

“But when it's there, like, more mouths [...] that's like ‘Oh, I'm actually kind of low key sad’”:

An Investigation into the Pragmatics of Emoticon Lengthening

by

Michele Pesch-Johnson

A Thesis submitted to the Faculty of Graduate Studies of

The University of Manitoba

in partial fulfillment of the requirements of

MASTER OF ARTS

Department of Linguistics

University of Manitoba

Winnipeg

Copyright © 2024 by Michele Pesch-Johnson

Examining Committee

Supervisor:

Dr. Verónica Loureiro-Rodríguez

Department of Linguistics

University of Manitoba

Members:

Dr. Terry Janzen

Department of Linguistics

University of Manitoba

Dr. Nicole Rosen

Department of Linguistics

University of Manitoba

Abstract

Emoticons are text-based graphicons built from characters and are frequently used in computer-mediated communication. Emoticons serve multiple functions ranging from expressing emotions (Kaye et al., 2016; Vidal et al., 2016; Yus, 2014) to signaling the intended meaning behind a message (Dresner & Herring, 2010; Yus, 2014). While the repetition of characters within emoticons, such as the mouth, is a common practice for achieving various pragmatic effects, there is a notable absence of dedicated analyses exploring these effects. Previous studies (Yus, 2005; Park et al., 2013) have briefly noted that lengthened emoticons indicate heightened intensity and emphasis, but further detailed research is needed.

This thesis investigates the contexts in which lengthened :) smile and :(frown emoticons occur and their functions, compared to their unlengthened counterparts. A corpus of texts was collected from Twitter, consisting of 1,831 emoticon tokens in order to identify the contexts in which unlengthened and lengthened emoticons appear. Additionally, seven focus groups involving 24 participants discussed some of these tokens, and their interpretations were qualitatively analyzed. Corpus analysis revealed that unlengthened smiles are more common in expressions of gratitude, and lengthened smiles in expressions of friendliness and closeness. And while unlengthened frowns are frequently used in questions, lengthened frowns appear more often in expressions of solidarity and support. Results from the focus groups confirmed that intensification is a major use of emoticon lengthening and identified additional functions. First, a lengthened emoticon can signal a higher degree of closeness between the user and the recipient than an unlengthened one. Furthermore, emoticons are known to enhance and modify tone and emotion, and lengthening can further modify these effects. Lengthening can also mitigate certain aspects of a message and influence its overall prosody. These findings illustrate that emoticon lengthening serves functions beyond intensification. Moreover, they suggest that the increasingly visual role of character repetition observed in written words (Brody & Diakopoulos, 2011; Kalman & Gergle, 2014; Lamontagne & McCulloch, 2017; Myslín & Gries, 2010) extends to emoticons as well.

Table of Contents

<u>Abstract</u>	3
<u>List of Tables</u>	6
<u>List of Figures</u>	6
1. <u>Introduction</u>	7
2. <u>Understanding Emoticons</u>	9
2.1 <u>History and Usage of Emoticons in CMC</u>	9
2.2 <u>Pragmatic Functions of Emoticons</u>	12
2.2.1 <u>To Express Emotion</u>	12
2.2.2 <u>To Signal Intent</u>	14
2.3 <u>What Lengthening Does</u>	16
2.3.1 <u>Lengthening in Words</u>	16
2.3.2 <u>Lengthening in Emoticons</u>	19
3. <u>Examining Contexts of Lengthened Emoticons</u>	21
3.1 <u>Twitter Corpus</u>	21
3.1.1 <u>Data Collection and Corpus Construction</u>	22
3.1.2 <u>Content Coding</u>	23
3.2 <u>Results</u>	26
3.3 <u>Corpus Discussion</u>	28
4. <u>Functions of Emoticon Lengthening</u>	31
4.1 <u>Focus Groups</u>	31
4.1.1 <u>Materials</u>	31
4.1.2 <u>Participant Recruitment and Data Collection</u>	34
4.1.3 <u>Data Coding</u>	34
4.2 <u>Functions Identified in Focus Groups</u>	37
4.2.1 <u>Interactional Functions</u>	37
4.2.2 <u>Emotion Expression</u>	40
4.2.3 <u>Intensification</u>	42
4.2.4 <u>Mitigation</u>	44
5. <u>Conclusion</u>	50

<u>References</u>	53
<u>Appendices</u>	57
<u>Appendix A – Content Code Distribution for Unlengthened and Lengthened Emoticons</u>	57
<u>Appendix B – Full Qualitative Coding Framework for Transcripts</u>	58

List of Tables

<u>Table 1 – Language Change Stages</u>	10
<u>Table 2 – Sampling Breakdown for Corpus (n=1,831) Analysis</u>	23
<u>Table 3 – Content Coding Scheme</u>	25
<u>Table 4 – Discussion Token Sets</u>	33
<u>Table 5 – Focus Group Questions</u>	34
<u>Table 6 – Transcript Analysis Framework</u>	36

List of Figures

<u>Figure 1 – Content Code Distribution for Lengthened and Unlengthened Smiles (n=136)</u>	27
<u>Figure 2 – Content Code Distribution for Lengthened and Unlengthened Frowns (n=384)</u>	28
<u>Figure 3 – Emoticons on Intimacy Spectrum</u>	39

Chapter 1: Introduction

Emoticons are images built from characters and symbols and are incorporated into the text of informal computer-mediated communication (CMC). In 1980, after an incident where a warning meant to be a joke was interpreted literally, the emoticon :-) was created at Carnegie Mellon University as a proposed solution to signal sarcastic intent in written messages (McCulloch, 2019, p. 177-8).

Today, emoticons have expanded beyond their initial role as sarcasm markers to serve multiple functions, including emotion expression (Kaye et al., 2016; Vidal et al., 2016; Yus, 2014) and signaling other intents, such as mitigation (Dresner & Herring, 2010; Yus, 2014). They also come in various forms, ranging from traditional horizontal emoticons (e.g., :-)) to vertical kaomojis (e.g., T_T), and they may depict facial expressions (e.g., smile :)), gestures (e.g., crying T_T), and abstract concepts (e.g., heart <3). Users often customize emoticons by omitting characters such as noses (Schnoebelen, 2012) or by repeating characters, usually the mouth, a practice referred to in this thesis as “lengthening.” Lengthening on the mouth is illustrated by the smile in (1) and the frown in (2).

(1) :)))

(2) :(((

While there is plenty of literature studying the effects of emoticons on online communication (Dresner & Herring 2010; Filik et al. 2016; Park et al. 2013; Thompson & Filik 2016; Yus 2014), as well as the effect and location of lengthening in words (Brody & Diakopoulos, 2011; Kalman & Gergle, 2014; Lamontagne & McCulloch, 2017; Myslin & Gries, 2010), the functions of emoticon lengthening have not been systematically explored. Existing literature suggests that lengthened emoticons intensify (Yus, 2005) or emphasize (Park et al., 2013) a message. Yus (2005) also suggests that once a lengthened emoticon establishes heightened intensity, further lengthening does not increase intensity. That is, if :))) signifies intensified happiness, adding extra mouths cannot intensify that happiness further.

