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Affective stance, ambivalence, and psychophysiological responses during conversational storytelling

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Abstract

Earlier research has shown that conversational storytelling is a regular locus for displays of affective stance. A stance display by the teller invites a mirroring response from the recipient, and these reciprocal displays are finely organized and timed. The article adds a new aspect to the research on affective stance and affiliation by examining the linkages between interactional stance displays and physiological responses in the participants. We show that the valence, and especially ambivalence, of the stance displayed by the storyteller is associated with an increase in the autonomic nervous system (ANS) activity in the recipient. The participants were 40 students who were discussing their life events in dyads. Heart rate, electrodermal activity (skin conductance), and facial muscle activity (EMG) of the participants were measured. The conversations were videotaped, and the storytelling instances were coded by means of a quantitative application of conversation analysis. The stories were coded into three classes: happy, sad, and ambivalent (twofold) stories on the basis of the affective stance that was displayed by the teller. In comparison to a happy and sad stance, ambivalence increased significantly the recipient's heart rate and electrodermal activity. Our interpretation is that the increased ANS activity reflects the more complex cognitive and interactional task faced by the recipients in affiliating with an ambivalent stance.

Keywords: Emotion; Ambivalence; Autonomic nervous system activity; Storytelling; Psychophysiology; Conversation analysis

1. Introduction

1.1. Affective stance in storytelling

Storytelling is common activity in mundane social life (see e.g. Labov and Waletzky, 1967; Barthes, 1977), and one of the principal ways in which people share their personal experiences (Jefferson, 1978). In the context of research on spoken stories and their reception in naturally occurring interaction, Stivers (2008, 32) conceptualized storytelling as ''an activity that both takes a stance toward what is being reported and makes the taking of a stance by the recipient relevant''.

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In this context, the term stance refers to the teller's affective treatment of the events he or she is talking about, or in a broad sense, to the emotional valence of the events as expressed by the teller (Sorjonen and Peräkylä, 2012: 5). Instances of storytelling are thus one regular locus for reciprocal displays of emotion, and they have proven to be rich materials for empirical research on interactional regulation of emotion (see e.g. Jefferson, 1978; Stivers, 2008; Ruusuvuori and Peräkylä, 2009; Peräkylä and Ruusuvuori, 2012; Couper-Kuhlen, 2012; Selting, 2010; Kupetz, 2014).

Earlier conversation analytical research has shown that the organization of storytelling, as well as displays of affective stance within it, have recurring structures and timing. Sacks (1974) described three basic sequences of a story: preface, telling sequence and response sequence (cf. Labov and Waletzky, 1967). Through initiating a story in a preface, the teller gets the floor for the telling sequence, in which the recipient typically refrains from taking a longer turn before the story gets to its completion and makes a full response relevant. During the telling phase, it is interactionally preferred that the recipient supports the process of telling by minimal responses (Sacks, 1974; Jefferson, 1978; Stivers, 2008). Furthermore, the story preface often projects the teller's stance to the events that will be reported, for example whether the story is going to be funny or horrible. The stance is conveyed by the teller and supported by the recipient (for example through nodding, facial expression, and minimal verbal affiliation) during the telling phase, and finally fully responded by the recipient in the story completion. The preferred response to the story mirrors the affective stance that the teller conveyed (Stivers, 2008; Jefferson, 1978; Sacks, 1974; Ruusuvuori and Peräkylä, 2009; Peräkylä and Ruusuvuori, 2012; Couper-Kuhlen, 2012; Selting, 2010; Kupetz, 2014).

Despite these recurrent structural features of storytelling, stories in spoken interaction are not necessarily simple and straightforward in the delivery and reception of affective stance. The affective stance in a story can be also vacillating, twofold or ambiguous. In prior interactional research, ambivalence in stories has received only little attention. In their study on facial expressions, Ruusuvuori and Peräkylä (2009: 386–392) discuss a case of storytelling where the teller conveys both troublesome and humorous stance toward a single topic. Ruusuvuori and Peräkylä showed how the teller of this particular story (about sewer bugs) used both verbal means and facial expressions to alert the recipient to slight changes of stance during the course of telling the story, and how there was some pursuit (by a subsequent assessment and an increment to the assessment and by qualifying facial expressions) from the part of the teller before both the stances were eventually reciprocated by the recipient. Hakulinen and Sorjonen (2012) discuss recipient's management of an ambivalent stance through a Finnish response cry ''voi että'' (combination of two particles). They suggest that this combination of particles allows the recipient of an emotionally ambivalent turn to respond with an affective expression but at the same leave unspecified what kind of affect is in question.

In this paper, our main argument considers this kind of ambivalent stance. We conducted a quasi-experimental study in which the participants were asked to talk about happy events and losses in their life. Our initial research question was how the happy or sad affective stance that is displayed in storytelling connects to physiological activation in the participants. Physiological indicators of emotional valence (facial muscle activation) and arousal (autonomic nervous system activation) were measured during the conversations. In qualitative exploration of the videotaped conversations, it turned out that despite the instruction to talk about happy events and losses, the participants often displayed an ambivalent stance toward the events they were talking about. We thus added a category of ambivalent stories to our coding of story valence. Through a quantitative analysis of physiological arousal in the participants during stories with different affective stances, we will show how ambivalent stance that is displayed by the teller associates to physiological arousal in the recipient in ways which, to our understanding, might reflect the recipient's interactional task of stance mirroring.

1.2. Studying linkages between interaction and physiological emotion process

Earlier interaction research – especially in conversation analysis – has been based on the premise that interaction has its own organization and regularities that can be empirically described without tracing them back to physiology or psychology of the participants (Goffman, 1983; Sacks et al., 1974; Schegloff, 2007); and that also emotional displays are finely interactionally regulated, as they are bound to the sequential organization of interaction (e.g. Jefferson, 1984; Goodwin and Goodwin, 2000; Maynard, 2003). Recent CA research has begun to show that this is the case regarding not only talk (and its prosody) but also bodily displays of emotion: posture, gesture and face. Such emotional expressions as smile and frown have been shown to be – rather than spontaneous expressions of the single individual's emotional state – interactionally organized and regulated. In other words, they appear in specific places in interaction and they have interactional consequences (Goodwin et al., 2012; Ruusuvuori and Peräkylä, 2009; Kaukomaa et al., 2013; Peräkylä, 2012). This conception of emotion in interaction motivates also the current study. We will, however, also deviate from the working hypothesis of the 'autonomy' of the organization of interaction, by investigating the linkages between the sequentially organized interactional events and the physiological responses in the participants.

Physiological responses are not socially available for observation in the same way as words, facial expressions or gestures are (even though, arguably, they are part of the interactants' subjective experience, because we also feel our