

(In press, 2010). *Communication Theory*.

Functions of the Non-Verbal in CMC: Emoticons and Illocutionary Force

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Abstract

The term 'emoticons'—short for 'emotion icons'—refers to graphic signs, such as the smiley face, that often accompany computer-mediated textual communication. They are most often characterized as iconic indicators of emotion, conveyed through a communication channel that is parallel to the linguistic one. In this article, it is argued that this conception of emoticons fails to account for some of their important uses. We present a brief outline of speech act theory and use it to provide a complementary account of emoticons, according to which they also function as indicators of illocutionary force. More broadly, we identify and illustrate three ways in which emoticons function: 1) as emotion indicators, mapped directly onto facial expression; 2) as indicators of non-emotional meanings, mapped conventionally onto facial expressions, and 3) as illocutionary force indicators that do not map conventionally onto a facial expression. In concluding, we draw parallels between emoticons and utterance-final punctuation marks, and show how our discussion of emoticons bears upon the broader question of the bounds between linguistic and non-linguistic communication.

Introduction

The term 'emoticons'—a blend of 'emotion' and 'icons'—refers to graphic signs, such as the smiley face, that often accompany textual computer-mediated communication (CMC). The addition of graphic signs to printed text made its debut in CMC in 1982, when the rotated smiley face :-)) was first proposed—along with a 'frowny' face :-(—by a computer scientist at Carnegie Mellon University, Scott Fahlman, as a means to signal that something was a joke (or not) in messages posted to a computer science discussion forum (Krohn, 2004). Since this early stage in the history of CMC, hundreds if not thousands of similar signs have developed, many of which have been catalogued in dictionaries (e.g., Godin, 1993; Raymond, 1996) and on websites (e.g., Netlingo, n.d.; Wikipedia, 2009b).

Emoticons vary considerably in form and meaning. Some signs, like the originals, use only ASCII symbols, while many newer ones are graphically rendered (e.g., ☺). A growing number of signs represent objects of various kinds (such as a heart or beer mug), although the majority mimic facial expressions. Signs such as the sideways smiley face originated in Western culture and are used in Western-culture contexts (often with global reach), while other signs are specific to other cultural contexts, such as Japanese *kaomoji* (lit. 'face marks'), which are viewed straight on, e.g., ^_^ (Katsuno & Yano, 2007; Markman &

Oshima, 2007). Smiley and frowny faces and their variants are used in synchronous CMC modes such as chat and Instant Messaging, as well as in email messages, bulletin board postings, and blogs (Baron, 2004; Huffaker & Calvert, 2005; Markman & Oshima, 2007; Merchant, 2001; Provine, Spencer, & Mandell, 2007; Utz, 2000). They also occasionally make their way into more traditional written contexts that are not computer mediated, such as advertisements and hand-written notes.

The prototypical emoticons are facial-expression icons, and the discussion that follows focuses on the Western-culture variants of these, as used in English CMC. The term 'emoticon' reflects how these signs are typically conceived today, both in CMC research and in popular culture: They are construed as indicators of affective states, the purpose of which is to convey non-linguistic information that in face-to-face communication is conveyed through facial expression and other bodily indicators. In textual computer-mediated interactions, these valuable channels are missing, the argument goes (cf. Kiesler, Siegel, & McGuire, 1984), and therefore a replacement for them was created in the form of emoticons.

This line of analysis seems to account for some uses of facial emoticons, and, indeed, may partially apply to all uses. Moreover, it seems plausible that some mechanism of compensation is responsible for the widespread introduction of these signs into interactive textual communication, and the suggestion that they are doing something that is performed through non-textual means in everyday, face-to-face communication is reasonable. However, as we argue in this paper, the term 'emoticon' misrepresents this function, at least with respect to many common and important cases. In such cases, the primary function of the smiley and its brethren is not to convey emotion but rather pragmatic meaning, and thus this function needs to be understood in linguistic, rather than extra-linguistic, terms.

In order to argue for this claim, we review in the following section of this paper the literature on emoticons and argue that the way they are construed fails to account for some of their typical uses. In the next section, a short overview of speech act theory is presented, with a focus on the concept of illocutionary force and conventionalization. In subsequent sections, the two previous pieces are brought together: We argue that in many typical cases, emoticons indicate the illocutionary force of the text to which they are attached, contributing to its pragmatic meaning, and are thus part and parcel of the linguistic communication channel.¹ More broadly, we identify and illustrate three ways in which emoticons function: 1) as emotion indicators, mapped directly onto facial expression; 2) as indicators of non-emotional meanings, mapped conventionally onto facial expressions, and 3) as illocutionary force indicators that do not map conventionally onto a facial expression. In concluding, we draw some parallels between emoticons and utterance-final punctuation marks, and show how our discussion of emoticons bears upon the broader question of the bounds between linguistic and non-linguistic communication.

¹ In contrast to the assumptions of structuralist linguistics, this argument crucially assumes that pragmatics is part of linguistics; in other words, that linguistics includes the study of meaning in use. See, e.g., Levinson (1983).

A terminological point needs to be addressed before these objectives can be pursued. As just indicated, we believe that the term 'emoticons' is unhelpful if the goal is to illuminate the full functioning of the signs we are dealing with here. However, it has been our lesson on various occasions that theoretical work should not make direct attempts to change everyday usage. Therefore, we henceforth refer to the subject matter of the discussion as emoticons, while attempting to make the case that, in fact, they do not always function as emotion icons.