Due to the limited attention given to emoticon lengthening, I conducted a pilot study (unpublished) in 2021 to explore its functions. Results showed that lengthened emoticons fulfill pragmatic functions beyond intensification, particularly passive aggression and in/sincerity. Building on these findings, this thesis aims to provide deeper insights into the distinct pragmatic

functions of unlengthened and lengthened emoticons. Specifically, this project aims to answer the following research questions:

1. In which contexts do lengthened :) smile and :(frown emoticons predominantly appear, and how do these contexts compare with those of unlengthened smiles and frowns?
2. What pragmatic functions do lengthened emoticons fulfill, particularly in comparison to unlengthened emoticons?

This research contributes to the pragmatic literature on CMC by identifying functions of lengthened emoticons beyond intensification. In doing so, it demonstrates how the functions of emoticon lengthening may have broadened and how emoticons have evolved since their inception. Additionally, this study explores the application of lengthening, once a word-specific prosodic cue that has become increasingly visual (Kalman & Gergle, 2014; Lamontagne & McCulloch, 2017), to emoticons, which are inherently inarticulable.

The remainder of the thesis is structured as follows. Chapter two reviews literature on emoticon pragmatics, word lengthening, and existing research on emoticon lengthening. In chapter three, the first research question is addressed by examining the contexts in which lengthened emoticons appear through the construction and analysis of a corpus of tweets. Chapter four reports the findings from focus groups to identify the pragmatic functions of emoticon lengthening, thereby answering the second research question. Descriptions of the data collected and methodologies used for the corpus and focus groups are presented in chapters three and four, respectively. Lastly, chapter five concludes this research project and offers avenues for future investigation.

Chapter 2: Understanding Emoticons

This chapter examines the usage and pragmatics of emoticons and word lengthening to build a foundation on which to explore lengthening in emoticons. To begin, Section 2.1 backgrounds the history and usage of emoticons in CMC, and then Section 2.2 discusses emoticon pragmatics. Lastly, Section 2.3 presents lengthening in words and then emoticons.

2.1 History and Usage of Emoticons in CMC

The term “emoticon” combines the words “emotion” and “icon” and refers to graphicons (graphical icons) constructed with characters and symbols to convey emotions in computer-mediated communication (CMC) (Dresner & Herring, 2010; Konrad et al., 2020; McCulloch, 2019; Yus, 2005; Yus, 2014). After a joking warning led to miscommunication, the first emoticon, the :-) smile, was proposed at Carnegie Mellon University in the 1980s (McCulloch, 2019, p. 177-8).

From their introduction, emoticons quickly surged in popularity. In addition to the original :-) emoticon, many new emoticons emerged and gained widespread usage within months (McCulloch, 2019, p. 177; Vidal et al., 2016). Initially resembling facial expressions, emoticons have evolved significantly over time. Today, they also represent abstract ideas (e.g., hearts to represent love), directions (e.g., arrows), and actions (e.g., shrugging) (McCulloch, 2019). They fulfill other functions beyond sarcasm as well, such as emotion expression and clarification (Kaye et al., 2016; Vidal et al., 2016; Yus, 2014). Additionally, while emoticons were originally horizontal (e.g., :-)), vertical emoticons (e.g., (^_^)), originating in Japan and known as “kaomoji,” have also gained popularity. Despite their occurrence in English, however, horizontal emoticons remain more prevalent (Dresner & Herring, 2010; Markman & Oshima, 2007; McCulloch, 2019).

Emoticons have undergone processes that have deeply affected their meaning. Table 1, from Konrad et al. (2020), displays the stages of language change, which they use to track the evolution of different graphicons. The first stage marks the initial emergence of an item, such as the introduction of :-) smile emoticon as a sarcasm marker in the 1980s. Stage two denotes highly variable use, characterized by a lack of consistent or widely understood applications. For instance, after their introduction to CMC, there was a surge in new emoticons. These new

emoticons ranged from simple and easily used ones (e.g., the ;-) wink, :-P tongue out) that would pervade CMC to creative ones (e.g., ==(:-)= Abraham Lincoln) that would test and play with the construction of emoticons but never became regularly used (McCulloch, 2019, p. 178).

Progressing to stage 3, emoticons became increasingly used and popularized. Stage four sees emoticons overlap in function with pre-existing cues, as observed in their use as punctuation in CMC (Konrad et al., 2020; Provine et al., 2007). Stage five does not apply to emoticons because they were the first graphicon introduced into CMC, and thus there is no older form to displace (Konrad et al., 2020, p. 229). Although emoticons can act as punctuation in CMC, they are not replacing it; this ability to perform punctuation-like functions is simply an overlap (Konrad et al., 2020).

Table 1 – Language Change Stages

Stage	Description
1	Initial innovation
2	Highly variable use
3	Rise in popularity/frequency of use
4	Overlap in meaning/function with older form(s)
5	Displacing older form(s)
6	Conventionalization, bleaching, broadening
7	Declining popularity/frequency of use

(Konrad et al., 2020, p. 230)

Of interest to this research, the sixth stage encompasses the processes of conventionalization, broadening, and bleaching. When an item becomes conventionalized, its meaning and form are determined by the widely accepted usage among individuals regardless of its original or literal meaning. Konrad et al. (2020) argue that using emoticons as sentence-final indicators of intent demonstrates their conventionalization (p. 221), especially in that this is a communally agreed-upon usage distinct from expressing either sarcasm or a literal emotion. Next, bleaching refers to the loss of meaning or intensity in an item. Konrad et al. (2020) point toward the use of emoticons as tone markers as a “more abstract, ‘bleached’ function than expressing emotion and non-verbal behavior” (p. 221). Finally, broadening occurs when an item accumulates additional meanings and becomes more generalized. For instance, the original :-) was initially proposed for sarcasm, but its use has considerably expanded to include various forms of expression and fulfill other roles, such as showing emotion in general.

Konrad et al. (2020) suggest that emoticons are currently in the seventh stage of declining popularity. One contributing factor to this decline is the influence of both platform and device on emoticon usage. While emoticons are easily constructed on desktop (e.g., computer and laptop) keyboards, how easily an emoji can be accessed depends on the software and program an individual uses. For instance, while a web browser may not necessarily automatically convert an emoticon to an emoji, a website might (e.g., Google Chrome may not, but Microsoft 365 or email will). Further, some desktop versions of platforms (e.g., Facebook, Discord) do not automatically convert emoticons to emojis, but have emoji dictionaries. However, with emojis now integrated into mobile keyboards, they consistently are suggested or replace an emoticon when the emoticon is typed (McCulloch, 2019; Yus, 2014). On mobile an individual does not necessarily need to search for an emoji to use one, as one often would on desktop. Consequently, emoticons have become associated with desktop devices, and emojis with mobile devices (McCulloch, 2019). Nevertheless, despite their declining popularity, emoticons continue to feature prominently online. One study on 12,260 food-related tweets found that 7.4% of the tweets contained an emoticon¹ (Vidal et al., 2016, p. 9), and another on 975 Facebook comments observed that emoticons are the second most used graphicon at 11.8% of graphicons² (Herring & Dainas, 2017, p. 2190). Further, it has also been observed that emoticons and gifs are more popular than emojis on Tumblr, which shows that there are online communities where emoticons continue to be preferred (Herring & Dainas, 2020, p. 21).

