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Expressing emotions in blogs: The role of textual paralinguistic cues in online venting and social sharing posts

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A B S T R A C T

Textual paralanguage cues (TPC) have been signaled as effective emotion transmitters online. Though several studies have investigated their properties and occurrence, there remains a gap concerning their communicative impact within specific psychological processes, such as the social sharing of emotion (SSE, Rimé, 2009). This study content-analyzed Live Journal blogposts for the occurrence of TPC in three phases of online SSE: initiation, feedback and repost. We compared these to TPC on a second type of emotional expression, emotional venting. Based on Social Information processing theory (SIP, Walther, 1992), and on the Emotional Mimicry in Context (EMC, Hess & Fischer, 2013) framework, we study predictive relationships in TPC usage in our phased model of online SSE. Results showed that TPC prevailed in SSE blogposts and strongly dominated in emotional venting posts. TPC was more common in affective feedback than cognitive. Moreover, the presence of tactile affective cues (i.e., hugs, kisses) in the initiation post predicted their presence in affective feedback. Results lend support to the idea that TPC are used in socio-contextual ways in online SSE and particularly extrapolate certain FtF nonverbal behaviors, such as the provision of socio-affective touch.

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1. Introduction

The once widespread assumption that computer mediated communication (CMC) was necessarily less emotional than face-to-face (F2F) communication has been proven wrong for about a decade (Derks, Fischer, & Bos, 2008). Textual paralanguage cues (TPC) such as emoji's or emoticons (:-D), character repetitions (*yeeei*) and nonstandard or multiple punctuations (*!!!, #%#!!*) have been found to be effective communicators of emotion in CMC (Harris & Paradice, 2007). TPC provide emotional context, strengthen the intensity of verbal messages and can be used for disambiguation (Derks, Bos, & Von Grumbkow, 2007; Riordan & Kreuz, 2010). Research has studied how receivers interpret TPC (Carr, Wohn, & Hayes, 2016; Harris & Paradice, 2007; Lo, 2008; Riordan & Trichtinger, 2017), individuals' motives to use TPC (Vandergriff, 2013; Walther & Parks, 2002, pp. 529–563), and the occurrence of

TPC in different platforms (Luangrath, Peck, & Barger, 2016; Kaye, Wall, & Malone, 2016). However, there is a lack of empirical knowledge about how TPCs are used in the social sharing of emotions (SSE, Rimé, 2009; Rimé, Mesquita, Boca, & Philippot, 1991).

Studying online SSE is important, since the *process* of SSE may report benefits to both the initiator and the listener. The first, due to a temporary relief of negative emotions or a re-surge of positive emotions, and the second, due to a fostering of emotional connection and closeness between both (Rimé, 2009). TPC may make a special contribution to online SSE, because of their ability to make CMC more warm, eloquent and "human," which may ultimately affect message effectivity and interactivity in online settings.

To close this research gap, we investigate the role of TPC based on the SSE framework, because it accounts for possible beneficial and reciprocal effects between the sender and receiver. SSE has been found to occur naturally in online social networks (Rodríguez-Hidalgo, Tan, & Verlegh, 2015). To analyse TPC usage, we draw on Rodríguez-Hidalgo et al. (2015)'s conceptualization of initiation, feedback, and repost (the initiator's reaction to feedback), and

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propose hypotheses for each phase. In order to understand how TPCs are used in the different phases, we draw on Social Information Processing (SIP, Walther, 1992), a framework which may explain why and how TPCs would be used to emulate non-verbal behaviours from FtF communication online.

To empirically test differences in TPC usage, we analyse emotional venting blogposts and compare TPC occurrence in these posts to online SSE. To add robustness, we also consider TPC usage in non-SSE blogposts. Introducing and operationalizing online venting (or expressing emotion 'outbursts') may be useful in identifying venting expressions in general in SNSs, and identify whether TPC may have a stronger presence in these posts.

Because SSE involves a chain of interactions between individuals, we investigate the assumption that TPC may be mimicked. Mimicry is highly dependent on the social context of the interaction, and it likely results in an increased feeling of empathy (Hess & Fischer, 2013). Although some researchers have questioned the idea that mimicry (at least in the case of emoticons) can exist, due to the asynchronous character of CMC, which some researchers argue is less spontaneous than FtF (Derks et al., 2008), we suggest that TPC correspondence between the sender and the receiver may be expected in highly contextual scenarios, such as the provision of socio-affective feedback online.

To test our assumptions, we content-analyse a sample of blogposts in Live Journal, a platform which has been proven suitable to run empirical studies on emotions and online social networks (i.e., Gaudeul & Giannetti, 2013; Zafarani, Cole, & Liu, 2010). Another reason to choose Live Journal is its character of a blogging tool with SNS features, where users create a profile and establish a list of friend connections which can be browsed, a key characteristic of a SNSs (Boyd & Ellison, 2007). In addition, Live Journal grants a greater degree of anonymity compared to other more popular SNSs (i.e. Facebook), in which natural occurrences of online SSE already were found (Rodríguez-Hidalgo et al., 2015).

