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Emoji and Illocutionarity: Acting On, and Acting As, Language

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Abstract

Emoji can modify a textual utterance; constitute a stand-alone speech act; or virtually perform an action. These three broad types of pragmatic function are usually treated separately in the literature when they are treated at all. We classify these functions in a systematic, unified manner by drawing on the classic speech act notion of illocutionarity. We present a conceptually motivated typology that accounts for the three basic types of emoji function, as well as most pragmatic functions reported in previous emoji research, illustrating it with data from American and Chinese social media. The scheme can serve as a practical heuristic to guide empirical research on emoji use and a theoretical anchor for pragmatic studies of other graphicon types.

Key words: speech act theory, emoji, performativity, classification, typology, social media, Facebook, Twitter, Weibo

1. Introduction

Illocutionarity has to do with "that aspect of an utterance which relates to the speaker's intention as distinct from what is actually said or the effect on a listener."[1] A broad concept, it subsumes the classic notions of speech acts, illocutionary force, and illocutionary force indicating devices (Austin 1962; Searle 1969; Searle and Vanderveken 1985). Traditionally, these notions have been applied exclusively to written and spoken communication. About 15 years ago, however, Dresner and Herring (2010) observed that ASCII emoticons – sequences of keyboard characters representing basic facial expressions – could be used to modify the illocutionary force of textual utterances in computer-mediated communication (CMC).[2] Dresner and Herring give the example of a woman on a fibromyalgia support forum who ends a lengthy description of her woeful condition with:

> I am very sensitive and cry easily, and gets even worse when i feel awful :)

The smiley at the end mitigates what otherwise could be read as a self-pitying list of complaints, shifting the illocutionary force of the utterance from that of a complaint to a simple assertion or description of the writer's situation (Dresner and Herring 2010).

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[1] *Webster's New World College Dictionary*. Copyright © 2014 by Houghton Mifflin Harcourt Publishing Company.

[2] Relatedy, Domaneschi, Passarelli, and Chiorri (2017) recently demonstrated experimentally that illocutionary force can also be indicated by human facial expressions.

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Since then, emoji have displaced emoticons in popularity and have inherited – and expanded – many of their functions (Herring and Dainas 2017; Pavalanathan and Eisenstein 2016). Not only do emoji "act on" the pragmatic force of textual utterances in CMC, they also "act as" linguistic acts in their own right. These functions typically manifest in different ways structurally, as modifiers of textual utterances versus as stand-alone turns, as in the following examples:

(1) I want to buy book~ But, my country haven't translation. Hmmm…does anyone can teach me English? 😘

(2) A: Did you just break up w me?
B: 👍😎👍

In the first example, from a public Facebook comment thread, the kiss emoji modifies the illocutionary force of the preceding text, mitigating the imposition of the textual request and indicating its non-serious nature. In the second example, from a text message exchange, the stand-alone emoji sequence itself performs an illocutionary act, that of confirmation.

A third type of emoji illocutionarity that is quite common but that is discussed less often in the literature is the use of an emoji or sequence of emoji to virtually perform an action, as in the following example:

(3) Huda Beauty: Your ultimate weekend makeup inspo 💁‍♀️ 💄

In this example, a tweet from a beauty influencer on Twitter, the emoji can be translated as 'I (my emoji avatar) present the lipstick,' referring to a new brand of lipstick the influencer is promoting as a makeup "inspo" (inspiration). Virtual performances (Virtanen 2013) are well attested in discussions of speech acts in textual CMC (e.g. Camfield 1998, 1999; Cherny 1994, 1995; Herring, 2012, 2019; Virtanen 2013, 2018, 2021, 2022), but they have rarely been discussed in connection with emoji.

Examples such as (1) – (3) have generally been treated as separate phenomena in prior emoji research (when they have been treated at all). This is not to say that attempts to classify emoji functions have not been made – on the contrary, lists of emoji functions have proliferated recently[3] – but no consensus exists among them. They are usually based on inductive analyses of specific corpora, which have the potential to introduce idiosyncrasies. Many classification schemes create new terminology or use existing terminology inconsistently with previous schemes, resulting in a proliferation of labels for the same phenomenon (for example, the face blowing a kiss emoji in example (1) has been variously analyzed as tone

[3] For example, Beißwenger and Pappert (2019); Cramer, De Juan, and Tetreault (2016); Danesi (2016); Herring and Dainas (2017); Tang and Hew (2019).

marking, softening, illocutionary force modification, and face-threat avoidance). Moreover, little attempt has been made to unify emoji functions conceptually; most existing schemes are not organized according to any systematic or governing principle.[4]

In this chapter, we propose that the three basic pragmatic functions of emoji in (1) – (3) can be unified under a single conceptual umbrella, that of illocutionarity, and that this perspective offers theoretical and practical advantages. Employing a two-phase approach, we first draw on classic speech act theory, virtual performatives in textual CMC, and existing emoji research to systematize the three illocutionary functions and their variants into a classification scheme, and we then illustrate the functions with examples from social media sites in two cultural contexts. The scheme comprises both illocutionary force (IF) indicators, which operate on textual utterances, and illocutionary acts (IA), which function as stand-alone propositions. We situate the former along a continuum of force, in the process identifying IF effects that have not been explicitly associated with illocutionarity before and that extend the classic definition of IF itself. To classify illocutionary acts, we employ a modified version of the CMC act taxonomy developed by Herring, Das, and Penumarthy (2005). The taxonomy was designed for analyzing text; we show here that it can be applied usefully to emoji, as well – crucially, with the addition of a 'behave' act to capture virtual actions. This classification scheme is intended as a holistic conceptual framework, as well as a typology that can be used as a heuristic in empirical research on emoji functions, for example, as the basis for a coding scheme using discourse or content analysis methods.

The classification scheme draws from three bodies of research: classic research on speech acts and performativity (Austin 1956, 1962; Searle 1969, 1976; Searle and Vanderveken 1985); speech act classification (Herring et al. 2005) and discussions of performativity in textual CMC (Camfield 1998; Cherny 1995; Virtanen 2013, 2018, 2020, 2022); and previous analyses of emoji as speech acts (e.g. Ge and Herring 2018), tone markers (e.g. Herring and Dainas 2017), and punctuation (Sampietro 2016). After summarizing key concepts and findings from these literatures, we describe our data sources and the approach taken in generating the classification scheme. The scheme is then presented and illustrated with examples from social media platforms in two cultural contexts: Twitter and Facebook in the West and Sina Weibo in China. In developing the scheme, we observed many similar illocutionary effects in the Western and Chinese emoji-containing messages, suggesting that the classification scheme may be broadly applicable across cultural contexts. We conclude by discussing illocutionary versus non-illocutionary uses of emoji and how borderline cases might be classified.

[4] An exception is a proposal by Yus (2019) to subsume three categories of emoji – emoji within (the text), emoji without (the text), and emoji beyond (the text) – under a broad 'cyberpragmatic approach.'

2. Background

2.1 Illocutionarity and Classic Speech Act Theory

Illocutionarity is the unifying concept for our classification of emoji functions because it includes, in a general way, all three phenomena illustrated at the outset of this chapter and has done so since its origins in classic speech act theory. That is, it includes "the *illocutionary act* [or] the action performed by uttering a certain sentence, … the *illocutionary force* of the utterance, i.e., its intended socially valid verbal action. … [and *illocutionary force indicating devices* that] show how an utterance is to be taken, i.e., what illocutionary act the speaker is performing while uttering a sentence" (Domaneschi et al. 2017:2, emphasis added). The latter include illocutionary or *performative* verbs, which when uttered constitute the performance of an illocutionary act. Each of these concepts is discussed below.

