A Rhetorical Model of Punctuation Mark Function in Computer-Mediated Communication

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Abstract

Punctuation marks perform a variety of functions in computer-mediated communication (CMC). In this paper, a rhetorical model for understanding these functions is delineated. According to the model, punctuation marks can function in three rhetorical capacities. First, they can build or damage the credibility of the writer. Second, they can clarify messages in a number of ways: They can elucidate the grammatical relationships between written ideas, provide conversational implicature, and clarify illocutionary force. And third, they can convey emotional and relational meaning. This model is explanatory, and it can also be used as a guide for analysis.

Keywords: Conversational implicature, emotion, ethos, punctuation, illocutionary force.

Introduction

Punctuation marks are more than mere grammatical expedients. They can function in many ways, especially in the informal digital texts of computer-mediated communication (CMC). In this paper, a rhetorical model is posited that will explain three ways that punctuation marks can function in CMC. First, they can build or damage the credibility of the writer. Second, they can clarify messages in a number of ways. And third, they can convey emotional and relational meaning.

The inspiration for this model came in part from an exchange of articles by Dawkins (1995, 1996) and Hasset (1996). In an article titled "Teaching punctuation as a rhetorical tool," Dawkins (1995) observed that excellent writers often do not follow the punctuation rules enumerated in style guides; rather, they "punctuate according to their intended meaning, their intended emphasis" (p. 534). In accordance with this observation, Dawkins' (1995) offered a method of teaching punctuation that emphasizes the creation of meaning over a slavish adherence to prescriptive rules. Hassett (1996) responded to Dawkins (1995) with an article titled, "Toward a

broader understanding of the rhetoric of punctuation." In this response piece, Hasset (1996) lauded Dawkins (1995) for his ideas, and asserted that additional rhetorical concepts would enlarge and improve Dawkins' (1995) theory of punctuation. In the final article of this exchange, Dawkins (1996) offered Hassett (1996) a concise follow-up response. He wrote that while his rhetorical theory of punctuation did not explicitly make mention of the additional concepts that Hassett (1996) brought up, it did have application to them: In its simplicity, he argued, the theory can be applied toward any rhetorical concept. At the end of his response, Dawkins (1996) addressed the important issue of reader interpretation of punctuation marks, positing that we should view punctuation marks in the same way we view words: There will be some differences of interpretation concerning their meanings, but they do possess general meanings that most people will agree upon.

The authors of these article were concerned primarily with the issue of how best to teach punctuation in the context of higher education. They view punctuation in the light of rhetoric, since punctuation marks are written devices that aid in the construction of meaning. Thus this exchange of articles inspired in part the rhetorical view of punctuation explained in this paper. There are, of course, significant differences between the rhetorical theory of punctuation that is preliminarily drawn by the authors of these articles, and the theoretical model presented in this paper. Here, the concern is not pedagogical, but rather is related to the ways people communicate in CMC, which was only in its relatively early stages at the times when the preceding articles were composed. Since the mid-1990s, CMC has altered the ways that people communicate with the written word, thereby contributing to changes in punctuation practices. These new practices call for a new and more thorough theoretical model – one that takes into account the informal nature of much of the text in CMC, and one that recognizes the emotional and interpersonal meanings that punctuation can convey.

Punctuation Marks in CMC: A Brief Literature Review

Punctuation is utilized in many different ways in CMC. It is used in both a standard and nonstandard manner. Any number of factors, from age to culture to digital medium to gender, can influence punctuation patterns (Baron & Ling, 2011). In some cases, punctuation in CMC is minimalistic or even omitted completely (Crystal, 2001). In other cases, traditional punctuation marks are put to new purposes. The ellipsis was formerly used as a sign of omitted words, a pause in verbal dialogue, or as an indication of more to come at the end of a text. In CMC, it has also become a popular conjoining marker (Raclaw, 2006). In the context of text-messaging in particular, ellipses can be used to prompt an interlocutor to reply if he or she is taking too long to respond (Curzan, 2013). In a study of text-messaging

and Instant Messaging (IM), Baron (2008) found that ellipses and dashes were used in place of periods, question marks, and commas, and were used to indicate other forms of pause as well. The exclamation point was formerly used to express excitement; it can now also be used to convey friendliness or to accentuate factual statements (Waseleski, 2006). The asterisk was formerly used as a means to indicate a reference or omission; it is now often added to both sides of a word or phrase to add emphasis (Crystal, 2001; Danet, 2002) or to enclose a description of physical actions related to a written text (Crystal, 2001). Further, in CMC, traditional punctuation marks are often written in strings of repeats, such as !!!! or ???? (Crystal, 2001; Thurlow & Brown, 2003). Kalman and Gergle (2009), in a study of punctuation and letter repeats in the Enron corpus, found that repeats of periods, exclamation points, and question marks were all common. While the authors concluded that strings of articulable letters are potentially a way for writers to demonstrate vocal cues, they went on to make the important point that "the existence of a significant minority of un-articulable repeats, as well as of repeated punctuation marks, remind us that repeats can also be used as purely visual emphasis tools, not necessary linked to an audible counterpart" (Kalman & Gergle, 2009, p. 21).