Once the construction of emoticons has become conventionalized and their functions broadened, users can further adapt and modify them to suit their communicative needs, thus driving language change. I propose that conventionalization and broadening, which have allowed the expansion of emoticons' pragmatic functions, have been necessary for the development of the functions and form of lengthening. Specifically, how an emoticon can be constructed must first be established and then eligible characters determined (i.e., expressive characters, generally mouths) in order for lengthening to occur. Also, the role of lengthened emoticons may have broadened to encompass the functions of unlengthened emoticons as well as

¹ More specifically, Vidal et al. (2016) find that 24% of tokens contain an emoji or emoticon, of which 30.9% contain an emoticon (p. 9). This calculates to 7.4% of the tweets containing an emoticon.

² Emojis, predictably, are the most common at 68.9%. Other sampled graphicons are images (9.5%), stickers (7.8%), videos (1.7%), and gifs (0.2%) (Herring & Dainas, 2017, p. 2190).

new ones beyond intensification, given that the intensification and emphasis functions identified in literature are indeed the original functions of lengthened emoticons. These evolutions can already be observed. To begin, conventionalization is observed in findings from a pilot project I conducted in 2021, where participants disliked lengthening on inexpressive characters of emoticons, such as noses, and preferred lengthening on what they considered meaningful features, such as mouths. Further, these repeated characters are inarticulable and the rightward most ones, which is similar to the lengthening of unpronounceable characters in English words (e.g. “pleaseee”) (Brody & Diakopoulos, 2011; Kalman & Gergle, 2014; Lamontagne & McCulloch, 2017). Finally, broadening may also be observed in pilot findings, as lengthened emoticons performed functions (such as in/sincerity and passive aggression) in a context where unlengthened emoticons would not.

2.2 Pragmatic Functions of Emoticons

2.2.1 To Express Emotion

Emoticons originated as sarcasm markers (McCulloch, 2019), but their pragmatic functions have broadened considerably, and now serve as social cues to convey playfulness in interactions (Hsieh & Tseng, 2017; Markman & Oshima, 2007), including “enabl[ing] individuals to enliven online conversation by displaying emotion and humor” (Hsieh & Tseng, 2017, p. 406). In other words, emoticons are a tool to create more engaging conversations and improve social relationships between users, notably through showcasing the emotion that an individual is currently experiencing (Kaye et al., 2016; Hsieh & Tseng, 2017; Vidal et al., 2016; Yus, 2014), directing an emotion toward a topic or exchange, and conveying the intensity of an emotion (Yus, 2014).

The emotion expression function of emoticons has been most closely compared with paralinguistic cues in face-to-face communication, particularly because face-to-face cues such as gesture, facial expressions, intonation, and so forth supplement verbal utterances with additional information (Derks et al., 2007; Hsieh & Tseng, 2017; Kaye et al., 2016; Markman & Oshima, 2007; McCulloch, 2019; Yus, 2014). Comparatively, plain text does not have equivalent cues and can be difficult to decipher, so emoticons have been used to fill this gap. In particular, emoticons can be used to clarify an emotion that would otherwise be ambiguous or difficult to

determine (Kaye et al., 2016; Hsieh & Tseng, 2017; Vidal et al., 2016; Yus, 2014). Participants in Kaye et al. (2016) describe this function as “mak[ing] people know how you're feeling a lot easier rather than you having to explain to them” (p. 8) and “emphasiz[ing] certain emotions which are sometimes hard to establish over a text message” (p. 7). For instance, the frown in (1) indicates that the user regrets that people are playing on Tuesday, whereas without an emoticon the emotion in the text would be hard to identify (e.g., simple assertion, regret, amusement, resignation, frustration, etc.) (Yus, 2014, p. 519).

- (1) Que toquen en martes no nos facilita las cosas :,(
[The fact that they are playing on a Tuesday, doesn't make things
easier :,(] (Yus, 2014, p. 519)

Similarly, emoticons can be used to direct an emotion toward the topic or the content of a text or the communicative act itself (Yus, 2014). For example, in (2)³ the individual uses the smile emoticon :) to show happiness toward the content of the text, that is, toward the fact that they are staying home on a Saturday. In contrast, in (3) the :-) smile from User 2 does not express an emotion toward anything in the text or toward User 1, but rather it is used to express the emotion or excitement experienced by talking with User 1 (i.e., toward the communicative act) (Yus, 2014, p. 524).

- (2) Sábado en casa :-)
[Saturday at home :-)]. (Yus, 2014, p. 523)
- (3) User 1: que guapa!!!peazo fiestas que te pegas, no paras!!!! :-)
How pretty!!! Some parties, uh! You never stop!!!! :-)
User 2: La próxima t aviso a ver si te animas!!!! :-)
Next time, I'll give you the heads up in case you feel like coming!!!! :-)
(Yus, 2014, p. 524)

Finally, emoticons can signal the intensity of an already explicitly stated emotion (Yus, 2014, p. 526). For instance, the emoticon in (4) reinforces and intensifies the excitement the user has explicitly expressed.

- (4) Sounds great!! So excited to see you!! :-) (Yus, 2014, p. 526)

³ Yus (2014) explains that these function illustrations come from friends on Facebook, though he does not justify the interpretations of these examples further.

2.2.2 To Signal Intent

Just as emoticons can clarify ambiguous emotions and emphasize those explicitly expressed in text, they are also an effective tool in clarifying the user's intent when ambiguous (Yus, 2014), transforming the illocutionary force or intent of a message (Dresner & Herring, 2010; Filik et al., 2016; Thompson & Filik, 2016; Yus, 2014), or by signaling to the recipient to search for an underlying meaning (Filik et al., 2016; Thompson & Filik, 2016; Yus, 2014).

To begin, an emoticon can clarify the intent of a message when it would otherwise be unclear. For instance, the individual in (5) asserts that she does not have enough time to be bored or to read. Without the emoticon to demonstrate, it would be hard to determine the user's stance toward this situation, as there is no explicit indication in the text. However, the frown emoticon helps direct the recipient to the correct interpretation: the user is showing regret by inserting the frown emoticon rather than simply stating a fact (Yus, 2014, p. 519).

