

Research Report

# Textual paralinguistic and its implications for marketing communications ☆

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Accepted by Amna Kirmani, Editor; Associate Editor, Priya Raghuram

Received 21 May 2015; received in revised form 4 May 2016; accepted 12 May 2016

Available online 17 May 2016

## Abstract

Both face-to-face communication and communication in online environments convey information beyond the actual verbal message. In a traditional face-to-face conversation, paralinguistic, or the ancillary meaning- and emotion-laden aspects of speech that are not actual verbal prose, gives contextual information that allows interactors to more appropriately understand the message being conveyed. In this paper, we conceptualize textual paralinguistic (TPL), which we define 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, punctuation, demarcations, or any combination of these elements. We develop a typology of textual paralinguistic using data from Twitter, Facebook, and Instagram. We present a conceptual framework of antecedents and consequences of brands' use of textual paralinguistic. Implications for theory and practice are discussed.

Published by Elsevier Inc. on behalf of Society for Consumer Psychology.

*Keywords:* Nonverbal communication; Paralinguistic; Brand communications; Linguistics; Emoji; Social media

A customer of Whole Foods tweets that he received a bad cupcake from the grocer, to which Whole Foods replies, “A bad cupcake?!?! Oh No!!! I’m so sorry. \*sigh\* Thank you for letting us know” (Whole Foods Market, 2013). How does communication on social media affect brand perceptions? Marketers are communicating with customers using a “shorthand, digital language” (Smith, 2015), yet the nature of these communications is under-investigated.

In marketing, research on linguistics has focused primarily on the effects of word choice, such as the effect of explanatory words on consumption experiences (Moore, 2012), refusal words on choice (Patrick & Hagtvedt, 2012), and vowel sounds in brand names on brand preferences (Lowrey & Shrum, 2007). We also see evidence that imperative messages (e.g., “Buy Now!”) are more effective in uncommitted consumer–brand relationships

(Moore, Zemack-Rugar, & Fitzsimons, working paper), and assertive statements are more effective at garnering consumer compliance for hedonic products (Kronrod, Grinstein, & Wathieu, 2012). In contrast, our work focuses not on the words said, but on the way nonverbal information is conveyed in writing.

As computer-mediated communication (CMC) has become more prevalent, people have evolved new ways of communicating. Electronic messages are often imbued with nonverbal cues that signal individual characteristics, attitudes, and emotions. Indeed, various researchers recognize that people adapt to the limitations of CMC by creating surrogates for missing social cues (Byron & Baldrige, 2007; Ganster, Eimler, & Krämer, 2012; Walther, 1996). The primary goal of this paper is to provide a framework for the surrogates that people are using in digital communications.

We define *textual paralinguistic* (TPL) 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, punctuation, demarcations, or any combination of these elements*. Expression of nonverbals in text typically differs from the verbal message in several ways: (1) the words are delineated by special characters (e.g., “\*”) or

☆ The authors would like to thank the editor, associate editor, and three anonymous reviewers for their helpful feedback as well as Veronica Brozyna, Laura Schoenike, and Tessa Strack for their research assistance.

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styles (e.g., CAPS), (2) the words are not standard English but still possess meaning, (3) the words do not flow grammatically with the sentence, and/or (4) the nonverbals occur in the form of a visual image (e.g., emoji). The Whole Foods' tweet, for example, contains four instances of TPL: “?!?!”, “Oh”, “!!!”, and “\*sigh\*”.

In this paper, we take both an inductive and a deductive approach to the conceptualization of TPL, first exploring how linguistic theory informs the study of TPL, then analyzing how companies are using TPL in their online interactions. We theorize five types of TPL and conclude with a discussion of theoretical and managerial implications as well as avenues for future research.

### **In-person nonverbal communication and behavior**

Nonverbal communication refers to communication effected by means other than words (Knapp, Hall, & Horgan, 2013). It is readily observed in all in-person interactions, yet the notion of what constitutes nonverbal communication online is not as clear. To understand the nature of nonverbals in text, we first explore nonverbals in face-to-face interactions.

#### *Auditory nonverbal communication*

One of the earliest theorists to study nonverbal communication was Trager (1958, 1960), who noted the depth and importance of information communicated by aspects of speech such as pitch, rhythm, and tempo. Trager (1958) described paralinguistic elements in terms of vocal qualities and vocalizations that qualify literal words. These vocal properties have been termed “implicit” aspects of speech (Mehrabian, 1970) since human speech is naturally imbued with vocal sounds. Communicating aspects of speech aside from literal words has been common among playwrights for centuries. In cinema and theater, paralinguistic elements are inserted into scripts to give stage directions, relay emotions, and facilitate interaction, guiding theatrical performance across languages, cultures, and time (Poyatos, 2008).

#### *Visual nonverbal communication*

Just as auditory aspects of speech are inherent in face-to-face communication, so too are visual elements of communication. Birdwhistell (1970) investigated kinesics, the conscious or unconscious bodily movements that possess communicative value, including human gestures and body language. An important bodily communicator is the human face; some scholars claim that it is the primary source of communicative information next to human speech (Knapp et al., 2013). Subtle changes in facial muscle movements can communicate emotional states and provide nonverbal feedback (Ekman et al., 1987). It is thus not surprising that visual textual paralinguistic elements exist in the form of facial emojis.

