakers? This preliminary investigation can serve as a foundation for further research, which in turn can contribute to the typology of recurrent gestures.

Throughout the paper we have identified two kinds of uses of recurrent gestures of negation: those that accompany utterances with overt grammatical negators and those that do not. This observation raises further questions that are crucial to our comprehension of recurrent gestures associated with negation in Indonesian. How frequently do gestural negations occur alongside overt grammatical negation in spoken Indonesian? Which recurrent gestures are more commonly employed by Indonesian speakers to accompany explicit grammatical negation compared to others? A study conducted on Savosavo found relatively few instances of gestural negation co-occurring with overt grammatical negation (Wegener and Bressem 2019). Another study suggests that gestures associated with negation, which are used synchronously with utterances lacking explicit grammatical markers of negation, imply a higher abstract notion of negation, namely negativity (Inbar and Shor 2019). However, most of their examples involved a lateral head shake (which was not considered in the present study), with only a few instances involving manual gestures. Do Indonesian speakers exhibit similar patterns? We leave these questions to be addressed in future research.

Future analyses of Indonesian recurrent gestures could benefit from incorporating a context-of-use analysis, exploring the broader discursive contexts in which the gestures are employed. Such analysis can unveil variations in form and meaning of the gestures (Ladewig 2011; Bressem et al. 2017). To delve deeper into the subject, additional data is required to facilitate a more comprehensive examination of these gestures.

5. Conclusions

Like speakers of various languages worldwide, Indonesian speakers also utilize recurrent gestures to convey refusal, denial, and negation in their communication. Exploring the development of meaning and structure in recurrent gestures over time offers an intriguing avenue for research and can contribute to our understanding of the emergence of sign languages (Mesh and Hou 2018; Palfreyman 2017, 2019). Additionally, the identification and documentation of monocultural repertoires of recurrent gestures (cf. Bressem and Müller 2014a) serve as a foundation for investigating crosscultural and cross-linguistic phenomena from a multimodal perspective.

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7. References

- Bressem, Jana, Silva H. Ladewig & Cornelia Müller. 2013. Linguistic Annotation System for Gestures. In Cornelia Müller, Alan Cienki, Ellen Fricke, Silva Ladewig, David McNeill & Sedinha Teßendorf (eds.). Body-languagecommunication. An International Handbook on Multimodality in Human Interaction (1), 1098–1124.
- Bressem, Jana & Cornelia Müller. 2014a. 119. A repertoire of German recurrent gestures with pragmatic functions. In Cornelia Müller, Alan Cienki, Ellen Fricke, David MacNeill, Sedinha Teßendorf & Silva H. Ladewig (eds.). Body language communication. An international handbook on multimodality in human interaction (Handbücher zur Sprach- und Kommunikationswissenschaft /HSK] 38.2), 1575–1591. Berlin: de Gruyter.
- Bressem, Jana & Cornelia Müller. 2014b. 120. The family of Away gestures: Negation, refusal, and negative assessment. In Cornelia Müller, Alan Cienki, Ellen Fricke, David MacNeill, Sedinha Teßendorf & Silva H. Ladewig (eds.). Body language communication. An international handbook on multimodality in human interaction (Handbücher zur Sprach- und Kommunikationswissenschaft /HSK] 38.2). Berlin: de Gruyter.
- Bressem, Jana & Cornelia Müller. 2017. The "Negative-Assessment-Construction"-A multimodal pattern based on a recurrent gesture? *Linguistics Vanguard* 3(s1).
- Bressem, Jana, Nicole Stein & Claudia Wegener. 2017. Multimodal language use in Savosavo. *Pragmatics* 27(2). 173–206.
- Brugman, Hennie & Albert Russel. 2004. Annotating Multimedia/Multi-modal Resources with ELAN, 2004. http://tla.mpi.nl/tools/tla-tools/elan.
- Calbris, Geneviève. 2003. From cutting an object to a clear cut analysis: Gesture as the representation of a preconceptual schema linking concrete actions to abstract notions. *Gesture* 3(1). 19–46.
- Calbris, Geneviève. 2011. *Elements of meaning in gesture* (Gesture studies 5). Amsterdam: Benjamins.