In classic speech act theory (Austin 1962), the illocutionary force is the speaker's intent in saying something (e.g. to make a bet or to apologize), and an illocutionary act (IA) is the performance of an act in saying something (e.g. betting or apologizing). Bach and Harnish (1979) distinguish two categories of IAs: communicative acts, such as asserting, and conventional ("speech") acts, such as betting, apologizing, and christening a ship. Austin[5] originally excluded statements and assertions from the category of IAs, but later revised his view, writing, "to state is every bit as much to perform an illocutionary act as, say, to warn or to pronounce" (Austin 1962:133).[6] Searle (1969) also includes the category of assertives in his classification of speech acts. With this inclusion, "[a]ny utterance will consist in performing one or more illocutionary acts" (Searle 1976:14). The CMC act taxonomy (Herring et al. 2005) that we draw on in this chapter follows the spirit of Austin and Searle in including the assertive acts of claiming and informing alongside 'conventional' IAs such as directing, thanking, and apologizing.

Illocutionary force indicating devices (IFIDs) are linguistic devices that indicate either that the utterance is made with a certain illocutionary force, or else that it constitutes the performance of a certain illocutionary act (Searle and Vanderveken 1985). IFIDs show how the proposition is to be taken, that is, what illocutionary act the speaker is performing while uttering the sentence. In English, IFIDs may include word order, stress, punctuation, the mood of the verb, and illocutionary verbs (e.g. *bet*, *apologize*) (Searle and Vanderveken 1985). Most often discussed in the speech act literature are illocutionary verbs, also referred to as performative verbs because they constitute the performance of the action they describe when uttered in a performative utterance using performative syntax. Austin (1956:241) observed that use of the first person and simple present tense of the verb are important clues

[5] As discussed in Doerge (2013).

[6] Indeed, Austin's "performative analysis" of sentence meaning holds that the deep structure (semantic structure, or meaning) of all sentences takes the form of explicit performative formulas, such that a statement like "It's warm outside today" has the underlying form "I assert (or I say) that it's warm outside today" (Doerge 2013).

that an utterance is performative in nature. That is, when the first author of this chapter says, "I apologize," it constitutes an act of apology, whereas "Susan apologizes" and "I apologized" lack performative force; these are simply descriptions of a habitual activity and of a past action, respectively. In textual CMC, as described in section 2.2.2, performative utterances have different syntactic characteristics, notably favoring the subject in the third person over the first person (Camfield 1998; Cherny 1995; Herring 2012, 2019; Virtanen 2013, 2018, 2021). Emoji, in contrast, do not encode morphosyntactic distinctions such as person and tense. However, they can be shown to function performatively on the basis of their semantics and the discourse context.

In traditional spoken and written language, only certain kinds of verbs can participate in performative utterances. These are a subset of verbs of communication, broadly construed to include verbs such as *apologize* and *bet*; yet not all verbs of communication are performative. Performative verbs can be identified using the "hereby" test (Austin 1956). Thus, for example, "I hereby apologize to anyone I may have inadvertently offended" is performative, but the utterances "I (hereby) grumble" and "I (hereby) insinuate" are not, even though grumbling and insinuating are kinds of communication. Notably, moreover, verbs that describe actions and states do not function performatively in speech or traditional writing; that is, one cannot utter them and bring about what they describe by saying e.g. "I (hereby) dance" or "I (hereby) love cashews" (Herring 2022). Further, there are felicity conditions that must be met to perform some acts; for example, one must occupy an institutional position of authority in order to sentence someone for a crime (judge) or pronounce a couple man and wife (religious or civil authority). As we will see, performatives in CMC, both textual and expressed through emoji, are not subject to the same semantic and pragmatic constraints.

In addition to performative verbs, IFIDs include mood and punctuation. Grammatical moods such as indicative (expressing an assertion, denial, or question), imperative (expressing a command, prohibition, entreaty, or advice), and subjunctive (expressing doubt or something contrary to fact) are indicated in English through verbal inflections (Palmer 1986). In written language, punctuation overlaps in function with mood, in that periods often accompany indicative mood and exclamation marks often occur with imperative mood. Punctuation also signals "nuances of semantic significance which might otherwise not be conveyed at all, or would at best be much more difficult for a reader to figure out" (Parkes 1992:1). These include setting the mood (in the everyday sense of the term, a temporary state of mind or feeling) of an utterance by indicating the writer's emotion or adding a particular emphasis to the text.[7] In addition, punctuation has a bounding function, delineating boundaries between rhetorical units (Parkes 1992).

[7] https://medium.com/what-to-do-about-everything/using-punctuation-to-affect-tone-in-your-writing-2e7ff7a42f1d, accessed April 9, 2023.

In spoken language, mood and emotion are conveyed in various linguistic and paralinguistic ways, including intonation, gestures, and facial expressions (Parkes 1992). Textual CMC, as a hybrid of written and spoken language (e.g. Baron 1998), uses grammatical mood marking and punctuation as in traditional writing and can also convey paralinguistic information through nonstandard orthography and typography (Herring 2012, 2019). Emoji that represent gestures and facial expressions are also used as IFIDs, both to indicate the illocutionary force of textual utterances by conveying the user's intended tone (Gawne and McCulloch 2019) and as punctuation that bounds rhetorical units and indicates the writer's mood (in the everyday sense).

2.2 Speech Acts and Performativity in Textual CMC

2.2.1 Speech Acts in Textual CMC

As in other modalities of communication, most utterances in textual CMC are produced to accomplish something, rather than to simply communicate a meaning (e.g. Carr, Schrock, and Dauterman 2012; Nastri, Peña, and Hancock 2006). Various taxonomies of speech acts have been proposed to classify the different types of actions that users seek to accomplish through their utterances (e.g. Austin 1962; Bach and Harnish 1979; Francis and Hunston 1992; Herring et al. 2005; Searle 1976). Two of these taxonomies have been used most often in CMC research. The first is that of Searle (1976), who classified speech (illocutionary) acts into five broad types: representatives (assertives), directives, commissives, expressive, and declarations. Using a modified version of Searle's (1976) taxonomy, Nastri et al. (2006) found that in constructed 'away' messages in instant messaging, *assertive*, *expressive*, and *commissive* acts were most common. In contrast, Facebook status updates have been analyzed as consisting primarily of *expressive*, *assertive*, and *directive* acts (Carr et al. 2012; Ilyas and Khushi 2012). A study of the Chinese social media platform Sina Weibo found that Chinese celebrities also often employ *expressive*, *assertive*, and *directive* acts to initiate user engagement (Ge and Gretzel 2018).