Nonverbal visual elements are not exclusively related to bodily movements. Visual presentational style conveys information in face-to-face communication through adornments, clothing, style, tattoos, and cosmetics (Barnard, 2001). Often referred to as artifacts, these stylistic choices possess nonverbal signaling

power that can communicate personality characteristics (Back, Schmukle, & Egloff, 2010) and are often the basis for initial judgments and impressions.

#### *Haptic nonverbal communication*

Touch is the most basic form of communication; indeed, at birth the sense of touch is the most developed of our senses (Hall, 1966; Knapp et al., 2013). Young children use touch to explore their environment, and later in life touch becomes an effective method for communicating with others. We know that individuals have differing preferences for touch in interactions with others, with some people seeking out touch while others avoid it (Webb & Peck, 2015). The meaning of touch in interaction is highly dependent on environmental, personal, and contextual factors. Recent research shows that the degree of relationship closeness influences the types of touch that are deemed appropriate (Suvilehto, Glerean, Dunbar, Hari, & Nummenmaa, 2015).

### **Nonverbal communication online and textual paralinguistic conceptualization**

Given the importance of nonverbal communication in face-to-face interactions, it is reasonable to assume that nonverbals play an important role in textual communication as well. Various researchers have noted the presence of paralinguistic elements in text-based messages (e.g., Lea & Spears, 1992; Poyatos, 2008). Lea and Spears (1992) suggest that paralinguistic marks, which they define as ellipses, inverted commas, quotation marks, and exclamation marks, affect perceptions of anonymous communicators online. Although symbols and punctuation possess communicative value, a broader conceptualization of textual paralinguistic elements is needed. To this end, we propose a typology for categorizing and differentiating the various paralinguistic elements that occur in text. It is our hope that this typology will facilitate future research on TPL, its antecedents, and its consequences.

Combining theoretical perspectives on verbal and nonverbal communication, we assert that in-person paralinguistic and text-based paralinguistic elements vary in three consequential ways. First, face-to-face paralinguistic elements are typically superimposed on the message, whereas TPL is often decomposed. That is, in face-to-face communication, the verbal and nonverbal elements are combined; vocal aspects of speech are inherent in the production of speech, and gestures occur concurrently with the message (Key, 1975). In text-based communication, however, it is possible for the paralinguistic element (e.g., \*wink\*) to occur before or after the verbal component of the message.

Second, paralinguistic elements in face-to-face communication are more likely to be processed nonconsciously; that is, in-person gestures and nonverbals are encoded and decoded with varying degrees of awareness and control (Knapp et al., 2013). In text, however, encoding and decoding of paralinguistic elements is more likely to be a conscious process. Whereas in-person nonverbals may be incidental or automatically enacted (e.g., smiling while

talking), nonverbals in text tend to be more deliberate and intentional (e.g., inserting a smiley face).

Third, when communicating in-person, paralanguage may be seen, heard, or felt, but in text it is visual, since it is through the eyes that the message and accompanying paralanguage are received. Although audible and haptic cues are referenced in text, no auditory or haptic stimuli are experienced. That said, TPL may evoke imagery of represented gestures, sounds, or facial expressions, which can make the message more concrete and realistic (Borst & Kosslyn, 2010).

Our typology of TPL (Fig. 1) is based on the senses predominantly used in human interaction: sound, touch, and visuals, rather than taste and smell, which are more relevant for personal experience. From the literature, we identified auditory, tactile, and visual properties of communication that are likely to occur in text. Consistent with previous research on paralanguage, we distinguish between voice qualities, vocalizations, and kinesics (Key, 1975). We further add a category of “artifacts” to accommodate visuals in text that may not correspond directly to in-person communication. We elaborate on each of these in the following paragraphs.

