

GESPIN 2019

11 - 13 September



This paper was presented at the 6th Gesture and Speech in Interaction Conference that was held at Paderborn University, Germany from September 11-13, 2019.

To cite this paper:

Schönfelder, N. & Heller, V. (2019). Embodied reciprocity in conversational argumentation: Soliciting and giving reasons with Palm Up Open Hand gestures. In: Grimminger, A. (Ed.): *Proceedings of the 6th Gesture and Speech in Interaction – GESPIN 6* (pp. 81-86). Paderborn: Universitätsbibliothek Paderborn. doi:10.17619/UNIPB/1-810

Embodied reciprocity in conversational argumentation: Soliciting and giving reasons with Palm Up Open Hand gestures

Nora Schönfelder and Vivien Heller

University of Wuppertal, Germany

schoenfelder@uni-wuppertal.de, vheller@uni-wuppertal.de

Abstract

Based on video-recorded peer interactions, this paper discusses the interactive functions of Palm Up Open Hand gestures in conversational argumentation. Drawing on conversation analysis, we demonstrate that PUOH gestures occur in sequential positions where new perspectives come up for discussion and divergent positions are established; they are thus resources for soliciting or giving reasons. It is argued that as publicly visible resources reciprocal PUOH gestures facilitate the orderly production of contiguous responses and ensure coherence between turns.

1. Introduction

This paper deals with “palm up” gestures, a family of *pragmatic* (Kendon, 2004, Streeck, 2007, Müller, 2004) or *interactive* gestures (Bavelas et al., 1995). According to Streeck, pragmatic gestures enact or embody communicative functions. For instance, they can display what an utterance is designed to do, embody the speaker’s stance towards the utterance or punctuate spoken discourse. Pragmatic gestures can be coupled with interaction units of different scopes, ranging from “turns, turn-construction units, speech acts, and speech act sequences” (Streeck, 2009, p. 179).

In a “Palm Up Open Hand” gesture (Müller, 2004; henceforth referred to as PUOH), the speaker presents the hand palm upwards in the shared space of perception; in this way, s/he enacts the physical act of giving, handing over or offering an object (Streeck, 2007, Müller, 2004). The meaning of these acts is evoked metonymically: the open hand presents an “abstract discursive object” (Müller, 2004, p. 233), for instance an opinion or a proposal, offers it for joint inspection, and invites the co-participants to position themselves towards the perspective offered in the speaker’s open hand. In this way, the discursive object receives a “transitional status” and “cannot be used for anything until the transaction of giving or receiving has been completed” (Kendon, 2004, p. 274). Aside from the presenting and offering function, PUOH gestures can also be used for soliciting responses. Streeck (2007) points out that the way in which the gesture modulates the verbal utterance changes depending on its duration, shifting from offering to expecting to receiving something. This means that the longer the open hand is held at the end of the turn, the stronger the obligation upon the recipient to respond becomes. One function of PUOH as a publicly visible resource is thus to display or amplify a conditional relevance. With this term, Schegloff (1968) refers to the relationship between adjacent turns. Particular sequence-initiating actions, for instance a summons or invitation, impose a normative obligation on the co-participant to perform a type-fitted response. PUOHs are one of the resources that serve to establish a conditional relevance. Past research has exclusively focussed on individual palm up gestures. In our data of conversational argumentations, PUOHs are not only employed in turns that establish an obligation to provide reasons (Quasthoff, Heller & Morek 2017), they are also used in subsequent turns to demonstrate that the conditional relevance has been fulfilled. Taking such reciprocal palm up gestures as our focus, we describe the uses and interactive functions of series of PUOHs in conversational argumentations.

2. Data and analytical approach

2.1. Data

The analysis is based on a corpus of 14 videotaped group discussions (46:19 minutes) of children aged between 7;0 and 13;6. The corpus includes 19 instances of reciprocal PUOHs, i.e. sequences in which at least two subsequent PUOHs were produced by different speakers. Groups of three to five children were asked to deal with a fictitious problem involving a shipwreck. The task was to arrive at a jointly agreed decision on three essential survival items. Since the scenario allowed for a variety of solutions, it was likely that the children's positions would diverge.

The data was transcribed in accordance with GAT 2 conventions (Selting et al., 2011); they include final pitch movements of intonation phrases, the focus accents (noted in capital letters) and multimodal phenomena. To represent PUOH gestures and gaze, still pictures were embedded into the transcripts.