The second taxonomy used in CMC research is that developed by Herring et al. (2005) for analysis of textual CMC. The CMC Act Taxonomy is an amalgam and distillation of Bach and Harnish's (1979) classification of speech acts, which is based on Searle's (1976) classification, and Francis and Hunston's (1992) classification of conversational speech acts. The taxonomy was designed to apply both to genres of CMC that are closer to traditional writing, such as email and blog posts, and to more conversational genres such as real-time text chat and text message exchanges.[8] Consisting of 16 act categories, the CMC Act Taxonomy makes more fine-grained distinctions than Searle's taxonomy, while being easier to apply reliably than the 33 acts identified by Francis and Hunston (Herring et al. 2005). The 16 CMC acts are described and exemplified in Table 1.

[8] Because of this, the CMC Act Taxonomy includes concepts related to conversational interaction (such as *repair* and *manage*) that are not considered illocutionary acts in classic speech act theory.

Table 1. The CMC Act Taxonomy (Herring et al. 2005)

CMC Act	**Description**	**Textual Examples**
Accept	Concur, agree, acquiesce	Definitely. I agree.
Apologize	Humble oneself, self-deprecate	Oops my fault :(
Claim	Make a subjective assertion that is unverifiable in principle; assert, speculate	I love you. That's the nicest thing you've ever said.
Desire (Irrealis)	Want, hope, wish; promise, predict, speculate; hypothetical, counterfactual	I can't wait to meet you. She will join us after class. If you're wrong, you'll pay.
Direct	Require, prohibit, permit, advise	Come look at this. You should stop doing that.
Elaborate	Comment on, explain, paraphrase a previous utterance	(I did what you said.) I got a haircut.
Greet	Greeting, leave taking; formulaic inquiries about/wishes for well-being	Hi, how are you? See you later. Happy birthday!
Inform	Provide "factual" information that is verifiable in principle, even if untrue; inform, state	Paris is the capital of France. My uncle just bought a jet. I've never been here before.
Inquire	Seek information, ask, make neutral or marked proposals	What are you guys eating? There's still time, right?
Invite	Solicit input, suggest; offer; include, seek participation/acceptance	Let's start over. What if we did it this way? Please join us.
Manage	Manage discourse, organize, prompt, focus, open or close discussions	I have two thoughts about that. First, … Second, … To conclude, …
React	Show listenership, engagement (positive, negative, or neutral), endorse, approve	That's great/terrible! hahaha; lmao; wow; hmm; ugh
Reject	Disagree, dispute, challenge, insult	No way is that accurate. Gayyyy
Repair	Return, clarify, correct misunderstanding	Did you mean "school holiday"? Just kidding.

Request	Seek action politely, make direct or indirect requests	Can you plz send pics?
Thank	Appreciate, express gratitude	Thanks so much.

The CMC act taxonomy has been applied to analyze social media messages on various platforms. For instance, a study of gender and communication in teen chat forums found that the *invite* act was favored by boys, whereas girls used the *react* act more (Kapidzic and Herring 2011). In analyzing celebrity communication patterns on Twitter, Nemer (2016) identified *inform*, *accept*, *claim*, *thank*, and *direct* as among the most frequently used CMC acts. Ge-Stadnyk (2021) compared messages posted by celebrities on Sina Weibo and Twitter and found that *claim*, *inform*, and *manipulate* (a collective term including *direct*, *request*, and *invite*) acts predominated on both platforms.

Overall, however, regardless of which taxonomy is used, much the same sorts of IAs are evident in textual CMC as in offline speech and writing, although their frequency varies according to communicative purpose, topic, platform, and user demographics (cf. Herring 2007).

2.2.2 Performativity in Textual CMC

Where textual CMC acts differ from traditional verbal acts is as regards performative utterances, and especially, their ability to perform virtual *actions*. This characteristic traces its origins to online text chat environments popular in the late 1980s and 1990s, which featured messages that report a participant's own behavior as though narrated from a third person perspective. This is epitomized by the Internet Relay Chat (IRC) meme, "[User1] slaps [User2] around a bit with a large trout" (Herring 2022). Structurally, these utterances take a third person subject and a verb in the simple present tense. Pragmatically, they are performative. That is, in the context of the virtual environment where they are typed, their appearance on the screen constitutes the enactment of the behavior they describe, and the action is non-cancelable (Cherny 1994).

From the perspective of speech act theory, these 'virtual performatives' (Virtanen 2013) are notable in several respects. Their paradigmatic uses involve a third person rather than a first person subject, likely due to the practice in IRC and other text chat systems of automatically preceding each message with the user's nickname or user ID. Further, there are few semantic or pragmatic restrictions on what can be a virtual performative. In addition to apologizing and promising, one can performatively complain and grumble, and even use 'hereby' with such acts (Virtanen 2013). One can adopt the roles of marriage official and judge and produce utterances like "Susan now pronounces you man and wife" and "Susan (hereby) sentences you to 10 years in prison without parole." Moreover, one can virtually perform actions, such as "Susan dances with joy." These utterances bring about the specified action in the digital context, for example, during collaborative narrative play.

Ambiguity can arise, however, between the *performance* of virtual actions and *descriptions* of offline activities and states of affairs. States are rarely purely performative in a virtual sense, even when typed using virtual performative syntax in a chat room. This is because they tend to describe offline as well as online realities, as with "Susan loves cashews," which is true of Susan in general.[9] Moreover, offline activities can be described using virtual performative syntax; for example, if the first author is writing up a complaint in physical reality, in an online chat room she could type "Susan complains about the new regulations." Cherny (1995) gives similar examples, speculating that the choice to use virtual performative syntax in such cases "has something to do with tone, via manipulation of perspective. The omniscient narrator's voice suggested by third person is more distanced,[10] and perhaps feels more authoritative." Adopting virtual performative syntax in describing offline states and activities could also be a stylistic nod to the virtual performatives that are characteristic of online chat environments (e.g. Virtanen 2022) or a playful attempt to blur the line between description and performance by implying both at once.

From a philosophical perspective, Camfield (1998, 1999) sees the essential question as whether, and if so, when, action verbs can be considered illocutionary acts. He introduces a distinction between the person who is typing and their online persona and suggests asking in potentially ambiguous cases, Who is acting? Whose situation is being described? "Within the limited reality of the personae, there is no difference between the uttering and the doing of an action," he concludes, and thus "from inside the textual reality, action verbs usually are [performative] illocutionary acts." From the perspective of the person typing in the real world, however, "they appear more as descriptions which happen in real-time" (Camfield 1998:28).

This duality of perspective is exploited for rhetorical and pragmatic ends in text chat, for example in narrative play, for distancing, or to avoid responsibility. Indeed, much of the appeal of virtual performatives is that they open up multiple frames of reference in the virtual world and in "real life" (Cherny 1995). Emoji and emoji sequences that symbolically perform actions similarly play with perspective and can be ambiguous between online action and offline description. In these uses, emoji can be considered (contextually specific) online personae that simultaneously represent the user and are not the user.[11]

A final noteworthy characteristic of textual virtual performatives is that they can function performatively even in shortened and syntactically ambiguous forms, which Virtanen (2021)

[9] *Imagined* states can be performative in playful online environments, however. For example, the first author could type, "Susan believes that Jing is a Ferrari" (e.g. in response to Jing typing, "Jing transforms herself into a Ferrari"). Susan's stated belief about Jing's ontological status could be virtually true without being true in offline reality.

[10] Similarly, Virtanen (2018) suggests that the self in virtual performative constructions is "externalized."