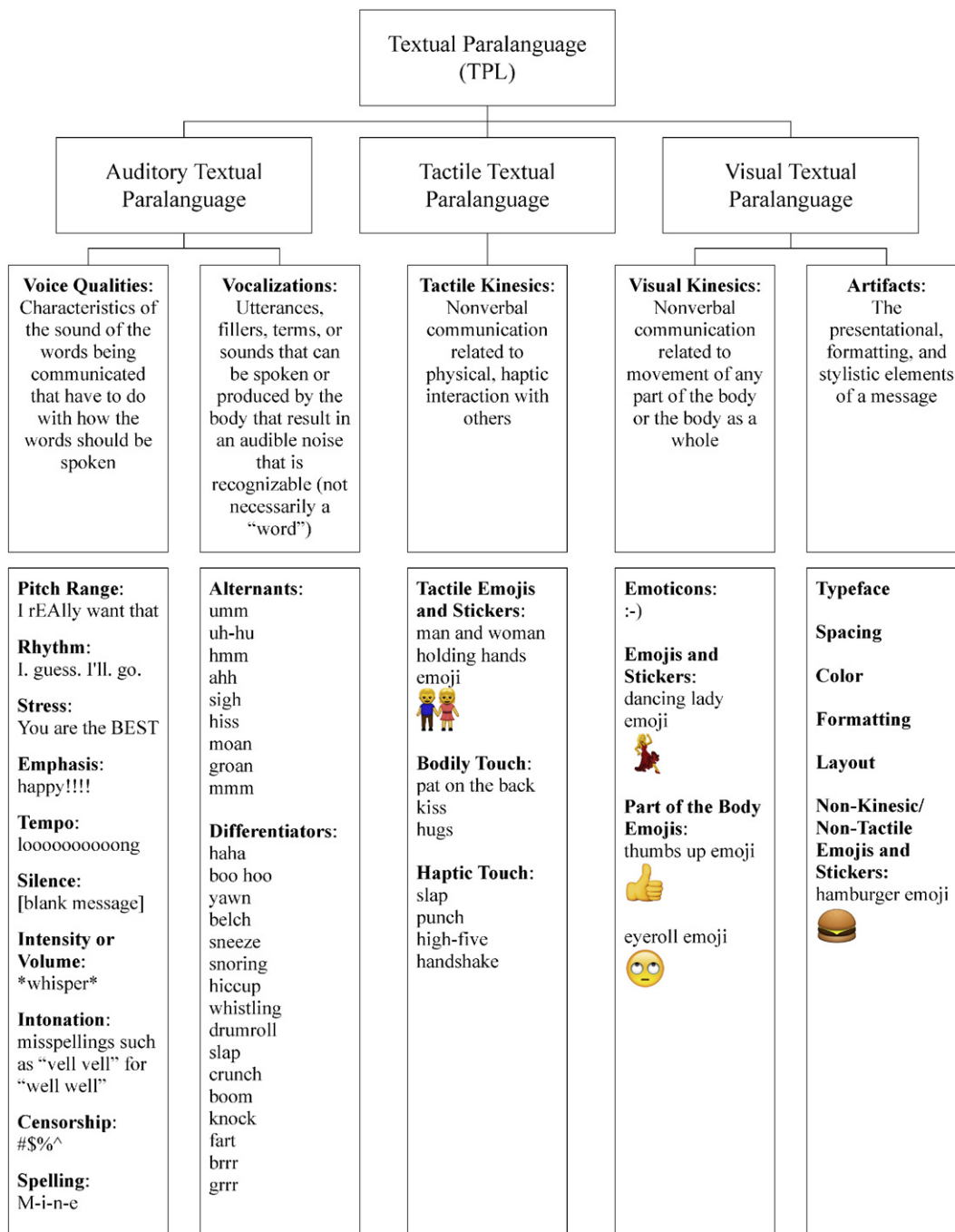


Fig. 1. Typology of textual paralanguage (TPL).

### Voice qualities

Voice qualities are characteristics of the sound of the words being communicated that have to do with how the word(s) should be spoken. This type of paralanguage represents auditory properties and incorporates aspects such as emphasis, pitch, and rhythm. Voice qualities are often communicated through capitalization, underlining, punctuation, and special characters (e.g., an asterisk). An example of a message that conveys voice qualities, and more specifically rhythm, is “Best. Sale. Ever.” The rhythm of the message is indicated by the periods after each word. Thus, the TPL imbues the message with additional significance, and “Best. Sale. Ever.” conveys more information than “Best sale ever.” There are also non-standard spellings of words that are intentionally written to convey sound qualities. As Carey (1980, p. 67) notes, “[mis]spelling may serve to mark a regional accent or an idiosyncratic manner of speech.” For example, “vell vell” suggests a different intonation than “well well”.

### Vocalizations

Vocalizations are utterances, fillers, terms, or sounds that can be spoken or produced by the body and that result in an audible noise that is recognizable. Vocalizations are not necessarily English words, but they do convey meaning. Examples include utterances such as “umm” or “uhhh,” which, depending on the context of the message, may convey hesitancy, nervousness, or indecision. Physiologic or bodily sounds, such as burping or sneezing, are also included in this type of paralanguage. While some vocalizations are clearly not “English words,” there are vocal sounds that have been granted “word” status by dictionaries. For example, “uh” and “uh-huh” are considered words by Merriam-Webster. Conversely, “zzz” is not recognized by Merriam-Webster or the Oxford English Dictionary (OED, 2015), although it is found in almost every online dictionary (e.g., Dictionary.com, 2015).

### Tactile kinesics

Tactile kinesics is the conveyance of nonverbal communication related to physical, haptic interaction with another individual. Tactile kinesic TPL includes interactional elements between two communicating parties through the use of interpersonal touch. For example, “\*high five\*” is a tactile kinesic because it is suggestive of physical contact between the sender and the recipient.

### Visual kinesics

Visual kinesics is the conveyance of nonverbal communication related to representation or movement of any part of the body or the body as a whole. Visual kinesics in TPL includes emoticons and emojis that signify bodily movements. Although various researchers have investigated the use of emoticons in online communications (e.g., Kim & Gupta, 2012; Walther & D’Addario, 2001), within our conceptualization emoticons are simply one example of visual kinesic paralanguage. For

example, “\*eyeroll\*” indicates a bodily movement and thus is an example of visual kinesic TPL.

### Artifacts

Artifacts are the presentational style of the text-based message. In text, artifacts pertain to how the message appears: typeface, stylistic spacing, color, formatting, and layout. Investigating written communication in print advertising, Childers and Jass (2002) demonstrate that typeface semantic cues affect brand perceptions. Also included in this category are non-kinesic and non-tactile emojis and stickers, such as the emoji for a car. Images and icons often supplement or replace words in online communications.

## Exploratory study: brands’ use of textual paralanguage

Heretofore we have employed an inductive approach to understanding the TPL phenomenon. In this study we approach TPL deductively; that is, we examine evidentiary data to see how TPL is being used in actual online communications. We examine brand posts on various social media platforms to substantiate our framework.