Emoticons as Emotion Icons

Emoticons are almost universally conceived of as non-verbal indicators of emotion. This view is given explicit expression throughout the CMC literature. Thus Walther and D'Addario (2001) quote (and accept) the definition of emoticons suggested by Rezabek and Cochenour (1998, p. 201) as "visual cues formed from ordinary typographical symbols that when read sideways represent feeling or emotions." Wolf (2000) cites the *Hackers' Dictionary* definition of an emoticon as "an ASCII glyph used to indicate an emotional state," noting that this is "the generally accepted definition" of the term (p. 828). The Wikipedia (2009a) defines an emoticon as a "a textual face of a writer's mood or facial expression" (n.p.). Even linguists, such as Crystal (2001), describe emoticons as "combinations of keyboard characters designed to show an emotional facial expression" (p. 36), and Baron (2000) refers to them as "emotion markers" (p. 242).

This conception is reflected in the questions and hypotheses that have been raised with respect to emoticons in recent research (e.g., Derks, Bos, & von Grumbkow, 2007; Provine et al., 2007; Walther & D'Addario, 2001; Wolf, 2000). For example, the significance of emoticons in Walther and D'Addario (2001) is presumed to be affective—either positively or negatively so—and the hypotheses of the study were formulated to find out how the affective value of emoticons combines with the linguistic messages to which they are attached. It was found that when the two components pointed in opposite affective directions (one positive and one negative), the linguistic part had a stronger impact on the overall affective assessment of the message. The researchers also found that the appearance of any negative component in a message (be it verbal or an emoticon) had a negative effect on the overall assessment of the message, whereas the same did not hold for positive components. While these insights into the affective aspects of emoticon use are of value and interest, Walther and D'Addario's (2001) study does not go beyond the question of whether emoticons modulate affect.

Provine et al. (2007) also take the emotive function of emoticons for granted in their study of asynchronous message board websites. They find that emoticons hardly ever interrupt the phrase structure of the typed messages, just as laughter rarely interrupts spoken phrases in conversation or signed phrases in sign language for the deaf. Similar to Walther and D'Addario (2001), Provine and his colleagues argue that this is because a higher-level process of language production takes precedence over emotive expression.

The belief that women express affect more than men do, coupled with the association of emoticons with affect, has also led researchers to examine the relationship between

emoticon use and gender. Two studies of asynchronous public discussion forums—Witmer and Katzman (1997) and Wolf (2000)—found that women used emoticons more often than men did. Similarly, Baron (2004) observed that the overwhelming majority of emoticons in her corpus of synchronous private Instant Messaging were produced by women, and Herring (2003) reported that women in the public Internet Relay Chat channels she observed typed three times as many representations of smiling and laughter (including emoticons) as men. In Wolf's study, however, men used emoticons more often to express sarcasm. Moreover, Huffaker and Calvert (2005) found that teenage male bloggers used more 'flirty' and 'sad' emoticons than did teenage female bloggers, and used slightly more emoticons overall, although the overall difference was not statistically significant. In these studies, as well, the emotive function of emoticons tends to be presupposed.

Finally, an affective orientation also characterizes research that is not specifically focused on emoticons, but rather is concerned with the overall description and analysis of communication patterns in a particular CMC context or mode. Research work of this kind often includes explicit consideration of emoticons and interprets their contribution to communication in line with their presumed emotive construal (e.g., Merchant, 2001; Morahan-Martin, 2000; Utz, 2000).

However, as we now turn to argue, this conception of emoticons is incomplete at best, since it leaves out of the picture important aspects of their use. For one thing, as a quick look at any emoticon dictionary shows, many facial emoticons do not seem to express a single emotion, or indeed any emotion at all. Is a face with the tongue sticking out—e.g., ;-p—a sign of a specific emotion? Various sources attribute to it the meanings of teasing, flirting, and sarcasm, all of which may be associated with emotional states, but which are not emotions per se. Or consider the familiar winking face ;) : Conventionally, it indicates that the writer is joking, but surely jokes are not associated with a single emotive state. People may joke when they are happy or sad. Finally, we turn to the smiley face itself: Its function is not only to express happiness or any other single emotion. Wolf (2000) makes a similar point in discussing her finding that males used smileys for the purpose of expressing sarcasm more often than females do. She writes:

What emerges on a closer inspection, however, is that while emoticons are defined as vehicles to express emotion—hence "emotional icons"—their actual function hinges on the definition of the word emotion. [...] While it can be argued that sarcasm and teasing, for example, derive from or comprise different emotions, whether they constitute an emotion is debatable. (p. 832)

Emoticons, then, seem to express not only emotions, but other things as well. Are these attitudes? Intentions? Previous research on emoticons does not offer an answer to this question.

A related deficiency of the conception of emoticons as emotion icons is that it depicts the contribution of emoticons to computer-mediated interaction as independent of language. According to this conception, our interpretation of the non-verbal channel may influence our understanding of the linguistic one, but the two have meaning independently of each other.

