Report on the international workshop "Facial Gestures in Interaction" from 30-31 January 2020 at the University of Bayreuth

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1. Introduction

Even though research on multimodality in interaction has increased considerably over the last decades, facial gestures have rarely been at the centre of interest in studies of Conversation Analysis (CA), Interactional Linguistics (IL) and multimodal analysis. Some of the few exceptions are the studies by Goodwin/Goodwin (1986), Goodwin/Cekaite/Goodwin (2012) and those by Kaukomaa/Peräkylä/Ruusuvuori (2013, 2014, 2015). Using this inspiration, the workshop *Facial Gestures in Interaction*, organized by Carolin Dix and Alexandra Groß, drew the attention to movements of the face as an essential interactional resource in its own right.

As pioneers of the study of facial expression and gestures, Johanna Ruusuvuori (Tampere University) and Anssi Peräkylä (University of Helsinki) shared their expertise by recapitulating their approach to analysing the face in interaction. Further, Florence Oloff (University of Oulu), Karin Birkner and Franziska Alt (University of Bayreuth), Carolin Dix (University of Bayreuth), Henrike Helmer (IDS Mannheim) and Sofia Rüdiger (University of Bayreuth) focussed on a variety of facial gestures in different interactional contexts ranging from everyday face-to-face interactions over institutional face-to-screen encounters to interactive monologues via YouTube. The phenomena, discussed in their respective local sequential contexts, ranged from single facial movements, e.g. raising the eyebrows, to complex combinations of facial movements, as simultaneous lip and eyebrow movements.

The wide range of phenomena helped to locate, develop and specify central open questions regarding facial gestures, e.g.: What are the advantages and disadvantages of decomposing facial or multimodal gestalts into its components? Do facial gestures have an original meaning or semantic "load"? Do new aspects like the temporality of facial gestures make a revision of the classical CA concepts of "action" and "turn" necessary? Can observations on facial movements be validated beyond the next-turn-proof procedure? Further, regarding the original emotional nature of facial movements: How can we include the topic of emotion into CA?

The concept of the workshop programme highlighted the relevance of data sessions as a CA tool. One and a half hour-slots offered enough time to go beyond presenting research results in favour of extensive data analyses and fruitful discussions. This report will present an overview of the phenomena and findings presented, sketch the topics and insights discussed during the workshop and give a short outlook on the future steps planned in the study of facial gestures in interaction.

2. Presentations

2.1. Alexandra Groß (Bayreuth): Facial Gestures in Interaction – Introduction to the Topic

In her introduction to the topic of the workshop, Alexandra Groß prepared the ground for the discussions in the following two days. Based on the various functional facets and scientific approaches to facial movements, she differentiated three types of facial movements: facial dynamics, facial expressions and facial gestures. Facial dynamics comprise facial movements resulting from physical processes, such as chewing or feeling pain. The term *facial expression* refers to facial indicators of underlying emotions (cf. Ekman/Friesen 1969) and originates from the field of emotion psychology. A *facial gesture* is facial action that originally contributes to "the process of deliberate utterance" (Kendon 1985:215). The latter was particularly highlighted as an object of study for CA/IL/multimodal analysis. However, Groß emphasized that also facial dynamics and expressions might exert interactional functions and thus serve as gestures. Potential interactional functions of facial gestures were located in three main areas of talk-in-interaction: First, they might display participation in the ongoing talk. Second, they might structure a speaker's talk and organize the process of interaction. Third, facial gestures can be essentially involved in the interactional creation of meaning. The three functions of facial movements are not mutually exclusive; rather facial gestures can serve either of the three functions.

By giving an overview of seminal studies about facial expressions and gestures both from social psychology and CA (e.g. Kendon 1990; Ekman 1985; Bavelas/ Chovil 2018 Selting 2017), Groß described three different methodological approaches to facial gestures that have been used in previous research. Experimental studies usually assign social functions to a specific facial movement. CA studies either aim at identifying facial practices (i.e. forms) implementing a conversational action in a specific sequential position or, vice versa, ask for the functional potentials of a specific facial movement at specific conversational positions.