[11] This duality recalls the concept of the 'not-selfie' introduced by Tiidenberg and Whelen (2017) to refer to when the subject of an image or GIF in social media does not physically resemble the user but in some way represents them.

refers to as 'fragments'. Sometimes these are set off by asterisks or other symbols, as in **blinks*, *yawn*, *gulp*, (giggle), *meow*, *hrmph*, *happy sobs*, *eyes warily*,* and **points upward**, and sometimes they are unadorned, as with *lol*, *kiss*, *hugs*, *wink wink*, *confused*, *dances with joy,* and *chillin with the homies*. These 'performative predications' (Herring 2012, 2019) set the stage for performative uses of emoji. On social media, emoji such as 😂 (lol), 🤗 (hugs), 😉 (winks), 😘 (kiss), 😒 (eyes warily), 🤦‍♀️ (facepalm), and 🐓 (dance for joy) are replacing many short-form performative utterances (Herring 2022). Sequences of emoji can also be used to perform more elaborate virtual actions, as is illustrated in section 4.2.

2.3 Emoji and Illocutionarity

Most emoji research does not engage substantially with illocutionarity beyond extending Dresner and Herring's (2010) analysis of emoticons as illocutionary force markers to emoji (e.g. Li and Yang 2018; Sampietro 2019).[12] Nevertheless, a number of studies describe emoji functioning as speech acts and actions, and many others describe emoji functioning as tone marking in relation to the textual utterances they accompany. In our proposed framework, the former are illocutionary acts (IAs), and the latter constitute illocutionary force indicating devices (IFIDs). These two lines of research are reviewed below.

2.3.1 Emoji as Speech Acts

Emoji readily substitute for words and utterances (Danesi 2016). In the latter usage, they convey stand-alone propositional content (Herring and Dainas 2017; Yus 2019) and can perform a variety of illocutionary acts. For example, Yang and Liu (2020) drew on Searle's (1976) classification to identify use of the burning candle emoji (🕯️) on Weibo as an expressive speech act that signals the illocutionary force of sympathizing (i.e. expressing RIP or 'rest in peace'). A study of stand-alone emoji on Facebook found that users often employ the face with tears of joy (😂) and heart (❤️) emoji to perform expressive acts; these emoji project the illocutionary force of happiness and love/compassion, respectively (Kazmi et al. 2019).

Kazmi et al.'s (2019) Facebook users also employed the clapping hands emoji (👏) and thumbs up emoji (👍) to convey the illocutionary force of approval, and they used the raised fist emoji (✊) to signal disapproval. More generally, emoji representing emblems – culturally established gestures with defined meanings such as thumbs up – and intentionally communicative bodily actions (Gawne and McCulloch 2019) convey a variety of acts by emblematically "performing" actions (Herring and Dainas 2017; Zhou et al. 2017). For example, one of Zhou et al. (2017)'s study participants reported that she sends emoji hugs to her middle school classmates because she would "really like to hug them in person."

[12] An exception is Gawne and McCulloch (2019), who compare the illocutionary effects of emoji to 'illocutionary gestures' which can be used to signal negativity, precision, and force, as well as to offer and question.

Herring and Dainas (2017) classified performing a virtual 'action' as one of seven main pragmatic functions fulfilled by graphicons in Facebook comment threads. In a survey of emoji understanding designed to validate their classification scheme, Dainas and Herring (2021) found that 'action' was the second-most common interpretation of emoji in contextualized examples, after 'tone marking.' The kissing face and heart emoji were interpreted by survey respondents as expressing virtual actions more often than the other emoji in the survey.

Research has also established that emoji sequences, two or more emoji with different semantic meanings strung together (Ge and Herring 2018), can function like verbal utterances. Using the CMC act taxonomy, Ge and Herring (2018) found that Sina Weibo celebrities and their followers employ emoji sequences to convey a variety of CMC acts, including *claim* (making a subjective assertion), *desire* (referring to a future, hypothetical, or counterfactual situation), and *manipulate* (a collective term for *direct*, *request*, and *invite* acts). Not all of the acts in the taxonomy were attested in their sample of 300 emoji sequences, however.

2.3.2 Emoji as IFIDs

Tone Modification. Dresner and Herring (2010) were the first to observe that emoticons can indicate the illocutionary force of a preceding textual utterance. For example, a winking face generally indicates that a statement is non-serious, and a smiley face can change the interpretation of a complaint to that of a friendly report. Subsequent research has identified similar functions of emoji (e.g. Kelly and Watts 2015). 'Tone modification' refers broadly to an emoji that functions as a nonverbal cue to how the text it accompanies should be interpreted, including its use for clarifying a speaker's intent and hedging the illocutionary force of an utterance (Herring and Dainas 2017).[13] Emoji studies have identified various tone modification strategies. A common strategy is the use of emoji to add an 'emotive tone' or a certain attitude to the text (Danesi 2016). In Danesi's example, 'Hi, this is Melody 😊', the smiling face emoji injects positivity into the *greet* act conveyed by the text. Users also employ emoji to change the illocutionary force conveyed by the accompanying text (Danesi 2016). In his example, 'Don't be too wild 😉', the winking face emoji signals that the speaker is not serious about what they are saying; that is, that the *direct* act in the text is non bona fide. Moreover, emoji can alter the intent of the message conveyed in the text. In Ge and Gretzel's (2018) example, 'I can handle it 😱😱😱', the repeated emoji of a terrified face shifts the confident *claim* act in the text to a more dubious claim (e.g. 'I'm not sure that I can handle it').

Drawing on politeness theory (Brown and Levinson 1987), some scholars also report that people use emoji to upgrade and downgrade the force of their textual utterances as a means

[13] Similarly, Yus (2019) characterizes the first function of 'emoji within (the text)' as "to signal the propositional attitude that underlies the message and which would be difficult to identify without the emoji."

of doing face-work in computer-mediated social interactions (e.g. Beißwenger and Pappert 2019; Sampietro 2019). Upgrading refers to use of an emoji as a booster for a face-flattering act, such as a positive *claim* act[14] (Beißwenger and Pappert 2019), or what Danesi (2016) calls a 'tone-enhancing function.' In his example, 'happy to see u all! 😘😘😘', the face throwing a kiss emoji boosts the positivity conveyed by the *claim* act in the text. An emoji can also be used to downgrade or mitigate the force of a face-threatening act or FTA (Sampietro 2019); an example is 'Let's talk 😘'. The kissing face emoji softens the *direct* act in the text, which potentially threatens the addressee's negative face. The classification scheme proposed in this chapter relates the various tone modification functions described above to each other along a dimension of (strength of) illocutionary force.

Emoji as Punctuation. It is generally accepted that ASCII emoticons have evolved over time to function like punctuation, that is, to indicate the mood of textual utterances and to separate utterances from each other (Dresner and Herring 2010; Provine et al. 2007). Emoji show evidence of following a similar evolutionary trend (e.g. Dürscheid and Meletis 2018; Konrad, Herring, and Choi 2020). Danesi (2016) sees this use of emoji as calquing — the emoji are literal 'translations' of punctuation marks. Thus, in his examples, 'awe 😕 get some food & sleep early tonight' and 'Love you too 😊', the two emoji are analogous in function to a comma and a period, respectively. However, emoji differ from traditional punctuation in that they also indicate "mood breaks" (when used between clauses or sentences) and "mood finales" (when used at the end of a message) (Danesi 2016). Moreover, as Sampietro (2016) points out, emoji functioning as digital punctuation marks mainly occur in social and positive contexts. While utterance bounding is an important function of emoji, we consider it to be a structural device that is distinct from illocutionary force marking. However, when emoji used as punctuation also indicate illocutionary force, they should be treated as IFIDs. Punctuation is discussed as a boundary case in section 5.