2.2. Analytical Approach

Drawing on multimodal conversation analysis, we analysed reciprocal PUOHs with regard to their sequential embedding in conversational argumentations and their precise position in the emerging turn. Conversational argumentation is approached as a discursive practice with a complex sequential organisation that involves certain conversational “jobs”, i.e. “constituting dissent/ problematising”, “establishing an obligation to provide reasons”, “providing and challenging reasons”, “closing” and “transition” (Quasthoff, Heller & Morek, 2017, pp. 97-101). Conversational argumentation can either be framed as controversial/persuasive or as consensual/collaborative reasoning (Ehlich, 2014). We therefore examined reciprocal PUOHs in both types of contexts. Regardless of the contextual framing, reciprocal PUOH gestures occur in the jobs *establishing an obligation to provide reasons* and *providing and challenging reasons*. In the following, we present two examples of reciprocal palm up gestures produced when participants provided and challenged reasons.

3. Results

3.1. Reciprocal PUOH gestures in a controversial context

Extract (1) shows Damira and Sila in a controversial moment of their discussion. The participants have already constituted a dissent and established an obligation to provide reasons. The extract starts with Damira pointing to the illustrations of the first aid kit and the mobile phone on the handout, thereby taking up the positions of previous speakers and formulating an interim conclusion (l. 71). She then establishes a fictitious scenario (l. 72) that results in another choice: a knife or matches (l. 76). A series of three PUOH gestures now occurs: the first gesture is produced by Damira when she offers her reasoned position, the second by Sila, who challenges the position, and the third again by Damira when she substantiates her claim. Note that some of the PUOHs contain two or three gesture phrases (Kendon, 2004).

Extract 1: DAM - Damira, SIL - Sila

077 SIL |<<doubting> n **MESse:r**,>|
 a knife
 | ((PUOH on handout)) |



078 |damit to man den Tötet (-), |,
 kill him
 | ((PUOH tow. Dam, then downwards)) |



079 SIL |↓oder WAS;|
 or what
 | ((PUOH)) |



080
 081 DAM [((holds PUOH))]
 [((palm up oh + head shake))]



082
 damit man keine ANGST bekommt <<p> vielleicht?>
 so you don't get scared maybe

The first PUOH occurs within an argumentative multi-unit turn produced by Damira. It is part of a gesture unit comprising three gesture phrases: a PUOH followed by a deictic gesture that is again transformed into a PUOH. While formulating a hypothetical condition of her fictitious scenario (“if someone comes”), Damira performs a PUOH. In this way, she is indicating to her co-participants that a new idea is being offered. The headshake that conveys an uncertain epistemic stance modulates her position and contextualises it as a proposal. As a consequence of the hypothetical condition, she formulates two new items by pointing to the knife and the matches (l. 76). During the turn-completion, the deictic gesture is transformed into a brief PUOH. At this turn position, the gesture not only hands over the turn to the co-participants, but also invites them to inspect the proposal.

In response to this invitation, Sila produces another argumentative multi-unit turn in which she challenges Damira’s proposal. Within her turn, a reciprocal PUOH gesture with three gesture phrases is performed. Gazing at Damira, Sila brings her open hand towards the illustration of the knife, holds it there and repeats “knife” with an intonation that conveys doubt (l. 77). At the same time, the hand, together with the intonation, also shows that the knife has received a transitional status: it is ‘put on the table’ for further negotiation. The gesture thus contributes to disambiguating reference to a particular object as well as establishing its disputability; as a visible resource, it provides an observable cue to the new epistemic order (Heller, 2018). Sila continues her turn by animating a potential argument in favour of the knife (l. 78: “to kill him?”). The facial shrug and the rising final pitch movement modulate the meaning of the verbal utterance and contextualise it as a rhetorical question that challenges Damira’s proposal. Temporally aligned with the rhetorical question, Sila initiates the second gesture phrase: she lifts the open hand and moves it towards her addressee, who now also gazes at her. She then lowers her hand and brings it to a hold next to the

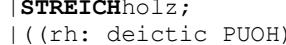
paper. Temporally aligned with this third gesture phrase is a colloquial tag question (l. 79: “or what;”) which establishes a conditional relevance for a response. In this turn position, the third gesture phrase of the PUOH becomes a “gesture of waiting – a hand waiting, as it were, to be filled with a response” (Streeck 2009, l. 175). It displays the unfulfilled conditional relevance of the turn and solicits a contiguous response. A third reciprocal PUOH gesture occurs in the forefield of Damira’s next turn. Still gazing at each other, both Sila and Damira hold their PUOHs above the table. While Sila’s hand solicits an answer, Damira projects that she is about to deal with the challenge, which is done in the next turn (l. 82: “so you don’t get scared maybe?”). This *pas de deux* of PUOHs embodies reciprocity in dealing with divergent perspectives.