Baron (2008) found that message-final punctuation was lacking in a preponderance of messages in her samples of text-messages and Instant Messages. This paucity of message-final punctuation is of particular interest – it seems that periods at the ends of sentences in CMC can be construed as an unduly harsh means of terminating a correspondence. Baron and Ling (2011), in an analysis of focus group data collected by the Pew Internet and American Life Project and the Department of Communication Studies at the University of Michigan, found that adolescent girls perceive the terminal period as potentially negative. In addition to the omission of the period, emoticons or exclamation points at the end of messages can also help to avoid any potential negative connotations, and can in fact be viewed as marks of courtesy (Baron & Ling, 2011).

In addition to traditional punctuation marks, texts in CMC are often punctuated with emoticons, which are pictographs composed of sequences of punctuation marks; the smiley:) is an example. Far from being only ornamental devices, emoticons "do have an impact on message interpretation" (Derks, Bos, & von Grumbkow, 2008a, p. 387). They are more often used in social than task-based contexts (Derks, Bos, & von Grumbkow, 2007), and they are frequently used "for the expression of emotion, for strengthening the verbal part of a message, and for expressing humor" (Derks, Bos & von Grumbkow, 2008b, p. 101). In particular, emoticons depicting smiling and laughter are common, and most frequently occur in places which punctuate, rather than interrupt, semantic units, as in

the case of real laughter (Provine, Spencer, & Mandell, 2007). Laughter communicated by emoticons (and by alphabetic representations such as 'haha' and 'LOL') has been shown to have an impact on the perception of personal interaction similar to that of real laughter, and, naturally, both have a positive effect (Vlahovic, Roberts, & Dunbar, 2012). Yuasa, Saito, and Mukawa (2011) demonstrated that the sections of the brain associated with the perception of emotion are in fact activated by emoticons; they furthermore found "that brain sites dealing with both verbal and nonverbal information are activated more strongly when emoticons are added to sentences, than in the case of plain text" (p. 22). While emotion certainly plays a role in emoticon use, emoticons are not always used as symbols of affective information: They can be used, and often are used, as a means of clarifying writer intent (Dresner & Herring, 2010; Markman & Oshima, 2007).

In addition to the punctuation-mark-based emoticons, developing technologies have allowed for the use of premade, stylized pictographic representations known as emoji. Emoji can be used in much the same way as emoticons, although the large numbers of different emoji available – from icons of facial expressions to icons of automobiles, food, plants, animals, buildings, and beyond – give emoji users a great deal of creative freedom in the construction of their messages.

Credibility

Punctuation can contribute to or detract from a writer's credibility. Communication occurs within different genres that have differing conventions (Halliday & Hasan, 1989); departure from appropriate conventions could lead to a loss of credibility, since it would appear that the communicator is ignorant of proper behaviors or unable to actualize them. Even within an individual genre, different contexts may call for different styles. For instance, in the genre of email, different contexts call for different styles of writing. In a case where two close friends fire off emails to one another quickly in an exchange similar to an online chat, a certain informality of language and form would not only be acceptable, but called for: It would be unusual to include proper salutations and sign-offs, and would slow the progress of the virtual conversation. Alternatively, in a case where a potential employee applies for a job via email, formal language and conventional form would be appropriate. It would be unusual, and potentially injurious to the applicant's chances of employment, to exclude the salutation and sign-off, or to write in an unduly casual manner.

These issues of credibility extend to the world of punctuation. In the realm of formal writing, punctuation that follows general principles of standard use can demonstrate that a writer is knowledgeable and articulate.

Contrarily, punctuation which is haphazard and flouts general best practices can demonstrate that a writer is lacking in knowledge and eloquence. In informal writing contexts, on the other hand, nonstandard punctuation can be a way to build emotional, or interpersonal, credibility: A person can use punctuation such as exclamation points, emoticons, and emoji, to demonstrate excitement or affection or other emotive states that are appropriate to the situation at hand. In certain contexts, and depending upon the recipient, the lack of these types of emotive punctuation – or at least some other signs of emotion, such as affective words – might make a message seem flat, insincere, or sarcastic.