3. Data Sources and Analytical Approach

3.1 Data Sources

The examples presented as illustrations in this chapter come from social media based in the U.S. and China. We considered sources from these two very different cultures in order to capture a diversity of emoji uses, with the goal of making the classification scheme more broadly relevant. In fact, most of the same illocutionary uses of emoji are found in both cultures, except where explicitly noted.

We draw illustrative examples, all of which are from public posts, from three platforms: Twitter and Facebook in the U.S. and Sina Weibo in China. The Weibo examples come from three data sets used in our previous research: 1) messages containing emoji sequences posted

[14] In interpreting these examples from the literature, we use categories from the CMC Act Taxonomy (Herring et al. 2005) for terminological consistency.

by Chinese designated celebrities (i.e. professionals with institutional positions; McQuarrie, Miller, and Phillips 2013) and general user-posted comments responding to those posts (Ge and Herring 2018); 2) messages containing emoji sequences posted by both Chinese designated celebrities and grassroot celebrities (i.e. ordinary users lacking professional experience and not holding an institutional position; McQuarrie et al. 2013) (Ge-Stadnyk 2021); and 3) Weibo posts containing single emoji published by Chinese designated celebrities (Ge and Gretzel 2018). Emoji examples on Twitter come from two sources: 1) English tweets containing emoji sequences published by social media influencers (Ge-Stadnyk 2021) and 2) English tweets collected for the purpose of this chapter containing single emoji posted by both designated and grassroot celebrities. Finally, some examples come from a data set of mostly single emoji posted to public, English-language Facebook groups (Herring and Dainas 2017). In all, 2091 emoji (distributed roughly evenly between the two cultural contexts) were examined in preparing the classification scheme. See Table 2.

Table 2. Summary of Emoji Sources

Platform (# emoji)	Description
Weibo (n=1119)	
Source 1	Emoji sequences posted by designated celebrities and their followers between April 11 and April 28, 2017
Source 2	Emoji sequences posted by both designated and grassroot celebrities between January 1 and December 30, 2019
Source 3	Single emoji posted by designated celebrities between February 12, 2016 and March 10, 2017
Twitter (n=300)	
Source 1	Emoji sequences posted by grassroot celebrities between March 13 and December 30, 2020
Source 2	Single emoji posted by both celebrities and general users between September 1, 2020 and February 28, 2021
Facebook (n=672)	Emoji posted to public Facebook groups in spring 2016

3.2 Analytical Approach

Classification can take place in either a top-down or a bottom-up fashion. In developing our typology of illocutionary effects expressed by emoji, we followed a top-down approach, moving from conceptual to empirical analysis (Bailey 1994). We first applied conceptual categories from classic speech act theory, on one hand, and from prior emoji research, on the other, to classify emoji that modify textual utterances and emoji that function as independent acts. We then confirmed the validity of the categories through qualitative

examination of emoji uses in our data sources, from which we identified representative examples.

For emoji that modify textual utterances, we were guided by the concept of IFIDs (Searle and Vanderveken 1985) in classic speech act theory and tone modification (e.g. Herring and Dainas 2017) and the various functions subsumed under that label in previous emoji research. The latter include, but are not limited to, tone enhancing (Danesi 2016), intensification (Yus 2019), softening (Beißwenger and Pappert 2019), modifying the attitude or affect of the textual message (Dainas and Herring 2021), contradicting the content of the message (Yus 2019), and changing it to a different illocutionary act (e.g. Ge and Gretzel 2018; cf. Dresner and Herring 2010).[15] We conceptualized and systematized these effects as four types of IFIDs: enhancement, mitigation, modification, and shift. Further, we locate these IFIDs along a continuum of strength of illocutionary force, ranging from weaker (enhancement of the textual IA) to stronger (shift in interpretation of the textual IA). In doing so, we broaden the scope of the term 'illocutionary force,' which was previously applied to emoji and emoticons mostly in reference to change in interpretation of the textual IA (Dresner and Herring 2010). In support of this broader conceptualization, all of the above-named uses of emoji *indicate how a preceding utterance is intended to be understood*, as has often been observed (e.g. Cramer et al. 2016; Li and Yang 2018; Yus 2019); this is the classic definition of illocutionary force (Austin 1962). Moreover, in all these uses (albeit to varying degrees), emoji contribute pragmatic meaning that could not be inferred strictly from the textual utterance alone.

In classifying emoji that function as independent acts, we began with Herring et al.'s (2005) CMC Act Taxonomy (see Table 1), since it has often been observed that emoji can function like, and substitute for, stand-alone utterances in CMC (e.g. Cohn, Engelen, and Schilperoord 2019; Danesi 2016; Yus 2019). The original 16 acts of the taxonomy, like classic speech acts, are communication acts, in the sense that all can be expressed verbally through acts of saying.[16] An additional communication act, *congratulate*, is introduced into the taxonomy in this chapter due to its frequent occurrence in our data sources. It is also found in textual CMC, as well as in other modes of expression, and thus we propose expanding the CMC act taxonomy to include it.

[15] See also Yus's (2014) classification of emoticons into eight pragmatic functions, six of which he relates to illocutionary force: signaling propositional attitude, strengthening/mitigating the illocutionary force of a speech act, signaling a joking tone, signaling an ironic tone, and signaling an affective attitude toward accompanying text. The other two functions are intensification and conveying a feeling or emotion separate from and parallel to the accompanying text. Our classification of emoji as IFIDs includes all eight functions.

[16] Some communicative CMC acts are also expressed nonverbally to a greater or lesser extent. For example, *react* acts are often expressed through gestures and facial expressions, whereas *elaborate* and *repair* acts are usually verbal.

CMC Act	Description	Textual Examples
Congratulate*	Praise an accomplishment; express confidence in future success, encourage; validate; celebrate	Well done! You've got this!

* Like some other category labels in the taxonomy (e.g. *desire*), *congratulate* is a cover term that includes verbal actions that are not literally congratulations but that are part of a set of related actions.

Further, we propose to expand the CMC act taxonomy to include an act that is not an act of communication, *behave*, to account for emoji that function primarily as virtual actions.

CMC Act	Description	Textual Examples
Behave	Performs a virtual action; does not primarily function as another CMC act	dances with joy *sips tea

A *behave* act was originally proposed for conversational interaction by Francis and Hunston (1992). In their act taxonomy, the *behave* code is applied when someone responds nonverbally to a directive via an action (133). We extend this definition to online environments and allow that the behavior may be either an initiating act or a response to a prior act. Emoji behave acts are typically virtual performatives, which, like virtual performatives in textual CMC (e.g. Virtanen 2013, 2018, 2021), constitute the performance of the behavior in the online context solely by virtue of being typed, and are not merely a description of offline behavior.[17] Unlike textual virtual performatives, however, emoji virtual performatives have no distinguishing syntax, but must be identified based on their semantics and the surrounding discourse context.