In summary, three reciprocal PUOHs have been performed by different speakers in subsequent multi-unit turns. The first gesture embodied the communicative function of *offering a reasoned position*. At the same time, it served as a *handover and invitation to inspect the proposal*. The reciprocal PUOH by the next speaker embodied the communicative function of *challenging the position*. The final component of this gesture phrase, initiated at turn-completion, selected a next speaker and reinforced the conditional relevance to deal with the challenge. The third reciprocal PUOH was again produced by the first speaker in advance of the next turn, at a moment when the last speaker’s PUOH was still visible. In this position, it *projected the fulfilment of the conditional relevance*, i.e. the production of another argument. In the controversial sequence analysed here, the series of reciprocal PUOHs emerges, due to the fact that a proposal – accompanied by a gesture – is challenged in the next turn. This raises the question as to whether series of reciprocal gestures also occur in consensual contexts in which a challenge is absent.

3.2. Reciprocal PUOH gestures in a consensual context

The second extract shows a moment of consensual reasoning. The speakers have already discussed different proposals. Now, Zaim provides a list of three options (ll. 74-76). The following extract shows the subsequent negotiation of the item ‘tent’.

Extract 2: ZAI – Zaim, CEN – Cennet

074	ZAI	=entweder MES ser, either knife ((lh: palm up open hand))	
075		ZELT , tent ((rh: deictic PUOH))	
076		STREICH holz; match ((rh: deictic PUOH))	
077			
078	CEN	°°h (-) tja den ZELT lassen wir,= well we keep the tent ((lh: deictic PUOH))	



079 | =den BRAUCH man [sowieso:,] |
| *you need that anyway* |
| ((both hands: PUOH)) |



080 ZAI [ja:-
yeah]

081 wenn es REGnet;
 when it rains

082 CEN JA:;

083 dann **KANN** man |da drunter so;= then you can go under it |((rh: lateral pitch PUOH))|



Within the process of giving a list of three suggestions ('knife', 'tent' and 'matches'), Zaim narrows down the choice. His verbal utterances are simultaneously accompanied by PUOHs on 'knife' and deictic PUOHs on 'tent' and 'matches' (ll. 74-76). The open hand displays these options towards Cennet as inspectable ones, whereby they receive a transitional status (Kendon, 2004, p. 247). Signalling turn-completion through falling final pitch and shifting his gaze from the paper to Cennet, Zaim makes a reaction by Cennet conditionally relevant. He does not loosen his visual focus until she projects her intention of taking the next turn (l. 78: inhaling).

Cennet establishes an agreement on the second option (l. 78: “well we keep the tent”) within a multi-unit turn and underlines her agreement with a mid-turn deictic PUOH towards the handout, which returns (palm up closed) to a position next to the left hand upon turn-completion. Then she supports her position (l. 79: “you need that anyway”) while bringing both hands together with her palms up open. The underlying reason is not yet specified; instead, it implies the assumption of common ground (Holler, 2009). The recipient fulfils the missing elaboration and leads Zaim to provide “when it rains” (l. 81). Note that when Zaim further explicates the reason that was initially brought into play by Cennet, no reciprocal PUOH is performed. Unlike the controversial reasoning in which the gestures revert turn after turn to their rest positions (Kendon, 2004), Cennet’s hands remain open while Zaim adds his reason. This may be interpreted as an indication of their collaborative reasoning (Heller, 2018) about one and the same item (‘tent’). Subsequent to Zaim’s completion and as a co-constructive elaboration, Cennet now extends her former argument (l. 83: “then you can go under it”). She simultaneously performs a brief rotating PUOH that evokes the assumed common ground (Holler, 2010).

The following observations could be made here: the first gesture is produced while listing three proposals (ll. 74-75); the subsequent reciprocal PUOH shows the next speaker's agreement with

¹ The handshape of Zaim's gesture – palm up oriented hand with curled fingers – does not represent a prototype of PUOHs. It is likely that the handshape results from economic reasons.

one of the proposals within a multi-unit turn (l. 78); the third gesture is produced in addition to the agreement, but now embodies the elaboration of the reason (l. 83). This extract shows that reciprocal PUOHs are also produced in consensual contexts. Unlike the first extract, they co-occur within sequences of co-constructive turns. Both transcripts support the argument that global semantic coherence between turns is facilitated by PUOHs: they embody participants' reciprocity in dealing with an abstract discursive object in both controversial and consensual contexts.