2.2. Johanna Ruusuvuori (Tampere) and Anssi Peräkylä (Helsinki): Analysing Facial Gestures in Interaction – A Research Report

Johanna Ruusuvuori and Anssi Peräkylä presented a chronology of their research on facial expressions in interaction; a project that had initially developed as a parttime avocation. The first impetus had come from reading Ekman in the late 1990s and the fact that emotion was considered an uneasy topic in the analysis of interaction. This led the speakers to the question whether it was possible to investigate facial expressions with the means of CA. From their recordings of five quasi-natural lunchtime conversations of students, a series of articles resulted (Kaukomaa/Peräkylä/Ruusuvuori 2013, 2014, 2015; Peräkylä/Ruusuvuori 2006, 2012; Ruusuvuori/ Peräkylä 2009).

The first step in the application of CA methodology on facial expression was to show through a step-by-step analysis of assessments that facial expressions are not only emotional expressions in the "Ekmanian" sense or communicative resources in the sense of Bavelas/Chovil (2000), but interactional resources with semiotic and relational functions (cf. Peräkylä/Ruusuvuori 2006; Ruusuvuori/Peräkylä 2009).

One of the main findings when studying facial expressions accompanying verbal assessments was the varying temporal configuration relative to each other, meaning that a facial expression could appear before, during or after a spoken turn. Ruusuvuori and Peräkylä concluded that a turn in a classical CA sense could be stretched with the means of facial movements. As a further function, they found that facial expressions could establish a response relevance. Being in line with current research on multimodality, Ruusuvuori and Peräkylä drew the methodological conclusion that also the organization of turn-taking needs to be reconsidered. In addition, they found that facial expressions can help ensuring intersubjectivity and progressivity during the interaction, therefore, working on a relational level as well.

Based on these general insights about facial expressions in their relation to verbal TCUs, both studies on *turn-opening smiles* (Kaukomaa/Peräkylä/Ruusuvuori 2013) and *turn-opening frowns* (Kaukomaa/Peräkylä/Ruusuvuori 2014) analysed the functional potential of the particular facial movements. Turn-opening smiles preceding a turn started an emotional transition to a positive stance and were reciprocated through complex interactional organization. Turn-opening frowns, however, were not reciprocated but were nevertheless integral to the following utterance while foreshadowing complications like disagreement. Turn-opening frowns were inseparable from the speaker's action and the whole gestalt of the turn. However, Ruusuvuori and Peräkylä emphasized that not only a speaker's but also a listener's facial expression can redirect the course of the talk, e.g. by shifting the emotional stance by means of a facial expression as was shown in another study (cf. Kaukomaa/Peräkylä/Ruusuvuori 2015).

With the focus on the interactional regulation of emotion, a further study analysed facial expressions at the end of storytelling, when a response was delayed (cf. Peräkylä/Ruusuvuori 2012). These *facial pursuits* stretched the boundaries of the preceding turn. Further, they helped regulating the immediate affective environment without the speaker having to start an additional verbal turn.

Ruusuvuori's and Peräkylä's talk showed that research on facial gestures with the methods of CA is possible, productive, necessary, and challenging classical CA concepts.

2.3. Florence Oloff (Oulu): *Hm? He? Hä?* – Some Embodied Features of Open Class Repair Initiation in Spoken German

Florence Oloff presented data on Open Class Repair Initiators (OCRI) in spoken German and their connection to specific embodied displays, based on her article (Oloff 2018). For that purpose, she searched transcripts of data for the alone-standing items *hm*?, *ha*? and *hä*?.

One of Oloff's main findings was that different OCRI (hm?, ha? and $h\ddot{a}$?) come with different facial gestures. With hm? the mouth was closed, the gaze was steady, and either no facial gesture or an eyebrow flash occured. The facial gestures appearing together with $h\ddot{a}$? were often characterized by an open mouth, retraction of the upper lip and a frown as well as blinking and moving gaze. The $h\ddot{a}$?-face in contrast to the minimal and short facial display accompanying hm? could be held longer and could stretch the action performed by this facial means. A ha?-face,

however, could either be flashed or held, and also the facial movements were more variable with possible eyebrow flashes or frowns. In addition, hm? mostly came with no mutual orientation, while $h\ddot{a}$? did not necessarily lack mutual orientation. Therefore, Oloff suggested a continuum to categorize the three repair initiating forms. It ranged from the more neutral form hm? which typically indicates a problem of hearing over the intermediate form ha? indicating either a hearing problem or a sequentially misplaced trouble source turn to the less neutral form $h\ddot{a}$? which indicates problems of understanding or even intelligibility.