In investigating these objectives, our study contributes by a) studying the use of TPCs in three phases of online SSE, b) comparing TPC usage in different forms of emotional expressions and blogposts, c) analysing the correspondence of particular cues between sender and the receiver, and d) provide evidence as to which particular nonverbal behaviours from FtF communication may be extrapolated to CMC. Our research thus advances our understanding about the role of TPC in online emotional exchanges.

2. Theoretical framework

2.1. Textual paralanguage cues in CMC

Luangrath et al. (2016) define TPC as "written manifestations of nonverbal audible, tactile, and visual elements that supplement or replace written language and that can be expressed through words, symbols, images, punctuations, demarcations, or any combination of these elements" (p. 1). Several studies have noted that TPC are effective emotion communicators (e.g., Derks et al., 2008; Harris & Paradice, 2007; Laflen & Fiorenza, 2012). TPC have been found to have two main functions. The first is message disambiguation, or helping the receiver to interpret the meaning of the message (i.e., Riordan & Kreuz, 2010; Walther & Parks, 2002, pp. 529–563). The second is increasing message intensity, by making it seem emotionally stronger (Derks et al., 2008). Moreover, a number of studies have focussed on the functions of one particular type of TPC, and found that exclamation marks and onomatopoeic words (e.g., 'HAHAHA' for laughter) emphasize the message (Laflen & Fiorenza, 2012) and make the message more expressive (Sasamoto & Jackson, 2016). Likewise, repeated punctuations set the tone of the message (i.e. 'that would be a nice idea … wouldn't it?'(Carey, 1980).

2.1.1. TPC usage intensity

The frequency or intensity of usage of TPC reported in recent studies has ranged from .6% per word in email messages (Kalman & Gergle, 2014), to .95% per word in a German chat corpus (Vandergriff, 2013). In a study of five large corpora (including discussion forums and electronic mailing lists), Riordan and Kreuz (2010) reported a base rate of 0.47% TPC per word. This low frequency does not imply that TPCs are unimportant. For example, a single parenthesis or dot can change the meaning of a long sentence. Thompson and Foulger (1996) found that a happy emoticon at the end of an unfriendly message changed its perceived hostility. Moreover, an experiment by Walther and D'Addario (2001) found that the presence of a negative element (verbal or nonverbal) changed the message interpretation to a negative one. Regarding punctuation, Gunraj, Drumm-Hewitt, Dashow, Upadhyay, and Klin (2016) found that sentences which ended with a period in text messaging were perceived as less sincere than those without.

Though the question of whether emoticons and other paralinguistic symbols can be considered as analogue to facial expressions and other nonverbal language remains being subject of some debate (i.e., Derks et al., 2007; Walther & D'Addario, 2001), for the purposes of this study we choose to focus on the nonverbal aspects only, largely based on the premise that in FtF communication, the nonverbal language employed can easily override the meaning of a verbal message, particularly when there is conflict between the two (Burgoon, 1985; Burgoon, Buller, & Woodall, 1996; Philpott, 1983). Additionally, CMC study findings seem to sustain the notion that TPC disambiguate the emotional meaning of messages and/or increase their intensity (Derks et al., 2008; Harris & Paradice, 2007). Therefore, we define TPC intensity parsimoniously as the number of times TPC appear in messages and assume that a larger number of TPC would add up to the message's emotional intensity.

Regarding TPC intensity, few studies have focussed on a wide array of paralinguistic cues in SNSs. Luangrath et al. (2016) found that approximately 21% of tweets, 19% of Facebook posts and 31% of Instagram posts, all brand-related, contained one or more TPC. However, the authors based these frequencies in the proportion of posts where TPC occurred. While we largely base ourselves in the TPCs categorizations made by the authors, and in line with Vandergriff (2013) and Riordan and Kreuz (2010), we argue that the intensity of TPC usage should be related to the length of the post. For instance, one blogpost containing 5 words with one TPC (1 out of 5 words = 20%) has likely a higher TPC intensity than a blogpost of 40 words containing 4 TPC (4 out 40 words = 10%).

2.2. The social sharing of emotion

When a person experiences an episode that affects their emotional balance, the resulting emotions are quickly expressed to recipients close to that person, triggering a process known as the social sharing of emotions (SSE) (Luminet, Bouts, Delie, Manstead, & Rimé, 2000). SSE is an intrinsic interpersonal communicative act, which requires at least two persons who communicate, i.e.: 1) the person who experiences an emotion, feeling an urge to affiliate and express it, and 2) the recipient of the shared emotion. SSE is very prevalent in the wake of emotions; at least in 60% of cases people communicate emotions to others on the same day the episode occurs. After one week, this percentage increases to 90% (Rimé et al., 1991). Furthermore, SSE is believed to occur regardless of emotion type, gender, age, culture and level of education (Rimé, Finkenauer, Luminet, Zech, & Philippot, 1998).

We conceptualize SSE as occurring in a manner that facilitates the understanding by part of the listener, when the initiator provides a balanced explanation of the emotional episode and/or the feelings associated with it. However, the expression of emotion can also occur