### Sample

To adequately capture the TPL phenomenon, we selected large national brands that have a diverse social media presence. It is common for brand communications to originate from both a corporate account (e.g., @Geico) and a spokescharacter account (e.g., @TheGEICOGecko) (Cohen, 2014). For each brand and spokescharacter, the most recent posts from Twitter, Facebook, and Instagram were collected. These text-based messages were then imported into TAMS Analyzer, an open source tool for coding text, and three individuals manually coded the tweets for TPL. (For additional methodological information and analyses, see the Methodological Details Appendix.)

### Results

In our sample, 20.6% of brand tweets, 19.1% of Facebook posts, and 31.3% of Instagram posts contained TPL. Across the three platforms, there is evidence that all five types of TPL are utilized by brands, with voice qualities appearing most frequently and tactile kinesics least frequently (Tables 1, 2, 3 and 4).

Uses of TPL emerged from the data that were not initially theorized from our review of the literature. One example is the spelling out of words. In a Facebook post, Chester the Cheetah (2014) wrote, “How do you spell Flamin’ Hot CHEETOS Burrito? M-I-N-E”. The use of the dashes to separate the letters in “mine” indicates that each letter is to be vocalized, thus representing a new instance of voice quality.

Table 1  
Types of textual paralinguage used by brands on Twitter.

Account type	Twitter handle	Instances of TPL	Voice quality	Vocalization	Tactile kinesic	Visual kinesic	Artifact	
Corporate	aflac	3	3 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	cheerios	58	30 (51.7%)	5 (8.6%)	0 (0.0%)	12 (20.7%)	11 (19.0%)	
	energizer	11	10 (90.9%)	1 (9.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	forestservic	25	20 (80.0%)	5 (20.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	fritolay	39	27 (69.2%)	7 (17.9%)	0 (0.0%)	2 (5.1%)	3 (7.7%)	
	geico	65	55 (84.6%)	4 (6.2%)	0 (0.0%)	4 (6.2%)	2 (3.1%)	
	kelloggsus	40	27 (67.5%)	2 (5.0%)	0 (0.0%)	5 (12.5%)	6 (15.0%)	
	progressive	21	16 (76.2%)	4 (19.0%)	0 (0.0%)	0 (0.0%)	1 (4.8%)	
	starbucks	57	19 (33.3%)	8 (14.0%)	0 (0.0%)	9 (15.8%)	21 (36.8%)	
	tootsieroll	85	39 (45.9%)	7 (8.2%)	0 (0.0%)	30 (35.3%)	9 (10.6%)	
Spokescharacter	afladuck	38	26 (68.4%)	7 (18.4%)	0 (0.0%)	3 (7.9%)	2 (5.3%)	
	buzzthebee	82	48 (58.5%)	19 (23.2%)	0 (0.0%)	8 (9.8%)	7 (8.5%)	
	chestercheetah	41	23 (56.1%)	4 (9.8%)	0 (0.0%)	7 (17.1%)	7 (17.1%)	
	energizerbunny	26	21 (80.8%)	3 (11.5%)	0 (0.0%)	1 (3.8%)	1 (3.8%)	
	frappuccino	280	74 (26.4%)	31 (11.1%)	3 (1.1%)	53 (18.9%)	119 (42.5%)	
	itsflo	52	37 (71.2%)	10 (19.2%)	0 (0.0%)	3 (5.8%)	2 (3.8%)	
	mrowl	112	70 (62.5%)	12 (10.7%)	1 (0.9%)	22 (19.6%)	7 (6.3%)	
	realtonytiger	50	44 (88.0%)	5 (10.0%)	0 (0.0%)	1 (2.0%)	0 (0.0%)	
	smokey_bear	59	37 (62.7%)	9 (15.3%)	1 (1.7%)	9 (15.3%)	3 (5.1%)	
	thegeico Gecko	37	30 (81.1%)	5 (13.5%)	0 (0.0%)	1 (2.7%)	1 (2.7%)	
	therealpsl	26	12 (46.2%)	6 (23.1%)	2 (7.7%)	5 (19.2%)	1 (3.8%)	
	woodsowl	26	18 (69.2%)	3 (11.5%)	0 (0.0%)	2 (7.7%)	3 (11.5%)	
				53.1%	13.8%	0.8%	13.9%	18.5%
	Overall			55.6%	12.7%	0.6%	14.4%	16.7%

All frequencies and percentages are based on 200 tweets per Twitter handle, with the exception of frappuccino (N = 194), starbucks (N = 122), and therealpsl (N = 52). Of the 4168 brand tweets that were analyzed, 859 (20.6%) contained one or more instances of TPL.

### Antecedents of textual paralinguage use

We now touch on brand, platform, and target audience factors that motivate the use of TPL (Fig. 2). In online communications, brands try to foster a strong “social presence” and the perception of being “real” (Sung & Mayer, 2012; Tu, 2002). Successful interaction with customers online has been attributed to whether

or not an organization can demonstrate a “conversational human voice” (Kelleher, 2009). Many individuals within an organization contribute to the voice of the organization, and the degree to which interactions are interactive, candid, and “human” can have a lasting impact on relational outcomes, especially when encountering negative electronic word of mouth (Van Noort & Willemsen, 2012). Since nonverbal cues are lacking in electronic

Table 2  
Types of textual paralinguage used by brands on Facebook.