- (5) Yo no tengo tiempo de aburrirme, ni de leer :((
[I have no time to get bored, nor to read :((]. (Yus, 2014, p. 519)

Regarding transformation of intent, an emoticon can mitigate the illocutionary force of a message (Dresner & Herring, 2010; Yus, 2014). For instance, the individual in (6) states that they want a direct solution, thereby making a request through the text by asking for “a non-circumventing solution.” However, the winking emoticon mitigates the seriousness of the text by creating a humorous statement. In other words, the emoticon transforms the illocutionary force from a directive to an assertive speech act (Dresner & Herring, 2010, p. 257; Searle, 1979).

- (6) I would like a noncircumventing solution ;-> (Dresner & Herring, 2010, p. 257)

Another method of transforming intent is by explicitly contradicting text valence with an emoticon (such as using a smile with a negative text), thereby creating sarcasm in order to lessen the intent. Filik et al. (2016) attribute this function to the “tinge hypothesis,” where an emoticon can subtly affect how a recipient interprets the intent in a text regardless of whether the intent is clear or ambiguous. For instance, including a negative emoticon in a positive text could indicate that the entire message should be interpreted as less positive and more sarcastic than the standalone text, and Filik et al. (2016)'s experiments reaffirm this idea in that “sarcasm [...]

‘mutes’ the positive or negative nature of sarcastic messages that are more ambiguous” (p. 2142). In other words, participants interpret sarcastic criticism as less negative than literal criticism and sarcastic praise as less positive than literal praise. For example, (7) is an illustration of sarcastic criticism if the recipient has gained weight. The user states a positive “the diet is going well,” but as the tongue out emoticon is generally associated with sarcasm (p. 2135), the message can be interpreted more negatively. That is, the emoticon indicates that the opposite should be read and that the diet is actually going badly. However, (7) is still interpreted less negatively than (8) in the same context (i.e., if (8) is literal criticism). The negative interpretation in this case highlights that emoticons’ more subtle function is not only to convey an or intent that has already been communicated, but also to modify or enhance that intent.

(7) I see the diet is going well :-P (Filik et al., 2016, p. 2133)

(8) I see the diet is going badly :-P (Filik et al., 2016, p. 2133)

Finally, an individual can indicate that the text should not be interpreted at face value by including an emoticon, thereby indicating that the recipient should read for the underlying meaning. Such underlying meanings includes jokes and sarcasm. For jokes, this transformation is achieved by creating a “humorous dissociation” between the text and the user’s attitude toward it (Yus, 2014, p. 522), or a clear disconnect between the text and how the user feels about it. The role of the emoticon in this usage is to pull the recipient away from the literal interpretation toward the intended one (Yus, 2014). For instance, in (9) the user makes the assertion that they did not know the recipient had a shop. However, both the user and recipient know that the recipient truly does not have a shop, and the emoticon directs the recipient away from this literal interpretation toward the intended humorous understanding. That is, the assertion is a joke (Yus, 2014, p. 521).

(9) No sabía que tenías una tienda en Alicante :)))))) Besos...

[I didn’t know you had a shop in Alicante :)))))). Kisses...] (Yus, 2014, p. 52)

Additionally, for sarcasm, explicitly contradicting text valence with an emoticon can direct the reader to a sarcastic interpretation, or that they should interpret the correct meaning as the opposite of the literal text (Filik et al., 2016; Thompson & Filik, 2016). In a case that leads the recipient to a negative interpretation (as in criticism), the negative diagonal emoticon :/ directs the recipient toward the sarcastic critical interpretation (Thompson & Filik, 2016). In this

instance, the recipient in (10) should not infer that they appeared confident, but rather that they did not. Similarly, Thompson & Filik (2016) observe that emoticons are more likely to occur in praise than criticism (p. 110). In a positive interpretation (as in praise) where the recipient has actually lost weight, the disconnect between the smile emoticon in (8) and the criticism signals to the recipient that they should search for the additional meaning: the statement should be read sarcastically, and that the criticism should instead be read as praise.

(10) Well, you looked confident :/ (Thompson & Filik, 2016, p. 109)

Overall, while indicating sarcasm was the original proposed function for emoticons, these cases illustrate ways in which these functions may have broadened. As demonstrated in this section, emoticons have become effective tools at clarifying intent of ambiguous messages, transforming the intent of a message, and by indicating to the recipient that there is an underlying meaning to decode. Thus, including an emoticon is an effective tool for communicating intent in CMC.

2.3 What Lengthening Does

Emoticon lengthening has been acknowledged as having an intensifying and emphatic function (Park et al., 2013; Yus, 2005) but has not been systematically investigated. However, word lengthening, also known as “emphatic lengthening” in literature, has received this attention. This section examines the work on word lengthening to discern what can be extended to emoticons, particularly in what can be lengthened and why lengthening is used. Thus, this section uses lengthening in words as a foreground to explore lengthening in emoticons.

2.3.1 Lengthening in Words

In the 1990s and early 2000s, word lengthening in CMC tended to occur on pronounceable characters. In a study of pre-2002 English workplace emails, Kalman & Gergle (2014) found that 94% (n=767) of their lengthened corpus tokens (n=815) repeated only on a pronounced character, as in (11), and 4% (n=36) lengthened on both a pronounced and an unpronounced character, as in (12) (p. 190). In a later 2008 corpus of 2.7 million Spanish words (of which 17% were lengthened), Myslin & Gries (2010) found that continuants and vowels were

observed to lengthen more frequently than other phoneme types, whereas stops lengthened the least frequently (Myslin & Gries, 2010, pp. 98-100). Additionally, the word types on which lengthening occurred broadened from onomatopoeias and interjections (Kalman & Gergle, 2014, pp. 190-1) expanded to also include items that are less focused on exclamations and imitating sounds, such as discourse markers, greetings, expressions of emotion, and adjectives (Myslin & Gries, 2010, p. 100). As we will similarly see on characters, this evolution highlights broadening of lengthening to include items that are not necessarily centered on prosody, pronunciation, or sound, which would have been an imperative step for lengthening to also extend to emoticons.

(11) pleeease

(12) pleeeaseee (Kalman & Gergle, 2014,
p. 192)

More recently, Lamontagne & McCulloch (2017) show that 2.3% of tweets in a 4 million token English language Twitter corpus contain lengthening. In these tokens, lengthening can occur on rightward most characters of clusters, such as diphthongs. For instance, offglide lengthening occurs in (13), where the “i” in “wait” is preferred over the “a.” The lengthening in this example also reflects pronunciation. However, in most cases word-final characters are preferred for lengthening – even when unpronounceable. For example, while repeating both characters is acceptable, lengthening the word-final “t” in (14) is preferred over the “i” in (13) in “wait.” Similarly, unpronounceable lengthening digraph- and word-final lengthening is illustrated in (15), where lengthening occurs on the “g” rather than on the “n” in “sing” (Lamontagne & McCulloch, 2017). Finally, word-final silent letters are an especially salient example of unpronounceable word-final lengthening, as illustrated in (16) where the “e” in “same” is repeated.