This conception seems to be at odds with some of the observations made above, however. Consider the use of smileys as indicating sarcasm. Should not this function be accounted for by relating smileys to the linguistic channel? As opposed to, for example, confidence or stress indicators, ‘sarcastic’ emoticons seem to have no self-standing content on their own, but rather contribute to—indeed, provide a vital cue as to how to interpret—the linguistic content of messages. When used this way, emoticons seem to be a part of the text, on a par with punctuation marks, which can also signal sarcasm. (Consider, e.g., ‘Oh, great!’ vs. ‘Oh, great.’—the former conventionally expresses enthusiasm, while the latter may imply just the opposite.) The current construal of emoticons seems not to be able to accommodate this aspect of their use.²

Emoticons, then, do not always function as vehicles for emotive expression, and their meaning is sometimes more closely tied to language than what is allowed for by their construal as emotion icons. At the same time, it is clear that emoticons do not comprise new lexical or morphosyntactic constituents of English.³ Thus what is required is a theoretical framework that situates emoticons (or, rather, some of their uses) between the extremes of non-language and language. We argue that the theory of speech acts can provide such a framework.

Speech Acts and Pragmatic Force

The first mature and elaborate treatment of speech acts was presented by the English philosopher J. L. Austin (1962) in his book *How to do things with words*. One of the key observations made by Austin is that when one produces an utterance, one typically performs concomitant acts of three types: *locutionary*, *illocutionary*, and *perlocutionary*. A locutionary act is the basic production of a linguistic expression, with a given syntactic structure and a literal meaning. An illocutionary act is the intended action performed through the production of the locution—the speech act carried out by the speaker. By producing the utterance, the speaker may be asserting a claim, asking a question, making a promise, threatening, begging, or even christening a child. (This last example was used by Austin to illustrate that speakers act through their words in ways that can change reality. The performative character of other speech acts may not be as direct or explicit, but this does not detract from their status as acts.) Finally, a perlocutionary act is an action performed through an utterance that depends for its identity not only on the speaker’s intentions, but rather also on the effect of the utterance on its audience. Persuading, for example, is a perlocutionary act, to the extent that the speaker succeeds in actually persuading the addressee: As opposed to promising and threatening, one cannot persuade someone simply by deciding or saying that one does.

² Provine et al. (2007) draw a parallel between what they call the “punctuation effect” of laughter placement in speech and signed language and the placement of emoticons in written CMC, but they do not suggest that emoticons function like punctuation.

³ This is less clear for Japanese, in that *kaomaji* resemble pictograms, consistent with the language’s *kanji* writing system (historically borrowed from Chinese), in which stylized images represent words or parts of words. For this reason, it is not inconceivable that some *kaomaji* could eventually lexicalize as Japanese words. In English, in contrast, there is no established precedent for words or other parts of language to derive from pictures.

The analysis of illocutionary acts performed through linguistic utterances (also called the *illocutionary force* of these utterances) was further developed by Searle (1969, 1979). Searle expounds on the conditions that need to be met in order for a given speech act to be successful. Some speech acts require propositional content of a certain kind—for example, one cannot promise what is out of one's control. Other speech acts depend on various social conditions for their success: One cannot marry two people by announcing that they are husband and wife, for example, unless one occupies a certain institutional role, and unless the setting is one in which such an act can legitimately be performed. Searle (1979) and others (e.g., Bach & Harnish, 1979) also organize categories of illocutionary acts into taxonomies. Searle's (1979) proposed taxonomy includes five categories: assertive illocutionary acts (e.g., statements), commissive acts (e.g., promises), directive acts (e.g., commands), expressive acts (e.g., avowals of emotion), and declarative acts (e.g., christenings).

A key question concerning illocutionary acts is whether they are conventional in nature. Austin and Searle, along with others such as Dummett (1978), hold that they are. Dummett maintains that the performance of assertion (in which he has a special interest) requires convention, in the same way that uttering a sentence with a given literal meaning does. The conventionality of literal meaning is obvious because of the arbitrary connection between sounds and meanings, but producing an utterance with a certain force is a rule-governed game as well, and therefore conventional, according to Dummett.

Davidson (1984), in contrast, views neither literal meaning nor force as essentially conventional. What is necessary for speech is only that a hearer be able to interpret a speaker, and this, in principle, can be achieved without shared conventions. It is only required that each interpreter be able to make an adequate ascription of content (be it semantic or illocutionary) to the other's utterances, on the basis of observing his or her linguistic and non-linguistic behavior (Dresner, 2006). Another account of speech acts that rejects the dependence of illocutionary force on convention is presented by Sperber and Wilson (1986). Following the Gricean tradition in pragmatics (e.g., Grice, 1975), they argue that in many cases the performance of a given illocutionary act does not depend on the speaker's following a given set of conventions, but rather on the hearer being able to infer the speaker's communicative intentions through considerations having to do, for example, with relevance.

The debate over illocutionary acts and convention is related to the question of how a competent language user learns to produce speech acts with a given force and correctly ascribe illocutionary force to other peoples' utterances. This question is important also with respect to research into pragmatics. How can researchers justify their claims that a given utterance carries this or that force, or that certain illocutionary acts indeed manifest the characteristics they ascribe to them?

On the one hand, those who view social convention as key in accounting for illocutionary acts (and for language use in general) maintain that the answers to the questions raised above reside in socialization processes. Thus Searle (1969, p. 12) argues that "[s]peaking a language is engaging in a (highly complex) rule governed form of

behavior." We learn these practices in the same way we learn other social conventions, and our having mastered them allows us to justify our judgments with respect to these practices on the basis of our intuitions as language speakers. On the other hand, those who ground illocutionary force in the ascription of intention, such as Sperber and Wilson (1986), conceive of mastery of this aspect of language use as being derived from more general human abilities to make context-dependent inferences involving interlocuters' intentions. Sperber and Wilson (*ibid.*) also note that conventional and intentional approaches to illocutionary force are not inconsistent with each other, but rather can be combined.