Account type	Facebook page	Instances of TPL	Voice quality	Vocalization	Tactile kinesic	Visual kinesic	Artifact
Corporate	aflac	35	31 (88.6%)	2 (5.7%)	0 (0.0%)	0 (0.0%)	2 (5.7%)
	cheerios	51	31 (60.8%)	3 (5.9%)	0 (0.0%)	8 (15.7%)	9 (17.6%)
	cheetos	37	30 (81.1%)	5 (13.5%)	0 (0.0%)	0 (0.0%)	2 (5.4%)
	energizer	29	28 (96.6%)	1 (3.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	fritolay	39	36 (92.3%)	1 (2.6%)	0 (0.0%)	0 (0.0%)	2 (5.1%)
	geico	47	38 (80.9%)	6 (12.8%)	0 (0.0%)	3 (6.4%)	0 (0.0%)
	kelloggs	25	21 (84.0%)	4 (16.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	progressive	24	20 (83.3%)	2 (8.3%)	0 (0.0%)	1 (4.2%)	1 (4.2%)
	starbucks	78	41 (52.6%)	3 (3.8%)	0 (0.0%)	14 (17.9%)	20 (25.6%)
	tootsieroll	168	64 (38.1%)	2 (1.2%)	1 (0.6%)	97 (57.7%)	4 (2.4%)
Spokescharacter	afladuck	72	46 (63.9%)	18 (25.0%)	0 (0.0%)	2 (2.8%)	6 (8.3%)
	energizerbunny	61	52 (85.2%)	4 (6.6%)	0 (0.0%)	4 (6.6%)	1 (1.6%)
	frappuccino	141	71 (50.4%)	23 (16.3%)	0 (0.0%)	20 (14.2%)	27 (19.1%)
	smokeybear	52	42 (80.8%)	6 (11.5%)	1 (1.9%)	1 (1.9%)	2 (3.8%)
	thegeico Gecko	74	41 (55.4%)	3 (4.1%)	0 (0.0%)	26 (35.1%)	4 (5.4%)
Overall			63.0%	13.5%	0.3%	13.3%	10.0%
Overall			63.5%	8.9%	0.2%	18.9%	8.6%

All frequencies and percentages are based on 250 posts per Facebook Page, with the exception of cheerios (N = 249). Of the 3749 Facebook posts that were analyzed, 716 (19.1%) contained one or more instances of TPL.

Table 3  
Types of textual paralanguage used by brands on Instagram.

Account type	Instagram account	Instances of TPL	Voice quality	Vocalization	Tactile kinesic	Visual kinesic	Artifact
Corporate	cheerios	37	30 (81.1%)	5 (13.5%)	0 (0.0%)	0 (0.0%)	2 (5.4%)
	cheetos	29	28 (96.6%)	1 (3.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	energizer	61	52 (85.2%)	4 (6.6%)	0 (0.0%)	4 (6.6%)	1 (1.6%)
	fritolay	39	36 (92.3%)	1 (2.6%)	0 (0.0%)	0 (0.0%)	2 (5.1%)
	geico	47	38 (80.9%)	6 (12.8%)	0 (0.0%)	3 (6.4%)	0 (0.0%)
	kelloggsus	25	21 (84.0%)	4 (16.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	progressive	24	20 (83.3%)	2 (8.3%)	0 (0.0%)	1 (4.2%)	1 (4.2%)
	starbucks	78	41 (52.6%)	3 (3.8%)	0 (0.0%)	14 (17.9%)	20 (25.6%)
	tootsierolltri	168	64 (38.1%)	2 (1.2%)	1 (0.6%)	97 (57.7%)	4 (2.4%)
			23.3%	3.9%	0.8%	21.1%	51.0%
Spokescharacter	afladuck	72	46 (63.9%)	18 (25.0%)	0 (0.0%)	2 (2.8%)	6 (8.3%)
	buzzthebee	51	31 (60.8%)	3 (5.9%)	0 (0.0%)	8 (15.7%)	9 (17.6%)
	frappuccino	141	71 (50.4%)	23 (16.3%)	0 (0.0%)	20 (14.2%)	27 (19.1%)
	smokeybear	52	42 (80.8%)	6 (11.5%)	1 (1.9%)	1 (1.9%)	2 (3.8%)
	therealpsl	74	41 (55.4%)	3 (4.1%)	0 (0.0%)	26 (35.1%)	4 (5.4%)
			19.1%	6.2%	1.0%	23.5%	50.1%
Overall			20.9%	5.2%	0.9%	22.5%	50.5%

All frequencies and percentages are based on 160 Instagram posts, with the exception of buzzthebee (N = 37), cheerios (N = 34), cheetos (N = 2), fritolay (N = 140), geico (N = 70), smokeybear (N = 147), therealpsl (N = 36), and toosierolltri (N = 124). Of the 1550 Instagram posts that were analyzed, 485 (31.3%) contained one or more instances of TPL.

communication (Walther, 1993), online communicators use TPL to convey meaning and emotion.

