Structuring and highlighting speech – Discursive functions of holding away gestures in Savosavo

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Abstract

Based on a study investigating gestures used for the expression of refusal, rejection, exclusion and negation in Savosavo, a Papuan language spoken in Solomon Islands in the Southwest Pacific, the article discusses how a particular type of pragmatic gesture, the *holding away* gesture, may highlight and structure the spoken utterance. It will be shown that the holding away gesture assumes three functions on different levels of discourse: It emphasizes the speaker's focus on the *conclusion and change* of a topic. It highlights the *contrast* between two propositions or emphasizes that the speaker is *inserting* additional information. The article demonstrates that holding away gestures operate on the spoken utterance and take over speech-performative function as they draw attention to the communicative act the speaker is engaged in and, at the same time, make this communicative action visually accessible to the hearer.

Index Terms: multimodality, speech, pragmatic gestures, discourse markers, discourse structure, Savosavo

1. Introduction

Particles fulfill a range of functions in spoken language. Modal particles, such as *denn, halt,* or *eben* in German, for instance, operate on the pragmatic-functional level of the utterance and "integrate utterances into the realm of interaction. [With modal particles], speakers can refer to shared knowledge, to assumptions or expectations of speakers or hearers, a particular reference to a preceding utterance can be marked or the significance that the speakers attest to the utterance can be marked. Modal particles thus modify illocutionary types in particular ways" [1: 2, translation authors]. Furthermore, particles assume a major function in the regulation of interactional processes and display the discursive structure of the utterance. In English, discourse particles or discourse markers, *well, but, unless,* or *then,* for instance, are expressions connecting parts of discourse. Similar to modal particles, they do not express propositional content but rather contribute to the interpretation of the utterance because "they signal a relationship between the segment they introduce, S2, and the prior segment, S1" [2: 950]. They connect messages and may either emphasize contrast (*but*), a quasi-parallel relationship between messages (*furthermore*) or they mark elaborations (*well*) and inferences (*then*). Furthermore, discourse particles may not only connect messages but rather topics and as such are of importance for managing discourse. 'Topic change markers' [2] highlight a thematic excursion or the reintroduction of a previous topic. These functions can, as Schiffrin notes, not only be realized by verbal expressions but also by paralinguistic elements (e.g., prosody) and gestures [3].

Research has shown that gestures with pragmatic functions are able to "relate to features of an utterance's meaning that are not a part of its referential meaning or propositional content" [4]. As such, gestures fulfill performative function by indicating a request, a question or refusal [e.g., 4, 5, 6]. Furthermore, they may "serve in a variety of ways as markers of the illocutionary force of an utterance, as grammatical and semantic operators or as punctuators or parsers of the spoken discourse." [4: 5]. By taking over modal function, gestures indicate the speaker's stance towards the proposition uttered [4-8]. They qualify something as negative, obvious or particularly noteworthy and thus operate on the speaker's own utterance. Accordingly, researchers have argued that such gestures show functional analogies with modal particles [7-9]. However, gestures with pragmatic function may not only be an indication for the speaker's attitude towards the proposition of the utterance but also have the capability of highlighting properties of discourse. By taking over 'parsing' [4] or 'interactive' function [10], gestures contribute to the marking of various aspects of the structure of spoken discourse and provide visible anchor points for connecting or separating parts of discourse [see also 11]. Accordingly, Kendon [12: 248] has discussed pragmatic gestures with discursive function as 'discourse unit markers', highlighting the fact that gestures may be able to "mark discourse units differentially as *topic* in contrast to *comment*" and may serve to "mark discourse units which are 'focal' to the theme or argument of what is being said". In doing so, gestures with pragmatic functions may have the same functions as discourse markers or rising intonation in spoken language [10].

The present article ties in with existing research on the discursive nature of pragmatic gestures. Based on a study investigating gestures used for the expression of refusal, rejection, exclusion and negation in Savosavo, a Papuan language spoken in Solomon Islands in the Southwest Pacific [13, 14], the article discusses how a particular type of gesture, the *holding away* gesture (see Figure 1), may highlight and structure the spoken utterance. The holding away gesture has been discussed in a range of studies on pragmatic gestures. Bressem and Müller [15] present an analysis of the gesture as part of the away family, gestures used by German speakers to express negation, refusal and negative assessment. The authors show that the holding away gesture is used to reject topics of talk, to stop arguments, beliefs or ideas from intruding into the realm of shared conversation and to stop the continuation of unwanted topics. Moreover, it qualifies the rejected topics as unwanted ones.