Context is important, because an action emoji may also perform a communicative CMC act, and its primary function must be determined from its context of use. While there are (as yet) no dedicated 'apologize,' 'inform,' 'claim,' 'reject,' etc. emoji, like there are illocutionary verbs in verbal languages, emoji users fill this gap by symbolically expressing communicative CMC acts through (literal) actions. For example, 😂 and 🤯 are used as reactions ['LOL', 'mind blown']; ❤️ and 😍 often function as claims ['I love …']; 👏 is used to congratulate; and 🎂 is conventionally used alone or with other "party" emoji to send a birthday greeting. Such uses should be considered communicative CMC acts, rather than

[17] Virtual performative constructions may simultaneously describe offline behavior to a greater or lesser extent, as noted in section 2.2.

behave acts, because they do not function only or primarily as virtual actions. However, action emoji uses also occur that are ambiguous between a conventional CMC act and a *behave* act; these are discussed in section 5.

4. The Classification Scheme

Having established all of the above as background, we now present the classification scheme (see table 3). The scheme is organized into two broad categories of illocutionarity: IFIDs and IAs. In the table, subcategories of each are indicated, along with operational definitions.

Table 3. Typology of Illocutionary Effects Expressed by Emoji

Category	Subcategory	Operationalization
IFIDs (Weaker ↕ Stronger)	IF enhancement	adds more positivity to what is in the text (cf. tone-enhancing, strengthening, intensification)
	IF mitigation	softens the FTA of the text (cf. downgrading, softening)
	IF modification	adds a different pragmatic nuance but does not change the IA of the text (cf. clarification, joking)
	IF shift	changes the interpretation of the IA in the text (cf. indicates a different 'illocutionary force' in previous literature)
IAs	Communication acts	accomplished through acts of saying, e.g. claim
	Behave acts	perform a (virtual) physical action, e.g. dance

Each subcategory is illustrated with a representative example in what follows. These examples were selected to be relatively straightforward; less clear-cut cases are discussed in section 5. We interpreted each emoji and emoji sequence and translated it into words by considering the cultural context and its surrounding discourse (i.e. co-occurring text, embedded re-tweeted messages, preceding messages). The static and animated graphics included in some social media messages were also valuable sources of context in interpreting emoji. To save space, these contextual elements are summarized briefly in text in square brackets where relevant. Also, although a single example is presented for most of the subcategories in the classification scheme, each function is attested in all three of our main data sources unless otherwise indicated.

4.1 Examples of IFIDs

(4) IF enhancement (Twitter)

[Previous context: A message complimenting Huda Beauty's customer service]

Huda Beauty: Thank you darling! ❤️❤️❤️

In this example, the repeated heart emoji in the beauty influencer's response intensify the positive affect of her text, making explicit and strengthening the nuance of love implicit in the word 'darling.'

(5) IF mitigation (Facebook)

[Previous context: Question about whether a new emoji set is available for free]

EmojiSource: Yes. Make sure you update to iOS 9.1. 😉

The winking face emoji softens the FTA of the *direct* act in the text, which threatens the addressee's negative face.

(6) IF modification (Weibo)

[Prompt: A Chinese actress, Angela Baby, displays 'before' and 'after' selfies: The first shows her normal face; the second, photoshopped, image shows her face with a double chin.]

Angela Baby: 秒胖 

Chinese text: '(I) got fat in a second'

The smiling dog face emoji at the end of the sentence adds playfulness to the *claim ac*t in the text and indicates that the act is non-serious (joking).

(7) IF shift (Facebook)

[Prompt: GIF of a Siamese cat jumping up and biting a man's behind]

Marlis Clark: Fernando still want to get a Siamese cat 

The tongue-out emoji adds a teasing tone, indicating that the question in the text is non-bona fide (i.e. rhetorical), as well as shifting the interpretation of the *inquire* act to a *claim* (e.g. 'You probably don't want to get a Siamese cat'). Arguably, the context of the GIF already hints at this shift, but the emoji clarifies and reinforces it.

(8) IF shift (Weibo)

陈坤：我想吃火锅 😖

Chinese text: 'I want to eat hotpot [a Chinese soup-food].'

In this Chinese example, the emoji, which is defined by Weibo as 'feeling wronged,' shifts the interpretation of the *desire* act in the text to a complaint.

4.2 Examples of IAs

4.2.1. Communicative acts

Examples were found in our emoji data sets of all the communicative acts in the modified CMC act taxonomy, except for the *manage* act.

(9) Accept (Weibo)

满满的套路，如何推广老年人保健品。上海小哥揭露推销套路 …全程高能，建议给父母老人看看！

Chinese text: 'There are many tricks for selling healthcare products for the aged! (In the video) this young man from Shanghai reveals these tricks. (I) suggest you recommend this video to your parents!'

Quasimodo-y: 😂😂🙏

The last emoji in this free-standing emoji sequence represents clasped hands, as if bowing to the addressee. On Sina Weibo, this bow conventionally signifies thanks, please, or respect. The entire sequence can be translated as: 'Haha, thanks (implied: I respect your recommendation).'

(10) Apologize (Twitter)

[Prompt: An image shows the social media influencer holding up a small dog whose left front leg is bandaged.]

Michelle Lewin: Last day with the cast 🥳 Sorry for stepping on you, Gigi 🤷‍♀️🤦‍♀️

The last two emoji enact the influencer's reactions to stepping on her pet: helplessly shrugging and burying her face in her hand, conveying the sense, 'It was an accident, I feel terrible about it.' This sequence of actions functions as an apology, elaborating on the apology in the preceding text. As such, it might more properly be considered an *elaborate* act. However, we include it here because it is the only example in our data of emoji expressing an apology. We suspect that the inherently playful nature of emoji might

undermine the seriousness, and hence the sincerity, of apologies and be dispreferred in that function for that reason.

(11) Claim (Twitter)

[Prompt: An image shows Anthony Bourdain.]
S.E. Cupp: Three years ago, today. Damn. 💔

The commenter refers here to the death by suicide of world-famous chef Anthony Bourdain. The emoji conveys the sense, 'My heart is broken,' which constitutes a *claim*.

(12) Congratulate (Weibo)

@ 杨幂：爱家庭，爱事业，更爱那个不断追梦的自己 🤗
Chinese text: '(You) love family, love career, love yourself who alway pursues dreams'

Here the context makes clear that the commenter is praising a celebrity. The applauding emoji after the text can be translated as 'Bravo!' and functions as a *congratulate* act.

(13) Desire (Weibo)

这个夏天，我们要瘦成一道闪电 🏃‍♀️🙅‍♀️🍺🍦
Chinese text: 'We need to lose lots of weight and become very thin this summer'

The emoji sequence consists of an emoji for 'running,' the female gender symbol (indicating the user herself), a person saying no, a glass of beer, and a dish of ice cream. The overall meaning is, 'I will run and say no to beer and ice cream.' Since this refers to a future, irrealis situation, it constitutes a *desire* act according to the CMC act taxonomy.

(14) Direct (Twitter)

Joe Wicks: Train with India 👉 youtube.com/playlist?list=...

The pointing finger emoji in this tweet functions like a directive, translatable as 'Go (to this website).'