Certain product categories, such as orange juice, possess inherent personality differences (e.g., warmth) compared to other product categories, like pain relievers (Bennett & Hill, 2012). TPL may be beneficial for brands that are motivated to create a young, relatable, or warm image. Brands may also choose to use TPL differentially across their communication portfolios. Consumer

brands, like people, are imbued with personality traits (Aaker, 1997; Fournier, 1998), often through techniques such as anthropomorphism (Aggarwal & McGill, 2012) and the use of a brand mascot (Brown, 2010), and these characters may be more likely to use TPL. Additionally, the type of TPL employed may depend on the personality of the communicator. Barbe and Milone (1980) identify visual, auditory, and kinesthetic cognitive learning styles. A visual individual may use more artifacts, a kinesthetic

Table 4  
Types of textual paralanguage used by brands across platforms (Twitter, Facebook, and Instagram).

Type	Name	Instances of TPL	Voice quality	Vocalization	Tactile kinesic	Visual kinesic	Artifact	
Corporate	Aflac	38	34 (89.5%)	2 (5.3%)	0 (0.0%)	0 (0.0%)	2 (5.3%)	
	Cheerios	123	62 (50.4%)	9 (7.3%)	0 (0.0%)	23 (18.7%)	29 (23.6%)	
	Cheetos	41	23 (56.1%)	4 (9.8%)	0 (0.0%)	7 (17.1%)	7 (17.1%)	
	Energizer	52	49 (94.2%)	2 (3.8%)	0 (0.0%)	1 (1.9%)	0 (0.0%)	
	Forest Service	25	20 (80.0%)	5 (20.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	Fritolay	107	72 (67.3%)	10 (9.3%)	2 (1.9%)	5 (4.7%)	18 (16.8%)	
	Geico	121	100 (82.6%)	12 (9.9%)	0 (0.0%)	7 (5.8%)	2 (1.7%)	
	Kelloggs	98	60 (61.2%)	9 (9.2%)	0 (0.0%)	5 (5.1%)	24 (24.5%)	
	Progressive	59	45 (76.3%)	8 (13.6%)	0 (0.0%)	1 (1.7%)	5 (8.5%)	
	Starbucks	284	74 (26.1%)	11 (3.9%)	1 (0.4%)	56 (19.7%)	142 (50.0%)	
	Tootsie Roll	354	124 (35.0%)	13 (3.7%)	1 (0.3%)	163 (46.0%)	53 (15.0%)	
			50.9%	6.5%	0.3%	20.6%	21.7%	
	Spokescharacter	Aflac Duck	303	85 (28.1%)	35 (11.6%)	0 (0.0%)	61 (20.1%)	122 (40.3%)
		Buzz the Bee	96	57 (59.4%)	23 (24.0%)	0 (0.0%)	8 (8.3%)	8 (8.3%)
Chester Cheetah		37	30 (81.1%)	5 (13.5%)	0 (0.0%)	0 (0.0%)	2 (5.4%)	
Energizer Bunny		87	73 (83.9%)	7 (8.0%)	0 (0.0%)	5 (5.7%)	2 (2.3%)	
Frappuccino		658	195 (29.6%)	64 (9.7%)	8 (1.2%)	128 (19.5%)	263 (40.0%)	
Flo		52	37 (71.2%)	10 (19.2%)	0 (0.0%)	3 (5.8%)	2 (3.8%)	
Mr. Owl		112	70 (62.5%)	12 (10.7%)	1 (0.9%)	22 (19.6%)	7 (6.3%)	
Real Tony Tiger		50	44 (88.0%)	5 (10.0%)	0 (0.0%)	1 (2.0%)	0 (0.0%)	
Smokey Bear		147	91 (61.9%)	18 (12.2%)	2 (1.4%)	15 (10.2%)	21 (14.3%)	
The Geico Gecko		111	71 (64.0%)	8 (7.2%)	0 (0.0%)	27 (24.3%)	5 (4.5%)	
The Real PSL		43	23 (53.5%)	10 (23.3%)	2 (4.7%)	6 (14.0%)	2 (4.7%)	
Woodsy Owl		26	18 (69.2%)	3 (11.5%)	0 (0.0%)	2 (7.7%)	3 (11.5%)	
			46.1%	11.6%	0.8%	16.1%	25.4%	
Overall			48.2%	9.4%	0.6%	18.1%	23.8%	