Figure 1: *Holding away gesture in Savosavo*

In a similar vein, Kendon discusses the holding away gestures as part of his account of gestures used by speakers of English and Italian "in contexts where something is being denied, negated, interrupted, or stopped" [4: 248]. With the *Open Hand Prone VP*, the speaker establishes a barrier, pushes back or holds back things moving towards him- or herself. The gesture indicates the speaker's "intent to stop a line of action" [4: 262]. Depending on the position of the hands, the gesture specifies the kind of action to be stopped: 1) close to the body: stopping ones own action, 2) in front of the body: stopping the action of the speaker and the interlocutor, 3) movement towards the interlocutor: stopping the action of the interlocutor. Also for speakers of English, Harrison identifies different variants of the gesture by which speakers may refuse or interrupt themselves or others (*PVraise*), express positive evaluation, apology or negation (*PVoscillate, PVhorizontal*) [16]. For speakers of French, the gesture is also documented as carrying the semantics of rejection and being used by speakers to actively refuse something [17: 200].

Research thus demonstrates that the holding away gesture is characterized by a variety of forms and functions across different Indo-European languages. However, these studies have primarily concentrated on its performative or modal use. The gestures' relevance for marking various aspects of the structure of spoken discourse has not yet been addressed in detail. The present article aims to fill this gap by presenting a first analysis of the discursive function of holding away gestures in Savosavo.

2. Savosavo language

Savosavo is the easternmost of only four (at best distantly related) non-Austronesian (Papuan) languages spoken among more than 70 Austronesian languages in Solomon Islands. The Savosavo speech community comprises about 3,500 people living on Savo Island, a small volcanic island approximately 35km northwest of the capital Honiara.

3. Database and methods

The holding away gestures were identified in a corpus consisting of 68 hours of video recordings from 84 different speakers (52 male, 32 female), ranging in age from about 20 to about 85, collected during Wegener's PhD fieldwork and the Savosavo Documentation Project (see [13] and the project website   http://dobes.mpi.nl/projects/savosavo/   for   more detail). It is stored in the DoBeS archive at the Max Planck Institute for Psycholinguistics in Nijmegen, and can be accessed   under https://corpus1.mpi.nl/ds/imdi_browser/?openpath=MPI55379

9%23. For the analysis of the holding away gestures, 6 hours of video recordings from the total of 68 hours of video recordings were chosen, consisting of mostly narratives, some procedural texts as well as a few interviews. The corpus comprises monologic, dyadic as well as group constellations of altogether 14 male speakers ranging in age from 39 to about 80. Altogether, 56 instances of the holding away gesture were identified. The holding away gestures were analyzed within a form-based linguistic approach also adopted for analyses of holding away gestures in German [15]. Accordingly, the analysis of the sweeping and holding away gestures in Savosavo consisted of a 4-step procedure [18]. The gestures were first annotated and coded in their form. Subsequently, the gestures were analyzed in relation to the verbal utterance. Here the gestures' meaning and function was examined with respect to the sequential, syntactic, semantic as well as pragmatic information given by speech but also by semantic and pragmatic information conveyed by adjacent gestures. In a next step, the analysis of the local context, i.e. the interactive environment of a gesture, was combined with an analysis of its context-of-use, the broader discursive situation in which a recurrent gesture occurs [4, 19]. The determination of the contexts-of-use built the basis for the fourth step, i.e. the distributional analysis of the gestures, the identification of gestural variants and the detection of a systematic correlation of context-of-use and variations of form [20]. The gesture annotation was either incorporated into existing ELAN files with morpho-syntactic annotations [13] or new ELAN files were set up. In the latter case, morpho-syntactic annotations for Savosavo were later added at and around those points in time where the gestures under investigation occurred. The distributional analysis was done using an Excel data basis.

The analysis of the gestures in relation with speech and the determination of the different contexts-of-use were conducted in collaboration with a native speaker of Savosavo, because non-linguistic context, such as background information on cultural, geographic, historical and other specific aspects of the life on Savo, is crucial to the understanding of speech and gestures. Moreover, in particular for the analysis of gestures with pragmatic functions, native competence of the language is indispensible in order to catch all of the gesture's relevance and function for expressing the illocution of the utterance.

According to this procedure, different context variants of the holding away gesture and, in particular, specific functions of the holding away gestures for highlighting and structuring discourse were identified.