(13) waiiiiiiiit (Lamontagne & McCulloch,
2017, slide 13)

(14) waitttttt (slide 13)

(15) singgggggg (slide 16)

(16) sameeeeeeee (slide 18)

This increase in unpronounceable lengthening has been tracked by Kalman & Gergle (2014). In particular, their timelapse of Google results on “please” and “help” shows an increase

of repetition on the final “e” in “please” and the final “p” in “help” between the years 1998-2002 and 2008-2012 (p. 192). The unpronounceability of these cases, along with those illustrated in (17)-(19), has led researchers to suggest that the relationship between CMC orthography and character repetition may not be purely phonological, but also be visual (Kalman & Gergle, 2014; Lamontagne & McCulloch, 2017; Myslín & Gries, 2010). Specifically, Kalman & Gergle (2014) conclude that “the importance of the visual cue increased, and the strength of the link to spoken language weakened” (p. 192). As emoticons are visual cues and inherently inarticulable, it would have been an essential step for lengthening to first develop both the ability to occur on unpronounceable characters as well as the additional role as a visual cue before extending to emoticons.

Moving to uses of word lengthening, one of the earliest noted functions is to emulate sounds and different spoken prosodies (Kalman & Gergle, 2014, p. 191). For example, in (17) the extra “e”s in “sweet” shows the same stretched out quality that it would have spoken, and the repetition of multiple characters in (18) reflects how *Happy Birthday* is sung.

- (17) I was in an electronics store the other night... Panasonic has 9”
 Portable DVD player (like . sony) with an 8 h battery...
 \$999.00 US. It is sweeeeeeeet.
- (18) Happy birthday to youuuu
 Happy birthday to youuuu
 Happy birthday dear frieeeeeeeeennnnnd (Kalman & Gergle, 2014,
 p. 191)

Now, word lengthening goes beyond mimicking prosody and also expresses emotion, attitude, and intensity (Brody & Diakopoulos, 2011; Giachanou et al., 2016; Giachanou & Crestani, 2016; Myslín & Gries, 2010). For instance, many of the words in which lengthening occurs are emotional or emphatic (Brody & Diakopoulos, 2011; Kalman & Gergle, 2014; Myslín & Gries, 2010), or are “often used with subjective words, presumably to emphasize the sentiment they convey” (Brody & Diakopoulos, 2011, p. 569), as in emotional stances like (19) and expressions of emotions like (20) (Myslín & Gries, 2010, p. 100).

- (19) woow

(20) encantaa
[enchants]

(Myslín & Gries, 2010,
p. 100)

The expression and emphatic effect of word lengthening is further supported by research that shows that accounting for word lengthening notably improves the accuracy and sensitivity of tools used for sentiment analysis in CMC (Brody & Diakopoulos, 2011; Giachanou et al., 2016; Giachanou & Crestani, 2016). In other words, looking for lengthening is an effective method of locating opinions and then correctly discerning how individuals feel about a topic on social media. This all illustrates that lengthening can be used to express attitude and intensity, and not solely prosody. Further, if lengthening can now be used in subjective contexts to show attitude or sentiment as well, then it is unsurprising on a pragmatic basis that the scope of lengthening would widen to include emoticons.

2.3.2 Lengthening in Emoticons

Existing research on lengthened emoticons is scarce and solely suggests their role in intensification and emphasis. Park et al. (2013, p. 469) acknowledge the emphatic function of lengthened emoticons, albeit with limited elaboration. Yus (2005, p. 167-8) suggests that lengthened emoticons indicate a level of intensity higher than the default; however, once this heightened intensity is reached, additional lengthening of an emoticon cannot amplify it (p. 167-8). For instance, while (21) intensifies (22), (23) cannot intensify that emotion further.

(21) have a great day ahead!!

(22) have a great day ahead!! :)))

(23) have a great day ahead!! :)))))) (TW269)

In 2021 I conducted a pilot study using focus groups to explore potential functions of emoticon lengthening beyond mere intensification. Findings supported intensification as a major role of emoticon lengthening, but also revealed that lengthening contributed additional meanings, specifically signaling passive aggression and in/sincerity. Passive aggression is evident in (24) through the deliberate extra parentheses on the =) smile emoticon, prompting participants to question whether the user's intent was malicious. Moreover, instances of in/sincerity through emoticon lengthening were observed in two distinct ways. First, participants noted that

lengthening an emoticon can fulfill an emotion expected from the user, irrespective of the user's sincere feelings. This is illustrated in (25), where the extra mouths on the :(frown emoticon might convey appropriate sadness, even if the user was not sincerely upset about missing the event. Conversely, in (26) lengthening on the :) smile emoticon was interpreted as sincere enthusiasm to the extent that the accompanying text could not be construed as anything but sincere (Pesch-Johnson, 2021).

(24) Now i know why you and [name] are best friends =)) (FBSG019O)

(25) i cant come :((((TWSG014O)

(26) Mavis is my all time favorite anime :))))

You are so awesome, I hope they can bring back Martha

(Dracula) for HotelT4 (TWSG017O)

It is important to note that these findings do not exclude the possibility of unlengthened emoticons signaling intensity, passive aggression, or in/sincerity. Rather, the findings highlight that, in a specific context, a lengthened emoticon may offer a different range of functions and interpretations compared to unlengthened emoticons. Additionally, I do not consider the identified functions by any means exhaustive; they are simply those discussed by participants based on the examples I provided.

Drawing from the literature presented in this chapter and my exploratory analysis, this thesis delves into the pragmatic functions of emoticon lengthening. Specifically, it examines how the choice of emoticon (i.e., smile and frown), emoticon lengthening, and the content of the token influence the interpretation of a given token.

Chapter 3: Examining Contexts of Lengthened Emoticons

This chapter addresses the first research question: *In which contexts do lengthened :) smile and :(frown emoticons predominantly appear, and how do these contexts compare with those of unlengthened smiles and frowns?* To answer this question, a corpus of tweets was constructed and analyzed. Corpus findings also inform focus group materials, which relate to the second research question (Chapter 4). This chapter is structured as follows: Section 3.1 describes how the Twitter corpus was constructed and analyzed, followed by the discussion of the results in Section 3.2. Finally, Section 3.3 contextualizes the results and discusses their implications.

3.1 Twitter Corpus

Because corpora are constructed from naturally occurring utterances, corpus construction and analysis are common and effective methods of examining how individuals actually speak and write (McEnery & Hardie, 2011). That is, corpora can be useful in assessing how a specific feature, as in emoticon lengthening in this thesis, truly occurs outside of any experimental or otherwise coaxed settings. In fact, various studies cited in this thesis analyzed either their own corpus or a pre-existing one. For instance, Kalman & Gergle (2014) examined the pre-existing Enron corpus, which is a collection of emails from the late 1990s into the early 2000s; Lamontagne & McCulloch (2019) constructed their own Twitter corpus; Dresner & Herring (2010) mentioned their corpus in a footnote; and though they did not explicitly use the term “corpus”, Vidal et al. (2016) also constructed a corpus of tweets for their analysis. Since the objective of the first research question is to examine the contexts of lengthened emoticons, I constructed my own corpus of tweets to examine the sorts of environments in which lengthened emoticons naturally occur. That way, any sort of claim about how and when lengthened emoticons appear online comes directly from real world Twitter data rather than my own judgment.