(15) Elaborate (Weibo)

王力宏：好啦，听你的 😂🙅‍♂️
Chinese text: 'Ok, I do what you said'

The emoji sequence comprises four emoji: a laughing face (defined by Weibo as 'haha'), (female) getting a haircut, light skin tone, and the male gender symbol (indicating the user himself). The overall meaning is something like, 'Haha, I got a haircut,' which is reinforced by a photo of the male celebrity with nicely trimmed hair. In that the sequence adds more specific information to the text about what the speaker did, it constitutes an *elaborate* act (Ge and Herring 2018).

(16) Greet (Facebook)

[Posted to the Emojis Group]
Kokzen Tsabi: 👋💑

The emoji sequence in this initiating post translates straightforwardly as 'Hi people!' and constitutes an act of greeting.

(17) Inform (Weibo)

[An image below these emoji shows two girls doing yoga.]
Luyi: 👯♂

The emoji sequence (two females exercising, followed by the male gender symbol in reference to the user himself) explains what is represented in the photo. It can be translated 'My girls are exercising.'

(18) Inquire (Twitter)

AMA: "The biggest waves never crash." 🌊 An interesting take on the future (and past) of content marketing from @markwschaefer on @Medium. Would you agree? 👍👎

The thumbs up and thumbs down emoji at the end of this message can be translated 'Yes or no?' Together, they constitute an *inquire* act.

(19) Invite (Weibo)

王力宏: 恭喜勇士勇夺NBA总冠军! 杜兰特FMVP实至名归! 转发这条微博, 送5件杜兰特5件库里5件詹姆斯球衣! 👉

Chinese text: 'Congratulations to the Warriors on the NBA championship! Kevin Durant deserves the title of FMVP! The organization is giving away 5 Durant, 5 Curry, and 5 James T-shirts. Repost this message and you'll have a chance to get one!'

The finger-crooked emoji at the end of this message is making a gesture of invitation. It could be translated as 'C'mon!'

(20) React (Facebook)

[Prompt: Image of a groundhog holding a sign that says, "I'm a rodent, not a meteorologist"]
Ralph Wilcock: 😂😂👍

The emoji sequence is a reaction to the amusing image in the prompt. It can be translated straightforwardly as 'Hahahaha, thumbs up!'

(21) Reject (Facebook)

[The prompt presents a new set of emoji, including a hand emoji making an obscene gesture with the middle finger.]
Christopher Quiroz Aguilar: 🖕🤔

In this sequence, the face emoji appears to be looking disapprovingly at the middle finger emoji. The sequence can be roughly translated as 'I'm dubious (or skeptical) of the middle finger emoji,' which constitutes a *reject* act, as it is broadly construed in the CMC Act taxonomy.

(22) Repair (Weibo)

唐嫣：友情已尽 🤭😚🐱
Chinese text: 'Friendship is over'

The emoji sequence after the text in this celebrity example consists of a chuckling face, a kiss, and a dog face (indicating the user[18]). The overall meaning is something like, 'I'm just kidding; kiss.' The sequence *repairs* the possible misunderstanding that could arise from the statement in the text, indicating that the celebrity was only joking.

(23) Request (Weibo)

姚晨：第一次监制，多多指教 🙏🙏🙏
Chinese text: 'This is (my) first time producing a film. Your valuable comments are welcome'

The repeated bowing emoji can be used on Weibo to indicate 'please' or 'thanks.' In this context, it could be translated as 'please' or 'thanks in advance.'

[18] On the first-person use of the dog face emoji on Weibo, see Ge and Gretzel (2018) and Herring and Ge (2020).

(24) Thank (Twitter)

[Prompt: A Twitter user posted a message praising internet personality and actor King Bach.]
King Bach: 🙏❤️

The praying hands emoji here signifies 'Thanks.' The heart emoji enhances the sincerity and feeling with which the *thanks* are made and is an example of IF enhancement.

4.2.2. Behave acts

The *behave* acts in our data sets are mostly virtual performatives. One such act was illustrated in example 3, which shows an emoji of a woman with one hand raised in an offering gesture, virtually presenting (cf. French *voilà*) the lipstick emoji following it. Examples of several other *behave* acts are presented below. Most of them are self-explanatory.

(25) Wave (Facebook)

[Posted to the Emoji Lovers group]
Li Fern: Heyy emoji lovers ! ! ! 👋

(26) Hug (Twitter):

[Prompt: Kelly De Meyer complimented Huda Beauty's product.]
Huda Beauty: 🤗🤗🤗

(27) Kiss (Facebook)

[Prompt: "There are people in our lives that help make it beautiful. Who is that for you?"]
Kim Palar: Simi Bhutan 😘

(28) Raise hand (Twitter):

[Prompt: A video shows a woman who is unable to apply perfectly-winged eyeliner.]
Huda Beauty: The struggle is real. 😂 Who can relate? 🙋😉

In this example, the influencer raises her hand ('raises-hand' emoji) in answer to her own question, thereby virtually performing the action. The tears of joy and wink emoji each modify the IF of what precedes them, indicating that the utterances are non-serious.

(29) Give a red packet (Weibo)

Yan Tang: 

Some *behave* acts on Weibo are culture-specific. This example references the Chinese tradition of giving a red packet containing money as a gift on holidays and special occasions. The first, animated, emoji is holding a red packet and making a giving gesture. Through the emoji, the action is virtually performed. The bowing hands emoji that follows here signifies respect. The sequence can be loosely translated as, 'I respectfully give you a red packet.'

(30) Send (Weibo)

[An image below this post reported that children who live in remote mountain areas of China don't have enough warm clothes in winter.]


The emoji sequence (literally: scarf, music note, send-send-send) translates roughly as, '(I) immediately (or abundantly) send scarves and music.' The repetition of the 'send' emoji conveys a sense of immediacy, speed, or abundance (Herring and Ge 2020). More often than on Twitter or Facebook, emoji sequences on Weibo function like sentences (Ge and Herring 2018; Herring and Ge 2020) and perform elaborate virtual actions. This is also illustrated in the next example.

(31) Sing songs together (Weibo):

谢娜: 8点10分，继续一起嗨起来 

Chinese text: '8:10 pm, let's continue having a happy time together.'

The emoji sequence virtually enacts what is proposed in the text. It can be translated as, 'We all sing a song, cheers' (literally: sing music we-all cheers).

5. Discussion: Boundary Cases

In this section we discuss five less clear-cut situations that arise and that could potentially cause confusion as to whether, and if so when, to apply the classification scheme. We group these boundary cases into two broad types: 1) emoji uses that are not, per se, illocutionary in nature but that sometimes indicate IF in addition to their main function, and 2) emoji uses that could be classified as one type of IF or another.

Regarding the first type, unlike in classic speech act theory, which holds that every utterance has an illocutionary force (Austin 1962; Searle 1976), not every instance of emoji use has an illocutionary effect. Thus, it is important to identify where the boundaries lie between illocutionary and non-illocutionary emoji uses. One liminal case involves the common use

of emoji to 'mention' or illustrate something expressed in text (Herring and Dainas 2017), as in this Twitter example: "Cat or Dog? 🐱🐶." It might be argued that such emoji *mentions* enhance the force of the textual utterance they illustrate by adding cuteness, humor, an attitude of playfulness, or simply by making the message more visually appealing. However, since emoji use generally connotes cuteness, playfulness, and so forth at a meta-pragmatic level (Danesi 2016; cf. Dresner and Herring 2010), including *mentions* as IFIDs on these grounds would dilute the power of the classification scheme to distinguish among illocutionary emoji uses. Therefore, we do not consider these meta-pragmatic effects, per se, as IFIDs. However, *mentions* may sometimes express illocutionary force in addition to their meta-pragmatic effects. For example, in the tweet, "We love our OHONEY Bees 🍯🐝😍", the three emoji together repeat (mention) the text (lit. 'honey bee love'), but in addition, the heart-eyes emoji strengthens the claim of 'love' in the text. This example could thus be considered a case of IF enhancement.