4. Holding away gestures in Savosavo

The holding away gesture in Savosavo is characterized by a particular formational core that is kept stable across speakers and contexts-of-use: The (lax) flat hand(s) with the palm oriented vertically away from the speaker's body are held in the center of the gesture space. This formational core can be varied, so that the hands may be moved away from the speakers body (cf. [4]) or moved downwards (see example 1, 2). The palm of the hands may be oriented diagonally downwards and the hands can be positioned in different regions of the gesture space (see [14] for more details). In accordance with existing research we assume that the formational core of the holding away gesture is derived from an underlying everyday action, such as the action of holding or pushing away an object, stopping a door from smashing into the face, or an unwanted person from intruding into the personal space. The vertically oriented hand(s) create a blockage, which either keeps objects from moving closer or

pushes them away [15]. As a result, annoying or otherwise unwanted objects are hindered from entering the space around the body. This effect of action is semanticized in the holding away gesture: Something wanting to intrude has been or is being kept away from intrusion. As such, the gesture is used to "reject topics of talk, to stop arguments, beliefs, or ideas from intruding into the realm of shared conversation, to stop the continuation of unwanted topics" [15: 1598].

We documented 56 holding away gestures, which are used in 3 different contexts-of-use (see Table 1): explanation (34, 61%), request (20, 36%), and description (2, 3%). In descriptions, speakers describe the characteristics and processes of (historical) events, fishing techniques or rituals, for instance. In explanations, speakers add one or more statements to clarify or explain something (e.g., a particular cultural aspect potentially unknown to a foreigner) or to give a reason or justification for an action (e.g., the end of a war or the duration of a particular event). In the context-of-use 'request', speakers fulfill the speech act of asking for something. Here, the gestures function as 'performatives' as they "aim at a regulation of the behavior of others" and 'perform' the illocutionary force of an utterance [8].

Context-of-use	Function of gesture		Number of instances	
explanation	*speech-performative*	*topic shift*	17	
		contrast	10	
		insert	5	34
	abstract-referential		2	n=56
request	*performative*			20
description	*speech-performative*	*topic shift*	1	2
	abstract-referential		1	

Table 1: *Overview of contexts and functions of holding away gesture*

In the examples from the context-of-use 'request', gestures are executed in temporal overlap with speech and request others to *stay* in a particular place (e.g., "don't you come ashore here" ak_biti_630) or are used as an *appeasement* (e.g., "I am not harming anyone" ap_cs_kabulabu_552). When used without speech, the holding away gesture requests someone to be *quiet*, to *stop* an ongoing action (e.g., talking while someone else is talking), or to *keep* someone from starting an action (e.g., to give further information on a topic) [for more detail see 14].

As shown in Table 1, the holding away gesture is most common in the context-of-use 'explanation'. 34 instances of the gestures are used when speakers provide explanatory statements or justify actions or events. In 2 instances, speakers employed the gestures to enact the stopping of events or actions that are in progress or are about to start. However, the majority of holding away gestures takes over speech-performative, discursive function. We will discuss this use in detail in the following section.

5. Structuring and highlighting discourse

94% of the gestures in the context-of-use 'explanation' (32 instances) fulfill speech-performative function and thus act upon the speaker's own utterance [8: 1544]. In these cases, "gestures are aligned with what the speaker is presently doing, and convey something about it" [21: 74]. They display the communicative act of the speaker and visualize the structure

of the spoken utterance. In our corpus, holding away gestures take over three different functions for marking aspects of the spoken discourse: They mark a *conclusion and change* of topic, highlight the *contrast* between two propositions or emphasize that the speaker is *inserting* additional information. In the first example, we see an instance in which the holding away gesture visually marks the conclusion of one topic, and, at the same time, marks the change to another topic. While talking about the last war on Savo and an important warrior, speaker DE explains the Sepe dance, which was inspired by this warrior and is performed on the island of Savo. After having finished describing the dance, its characteristics and explaining who performs the dance, the speaker utters "that is the Sepe dance" and at the same time produces a holding away gesture encompassing almost the whole phrase (see example 1). Afterwards, he continues his narration with another aspect of the story about the last war on Savo. In this example, speech and gesture work together in marking the closing of a topic and indicate that the speaker's explanation about the Sepe dance has come to an end. The vertically oriented hand, which is movement downwards with a short accentuated movement, sets up a barrier in front of the speaker's body, blocking any requests for further explanations of the topic of the Sepe dance. The gesture takes over meta-communicative function by operating on the concurrent speech and displaying the communicative act of the speaker, namely his intention to end the story of the Sepe dance and his goal to move on to a different aspect of the overall topic.