Oloff also discussed the challenges that accompanied this approach. These were e.g. minor quality of the audio recording or the video image, respectively the angle of the recording or the position and number of the participants, which turned out to be methodological problems during the data collection. Oloff also mentioned a more general problem of corpus analyses: Purely embodied repair initiations dropped out of the word search since they were not transcribed. Other dropouts were due to variations in the transcription of the audible repair initiating sounds.

In the group discussion of the data, several aspects where brought up as potential interactional factors affecting the selection of one of the three forms. First, the question of being addressed and knowing that one is addressed is strongly connected to the mutual orientation (or not) of the interlocutors. Here, a second aspect came into play: the spatial distance between the interlocutors. Third, the aspect of politeness must be taken into account because the three open class repair initiators are rather informal and less polite in comparison to for example "wie bitte? / excuse me?". Altogether, Oloff's study showed how verbal forms, like OCRIs, are strongly connected to specific facial gestures, forming multimodal gestalts together with gaze and body posture.

2.4. Karin Birkner (Bayreuth) and Franziska Alt (Bayreuth): Facial Gestures in Telemedical Doctor/Patient-Interaction

Karin Birkner and Franziska Alt presented data of neurological telemedical consultations. Within the project *Telemedical Stroke Network in Bavaria* (TEMPiS) doctors in non-urban areas can call a neurologist for a telemedical consultation in a stroke centre in Munich or Regensburg if a patient is suspected of having an acute stroke. Characteristic for these interactions is the triadic constellation of neurologist, local doctor and patient, the simultaneous face(s)-to-screen and face-to-face situation as well as the division of labour between the neurologist and the local doctor while conducting diagnostic tests. Two different facial phenomena were discussed: First, what Birkner called the *attentive face* of the patients at the beginning of the examination and second, the occurrence of smiling while the remote neurologists close the interaction.

The *attentive face* was localised immediately before the testing, when the neurologist announces the examination of the eyes. Besides taking off their glasses even before being asked to, patients open their eyes more widely, freeze their movements, and by that make themselves and their faces available for the examination. The analysis of the *attentive face* showed that the patients are 'actively passive' and collaborating even before knowing what the examination of the eyes will entail. It was discussed whether this particular practice of a freeze of all facial movements

was better described as a facial display of doing nothing while waiting that something will be done.

The second phenomenon discussed was smiling in the closing sequence of the telemedical encounter. Usually, the neurologist, who leads the conversation, initiates it. Smiling was possible at different stages of the closing, namely during preclosing, good wishes for the patient, and the goodbye sequence. The discussion focussed on the temporal unfolding of the smile and its holding after turn closure. Apparently, there were formal differences between smiles at different sequential positions, which include pursed lips versus open mouth and normal versus raised eyebrows. Further, the nature of the smiles was discussed in terms of whether they can be related to emotions, particularly if they are treated as social or rather as professional smiles in this institutional context. A thorough sequential analysis of the interactional unfolding of facial movements could reveal new aspects of doctor-patient interaction.

2.5. Carolin Dix (Bayreuth): Raising Both Eyebrows in Interaction

Carolin Dix took the raising of the eyebrows as starting point for her analysis in order to explore instances of this facial gesture in their sequential contexts and with accompanying multimodal resources. She presumed that together with other resources they could constitute multimodal gestalts in order to fulfil different interactive functions. Eyebrow movements are a very frequent facial movement in social interaction. Previous papers (e.g. Ambrazaitis/House 2017; Chovil 1991; Ekman 1979; Flecha-Garcia 2010; Kärkkäinen/Keisanen 2012; Parkhurst/Parkhurst 2008; Sendra et al. 2013; Swerts/Krahmer 2008) on this well observable phenomenon have already discussed the coordination of eyebrows and several interactive functions or actions as well as syntax, topics and discourse, etc. However, a systematic investigation of raising the eyebrows in naturally occurring social interaction as a facial gesture with and without co-occurring speech is still lacking. Furthermore, the analysis of parameters, such as height and duration, as well as sequential positions remains a desideratum.

In her data, a 360°-video-recording of a Thermomix dinner party, eyebrow movements occurred in the following activity and sequential contexts: Tellings, of-ferings, repairs, and assessments. From approximately 250 eyebrow movements that appeared during 20 minutes of interaction at a dinner table, about the half were considered interactional relevant facial gestures. This high rate shows how essential research on facial gestures and, particularly, eyebrow movement, is.