Overall, this corpus has three objectives. First, it seeks to determine the type of content with which lengthened emoticons most commonly occur, particularly in comparison to unlengthened emoticons. Second, it aims to investigate how often :) smile and :(frown emoticons are naturally lengthened in CMC in a public online setting. Twitter was selected as

this setting because of the tools available for researchers (such as TweetDeck) and because of the publicly available data. Third, the corpus findings will be used to create focus group materials.

3.1.1 Data Collection and Corpus Construction

In March 2021, I collected 1,831 emoticons along with their tweets via TweetDeck. TweetDeck is a dashboard used by researchers and professionals on social media for a range of functions, such as tracking tags, searches by keywords and location, collecting and organizing tweets, scheduling posts, and so forth. Moving forward, the term “tweet” solely refers to a message when it is still on Twitter, and “token” refers texts pulled from the corpus to be used as data. The collection started with the most recent tweet and continued with all subsequent tweets containing at least one emoticon. I chose the :) smile and the :(frown emoticons as search queries because they are among the most common emoticons (McCulloch, 2019) and including both a positive and a negative emoticon broadened the scope of the types of tweet content collected.

This corpus was deliberately stratified between smile and frown emoticons, regardless of lengthening. Fifty tweets containing any :) smile emoticon and 50 tweets with any :(frown emoticon were collected per day. The purpose of collecting any :) smile and any :(frown here is to reflect the rates at which lengthening in the emoticons naturally occur, and from there the rates at which the emoticons lengthened could be calculated. Each emoticon within a tweet was logged as an individual token in a spreadsheet, resulting in multiple tokens for tweets with more than one emoticon. This approach ensured the corpus reflects the use of emoticons rather than the use of tweets. Each token was then assigned an ID constructed with ‘TW’ for Twitter, followed by a number indicating the order of collection.

Table 2 displays the distribution of emoticons in the Twitter corpus. Overall, 1,831 emoticons and their contexts were collected, of which 619 are smiles and 774 are frowns. The smile was lengthened in 11% (n=68) of instances, while the frown emoticon was lengthened in 25% (n=192) of instances. Thus, I randomly selected a sample of 68 unlengthened smiles and 192 unlengthened frowns for content code analysis. The outstanding unlengthened emoticons (492 smiles, 381 frowns) were not analyzed; also, other emoticons appearing in the corpus (e.g.,

<3 hearts and :D mouth open smiles) were not analyzed, as examining their functions is beyond the scope of this thesis.

Table 2 – Sampling Breakdown for Corpus (n=1,831) Analysis

	Smiles	Frowns	Other emoticons	Total
Lengthened	68 (11%)	192 (25%)	N/A	260
Unlengthened	68 (11%)	192 (25%)	N/A	260
(Sample)				
Unlengthened	483 (78%)	390 (50%)	N/A	873
(Unanalyzed)				
Other Emoticons	N/A	N/A	438	438
Total	619 (100%)	774 (100%)	438	1,831

3.1.2 Content Coding

As the next step, the token in which each emoticon occurred was assigned a content code from Table 3. The coding framework used in this analysis is modified from Waseleski (2006), who adapted the coding scheme from Rafaeli et al. (1997, 1998) and Savicki et al. (1996). While the purpose of the original framework was to examine the content of online messages, Waseleski (2006) used this framework to examine the usage of exclamation marks in electronic discussion lists.

As Waseleski's analysis focused on exclamation marks, she removed *Question* from her work; I added it back because emoticons can co-occur with questions. Additionally, I modified some pre-existing categories, which are marked with (#) in Table 3. The *Coalition* code was broadened to show emotional support, sympathy, or empathy. I collapsed the multiple subcategories of *Friendly*, *Flame*, and *Thanks* into broader categories (e.g., *Friendly1* and *Friendly2* now compose *Friendly*). For *Fact*, I added the referred person or topic, indicated by the number (first, second, and third person) and *Ex* (remaining assertions, usually about things, places, abstract ideas, etc.). The new overarching *Fact* category is split based on the token's topic: *Fact1* for self-assertions (merging *Firstperson1* and *Firstperson2*, which involved assertions about oneself or one's thoughts), *Fact2* for assertions about the recipient, *Fact3* for assertions about others, and *FactEx* for all other factual assertions. The reason for distinct *Fact* codes is to capture whether there are differences in lengthening depending on who (or what) is

being referred to (e.g., if someone is more likely to use a lengthened frown when referring to the recipient, or a lengthened smile with themselves). Codes I created, and their corresponding definitions, are marked with (*): *Affection*, *Emotion*, *Hypothetical*, *Joke*, *Reaction*, and *Wish*. This creates a finer grain coding framework from which generalizations can be drawn while maintaining some detail to nuance those generalizations.

While only one content code was applied to each token, multiple codes could have been applied to some multi-phrasal tokens. To ensure I was applying codes consistently across all multi-clausal tokens, I selected the immediately preceding clause to determine the content code. The decision to use the immediately preceding clauses is grounded in research showing that emoticons are overwhelmingly preferred in clause final positions (Provine et al., 2007; Markman & Oshima, 2007). Provine et al. (2007) show that emoticons most often occur in clause final positions where punctuation would (p. 303), and Markman & Oshima (2007) also show that emoticons can be used to signal the end of a turn in CMC, which occurs clause finally. For example, (27) could be coded as *Wish* through “I really really really wanna get my hair done” and as *Question* through “but when do I ever have the time.” Similarly, (28) expresses *Reaction* in “wtf” (“what the fuck”), *Affection* in “ily” (“I love you”), and *Coalition* through “yes” and expressing emotional support. Ultimately, (27) was coded as *Question* and (28) as *Affection* since the immediately preceding phrases are a question (“when do I ever have the time”) and an expression of affection (“ily”), respectively.

