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Regulating shared reality with micro-dynamics in the form of conversation

Namkje Koudenburg

One of the central goals within communication is to establish whether people are on the same wavelength. Although such assessment can occur objectively, by exchanging and comparing viewpoints, people may also derive a sense of shared reality subjectively, through micro-dynamics in the form of conversation that inform them whether their views are shared. The present review outlines the role of these micro-dynamics in developing and regulating a shared reality. It focuses on three different contexts: intergroup communication, computer mediated communication and communication within intimate relationships. The review concludes with a discussion of the power of micro-dynamics in comparison to more explicit forms of social validation.

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Effective and smooth communication is contingent upon the experience of a shared reality between interaction partners. This does not mean that knowledge needs to be *objectively* shared: in contrast to some other approaches [1,2] shared reality theory focuses on the *subjective* experience of sharing inner states [3,4]. This experience can emerge from more or less explicit responses by the audience that reveal their acceptance of a speaker's statement [5], but quite often it emerges from the mere assumption that the audience has accepted the message [6]. For instance, when interaction partners share membership to the same group it may be assumed that they also share the same world views [7,8]. The present review focuses on a third source from which people may infer that their views are shared by their conversation partners. This source is located somewhere between *explicit* acceptance and merely *assumed* acceptance: People may derive

their subjective experience of shared reality from micro-dynamics in the form of conversation [9,10,11**].

The paper will start with an account of how micro-dynamics can influence processes at the macro-level, such as emergence and regulation of shared reality. I specifically refer to micro-dynamics in the *form* of conversation: these are silences, interruptions, and other dynamics that influence whether the conversation is experienced as smoothly flowing. Then follows a review of studies examining these micro-dynamics in three different contexts: intergroup contexts, online contexts, and within intimate relationships. The review concludes with a discussion of the power of conversational micro-dynamics and suggested directions for future research.

Conversational micro-dynamics and the emergence of a shared reality

Considerable evidence emerging over the past decades has pointed to the many mechanisms that enable people to coordinate their speech. Research in the areas of interactional synchrony [12], turn-taking [13,14], behavioral mimicry [15], nonverbal behavior [16], communication accommodation [17], psycholinguistics [18], and joint action [19] documented the numerous ways in which interaction partners coordinate their speech acts to enhance the meshing of behaviors into a smooth conversational flow.

Speech coordination not only enhances the efficient exchange of information, it also has a communicative function in and of itself [10]. Within conversations, smoothly coordinated turn-taking is experienced as pleasant, but also signals that relationships are maintained and the shared reality is intact [9,10,11**]. Conversation analysts identified a relation between the temporal organization of turn-taking and the establishment of mutual understanding: shorter latencies between turns signaled a greater degree of common ground [20]. Similarly, we demonstrated in a number of studies that when conversation occurred in a smoothly flowing fashion, people took this as a signal that they were on the same wavelength. In these studies, we were interested in what would happen when we were to disrupt this conversational flow, for instance with a brief 4-second silence that occurred right after a person had expressed their opinion [9,21*,22], or by instigating a response delay in computer-mediated communication [10,23]. We found that even very subtle flow disruptions seriously affected the experience of shared reality: people reported higher feelings of rejection and

raised questions about the consensus within the group [9,10].

Evidence from a large correlational study on speed dating [24^{*}] underlines the role of micro-dynamics: alignment of speech, for instance by completing the other's sentences, and mimicry (of laughter and function words) predicted the experience that people 'clicked' with their date¹ and their willingness to go out again. The 'click'-experience was however reduced when dating partners used more hedges and asked more questions, as these were likely to disrupt conversational flow.

It thus appears that the smooth flow of conversation serves as an indication of a shared reality between people. Accordingly, one would expect that communicating information that is consistent with the shared reality should elicit behaviors that enhance conversational flow. Indeed, research showed that communication of stereotypes elicited more non-conscious mimicry — a behavior that stimulates smooth and efficient conversation — compared to when stereotype inconsistent information was communicated [25^{**}].