(1)	*Lole*	***lo***	***Sepena.***
	lo=le	*lo*	*Sepe=na*
	3SG.M=EMPH.3SG.M	DET.SG.M	Sepe=NOM
	PP	ART	N
		G1	G1

"That is the Sepe dance."   (de_torolala_425)

G1: The left flat hand, palm oriented diagonally vertically away from the speaker's body, is moved downwards in the lower center of the gesture space.

Example 1: *Holding away gesture highlighting the conclusion and change of topic.*

In doing so, the gesture takes over a similar function as observed for discourse markers in spoken languages: The gesture functions as a topic-relating discourse marker [2]: Through the holding away gesture, the topic of the present utterance (the Sepe dance) and the topic of the following utterance (last war on Savo) are set in relation. The gesture helps to structure the discourse in terms of topic management. This is an interesting difference to studies of other languages, which usually show how pragmatic gestures operate on the topic-comment structure of one utterance (e.g., [12]). In our corpus, the holding away gesture does not indicate the topic or

comment portion of one particular utterance, but rather sets two different discourse topics in relation, marking the change from one topic to another. In this and other examples, when speakers use the holding away gestures with the function of indicating a change of topic, it is accompanied by a closing statement on the present topic (e.g., "that is the Sepe dance", "that is what they say" si_kuarao_1532, "that is a different story" jn_lotu_103) before picking up another topic.

A second function can be observed in the following example, in which the gesture does not function as a topic-relating discourse marker, but focuses on the message and is used to set up a contrast between two propositions. In example 2, speaker PNG talks about the length of the Second World War in Solomon Islands. He counts the years during which the fighting went on and concludes that it was only three years. While uttering "only for three years", the speaker performs a one handed holding away gesture by which he sets up a visual barrier blocking off any objection from his interlocutors and metaphorically holds away possible arguments or counter-examples meant to contradict his explanation. Here again, the gesture operates on the speaker's own utterance, yet this time it indicates that the speaker is setting up a contrast between his utterance and a contradicting alternative: The gesture establishes a contrast between the actual duration of the Second World War in Solomon Islands mentioned by speaker PNG and a potentially expected longer duration as compared to other countries, for instance. The gesture operates on the message of the utterance and not, as in example 1, on the topic.

(2) *Omalo*   *gneqai*   *ata;*   **kede**
     oma=lo   *gneqa-i*   *ata*   *kode*
     no=3SG.M.NOM   be.long-FIN   here   only.NSG
     NEG=PP   V   LOC   QUAN
                                                         G1

     ighia   *eleghoghalalo*   *te*
     ighiva   *elegho=gha=la=lo*   *te*
     three   year=PL=LOC=3SG.M.NOM   EMPH
     QUAN   N=PP   PA
     G1

     ata   *palei.*
     ata   *pale-i*
     here   stay-FIN
     LOC   V
     "It wasn't long here, only for
     three years it stayed here."   (png_WWII_1_628)
     G1: The left flat hand, palm oriented diagonally vertically away from the speaker's body, is moved downward in the upper center of the gesture space.

Example 2: *Holding away gesture setting up a contrast between propositions*

In other examples of this kind in our corpus, speakers set up a contrast between a fishing taboo mentioned in the present utterance and other potential fishing taboos ("The only taboo is that which I said earlier, stepping over the string and (all) that." si_kurao_746) or between different types of custom money owned by people of different status ("not the custom money that the young people or the normal people would own, the important people only" ap_seka_547). In all cases, the holding away gesture seems to show a functional analogy to contrastive discourse markers in spoken languages by which an "explicit message of [an utterance] is in contrast with an […] implied message [of another utterance]" [2: 947].

In example 3, we see the third discursive function of the holding away gestures documented in our corpus. Here, the gesture indicates that the speaker is departing from his main story line and is inserting additional information.

(3) *Pozogho*   **do**loghu   *pai kia*
     pozogho   *dolo-ghu*   *pai kia*
     basically   be.friend-NMLZ   or.maybe
     ADV   N   CONJ
                        G1

     zughuzughu   *abagnighu*
     zughu~zughu   *abagni-ghu*
     NMLZ~disagree   argue-NMLZ
     N   N
     "basically, peace, or otherwise disagreement and arguments(, or otherwise anything)"   (jn_lotu_349)
     G1: Both hands, palm oriented vertically away from the speaker's body, are moved downwards in the center of the gesture space.