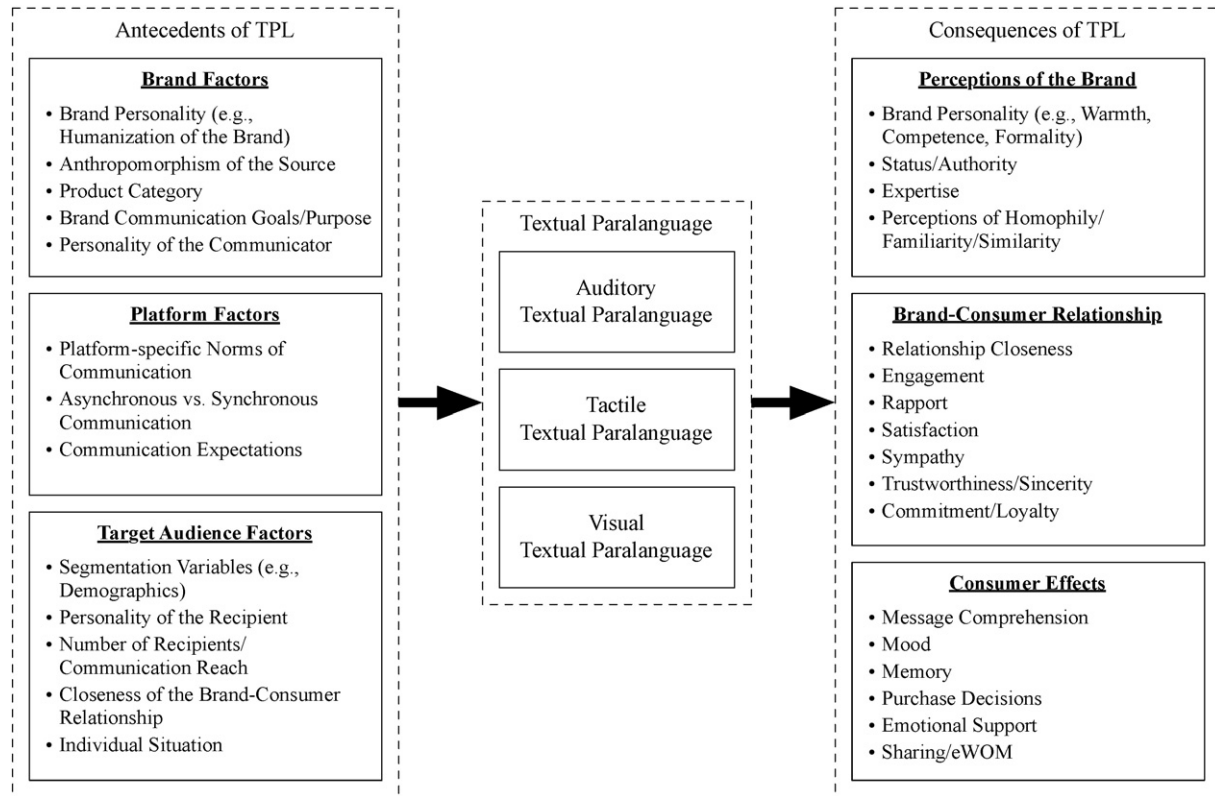


Fig. 2. Conceptual framework of antecedents and consequences of brands' use of TPL.

communicator may prefer tactile kinesics, and an auditory-oriented individual may favor vocalizations.

Besides brand considerations, platform-specific norms of communication may guide the use of TPL. For example, the character limit on Twitter encourages posters to find unique ways of constructing messages to save space (e.g., ☺). In addition, platforms are characterized by differences in synchronicity (Porter, 2004). In synchronous communication, conversations take place in real time through written language (Hoffman & Novak, 1996), as in online chats with customer service representatives. In asynchronous communication, posting, viewing, and responding take place at intervals of time. Since synchronous communication requires immediate responses, message length is necessarily limited, and it is possible that synchronous interactions will contain more TPL.

Communications also vary based on the target or the intended recipient of a message. For example, a younger target may respond more positively to the informal nature of TPL. When a brand is communicating directly with one customer, the personality of the recipient is likely to influence whether TPL is used and how it is interpreted. If a brand is interacting with an expressive and emotional consumer, more consideration may be given to the use of TPL.

### Consequences of textual paralanguage use

TPL has potential downstream consequences for brands (Fig. 2). For example, TPL is likely to impact perceptions of a brand's personality (Aaker, 1997). Warmth and competence are

two characteristics that brands may cultivate, since these translate into increased consumer engagement, connection, and loyalty (Aaker, Garbinsky, & Vohs, 2012). Emoticons, for example, are used more in communications with friends than strangers (Derks, Bos, & Von Grumbkow, 2008) and may foster feelings of warmth and personableness. Emoticons have also been viewed as casual and unprofessional (Jett, 2005), though, and the level of informality associated with TPL could potentially hurt perceptions of firm competence.

Aside from perceptions of a brand's personality, TPL has the potential to influence the brand–consumer relationship. Tactile kinesics, for example, may be used to convey relationship closeness. Many of the textual paralinguistic elements that fall into this category are of a personal nature (e.g., “\*hug\*”), which foster a sense of closeness.

On the consumer end, TPL may affect message interpretation. Derks et al. (2008) show that emoticons strengthen the intensity of a message. They find that emoticons often serve the same functions as nonverbal behavior and aid in message comprehension. Brand and consumer effects of TPL remain unstudied empirically, and in the next section we consider avenues for future research.

### General discussion and future research

In 2015 the Oxford Dictionaries chose, for the first time ever, an emoji as the word of the year (Dictionaries, 2015). Textual paralanguage has become germane to consumer and marketing communications, and it carries the potential to shape how

messages are understood. This work suggests that there exists much complexity in the way in which textual messages are used and interpreted. By developing a typology of TPL, we have attempted to make it easier for future researchers to study the properties of text and their various effects on marketing communications.

The TPL dictionary is infinite and ever-expanding. From an etymological perspective, the number of words (and symbols) that we use to communicate meaning has grown exponentially with CMC. It is important to note that nonverbal cues, like verbal ones, rarely have a single denotative meaning; rather, meaning depends greatly on the social context in which the communication resides. Furthermore, the categories of TPL are generally, although not absolutely, mutually exclusive. For example, “\*sigh\*” can be interpreted as the sound of breath being exhaled forcefully (vocalization), or as the bodily movements associated with sighing, such as shrugging one’s shoulders forward or physically looking down (visual kinesics). Notwithstanding examples like this, most instances of TPL are readily classifiable.