The recipient of a person's message is an important factor that should be considered in the decision of whether to use a formal or informal style. Krohn (2004) suggested that students of business communication be taught to consider the generation of the recipient when deciding whether or not emoticons might be appropriate in a message. Furthermore, there are some recipients who might highly prize creative punctuation usage, while there are others who might view such usages as inane or childish. Some may view the use of punctuation at all as stuffy and unnecessary. A knowledge of the recipient can help the sender choose an appropriate punctuation style, such that credibility can be established or maintained.

Clarity

Punctuation marks function as important clarifiers. In the first place, punctuation marks can clarify messages by performing their basic and original function: Namely, creating disjunction between words, phrases, and clauses in such a way as to elucidate the underlying meanings of text, to give emphasis to certain ideas, and to demonstrate (to some greater or lesser degree) the relationships between ideas.

Punctuation marks also clarify texts by conveying conversational implicature. According to Grice's Cooperative Principle (1975/1996), human communication is generally an activity in which interlocutors work together to share meaning. Grice (1975/1996) outlined four maxims which are foundational for cooperative communication: The first is the Maxim of Quantity, which says that messages should not be too brief or too verbose; the second is the Maxim of Quality, which says that messages should be true and that the communicators who offer them should have reasonable justification for believing them to be true; the third is the Maxim of Relation, which says that messages should be relevant to the circumstances in which they are given; and the fourth is the Maxim of Manner, which says that messages should be clear. These four Maxims are sometimes not followed, even in situations where the speaker or writer fully intends to be cooperative. In these situations, there are often implied meanings, which Grice

(1975/1996) terms "conversational implicatures" (p. 161), that make up for the violation and allow whatever is missing to be inferred, or whatever is seemingly amiss to be understood in the correct light. Numerous factors can create conversational implicature; they include linguistic conventions, shared knowledge of the past, non-verbal and paralinguistic behavior, and, for our purposes, punctuation.

Punctuation marks can be deployed in numerous ways to convey implied meanings that can make up for apparent transgressions of the Gricean Maxims. Here is a sample, by no means exhaustive, of illustrative examples of ways that punctuation can function in such a capacity. A message which says simply "lunch" would seem to be lacking in enough information for a recipient to know what the sender is trying to communicate; this message would therefore violate the Maxim of Quantity. When a simple question mark is appended to the word, "lunch?", although the messages is still only a single word, the punctuation mark contributes a conversational implicature which would lead most people to understand the message as asking if the recipient would like to go to lunch. In other situations in which the Maxim of Quantity is seemingly flouted, ellipses can be of help in establishing conversational implicature: When placed at the end of a message which appears to be incomplete, they can let the recipient know that certain things are being left to his or her imagination; or they can let the recipient know that the current transmission has been, for whatever reason, cut short, but there is more to come at some time in the future. The Maxim of Quality is violated in cases of sarcasm and other forms of ironic communication in which the meaning of the words is not intended to be taken as the literal truth; jokes can violate the Maxim of Quality in a similar manner. In such cases, emoticons such as the smiley:) and the winkey;), or their emoji analogues, can demonstrate that the messages are not meant to be taken at face value; these emoticons help to explicate what the writer is doing with his or her words, a point further discussed in the following paragraph.

Punctuation can clarify the speech acts, or illocutionary forces, of messages. Austin (1962) posited that when people use words they both share meaning and perform social actions; those actions are termed the illocutionary force of the words. (Austin's work gave birth to Speech Act Theory, which was further expanded and developed in the work of Searle [1979]). Question marks are an obvious clarifier of illocutionary force, since they signal questions, thereby showing that a person is performing the speech act of questioning. Emoticons can help clarify illocutionary force as well. Dresner and Herring (2010) asserted that though emoticons are frequently associated exclusively with emotional meaning, they often function to show what a sender is actually doing with his or her words. Dresner and Herring

(2010) give the example of the :-p emoticon, which is a representation of a visage from which a tongue is protruding, and observe that it does not really convey any specific emotion, but rather can conveys illocutionary forces such as teasing, joking, or flirting, depending upon the context in which it appears. (Generally, it should be remarked, this emoticon would convey a certain level of positive affect; however, Dresner and Herring's [2010] point is taken – the emoticon is not merely emotional, since it also helps the reader to understand the illocutionary force of the message.) The authors furthermore gave the winking face ;-) as an indicator of the illocutionary force of joking, and observed that joking is not associated with only one emotion. Dresner and Herring (2010) then went on to assert that emoticons can be used to diminish face-threatening acts (see Brown & Levinson, 1987), a point further discussed in the next section.