Example 3: *Holding away gesture setting up a contrast between propositions*

Speaker JN tells the story of the first arrival of missionaries on Savo Island and describes how a group of elderly women communicates with two missionaries. As neither of the groups speaks the language of the other, the elderly women and the missionaries communicated by using their hands. After having uttered "because of that they only used their hands to make signs", the speaker inserts some further information, explaining what could have been the topic of their conversation. While saying "basically, peace, or otherwise disagreement and arguments, or otherwise anything, only with the hands did they talk about it on that day", he produces a holding away gesture in temporal overlap with "peace". Here, the hands visually mark the point in time where the additional information is added. After having uttered "peace", speaker JN lists some further topics of talk (disagreement, arguments). By being executed in temporal overlap with the first item

listed, the holding away gesture highlights the part of the utterance inserting additional information and thus visually foregrounds the insertion. In spoken English, for instance, discourse markers such as *furthermore, in addition* or *namely*, highlight that the present utterance is "adding yet one more item to a list of conditions specified by the preceding discourse" [2: 948]. Considering example 3, a similar function can be attested to the holding away gesture. Here, the two vertically oriented hands visually mark the point in time where additional information is given to provide some further elaboration on the possible topics discussed by the women and the missionaries. In another example in our corpus, the gesture is used when a speaker talks about magic and adds an aside, specifying a particular type of magic ("vele magic, that custom thing, vele magic they took" png_WWII_3_1616).

All of the discussed examples above illustrate that the holding away gesture is able to operate on the level of the message, when setting up a *contrast* or *inserting* information. Yet it can also be used as a topic-relating discourse marker when emphasizing the speaker's focus on the *conclusion* of a topic and the subsequent topic *change*. By doing so, holding away gestures relate discourse segments and do not contribute to the propositional meaning of either segment. Rather, they operate on the pragmatics of the spoken utterance by embodying communicative actions and discourse structure. The holding away gesture displays the communicative act the speaker is engaged in and, at the same time, provides a clue to the listener on how to treat the respective information and to refrain from possible counter arguments. The meaning that is expressed by the gestures is thus mainly a procedural one, specifying how segments of an utterance are to be interpreted relative to the each other. Following Kendon, it can be concluded that pragmatic gestures, or in the present case, holding away gestures "appear to serve as if they are labels for segments or units within a discourse, thereby indicating the part these units play within the discourse structure" [12: 264] for the speaker and the hearer.

6. Conclusion

Based on an analysis of a particular type of pragmatic gesture used by speakers of Savosavo, the article elaborated on the relevance of pragmatic gestures for highlighting and structuring discourse. Taking up Fraser's pragmatic classification of discourse markers, it was shown that the holding away gesture assumes a diverse function on different levels of spoken discourse structure in Savosavo. The gesture may operate on the level of the message of the utterance or it puts topics of different utterances in relation to each other. By doing so, holding away gestures act on the spoken utterance and take over speech-performative function as they highlight the communicative act the speaker is engaged in and make this communicative action visually accessible for the hearer. Holding away gestures with discursive function thus take over particular communicative relevance as they not only regulate discourse but also clarify discourse structures for speaker and hearers by drawing attention to speech act sequences, cohesion and thematic relations.

Taking up the analysis presented in this article, a comparison of the functions identified for the holding away gestures in Savosavo with other languages would be particularly interesting for gaining further insights into the nature of the holding away gestures, pragmatic gestures in general and their discursive potential. Regarding performative functions of the holding away gestures, a cross-cultural and cross-linguistic distribution can be identified. Speakers of Savosavo use the gestures in a very similar way as speakers of German, English,

or French, for example. Their formational features as well as their semantic and pragmatic characteristics match those described by other researchers (see [4, 15-17]). The documented forms, meanings, and functions thus seem not to be restricted to their use in Indo-European languages but might have a rather wide cross-linguistic and cross-cultural distribution [see 14 for more detail]. Investigating the discursive function of the holding away gestures across a range of different languages would provide a further puzzle piece for language specific or possible universal functions of pragmatic gestures. Examining the relevance of gestures for discourse structure thus poses an interesting field of research by which further insights into the nature of pragmatic gestures can be gained and, furthermore, on the relevance of gestures for establishing multimodal utterances.

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8. References

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