(27) I really really really wanna get my hair and nails done but when do I ever have
the time :((TW1706)

(28) yes wtf ily :((TW1269)

Table 3 – Content Coding Scheme⁴

Code	Description	Example
Action	“Action or call for action by the individual posting the message”	(29) Come watch my partner cactus farm :))) [retweet] (
Affection*	Expressions affection to another	(30) i miss u :(((TW1616)
Apology	“Implied or direct apology”	(31) oh noooo i’m sorry :(((TW060)
Challenge	“Challenge, dares or bets”	(32) omg i bet u’ll look great :D watch me wear 2929469239369263927382 92 layers (TW1063)
Coalition#	“Agreement with/support of those in the group or elsewhere”	(33) noo you’re so beautiful :((💕 (TW1278)
De-flame	“Attempts to avoid tension, attempts to reverse flaming”	(34) OK, calm down! Let’s look at it another way! (Waseleski 2006, p. 1017)
Emotion*	Explicitly stated emotion or emotion action (e.g., <i>cry</i>)	(35) :(((I’m so sad about this (TW1535)
Fact1# Fact2# Fact3# FactEx#	“Intended statement of fact, whether or not the fact is correct; opinion stated as fact” 1/2/3 person & external coded	(36) i lost all my bookmarks :(((TW1461) (37) i think you can pick everyone but im not entirely sure ? i think you can though because its based on story keys and this is a permanent feature not tied to 1.4 but yes u can redo the quests :)) (TW037) (38) the poor lad is trying :(((TW1307) (39) there is a little plant too :(((TW343)
Flame#	“Mild argument/annoyance” “Moderately aggressive/rude” “Hostility, personal insult”	(40) this is so sad to watch what the hell :-(((((((poor [name] [tag] (TW177)

⁴ Most examples in Table 3 are from my Twitter corpus and are labelled as (TW+NUMBER). Waseleski's examples are cited as (Waseleski, 2016).

		(41) [username] hi youre fucking irrelevant. what a shame :((TW1085)
Friendly#	“Friendly greetings or closings” “Friendliness, helpfulness, cordiality expressed within body of message”	(42) HELLO MUTUALS!! :) [image] (TW1762)
Hypothetical*	Presents a hypothetical or <i>if</i> to another	(43) what if they'd just take him with them because he's so pretty :(((TW1576)
Joke*	Joking or (amicable) teasing	(44) [username] I blame you for me being a stupid driver today :))) (TW658)
Question	Presents a question	(45) Can I :) [retweet] (TW445)
Reaction*	An interjection and/or response to another person or comment	(46) Oooooo!!! :00 thats so coolsies!!!! :D (TW387)
Sarcasm	“Sneering or cutting remarks”	(47) girls who verbally attack other females for being around their bf ((in a completely innocent manner)) are disgusting :) (TW260)
Thanks#	“Thanks used in closing or in opening” “Thanks being expressed by sender in the body of the message” “Effusive expressions of thanks”	(48) thank you guys for sharing the link, i really appreciate it :) (TW647)
Wish*	Expresses hope, want, wish	(49) man i wish i had a garden for myself :(((TW717)

Adapted from Waseleski (2006, p. 1017)

3.2 Results

This section examines the content code distribution in the 260 lengthened tokens and the random sample of 260 unlengthened tokens. Presented codes must meet the following criteria: be one of the five highest content codes and the emoticon must occur more than five times with the code. All remaining codes are collapsed under *Other*.

Figure 1 shows the content code distribution of analyzed tokens with unlengthened (n=68) and lengthened (n=68) smile emoticons. The four most frequent codes for tokens with unlengthened smiles are *FactI* (n=14; 21%), *Action* (n=11; 16%), *FactEx* (n=10; 15%), and *Thanks* (n=7; 10%). These codes comprise over half of unlengthened smile tokens (62%).

Content codes for tokens with lengthened smile emoticons are *Fact1* (n=11; 16%), *Friendly* (n=11; 16%), and *FactEx* (n=11; 16%), and *Action* (n=7; 10%), which compose 59%⁵ of lengthened smile tokens.

Figure 1 – Content Code Distribution for Unlengthened and Lengthened Smiles (n = 136)

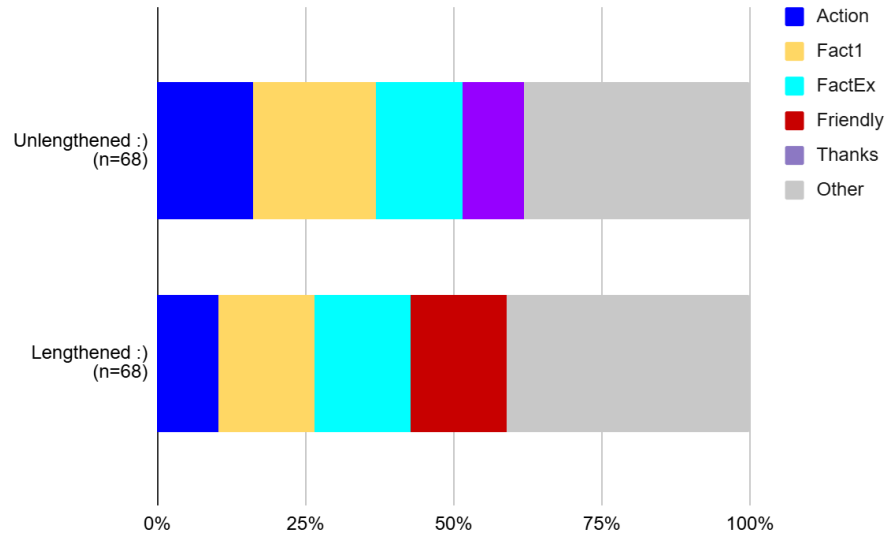
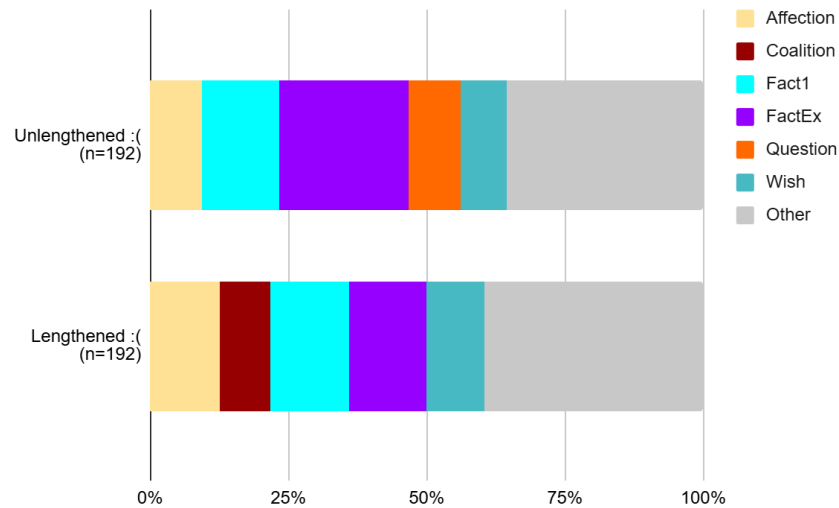


Figure 2 shows the content code distribution of analyzed tokens with unlengthened and lengthened frown emoticons. The most common content codes for tokens with an unlengthened frown emoticon are *FactEx* (n=45; 23%) and *Fact1* (n=27; 14%). The third highest frequency is tied between *Question* (n=18; 9%) and *Affection* (n=18; 9%), closely followed by *Wish* (n=16; 8%). Together, these codes compose just under two thirds (65%)⁶ of unlengthened frown tokens.