A central discussion throughout the data session concerned the multimodal transcription Dix used. In order to extend the GAT 2 transcription convention (Selting et al. 2009) for facial movements, she combined stills of the video recording with GAT 2 for the verbal and vocal features with symbols of the International Sign Writing Alphabet (ISWA) (Sutton 2010) for the visual aspects. This approach enabled the representation of facial and non-facial resources within one transcript, reflecting the multimodal interplay. It also adds to the current debate on what CA expects from multimodal transcripts. One problem discussed by the participants was that the ISWA shows an intrinsic position while the stills are from an extrinsic perspective. Moreover, the discussants considered ways to improve the signs for conversation analytic purposes, e.g. how the signs could be better aligned to the verbal transcript and how temporality could be represented more clearly. The discussion about this way of transcribing multimodality also led to the question of whether it is useful to decompose whole multimodal gestalts into such small pieces. The participants' views were quite divergent. While some strengthened the argument of a detailed step-by-step analysis, others focussed more on multimodal gestalts as unities. Altogether, this topical debate showed that the negotiation of the role of multimodal transcripts in CA is still necessary and continuing.

2.6. Henrike Helmer (Mannheim): Divergence between Facial and Verbal Expression: Resources for Displaying Disaffiliation while Formally Acknowledging

Henrike Helmer brought up a new facet of facial gestures. She showed video data of Stuttgart 21 mediation sessions, broadcasted live on TV in 2010. While the discussions before had mainly focussed on specific facial gestures that go hand in hand with verbal tokens or vice versa, the attention was then directed to cases of divergence between facial gestures and the verbal part of an action performed. In Helmer's examples, speakers verbally uttered acknowledgement or a change of state. By specific movements of their faces, however, they displayed disaffiliating stances. The discussion of the data focussed again on the question of separating facial gestures or treating them within whole multimodal gestalts. This led to the question whether single facial gestures have a prototypical semantic load and what that could mean for the combination of such facial prototypes. An aspect relevant for the TV data Helmer used is the potential double addressing of the interlocutor and/or the (TV) audience. However, in mediation sessions normally only one person's microphone is switched on and therefore the (verbal) interactional resources of the others are limited.

2.7. Sofia Rüdiger (Bayreuth): Chewing, Swallowing, and Enjoying Your Food: Eating as Entertainment for Others

Sofia Rüdiger, a corpus linguist, ventured an interdisciplinary exchange when she presented her data corpus of YouTube eating shows, which originate in the global trend of Korean Mukbang shows. During the shows, one person eats an enormous amount of food in front of a camera while talking to the audience. Rüdiger therefore described Mukbang as a discursive performance of an interactive monologue, often entailing an involved speaking style and self-disclosure. The central questions of the data sessions were, first, how eating and talking is managed and, second, whether there are different types of chewing which can have different functions in terms of simulating synchrony and interactivity of the situation. The videos showed an intersection between natural facial dynamics that come with chewing, swallowing and eating in general, and interactional relevant facial gestures as visible acts of meaning. One purpose of these eating shows is to display the pleasant taste of the food eaten, which can be done verbally and vocally with gustatory expressions and assessments. Rüdiger showed that facial movements could be used intentionally to visually perform the consumption of tasty food.

Next to the conversational activity of talking about and complementarily savouring food, the performers also talked about other topics, for instance about events in their private life. Here, the eating was backgrounded and became more of a competing activity next to talking. These phases offered the possibility of analysing the usage of facial resources in a multiactivity situation. Similar to Dix' data of eating during the Thermomix dinner or the switched off microphone in Helmer's data, here, facial gestures can be used interactionally while not being able to speak.

3. Conclusions and Outlook

The workshop proved to be an excellent format for collating the state of the art and discussing research results and open methodological questions. Analysing facial gestures in interaction using CA, IL and Multimodal Analysis is still at its beginning. One reason, why studies in this field are so rare might be the insufficiently developed theoretical framework: How can we describe facial gestures and what facial resources need to be included, e.g. what about gaze and head movements? However, the necessity to develop the theoretical framework lies at hand: It will strengthen and deepen the holistic multimodal perspective on social interaction.

Next to the theoretical level, the discussions during the workshop also generated questions about the technical, methodological and analytical level. These concern, for example, the use of cameras, and the multimodal transcription of sequential and simultaneous aspects. Another question affects the status of facial gestures within a multimodal gestalt. Further, Peräkylä and Ruusuvuori emphasized the focus on the relation of emotion display and social action.

Altogether, the workshop developed a promising agenda for future research on facial gestures. As a next step, a second workshop will be held, integrating more researchers interested in and working on facial gestures in interaction.

4. References

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