Emotional and Relational Information

In face-to-face conversations, ideational meanings are usually conveyed with words and emotional and relational meanings are usually conveyed with nonverbal behaviors (Richmond, McCroskey, & Payne, 1991). Punctuation marks can be used, and often are used, as a way to convey emotional meanings in the informal written texts of CMC, where body language is absent. In this way, punctuation marks can serve a crucial purpose in communication: That of demonstrating senders' feelings.

Emoticons are probably the most obvious form of punctuation that

Emoticons are probably the most obvious form of punctuation that conveys emotion. As discussed above, emoticons can have functions beyond the expression of affective states – in particular, they can help to clarify the speech act of a message – but they do indeed function as indicators of emotion as well. The simple smiley:) and the simple sad face: (unquestionably do correspond to certain respective emotions: Happiness and sadness, or, more generally, varying forms of positive affect and negative affect.

In the current state of CMC, writers often have access to prefabricated, stylised pictograms that are often termed emoji. Many smartphones have entire keyboards of emoji, supplying their users with copious pictographs that can easily be inserted into texts. Emoji represent any number of different things: Facial expressions, certainly, but also flora and fauna, vehicles, buildings, food, everyday objects such as tools and writing utensils, common iconic signage, and nonfacial body language such as clapping, giving a thumbs-up and thumbs-down, waving, and pointing. The emoji that signify facial expressions are many and sundry. Because of their great variety, these emoji can convey more specific feelings than the traditional:) and: (and other emoticons. Emoji can, like emoticons, convey both emotion and illocutionary force.

Exclamation points are another possible way of conveying affect in CMC. The exclamation point, as its name suggests, is traditionally associated with the emotions that would accompany verbal exclamations – namely, different forms of excitement. And certainly exclamation marks continue, to some greater or lesser degree, to convey positive or negative excitement. However, Waseleski (2006), in a study of exclamation points on online discussion lists, found that the exclamation point is frequently used, by both genders, as a marker of friendliness; and Waseleski (2006) further found that it can be used as an emphasizer. Baron and Ling (2011) argued that the exclamation point can be viewed as a "courtesy symbol" (p. 54). Friendly or polite uses of the exclamation point may not communicate pure excitement, but they can convey a certain level of positive affect. When an exclamation point is included in a quick message of gratitude such as "Thanks!", it could carry a meaning of excitement, or courtesy, or both. But exclamation points need not always be positive. If someone sent a friend a messages reading "Hurry up!", the exclamation point would not usually be read as a sign of courtesy. It would, rather, be read as a sign of agitated excitement on the part of the sender (if there were not, of course, other circumstances to ameliorate the seeming hostility of the message). Similarly, if someone were textually asked if he or she enjoyed a certain food, and he or she responded with a "No!", the mark would be taken as a sign of emphasis, and it would therefore indicate an especial distaste for the cuisine in question. Once again, context dictates the nuances of meaning that the punctuation carries.

In some cases, exclamation points could be used as a means of giving emphasis without conveying any affect and in a message that has no underlying affect. As was mentioned in the preceding section, the traditional grammatical function of punctuation allows for the demonstration of emphasis; for instance, a dash can set off a phrase and give it special accentuation. Thus, according to the system delineated in this paper, an exclamation point that is purely an emphasizer of a non-emotional message would be classified as a grammatical clarifier, since it marks disjunction or conclusion while demonstrating the prominence of an idea within the discourse.

These discussions bring us to the topic of punctuation strings. If, in any of the cases above, additional exclamation points were appended, and a string was thereby created ("Lunch?!!!", "Thanks!!", "Hurry up!!!!", "No!!!"), the respective meanings of the messages could be seen as being more intense or emphatic. Likewise, if an added question mark were added to the lunch inquiry, as in "Lunch??" or even "Lunch???", the message's meaning could come across as more emphatic. It is furthermore possible that, because of the informality of the punctuation string, the meanings might, depending on the context, come to be seen as less serious, especially in the