The second usage involves emoji as punctuation. The distinction in the literature between punctuation and tone modification is often unclear. The tendency for tone-modifying emoji to appear at the ends of utterances (Sampietro 2016) contributes to the confusion, as does the fact that emoji punctuation may add mood or tone. Sampietro's observation that emoji are not used with traditional punctuation marks in her WhatsApp data suggests a possible distinguishing criterion: Emoji functioning as punctuation do not take a preceding punctuation mark. However, in our data sets, emoji indicating tone modification are used both with and without preceding punctuation (compare example 4 with examples 6-8 above). The semantics of the emoji can be another distinguishing criterion: Emoji functioning as punctuation are more likely to be semantically empty; examples include flowers, stars, and sparkles, which are visually decorative but convey little else, as in the Twitter example, "Monday morning chores never looked so fun ✨."[19] Other emoji, however, such as hearts and smiles, add richer nuances of meaning: When used as punctuation to bound utterances, they also boost positivity, as in the following Facebook example:

(32) I missed out on the sydney tickets…[I know] some people are complaining about [Selena Gomez] doing one concert there but I guess she's only human 😊 love u sel.

We separate the bounding function of emoji from their illocutionary function and include only the latter in the classification scheme. Thus the emoji in example 32 would be considered IF enhancement. This is analogous to how an emoji *mention* might indicate an illocutionary force in addition to adding cuteness, playfulness, and/or visual appeal.

[19] However, the authors were recently informed that some younger people have started using the sparkle emoji ironically. If that is the user's intention in this Twitter example, the usage would be an instance of IF modification.

The third usage is the substitution of emoji for words in textual utterances, as in "I ❤️ pizza" and "I lost fifteen kilograms by eating 🍇🍐🍑 🍎🍉." Such substitutions are frequently mentioned in the emoji literature (Danesi 2016 characterizes them as 'calques'), and constructed examples can readily be found by searching the internet, although they are rare in our naturally occurring data. Lexical choice plays an important role in conveying the illocutionary force of an utterance (Searle and Vanderveken 1985). Yet replacing words with emoji does not appear to modify their force; the emoji usually simply denote their verbal equivalents. Like *mentions*, such *substitutions* may add playfulness, cuteness, or visual appeal to the message, in the general way that emoji do, but we do not consider those effects IFIDs. Nevertheless, an emoji substitution could also have an illocutionary effect; for example, a face emoji substituting for the user ("I") could additionally express an attitude or emotion. In that case, the IF-indicating function of the emoji should be noted.

Another boundary area where confusion could arise is between two categories of the classification scheme. One situation involves emoji that visually represent actions or gestures and that potentially could be classified either as *behave* acts or communicative CMC acts. Hearts (❤️) and joined hands (🙏), for example, conventionally express claims (of affection) and thanks or requests, respectively, and should be classified as such. However, it is not always clear to what degree emoji actions are conventionally associated with other illocutionary acts. For example, is sending flowers a virtual action or an act of congratulation? (On Weibo, it often seems to be the latter, as in "Finally, you are not single anymore. 🌹.) Is blowing a kiss (😘) a virtual action or a claim of affection? Is a kneeling emoji (🧎) an action or an act of requesting (begging)? The determination must ultimately be made on the basis of the discourse and cultural context.

Finally, when an emoji follows and appears on the same line as a textual utterance, it can sometimes be difficult to determine whether it is an IFID or an IA, as in the following Twitter example. (Typos are in the original.)

(33) I have about 5 or 6 zoom meeting this week 2 of them are 2+ hours long. Let's see if I can manage not dissociating for that long 🤞🏻

The crossed fingers emoji could be understood as modifying the tone of the last sentence in the textual message to be more hopeful (IF modification), or it could be translated as a stand-alone proposition, e.g. 'I hope so.' Such cases are not uncommon. We rely on two main criteria to determine whether such emoji are functioning as IAs: They can convey a proposition on their own, and the situation they describe can logically be understood to occur after, rather than co-occurring with, the preceding text.[20] According to these criteria, the emoji in example 33 could be classified as an IA.

[20] Cf. Yus (2019), whose criterion for classifying an emoji that appears on the same line as text as 'emoji without (the text)' is that the "emoji does not influence or qualify that text."

6. Conclusion: Theoretical and Practical Implications

Emoji are a staple of CMC, facilitating user interactions across digital platforms. To further understanding of their pragmatic effects, we proposed a systematic and holistic classification scheme, a typology of emoji illocutionary effects, reflecting the fact that emoji both "act on" the illocutionary force of textual utterances in CMC and "act as" linguistic acts in their own right. The classification scheme is derived from conceptual categories from classic speech act theory, virtual performativity in textual CMC, and prior emoji research, and grounded in empirical emoji data from Twitter, Facebook, and Weibo. At the same time, we updated the concept of IF in classic speech act theory (Austin 1962) by introducing new conceptual categories essential for understanding emoji usage (Table 3) and by delimiting the boundaries between illocutionary and non-illocutionary emoji uses. Moreover, we expanded the CMC act taxonomy by introducing and operationalizing two new illocutionary acts: 'congratulate' and 'behave.' The chapter thus brings the application of speech act theory into the 21st century and adds theoretical weight to the literature on emoji pragmatics.

The conceptual framework can serve as a useful heuristic to guide future empirical research on emoji use across cultures and across platforms, for example, by forming the basis for a coding scheme. Although we did not calculate the frequencies of the different categories in our data sources, the classification scheme lends itself readily to quantification. Quantitative analyses could be useful to identify prominent and underused categories of illocutionary effects. The conceptual framework could also provide a theoretical anchor for studies of other graphicon types. As some research suggests (Tolins and Sammermit 2016; Tang, Hew, Herring, and Chen 2021), stickers and GIFs, too, can affect the tone of preceding text and function as stand-alone acts, raising the possibility that illocutionary force marking is a function of graphicons in general. Finally, the classification scheme could potentially serve as a framework for examining the illocutionary functions of non-verbal cues and behaviors, including facial expressions (Domaneschi et al. 2017), in face-to-face interactions.

The classification scheme also has potential practical applications. It can inform designers of graphical icons about ways users employ emoji to convey common pragmatic effects and support them in introducing emoji that fulfill user needs in digital communications. Pragmatic preferences in emoji usage could also inform the design and optimization of emoji keyboards, including providing options to integrate emoji into messages. Furthermore, since our classification scheme comprises mutually exclusive categories, specific category names, and definitions, it could be used as a resource for training machine learning algorithms to identify emoji functions automatically and on a large scale. However, it should be kept in mind that the scheme does not purport to encompass all uses of emoji, but only those related to illocutionarity. Moreover, the classification scheme as presented here should not be taken as definitive, if for no other reason than that emoji usage itself is dynamically evolving (Konrad et al. 2020).

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