Related to considerations of conventionality is the connection between speech acts and sentential moods. English speakers typically use sentences in the indicative to make assertions, in the imperative to issue commands, and in the interrogative mood to ask questions. However, this connection is both rough and loose. For one thing, there are numerous kinds of speech acts, while sentential moods are few in number, so clearly the accomplishment of a given kind of speech act does not depend on the use of a specifically correlated mood. Second, even for the few moods that are syntactically encoded in language, there is no one-to-one fit between their use and the illocutionary force with which they are typically associated. Thus, for example, interrogatives can be used to make requests (as in, "Do you have the time?"), and indicatives sometimes express commands ("Next time you'll clean your hands first"). Mood is better characterized as helping indicate the force of an utterance; it is not essential to the identity of a speech act or to its success.

This leads to consideration of a question that brings together the issues raised in the previous two paragraphs and leads to the next section: Is typographic indication of force possible? Analogous to syntactic indications of mood, some of the signs that appear as part of standard contemporary typography help indicate force. Thus the question mark is coupled with the interrogative mood to indicate acts of questioning, and the exclamation mark, albeit more heterogeneous in function than the question mark, is associated with commands, protests, and other speech acts that can be considered forceful or emphatic. However, as in the case of the relation between mood and force, punctuation marks are not nearly as numerous as types of speech acts, nor are they correlated in a strict, rule-like fashion with the speech acts that they indicate. This is not to suggest, however, that textual markers such as punctuation cannot be useful and important in helping indicate the force of written utterances, nor that written communication might not benefit from expanding the textual means for expressing force. We turn now to argue that such an expansion is taking place in contemporary CMC with respect to emoticons.

Communicative Functions of Emoticons: From Emotion to Illocutionary Force

The thesis of this article is that in many cases emoticons are used not as signs of emotion, but rather as indications of the illocutionary force of the textual utterances that they accompany. As such, they help convey the speech act performed through the production of the utterance. These uses of emoticons do not contribute to the propositional content (the locution) of the language used, but neither are they just an extra-linguistic communication channel indicating emotion. Rather, they help convey an important aspect of the linguistic utterance they are attached to: what the user intends by what he or she types.

Several examples are discussed below.⁴ The examples and discussion focus on the most frequently-used emoticon types, as reported in the literature:⁵ smiles, winks, and to a lesser extent, frowns. First, it is clear that these emoticons are sometimes used to express or perform emotion, where the emoticon iconically represents an emotional facial expression.⁶ Two examples of this use occur in the following excerpt from an instant messaging conversation between the second author and one of her doctoral students about an upcoming Association for Internet Researchers (AoIR) conference. (The IM client both are using automatically converts ASCII emoticon sequences into their graphical counterparts.)

Student: just wanted to let you know that [jason] found me a place to stay at AoIR, so it looks like I'll be going ☺

[...]

Professor: I wish I could be at AoIR.

Professor: ☹

The smiling face in the first instance seems unproblematically to express the student's happiness that he could attend the conference, and the professor interpreted it thus, particularly since the student had earlier expressed a strong desire to attend. The frowning face in the second instance expresses sadness or regret, consistent with the professor's comment, "I wish I could be at AoIR." The second author confirms that this was the meaning she intended when she typed the emoticon. These examples constitute expressive acts, according to Searle's (1979) taxonomy.

Many other uses are less straightforwardly affective, however. Consider the use of the winking smiley, which is often used as an indicator that the writer is joking, teasing, or

⁴ These examples are drawn from the second author's archives over the last 10 years, and include private email, private chat (Instant Messaging), public chat (AOL chat; Internet Relay Chat), and public discussion forum postings. This sample is not systematic, and no attempt is made to advance claims about the frequency of occurrence of any usage based on it.

⁵ As regards the distribution of emoticon types, Wolf (2000) reported that the basic smiley was the most common emoticon in the unmoderated Usenet newsgroups she analyzed. On a female-predominant newsgroup, 93% of emoticons were smiles and 7% were frowns; on a male-predominant newsgroup, smiles and winks were distributed evenly, at 43% each. The emoticons in Wolf's study were all typed using ASCII characters. More recent studies have reported the distribution of automated graphical emoticons, with similar overall findings. Huffaker and Calvert (2005) found that 53% of emoticons used in adolescent blogs were 'happy' and 30% were 'sad', and that these types were rendered equally in ASCII and graphical forms; whereas 5% were 'flirty' (mostly ASCII), and 4-5% each were 'tired' or 'angry' (mostly graphical). On the web discussion boards analyzed by Provine et al. (2007), 52% of emoticons (presumably all graphical) represented smiles or laughter, followed by 10% that were winks, with 35 other types (including 'thumbs-up', 'roll-eyes', and 'confused') occurring infrequently. A similar overall finding was reported by Baron (2004) for synchronous CMC: two-thirds of the emoticons used in her corpus of Instant Messaging conversations were smileys.