examples where there are numerous exclamation marks; if this is the case, then the negative uses in particular would undergo an alteration in meaning: The "Hurry up!!!" may be seen as less agitated and more playful, and the "No!!" may be read as more funny. In any case, if an outrageous number of exclamation points were added to the messages – as in the case of "Thanks!!!!!!!!!!!!!" or "No!!!!!!!!!!!!!!!!" or "Lunch???????????" – the sender would probably in most circumstances be viewed as being humorous. As was shown in the "Lunch?!" example, strings need not always be composed of the same mark. In fact, the combination of exclamation points and question marks (as in, "!?!?") seems to show, on the negative side, consternation, and on the positive side, surprised enthusiasm, or excitement and the seeking of confirmation. Again, because of its informality, even when this string is used for the purposes of conveying a feeling more akin to consternation, the meaning may be colored with a certain playfulness, in which case the feeling communicated would not be entirely negative. Kalman and Gergle (2009), in their study of the Enron corpus, found many examples of punctuation strings. They concluded that the strings can help to make up for the lack of paralinguistic cues and can serve as "purely visual emphasis tools, not necessarily linked to an audible counterpart" (p. 21). Once again, it is clear that, depending on the context, strings of punctuation marks can signify different kinds of emotional and relational meaning.

The period, in this textual milieu of emoji and exclamation marks, has, for some people, come to symbolize negative affect (Baron & Ling, 2011; Crair, 2013; Yagoda, 2012). At the end of a message, especially a short, informal text-message or IM transmission, periods are not necessary to demonstrate the end of the transmission. Often, therefore, they are not used (Baron, 2008). When periods are used, they can be seen as a harsh termination of the message.

Baron and Ling (2011), having evaluated the data of focus groups comprised of adolescent females, concluded that some such young ladies view the terminal period as a potentially negative symbol. It would seem that this sense of negative affect would only be perceived in informal, interpersonal contexts, and in particular in contexts where messages are relatively short (e.g., IM messages and text-messages); it is difficult to imagine a business person being upset because an email they received ended in a period.

There is another very important way that punctuation can be put to an emotional purpose – namely, as a means of emotional identification. Such identification occurs when an interlocutor expresses that he or she is to some degree partaking of the emotional state of the receiver(s) of the message. The notion of identification was a salient component of the rhetorical thought of

Kenneth Burke. In his *Rhetoric of Motives*, Burke (1969) expressed that rhetoric is concerned with the how people connect with one another – with how they recognize their shared substance. Punctuation, as a means of sharing emotion, is a way of demonstrating shared emotion in the form of sympathy and empathy. Two rather obvious examples of punctuation-based emotional identification would be the use of a sad face :(in a consolatory message and the use of a smiley :) in a congratulatory one. When punctuation is used as a means of emotional identification, it not only displays affective meanings, but also relational meanings, in that it shows a closeness between interlocutors as perceived on the part of the message sender, as well as a sense of goodwill and affection on the part of the sender.

In what is perhaps the most famous work in all of the abundant literature concerning linguistic expressions of politeness, Brown and Levinson (1987) built upon the work of Goffman (1967) to theorize that people desire two forms of "face:" positive face, which is personal affirmation, and negative face, which is personal liberty. There are times in human interaction, however, when these faces are threatened. Sometimes, a person will choose to put forward ideas which could potentially hurt the feeling of personal value held by another person or other people, thereby threatening the positive face of the person or people being addressed. At other times, a person will choose to put forward ideas that could seem to importune another person or other people, thereby threatening the negative face of the person or people being addressed. In either case, messages that threaten positive or negative face are termed by Brown and Levinson (1987) as "face-threatening acts or FTAs" (p. 25), and politeness strategies are ways of helping avoid – or, a the very least, helping dimish the power of – FTAs. Punctuation can function to convey politeness in a number of ways in accord with the politeness theory posited by Brown and Levinson (1987). When punctuation marks are used to convey positive affect, they can be affirming for people, and can thus edify positive face; such marks can also be viewed as helping to put other people first and maintain social harmony. Punctuation marks such as the smiley and the exclamation point can furthermore serve as mollifiers of face-threatening acts; by showing an iconic smile, or by demonstrating friendliness and enthusiasm by means of an exclamation mark, a potentially threatening message can be made more palatable. It is fascinating to observe that, given the discussion of the period above, the omission of the period may be a way to be polite. It is clear that the inclusion of a period can be seen by some as a face-threatening act, depending on the context of the message.

Conclusion

Punctuation marks are rhetorical tools that enable people to send effective messages. In particular, punctuation can affect the credibility of the writer, can clarify messages in many ways, and can provide an emotional and relational element that can give messages affective meanings in addition to logical meanings. In these ways, punctuation marks increase the efficacy of interaction via CMC. The theoretical model posited in this paper serves an obvious explanatory function, but it can also be used as a guide for analyzing punctuation in CMC: The punctuation found in a given message in a CMC dataset can be evaluated based on how it might influence the credibility of the writer, how it might help clarify the message, and how it might convey emotional and relational meaning. Examining punctuation marks from this perspective could allow for more robust analyses of computer-mediated messages.

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