Sociological theory provides insights to explain why micro-dynamics in the form of conversation serve this signaling function. Goffman [26], for instance, suggested that because interaction rules are generally unspecified, they are largely carried out unthinkingly. Only when rules are broken, for instance because one speaker interrupts another, or because there is a prolonged silence between speaking turns, interaction partners become aware that something is not right [9,14]. One could say that the smooth flow of conversation is a representation of the state of affairs between people, and that any disruption of that flow conveys a threat to either their relationship or the consensus between them (see [11^{**}] for an elaboration of this argument).

Regulating shared reality through conversational micro-dynamics

The finding that micro-dynamics in the form of a conversation provide subtle cues to infer norms and shared realities, opened up possibilities for examining the regulatory function of these dynamics. Indeed, if flow disruptions are to be taken as a proxy for disagreement, or even disapproval, they should provide people with very subtle means to regulate norms and shared realities within groups.

The reason for this is that people are motivated to maintain social relationships and shared understandings with others [27,28]. Disruptions of conversational flow, such as brief silences [9,21^{*}] and a lack of spontaneous

¹ Although 'clicking' is not explicitly defined in [24^{*}], it often refers to a feeling of connectedness and mutual understanding.

imitative behaviors [25^{**}] pose a threat to these relational and epistemic motives. In order to restore social unity,² people may be motivated to engage in reconciliatory behaviors, such as conformity. Evidence supporting this idea demonstrates that flow disruptions pose a latent threat to expulsion from the group, which motivates people to shift their opinions to be more in line with the group norms [21^{*}]. Micro-dynamics in the form of conversation may thus not just function to inform people about the shared reality, but also maintain or regulate this shared reality in the face of threats.

Conversational micro-dynamics in context

Elements of conversation should always be interpreted within the context in which the conversation takes place. In this review, I distinguish three contexts in which studying micro-dynamics in the form of conversation may provide important insights: computer-mediated communication, intergroup communication, and communication within intimate relationships.

Computer-mediated communication

Conversation via mediated channels (i.e., via video-conference calls or a telephone line) is likely to be especially susceptible to disruptions of flow. Much research has pointed to the risk of losing important social information when communicating via mediated channels that only present auditory information (e.g., via the telephone) or written information (e.g., e-mail communication [29]). Current developments in high-bandwidth computer mediated communication, however, make it increasingly resemble face-to-face encounters. This presents a new problem: people may unconsciously expect conversations to occur in a similar fashion as face-to-face communication (i.e., with a similar smooth flow). When these expectancies are not met, for instance due to minor response delays, people may feel a lack of belonging or social validation for reasons they do not understand.

In three studies we asked participants to communicate with each other via computer mediated communication, using headsets and a computer screen. We then delayed visual and auditory feedback with 1s throughout the second half of a conversation, which obstructed the smooth coordination of speech acts and therefore caused interruptions and silences. Across studies, we found that the delay seriously disrupted the flow of the conversation and consequently obstructed the emergence of social relationships and shared reality. Even when we made explicit that disruptions of flow occurred due to a bad connection, conversation partners still experienced a

² Social unity refers to a general sense of we-ness, including both a feeling of togetherness (belonging, entitativity) and of common knowledge, values, and beliefs (shared cognition or shared reality). In the studies described, we find that the experience of unity is closely linked to the experience of shared cognition.

reduced sense of social unity [10]. It appears that because people are unaware of the effects of micro-dynamics in the form of conversation on emerging relationships and shared realities, they are unable to compensate for failure of these micro-dynamics, even when they can attribute such failure to a source outside the relationship.

Intergroup communication

Studies demonstrate that intergroup dyads display more behaviors that potentially disrupt conversational flow: compared to intragroup dyads, intergroup dyads spent less time interacting, use fewer words, and smile less frequently at interaction partners [30]. They also display less immediacy and higher rates of speech errors [31], and are more likely to have different accents [32*]. Moreover, when intergroup categorizations are highly salient, violations of coherence are more frequent [33] and people are more likely to use diverging rather than converging communication strategies [34]. Accordingly, people rate the quality of communication (e.g., smoothness, openness, understanding) significantly higher when they communicate to someone from their own culture or ethnicity, compared to someone from a different culture or ethnicity [35].