⁶ This should not be taken to suggest that there is any necessary relationship between the use of an emoticon to express emotion and the text producer's actual facial expression. Marcoccia, Atifi, and Gauduchaut (2008) videoed people using instant messaging (IM) and found that users' facial expressions often differed from those of the emoticons they typed. Their IM users tended to type smiles and winks without physically smiling or winking, and in one example given by the authors, a male user smiled while typing a frowning face. Thus, even 'iconic' uses of emoticons to express emotion must be understood as having a conventional aspect: Such emoticons are conventionally understood to refer to the facial expressions they resemble, rather than mirroring actual facial expressions.

otherwise not serious about the message's propositional content (e.g., Wolf, 2000). Clearly joking is not an emotion—one could joke while being in a variety of distinct affective states. Rather, joking is a type of illocutionary force, something that we do by what we say. (This is as opposed to being funny, which might be described as a perlocutionary force, on a par with being persuasive.) In the following public email post to the AoIR mailing list, the winking smiley is used to indicate that the utterance that immediately precedes it is not intended as a serious summons of the (deceased) media scholar Marshall McLuhan, but rather as a joke:

Paging Mr. McLuhan.... ;)

The winking emoticon here is best conceived of as a sign of the force of what has been (textually) said, rather than as an indication of emotion.

One could argue that this usage represents a facial expression—a physical wink also conventionally signals that the speaker is not serious about what s/he is saying—even if it does not express an emotion *per se*. Thus, it could be considered to be iconic, rather than pragmatic, in nature. Not all uses of the winking icon indicate joking, however; some indicate other illocutionary forces. Consider the winking face at the end of the following example, a message posted to the same AoIR mailing list in response to a contributor's recommendation for a way to remix YouTube video that involves an extra step:

I would like a non-circumventing solution ;->

Here the writer is serious about the propositional content of the preceding message; he would truly prefer a non-circumventing solution to his video remixing problem. The winking emoticon indicates that the message should not be taken as a request or a demand, as its form (“I would like”) otherwise suggests. Instead, the winking icon seems to downgrade the utterance to a less face-threatening⁷ speech act, a simple assertion of the writer's preference. (According to Searle's [1979] taxonomy, the emoticon can be described as indicating that the force of the sentence preceding it is assertive rather than directive.) This usage neither expresses emotion nor does it mimic a physical wink; its sole function seems to be to indicate the utterance's intended illocutionary force, which it does through mitigation of face threat.

Similarly, consider the use of the standard smiley, which also often serves mitigating functions. In the following private email example, a student uses a smiley to mitigate her request to the second author for assistance:

I wonder if you could recommend me some good readings related to conversational data. We just collected some IM data and are about to conduct some analysis on it. Since I've never worked on this kind of data before, I am writing for some suggestions.:)

⁷ On face threats and speech acts, see Brown and Levinson (1987).

It would be odd in this context to interpret the smiley as indicating happiness or some other positive affective state; if anything, the student is anxious about imposing on the author. Thus, in contrast to the previous example, here the emoticon functions not to help the reader of the message identify the general type (or category) of the illocutionary act performed, but rather to modulate an already identifiable act.

One might argue that people smile in face-to-face communication when they are anxious, too, and that this usage, if not emotive, at least maps more-or-less directly onto the way facial expressions function in physical space. To argue thus is to acknowledge that facial expressions do not always represent emotions—that they are associated with other meanings, some of them partially or entirely conventional (such as the polite but bored smile used to disengage from an uninteresting conversation at a cocktail party). Nonetheless, it is difficult to imagine the writers physically smiling when they produced the following electronic examples. In these messages, the smileys indicate that the intended meaning of the preceding utterances is not as it otherwise appears—in effect, that the utterances were intended as one kind of speech act, rather than another. In each case, the smiley downgrades a strong complaint to something else.

JKingsbury : GUIDE> have you ever made a home page on aol?

Guide ASH : JK, yes and I can't get rid of the stupid thing! :))

In the above example, posted to a help chatroom on the Internet service provider AmericaOnline (AOL), the guide appears to make a strong complaint that is not a helpful response to the user, JKingsbury's, query about how to make a home page on AOL. The smiley at the end alters the pragmatic meaning of the utterance, however: Rather than being a rude, selfish gripe, it becomes a mild, humorous complaint that demonstrates a friendly attitude towards the user. Under no reasonable reading is it possible to construe that the guide is happy that he cannot get rid of his home page, as a smile literally suggests.

Another clear example is the following message, posted recently to a Yahoo! fibromyalgia support forum:

i'm 23 with CFS/FMS⁸ and some other things. i was diagnosed about 3 years ago, but i've been ill much longer than that. i'm sick of the crying and moping too. i was actually in a really down mood and decided to get on to see if anyone had posted. i've been inactive for awhile. i'm in a pretty bad flare-up right now, and that def. affects my mood. I am very sensitive and cry easily, and gets even worse when i feel awful :)

The writer is obviously not happy about the conditions she describes; she explicitly states that she has been “crying,” “moping,” and feeling “down”—affect opposite to what a smile usually indicates. Claiming that the smiley indicates positive emotion in this case would be perverse. It seems rather that the smiley functions to mitigate what otherwise could be read as a self-pitying list of complaints, suggesting the interpretation

⁸ CFS/FMS=Chronic Fatigue Syndrome/Fibromyalgia Syndrome.

that the author is not complaining, but rather merely asserting or describing her situation. (Whether the smiley has that perlocutionary force, or effect on the reader, is a separate question.)