- Cooperrider, Kensy. 2019. Universals and diversity in gesture: Research past, present, and future. *Gesture* 18(2-3). 209–238
- Gawne, Lauren. 2021. 'Away' gestures associated with negative expressions in narrative discourse in Syuba (Kagate, Nepal) speakers. Semiotica 2021(239). 37–59.
- Harrison, Simon. 2010. Evidence for node and scope of negation in coverbal gesture. Gesture 10(1). 29–51.
- Harrison, Simon. 2014. The organisation of kinesic ensembles associated with negation. *Gesture* 14(2). 117–140.
- Harrison, Simon. 2018. *The impulse to gesture: Where language, minds, and bodies intersect:* Cambridge University Press.
- Inbar, Anna & Leon Shor. 2019. Covert negation in Israeli Hebrew: Evidence from co-speech gestures. *Journal of Pragmatics* 143. 85–95.
- Kendon, Adam. 1980. Gesticulation and Speech: Two Aspects of the Process of Utterance. In Mary Ritchie Key (ed.). *The relationship of verbal and nonverbal communication*, 207–228: Walter de Gruyter.
- Kendon, Adam. 1995. Gestures as illocutionary and discourse structure markers in Southern Italian conversation. *Journal* of *Pragmatics* 23(3). 247–279.
- Kendon, Adam. 2004. *Gesture: Visible action as utterance*. Cambridge: Cambridge Univ. Press.
- Ladewig, Silva H. 2011. Putting the cyclic gesture on a cognitive basis. *CogniTextes. Revue de l'Association française de linguistique cognitive*(6).
- Ladewig, Silva H. 2014. Recurrent gestures. In Cornelia
 Müller, Alan Cienki, Ellen Fricke, Silva Ladewig, David
 McNeill & Sedinha Tessendorf (eds.). Body-Language-Communication. Volume 2, 1558–1574: Walter de Gruyter.
- Ladewig, Silva H. & Jana Bressem. 2013a. New insights into the medium hand: Discovering recurrent structures in gestures. *Semiotica*(197). 203–231.
- Ladewig, Silva H. & Jana Bressem. 2013b. New insights into the medium hand: Discovering recurrent structures in gestures. *Semiotica* 2013(197). 203–231.
- McNeill, David. 2005. *Gesture and thought:* University of Chicago Press.
- Mesh, Kate & Lynn Hou. 2018. Negation in San Juan Quiahije Chatino Sign Language. *Gesture* 17(3). 330–374.
- Palfreyman, Nick. 2017. Gesture and sign language: Findings from a corpus of Bisindo. In Unika Atma Jaya (ed.). *Konferensi Linguistik Tahunan Atma Jaya* 16, 1–7.
- Palfreyman, Nick. 2019. Variation in Indonesian Sign Language: A Typological and Sociolinguistic Analysis (Sign Language Typology /SLT] Ser v.8). Boston: De Gruyter Inc.
- Streeck, Jürgen. 2008. Gesture in political communication: A case study of the democratic presidential candidates during the 2004 primary campaign. *Research on language and social interaction* 41(2). 154–186.
- Teßendorf, Sedinha. 2014. Pragmatic and metaphoric:
 Combining functional with cognitive approaches in the analysis of the "brushing aside gesture". In Cornelia Müller, Alan Cienki, Ellen Fricke, Silva Ladewig, David McNeill & Sedinha Tessendorf (eds.). Body-Language-Communication. Volume 2, 1540–1558: Walter de Gruyter.
- Wegener, Claudia & Jana Bressem. 2019. Sharing the load: The interplay of verbal and gestural negation in Savosavo (LingCologne 2019) (accessed 22 March 2023).