This fact is especially concerning when we consider that the *effects* of flow disruptions are more detrimental in intergroup communications [36,37**]. People who communicate with members of an outgroup are likely to report greater anxiety and reduced interest in contact after engaging in a conversation in which flow was disrupted compared to when flow was not disrupted (i.e., by delaying auditory feedback [37**]). In this study, communication with ingroup members was not negatively affected by flow disruptions (in fact, they perceived their partners as less anxious compared to when flow was not disrupted). Combining these findings, both the increased presence and the more harmful effects of flow disruptions may explain the reduced emergence of shared reality in intergroup encounters [7].

Intimate relationships

Within close relationships, partners usually assume the presence of a strong shared reality [38,39] which should provide a context for the evaluation of flow disruptions. Therefore flow disruptions among people in a close relationship (intimate partners, family members, or friends) are not necessarily experienced negatively. In a set of studies [23], we asked partners to communicate with each other via computer mediated communication, while we disrupted conversational flow by introducing a response delay (also see [10]). Interestingly however, the flow disruption did not obstruct the experience of shared reality. In fact, the opposite occurred: partners who felt very close to each other were likely to feel more socially validated when flow was disrupted compared to when conversation was smoothly flowing. We interpreted this as

an indication that partners used the shared reality that they held with their interaction partner to fill the gaps that occurred in a disrupted communication. Through this mechanism, partners who experienced a disruption of flow could end up with even higher feelings of social validation than partners who were able to effectively communicate with their partner (potentially because the latter were constrained by the reality of their partners' views).

The power of micro-dynamics

Although micro-dynamics in the form of conversation may occur largely at an implicit level, they have a substantial effect on our experience of shared reality with others. In fact, it could be argued that information that is transferred implicitly is more likely to influence our shared reality than information that is stated explicitly. Three factors are likely to contribute to the power of micro-dynamics: their implicitness, collectivity, and off-record nature.

First, Kashima and colleagues demonstrated that attitudes that are not verbalized or directly observable, but implicitly inferred from cultural practices, are better maintained [40,41]. Following classic sociological reasoning [26,42], attitudes that need not be explicitly stated, but are ingrained in daily practices and therefore taken for granted, are likely to be viewed as shared. Extrapolating from this, when in a conversation an expressed opinion does not elicit explicit discussion, but is instead followed by smoothly flowing conversation, it is likely that this opinion is not perceived as debatable, but as commonly shared and therefore grounded among the conversation partners.

The power of micro-dynamics may be further enhanced by their off-record nature. Although the receiver of a silence may experience feelings of rejection, it is difficult to address this, because the behavior occurs in a sense, off-record [43]. Indeed, interaction partners could deny the rejection by saying they were just momentarily distracted or pondering to say next. In the ostracism literature, the ambiguity of the behavior is identified as contributing to the unique power and usability of ostracism: One can ostracize another without ever needing to admit doing it or having to apologize for it [44]. Accordingly, it is shown that rejection that is implicit in nature (e.g., when one is ignored) is more likely to promote behaviors aimed at social reengagement, whereas explicit rejection is likely to lead to social withdrawal [45].

The final factor that makes silences especially powerful indicators of norm breach, is the collectivity of the event. By definition, a silence will only occur when every partaker in the conversation remains silent, suggesting that one's expression leading up to the silence has been collectively disapproved.

Conclusions and future directions

To conclude, creating a shared reality is a dynamic process, and the form of the conversation provides communicators with subtle, but very important tools to regulate this reality. One could argue that the form of conversation among group members is experienced as a representation of the social unity within a group [11**]. As such, any threat to the flow of a conversation, for instance in the form of a brief silence, represents a threat to the collective, as well as to its ideas.

It is important to consider consequences of the implicit maintenance of shared reality. In some situations, one may be motivated to maintain a good conversational flow in an effort to preserve the relationship. We should consider that in such a situation, one may effectively communicate a shared understanding on the topic — people may take the flow as a proxy for agreement. Building on this, the maintenance of conversational flow could lead to the emergence of subjectively shared realities that may not reflect the actual attitudes of the collective [46,47].

Conflict of interest statement

Nothing declared.

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