Smiling emoticons also sometimes serve to indicate that the writer is not serious about the content of a message, similar to winking icons. For example, when the second author emailed to invite several of her students to join her in a group photo shoot in her office recently, one male student emailed back as follows, using a smiley to indicate that the message was intended as joking, non bona fide communication:⁹

Wo wo wo...I must put [on] some hair gel tomorrow then :)

In each of the above cases, the indication is not of emotion, but rather of the way the force of the words should be taken.

This analysis can be extended to cases where emoticons are used on their own, without being attached to a textual utterance—what Provine et al. (2007) call ‘naked emoticons.’ Some such uses can be characterized as simple expressions of emotion that map iconically onto body movements, such as smiling and frowning (see, for example, the frowning emoticon in the first example above). However, other uses of stand-alone emoticons are better conceived of as performances of illocutionary acts—acts that can be carried out also through the use of language, as in the following example taken from an Internet Relay Chat room:

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<GTBastard> dtox: when are u leaving?
<dtox> gtb: 3pmish on sat
<GTBastard> werd
<Madman> no no no
<Madman> 2ish
→ <Madman> :)
<dtox> oh.. lame
<GTBastard> hmmm
<dtox> dunno then
<Madman> hahah
→ <Madman> just busting your balls

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In this exchange, Madman contradicts dtox regarding the time he is planning to leave on a trip and then posts a stand-alone smiley. While the interpretation that Madman is happy about something is possible at this point, his explanation several messages later reveals the emoticon to have been intended in a different way. Madman explicitly glosses his intention with the full clause “just busting your balls” (i.e., I’m just teasing you)—a function that, incidentally, he could also have expressed with a winking icon.

⁹ On humor as non-bona fide communication, see Raskin (1985) and Attardo and Raskin (1991).

Both in this example and in the earlier example of the frown, the stand-alone emoticon modifies an utterance in a previous message.¹⁰ Whatever a text producer's reason for placing an emoticon on a separate line—e.g., as an afterthought, for emphasis, or to separate the locution from its force indicator so as to lead the reader to first one interpretation and then another—stand-alone emoticons appear to function similarly to emoticons that appear on the same line as the textual locutions they modify, in that they can express emotional facial expressions, conventionalized (non-emotional) facial expressions, or contextually-dependent illocutionary force, depending on the producer's communicative intent.

Discussion

In the previous section, we illustrated the applicability of our theoretical account to examples of actual emoticon use. In this section, we discuss several further issues and questions that our account gives rise to.

First, it should be clear that the account presented here does not rule out an iconic mapping between the function of emoticons and some bodily and facial movements. It is not the case that the received view of emoticons that we have been critiquing retains such a mapping, while our account does not. Rather, what has been described here with respect to emoticons applies, *mutatis mutandis*, to bodily gestures as well, and coheres with a large body of research that ties gesture to language. As McNeill (2005) writes: “It is profoundly an error to think of gesture as a code or ‘body language’, separate from spoken language. (...) (G)estures are *part* of language” (p. 4, italics in the original). The meanings expressed by gestures are conventionalized to varying degrees, like those expressed by emoticons. Moreover, Kendon (1995) claims that some gestures function as illocutionary speech acts, making visible the implications of what is being said. Our account of emoticons resonates with this outlook, and may be viewed as lending support to it, by pointing to expressions of (facial) bodily movement in text.

Second, the loose connection between emoticons and the speech acts they sometimes help carry out—such that there appears to be no simple one-to-one mapping between any of the commonly-used emoticons discussed in this paper and a particular illocutionary force—is in accord with the general discussion of textual markers and speech acts presented in an earlier section. As noted there, the relationship of markers such as sentential mood and utterance-final punctuation to pragmatic force is quite loose, and according to some views, may not be amenable to complete regimentation and conventionalization. This state of affairs should not be taken to falsify the widely accepted conception of such structural apparatuses as indicators of illocutionary force, nor should it be taken that way vis-à-vis emoticons. In all cases, contextual interpretation is involved, which the textual markers contribute to rather than make redundant.¹¹ At the same time, it may be observed that all of

¹⁰ Our corpus contains no examples of stand-alone emoticons that cannot be associated with a previous utterance. In most cases, the previous utterance was produced by the same participant in an immediately prior message. Markman and Oshira (2007) report somewhat different observations, however.

¹¹ See Sperber and Wilson (1986) for an account of the way context helps determine the speech act performed through the production of a given utterance.

the examples of emoticon usage discussed in the previous section convey a nuance of playfulness (cf. Danet, 2001), even the frown. This appears to be an illocutionary force that maps onto emoticon use in general, indicating that the speech act performed is not intended to be taken entirely seriously. However, this force is so general as not to provide a very precise or useful guide to the interpretation of most instances of emoticon use. It is thus the exception that proves the rule, in that context is clearly required to interpret the specific intended meaning, beyond playfulness, of any given emoticon.