4. Discussion

Embodied reciprocity is not only an interesting phenomenon from the analyst's point of view, but is, first and foremost, a matter for the participants themselves. This is especially the case when participants need to negotiate how divergent positions are to be dealt with. In such situations, the collaborative continuation of talk is potentially at risk. In such conversational environments, PUOHs fulfil important functions with regard to the participants' "working consensus" (Goffman, 1959, pp. 9-10) on the purpose and structure of the activity in progress. As publicly visible resources, reciprocal PUOHs both enact and embody the give-and-take of arguments and the constantly changing epistemic order. A comparison of controversial and consensual argumentative contexts revealed that reciprocal PUOHs were employed as long as the disputability of a position needed to be established and negotiated. Once the participants achieved a consensus, no more reciprocal PUOHs could be observed (extract 2, l. 80). Our analysis shows that reciprocal PUOHs facilitated the orderly production of contiguous responses and ensured coherence between turns.

The present study was based on child interactions. Recent research on PUOHs (Müller, 2004, Streeck, 2007) shows that these gestures also occur in adult conversational argumentation. Whether series of reciprocal PUOHs exist in adult interaction remains the topic for future research.

An interesting question is the emergence of embodied reciprocity in ontogenetic development. Previous studies on PUOHs in narratives (Graziano, 2014) and explanations (Alamillo, Colletta, & Guidetti 2012) indicate that pragmatic gestures are used as early as the age of four; yet the variety of communicative functions, especially their modal use, seems to develop in parallel to other linguistic resources and interactive competences. Future studies should further investigate the development of embodied reciprocity as one (key) component of discourse competence.

References

Alamillo, A., Colletta, J., & Guidetti, M. (2012). Gesture and language in narratives and explanations. The effects of age and communicative activity on late multimodal discourse development. *Journal of Child Language* 40(3), 511-538.

Bavelas, J.B., Chovil, N., Lawrie, D.A., & Wade, A. (1992). Interactive gestures. *Discourse Processes* 15(4), 469-489.

Ehlich, K. (2014): Argumentieren als sprachliche Ressource diskursiven Lernens. In A. Hornung, G. Carobbio, D. Sorrentino, (Eds.): *Diskursive und textuelle Strukturen in der Hochschuldidaktik. Deutsch und Italienisch im Vergleich* (pp. 41-54). Münster: Waxmann.

Goffman, E. (1959). *The Presentation of Self in Everyday Life*. New York: Doubleday Anchor.

Graziano, M. (2014). The development of two pragmatic gestures of the so-called Open Hand Supine family in Italian children. In M. Seyfeddinipur, & M. Gullberg (Eds.), *From Gesture in Conversation to Visible Action as Utterance. Essays in honor of Adam Kendon* (pp. 311-328). Amsterdam, Philadelphia: John Benjamins Publishing.

Heller, V. (2018). Embodiment epistemic responsibility. The interplay of gaze and stance-taking in children's collaborative reasoning. *Research on Children and Social Interaction* 2(2), 262-285.

Holler, J. (2010). Speaker's Use of Interactive Gestures as Markers of Common Ground. In S. Kopp, & I. Wachsmuth (Eds.), *Gesture in Embodied Communication and Human-Computer Interaction* (pp. 11-22). Berlin: Springer.

Kendon, A. (2004). *Gesture. Visible action as utterance*. Cambridge, New York: Cambridge University Press.

Müller, C. (2004). Forms and uses of the Palm Up Open Hand: A case of a gesture family? In C. Müller, & R. Posner (Eds.), *The semantics and pragmatics of everyday gestures* (pp. 233-256). Berlin: Weidler.

Quasthoff, U., Heller, V., & Morek, M. (2017). On the sequential organization and genre-orientation of discourse units in interaction. An analytic framework. *Discourse Studies* 19(1), 84-110.

Selting, M. et al. (2011). A system for transcribing talk-in-interaction: GAT 2. *Gesprächsforschung* 12, 1-51.

Streeck, J. (2007). Geste und verstrechende Zeit: Innehalten und Bedeutungswandel der „bietenden Hand“. In H. Hausendorf (Ed.), *Gespräch als Prozess. Linguistische Aspekte der Zeitlichkeit verbaler Interaktion* (pp. 157-177). Tübingen: Gunter Narr Verlag.

Streeck, J. (2009). Forward-Gesturing. *Discourse Processes* 46(2-3), 161-179.