Various scholars acknowledge the need for more research on language in consumer psychology (e.g., [Kronrod & Danziger, 2013](#); [Schellekens, Verlegh, & Smidts, 2010](#); [Sela, Wheeler, & Sarial-Abi, 2012](#)). [Krishna \(2012\)](#) calls for work on the extent to which language comprehension is bodily grounded. “Can a product description make something smell, feel, sound different? There is an enormous need for research exploring the effect of verbal information on sensory perception” ([Krishna, 2012, p. 347](#)). Similarly, can the use of TPL alter sensory experiences? Our TPL typology provides the foundation for exploring these questions.

Auditory, tactile, and visual TPL may be processed differently. There is evidence that modality influences how attitudes are formed, remembered, and altered. [Tavassoli & Fitzsimons \(2006\)](#) demonstrate that attitudes expressed through oral and written communication recruit different cognitive, motor, and perceptual systems and result in the encoding of differentiated memory traces. When the same information is presented in varied contexts, multiple routes are formed in memory. Ease of encoding and response latencies in decoding the types of TPL might differ across individuals’ auditory, tactile, and visual learning styles. Future research should consider how the types of TPL are encoded in memory and how this affects retrieval and use of information.

Mental imagery relies on sensory experiences represented in working memory ([MacInnis & Price, 1987](#)), and TPL is likely to evoke strong auditory, haptic, and visual imagery. We anticipate that the different types of TPL evoke imagery corresponding to the sensory experience being conveyed, but we also know that imagery systems are interrelated, for example haptic and visual imagery can occur simultaneously ([Peck, Barger, & Webb, 2013](#)). There are also individual differences in both the ease of processing and the vividness of imagery ([Childers, Houston, & Heckler, 1985](#)). The exploration of imagery evoked by TPL thus promises to be an intriguing area of research.

Nonverbal communication may be processed by either hemisphere of the brain, although the left hemisphere is thought to process more of the verbal and linguistic aspects of communication, and the right hemisphere is credited with visual/

spatial relationships, Gestalt information, and the bulk of nonverbal information ([Knapp et al., 2013](#)). It would be interesting to test if visual and alphabetic TPL are processed in different regions of the brain. Perhaps characteristics of communicators, such as left vs. right brain dominance, affect the types of TPL they employ. For example, right-brain dominance may lead to more image-based TPL (e.g., emojis), whereas left-brain dominance may favor TPL that modifies words (e.g., loooooong).

If a consumer employs TPL while interacting with a customer service representative, does mimicry of the consumer’s writing style by the representative affect what the consumer thinks of the service? We would expect so. Previous research shows that language accommodation is important for customer satisfaction ([Van Vaerenbergh & Holmqvist, 2013](#)). Concordance or discordance in the use of TPL in conversation may affect the way a consumer perceives a brand.

Relatedly, physical mimicry could be investigated. When a consumer is reading a message that contains TPL, does she unconsciously simulate or mimic the expression? For instance, when encountering “\*shrug\*”, do people physically shrug their shoulders? There is research to suggest that when reading auditory cues, people sound out words or imitate how they believe the words to be communicated ([Ehri, 2005](#)). We know that when we form perceptions, it is not just a cognitive process, but also an emotional ([Loewenstein, 2000](#)) and physiologic ([Barsalou, 2008](#); [Carney, Cuddy, & Yap, 2010](#)) one.

There is evidence that language is embodied as well. A growing literature on linguistic embodiment suggests that comprehension relies on internal simulation and bodily action ([Fischer & Zwaan, 2008](#)). Recent research on phonetic embodiment finds that phonetic structure influences meaning, as in the direction of tongue movement influencing approach-avoidance tendencies ([Topolinski, Maschmann, Pecher, & Winkielman, 2014](#)) and perceptions of acceptance or rejection of a brand name ([Kronrod, Lowrey, & Ackerman, working paper](#)). Linking TPL that employs embodiment to measures such as recall and recognition would be a promising area of study.

Conceptually, this research has focused on brands’ use of TPL in communications with consumers. However, future research could explore what companies can understand about consumers based on their personal usage of TPL. Can we predict personality, loyalty, or engagement based on TPL? Language use is an individual difference and a meaningful way of exploring personality ([Pennebaker & King, 1999](#)). TPL could be used as a predictor of customer personality, tendencies, and behaviors, including age, gender, socioeconomic status, education level, emotional intelligence, closeness of relationships, structure of networks, sentiment, and purchase behavior.

From a managerial perspective, TPL is an important consideration when connecting with consumers online. Choosing whom to hire to manage a brand’s social presence has an immense impact on the personality of the brand. Hiring and training decisions should consider TPL, which is a facet of one’s tone and “voice” in online communication. For example, a customer service representative who uses online chat to address consumer complaints may need to utilize different communication strategies depending on the source, valence, and context of the message.



Online communication has qualities of both spoken and written language, but it is truly neither. Although early work on interactional and conversational research in marketing acknowledges that nonverbal factors have an immense impact on the interpretation of a marketing message, it was thought that “paralanguage can be eliminated only in situations in which stimulus materials are presented in the form of written dialogue” (Thomas, 1992, p. 89). It is possible for written content to be devoid of paralanguage, but this is rarely the case. Paralanguage is abundant in online communication, and its use will continue to grow with social media. Language, as the basis for human interaction (Grice, 1975), has the capacity to reveal our social and psychological selves. Textual paralanguage contains a wealth of information that marketers should be eager to explore.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <http://dx.doi.org/10.1016/j.jcps.2016.05.002>.

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