The question of context raises a third issue: What factors condition the use of emoticons and the ways in which they are used? Although we have argued on a conceptual level for a shared function of commonly-used Western-style emoticons in English CMC—as a textual indicator of illocutionary force—the forms and meanings of emoticons vary considerably in actual use, as the examples discussed above of smiling and winking faces illustrate. Technological considerations motivate emoticon production in the first place, in that typed (especially sideways) emoticons are native to CMC. It should be evident from our analysis that the functions of emoticons extend beyond substituting for facial and gestural ‘cues filtered out’ in textual CMC; at the same time, technological factors influence the extent to which emoticons are used and which ones are used in different CMC modes. Thus, for example, efficiency considerations, which are more pertinent to synchronous CMC than to asynchronous CMC, should affect users' decisions to employ emoticons, if we consider emoticons to be shorthand substitutes for longer textual expressions of intention. In support of this view, emoticons tend to be found more frequently in synchronous chat than in asynchronous discussion forums (but cf. Baron, 2004). In addition, the availability of graphical emoticons—for example, via pull-down menus in some IM clients—should promote the use of more diverse (and less commonly-used) emoticons; this is supported by the findings of Provine et al. (2007; see also fn. 6).

Moreover, situational factors such as user demographics, topic of discussion, and communication setting (e.g., work, school, or recreation) also appear to influence emoticon use (cf. Herring, 2007). Emoticons, especially smiling and laughing ones, tend to be used more by women than men, for example (e.g., Wolf, 2000), and more often in informal, playful communication than in formal or task-focused CMC (Derks et al., 2007). Perhaps because of their resemblance to whimsical line drawings, emoticons have expressive, playful, and informal connotations, and these help to explain the gender, topic/setting, and tone variations associated with their use noted above. However, except in the very general sense of indicating playfulness, these connotations are independent of illocutionary force marking *per se*. The use of punctuation, we might note, is in principle not limited only to some writers, some kinds of writing, some topics, etc., but rather it is a phenomenon of standard written English (and many other languages) in general. Similarly, illocutionary force-marking via emoticons, according to our analysis, is a phenomenon of English CMC. Thus while it is important to identify the factors that condition the variable uses to which emoticons are put, such variation is orthogonal to the claims of the present article.

Our analysis of emoticons as illocutionary force markers can shed light on a fourth issue: the apparent paradox that emoticons mimic (often non-intentional) facial expressions, although they are intentionally produced. In Goffman's (1959) terms, facial expressions are

expressions *given off* rather than expressions *given*. Emoticons, in contrast, are always produced consciously and intentionally, on a par with other aspects of written language. The use of emoticons as emotion indicators seems difficult to explain in this respect. Non-intentional ‘expression given off’ is usually taken to be a more reliable cue to interpreting other people's emotive states than intentional ‘expression given.’ It follows that the representation of a bodily channel that in some cases involves involuntary expression in the intention-governed domain of textual expression should be detrimental to its perceived value as an indicator of emotion, and the apparent success of this representation is left unaccounted for.

The construal of emoticons as indicators of illocutionary force partially obviates this paradox. The illocutionary force of an utterance is part of what a speaker means by the utterance, part of what he or she intends to convey by making it. Force is fully within the domain of the intentional—it is expression that is given. Thus the appearance of intentional indicators of force in CMC, possibly replacing some non-intentional indicators in face-to-face communication, does not present any theoretical difficulty, and it is not necessary to assume that users are unaware of the switch from non-intentional to intentional expression or find it problematic. The question of whether and how similar considerations might be invoked in order to address the problem of emotive uses of emoticons remains; we leave this as a topic for future research, noting here only that emoticons that express emotion also have a conventional (hence, intentional) aspect, in that they often do not mirror the writer's actual facial expression (see fn. 7).

Finally, we turn to consider briefly a pair of questions that the foregoing discussion naturally gives rise to. How are emoticons connected to the illocutionary force they express? And what justifies a claim that a given emoticon indicates that a certain illocutionary act is performed? Analogues of these questions concerning illocutionary acts in general were raised in the second section of this paper, and many of the considerations raised in that discussion—especially those involving conventionalization—apply also to emoticon use.

The use of emoticons as indicators of illocutionary force appears to comprise both conventional and non-conventional aspects. On the conventional side are cases where conventions are borrowed (or extrapolated) from face-to-face communication, as well as conventions that evolve within CMC contexts. The use of a winking emoticon as an indication of a joke is a good example of conventions of the first kind. As an example of a convention that originates in CMC, consider the association between certain strings of characters and the matching facial expressions: In many cases we learn to make these associations through socialization, when we take our first steps as CMC users, or when we join a computer-mediated community that has its own idiosyncratic repertoire of emoticons (see, e.g., Peña & Hancock, 2006 for a discussion of emoticons as conventions in an online gaming community). The function of emoticon dictionaries that are found on the Web is arguably to introduce users to such conventions, and the differences that can sometimes be found across dictionaries highlight the fact that there are, indeed, conventions involved. (For example, in the Urban Dictionary [2009, December 10], ':o' is described as a surprised face, and in Docstoc [2009, December 10], ':-o' is described as a yell.)

In other uses, a non-conventional, inferential explanatory framework is required. In several examples in the previous subsection, an inference about the intentions and beliefs of the (textual) speaker seems to explain best the force expressed by the emoticon used. In one example, a fibromyalgia sufferer produced a smiling emoticon right after describing her many hardships. Various interpretations of this emoticon are ruled out due to lack of relevance, and the only one that seems plausible is to construe the emoticon as indicating the sufferer's desire to mitigate the negativity of her message—to appear positive in the face of her pain, rather than complaining. (Note that the inference made here is also ascribed to the readers of the message—by making this inference, the readers arrive at the intended *interpretation* of the message, whether they are *persuaded* by the writer's effort or not.) Thus we argue that there is similarity and continuity between the way questions about pragmatic knowledge and justification are answered in the theory of illocutionary acts in general, and the way they can be answered in the context of emoticon use.

Conclusions, Implications, and Questions for Future Research

In this article, we have applied speech act theory to the communicative function of emoticons in CMC, arguing that a general function common to many emoticons is as a textual indicator of illocutionary force. More broadly, three functions of emoticons were identified: 1) emotion, mapped directly onto facial expression (e.g., happy or sad); 2) non-emotional meaning, mapped conventionally onto facial expression (e.g., a wink as indicating joking intent; an anxious smile), and 3) illocutionary force indicators that do not map conventionally onto facial expression (e.g., a smile as downgrading a complaint to a simple assertion). The question naturally arises, then, as to the balance among the different functions. Is one of them appreciably more dominant? Are there technological, cultural, and/or situational parameters that affect their distribution? Are these three options exhaustive, or are there other functions of emoticons that have so far been missed by researchers? These questions are outside the scope of this conceptual paper, but they deserve detailed empirical study in future work. Indeed, an understanding of emoticons as illocutionary force markers opens up numerous new possibilities for theoretically-grounded empirical emoticon research—research that goes beyond simple description and classification of emoticon types and that does not presume them always to express emotion.

Another set of goals for empirical research is internal to the domain delineated here, viz. the uses of emoticons as indicators of illocutionary force. As outlined in the section on speech acts and pragmatic force, a major line of research within speech act theory aims to characterize and categorize speech acts, and to articulate the indicators of their production and the conditions for their successful performance (e.g., Searle, 1979). This type of work can and should be expanded further to include emoticons and their use as force indicators in CMC. What is the range of speech acts performed with the help of emoticons, and how (and to what extent) are the acts correlated with the indicators? In particular, are emoticons used to perform illocutionary acts of all the types in Searle's (1979) taxonomy, and are specific emoticons used for some types in the taxonomy and not others? Are there success conditions that are particular to computer-mediated contexts?

Finally, we return to the broad question of the implications of this discussion as regards the boundaries between linguistic and non-linguistic communication. Facial expressions, which emoticons graphically imitate, traditionally have been thought of as playing a role in extra-linguistic (typically non-intentional) communication. That perspective motivates the construal of emoticons as icons of emotion that are independent of language. In contrast, the account presented here suggests that emoticons that indicate pragmatic illocutionary force are parts of text, on a par with, e.g., punctuation marks. If emoticons expand the definition of text, what about the facial expressions that they mimic—should they, too, be considered linguistic behavior?

Possible answers to this question can be found in the foundations of speech act theory. The main thrust of this theory is that linguistic communication is not exhausted by the production of phonetically- or graphically-encoded, grammatically well-formed, semantically evaluable expressions. Once this is acknowledged, the bounds of language and linguistic behavior become vague. For example, often the intonation with which an utterance is produced helps identify its force and thus can be thought of as linguistic behavior (imagine the spoken realizations of the example given earlier: ‘That’s great!’ [enthusiastic] vs. ‘That’s great.’ [sarcastic]). Intonation in English does not contribute to the grammatical identity of the expression produced,¹² however, so why should it be thought of differently from a facial expression that also helps identify force? There does not seem to be a principled reason for drawing a clear-cut line between these two types of behavior, or anywhere else. Rather, the picture that emerges is of a graded, context-dependent distinction between aspects of behavior that are and are not relevant to linguistic expression and interpretation. This picture is consonant with recent research into the interrelations between gesture and language (Kendon, 1995, 2004; McNeill, 1992, 2005).

It follows from the foregoing considerations that uses of emoticons as indicators of illocutionary force can be viewed as an expansion of text in the same way that, e.g., question marks and exclamation marks are. The history of punctuation (Parkes, 1993) teaches us that these marks were also late additions to text; that their early uses were not subject to widely agreed-upon conventions; and that the marks we use today are a subset of a larger class of punctuation marks that were experimented with and discarded over the course of the history of writing and print.¹³ The current seemingly chaotic state of emoticon use thus should not mislead us into thinking that there is a fundamental difference between emoticons and more familiar textual markers. Indeed, Markman and Oshima (2007) conclude that punctuation is the primary function of emoticons, based on an analysis of their sequential placement at the ends of phrases, sentences, and messages.

¹² The same is not true for tonal languages, such as Chinese, or pitch-accent languages, such as Japanese.

¹³ Examples of punctuation marks that have not caught on include the ‘irony mark’ (a small, backwards, elevated question mark) proposed by the French poet Alcanter de Brahm in the late 19th century, and a series of punctuation marks proposed by author Hervé Bazin in 1966 that included the ‘doubt point,’ ‘certitude point,’ ‘acclamation point,’ ‘authority point,’ ‘indignation point,’ and ‘love point’ (Wikipedia, 2010). It is noteworthy that none of these could be rendered by standard typewriter keyboards, but rather required the introduction of new symbols—a disadvantage emoticons do not share.

This last point suggests another important direction for future research: longitudinal study of emoticon use, to determine whether emoticons are becoming increasingly conventionalized as textual markers. To address this question, it will be necessary to collect a wide variety of contextualized examples of emoticon use over time, categorize them by type, and analyze their functions in their contexts of communication. In this endeavor, we believe that the analytical lenses of speech act theory and illocutionary force can provide useful guides to understanding.

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