The most used content code for tokens with lengthened frown emoticons is tied between *Fact1* (n=27; 14%) and *FactEx* (n=27; 14%), followed by *Affection* (n=24; 13%), *Wish* (n=20; 10%), and *Coalition* (n=18; 9%). These codes compose 60% of lengthened frown tokens.

⁵ The total from adding in-text percentages is 58%, and the total from calculating directly by tokens is 59%. This discrepancy is due to rounding.

⁶ The total from adding in-text percentages is 63%, and the total from calculating directly by tokens is 65%. This discrepancy is due to rounding.

Figure 2 – Content Code Distribution for Unlengthened and Lengthened Frowns (n = 384)

In summary, all un/lengthened emoticons occur most frequently in *Fact1* and *FactEx* tokens. Both unlengthened and lengthened smiles often occur in *Action* tokens, but they diverge in that unlengthened smiles occur frequently in *Thanks* tokens whereas lengthened smiles occur in *Friendly* tokens. Both unlengthened and lengthened frowns often occur in *Affection* and *Wish* tokens. Unlengthened frowns specifically occur in *Question* tokens often, and lengthened frowns frequently occur in *Coalition* tokens.

3.3 Corpus Discussion

This chapter addresses the first research question, examining the contexts in which lengthened emoticons occur compared to unlengthened ones. First, it was shown that smiles lengthened in 11% (n=68) of instances, while the frown emoticon lengthened more frequently at 25% (n=192) of instances. For reference, though a direct comparison cannot be made based on where the lengthening is measured (i.e., by emoticon versus by tweet), previous research found that word lengthening occurred in 17% (Brody & Diakopoulos, 2011, p. 564) and 2.3% (Lamontagne & McCulloch, 2017) of English tweets. Based on this observation, the key implication that emerges is that lengthening in emoticons is much more prevalent than one might expect, given that lengthening is originally a prosodic word-specific cue, though still not pervasive overall in online communication.

Next, in regard to codes, all un/lengthened emoticons occur at high frequencies in tokens where the user asserts a fact about themselves (*FactI*) or at something in particular (*FactEx*), as in (36)⁷ and (39), respectively. One possible explanation for this finding is that the user includes an emoticon to either express an emotion they experience while sharing a fact or opinion about the topic, or to direct an emotion at their assertion. For instance, while *Fact* tokens are not direct emotional expressions (as that would be coded as *Emotion*, as in (35)), including an emoticon can clarify that the user is happy or sad about the message content, or the user's attitude or emotional response. This explanation would be consistent with literature that illustrates how emoticons express emotion, particularly in direction of expression, ambiguity clarification, and simple expression (Kaye et al., 2016; Vidal et al., 2016; Yus, 2014).

(36) i lost all my bookmarks :(((TW1461)

(39) there is a little plant too :(((TW343)

(35) :(((I'm so sad about this (TW1535)

For smiles, both unlengthened and lengthened versions often occur in *Action* tokens, as in (29). Some of these *Action* tokens can likely be accounted for by Dresner & Herring (2010)'s observation that emoticons can mitigate commands and requests. Further, it would be worthwhile to use the focus groups to discern which additional functions (e.g. emotion expression, intensification), if any, lengthened emoticons perform in *Action* tokens. Where unlengthened and lengthened smiles diverge in code frequency, unlengthened smiles occur at a high frequency in *Thanks* tokens (e.g., (48)), and lengthened smiles in *Friendly* tokens (e.g., (42)). Focus group findings provide insight on this divergence, which will be examined in the conclusion.

(29) Come watch my partner build a cactus farm :))) [retweet] (TW1386)

(48) thank you guys for sharing the link, i really appreciate it :) (TW647)

(42) HELLO MUTUALS!! :) [image] (TW1762)

Both unlengthened and lengthened frowns occur most often in *Affection* (e.g., (30)) and *Wish* (e.g., 49) tokens, which both inherently include emotion expression in some capacity (e.g., the user telling the recipient “I love you” or “I wish you were here”). Adding a lengthened or an

⁷ Examples in this section are pulled from Table 3 in Section 3.1.2 and retain their original numbering.

unlengthened frown can display the emotion experienced in the moment, convey intensity or reinforce an already expressed emotion, and direct the emotion at the content or recipient (Kaye et al., 2016; Vidal et al., 2016; Yus, 2014). Where unlengthened and lengthened frowns diverge, unlengthened frowns specifically occur in *Question* tokens (e.g., (45)), and lengthened frowns in *Coalition* tokens expressing solidarity and support (e.g., (33)). As with smiles, focus group findings explain this divergence, which will be examined in the conclusion.

(30) i miss u :(((TW1616)

(49) man i wish i had a garden for myself :(((TW717)

(45) Can I :) [retweet] (TW445)

(33) noo you're so beautiful :(( (TW1278)

It is interesting to note that the codes for only lengthened emoticons (i.e., *Friendly*, *Coalition*) are more socio-emotional when compared with the codes for only unlengthened emoticons (i.e., *Thanks*, *Question*). Similarly, codes for only frown emoticons (i.e., *Coalition*, *Affection*, *Wish*, *Question*) are more socio-emotional when compared with codes for only smiles (i.e., *Action*, *Thanks*, *Friendly*). That is not to say that unlengthened emoticons or smiles do not occur in socio-emotional contexts since they demonstrably do, as evidenced by their high occurrence rates in their respective codes and previous research (Derks et al., 2007). The relationship between socio-emotional contexts and emoticon lengthening are investigated further in the focus groups.

In conclusion, lengthened smiles are more commonly used in expressions of friendliness and closeness, whereas unlengthened smiles tend to be more prevalent in expressions of gratitude. Further, lengthened frowns appear more often in expressions of solidarity and support, whereas unlengthened frowns appear more often in questions. Moving forward, this research will utilize the corpus analysis to inform focus group materials, as in selecting discussion tokens from the dataset.

Chapter 4: Functions of Lengthened Emoticons

This chapter answers the second research question: *What pragmatic functions do lengthened emoticons fulfill, particularly in comparison to unlengthened emoticons?* To identify pragmatic functions of emoticon lengthening, this research conducted focus groups where participants discussed interpretations of token sets. Further, this research uses corpus findings to inform materials used during discussions. Un/lengthened tokens for discussion were selected from the two content codes that occur frequently across all emoticons (*FactI*, *FactEx*), as well as a context that prefers smiles (*Action*) and frowns (*Affection*). Then, transcripts were qualitatively analyzed to discern functions of lengthened emoticons. Moving forward, focus group methodology is presented in Section 4.1, and the functions identified in the focus groups are discussed in Section 4.2.

4.1 Focus Groups

4.1.1 Materials

The materials for the focus group discussion comprised two tokens from the two prominent content codes across both emoticons (*FactI* and *FactEx*) from the corpus analysis, as well as one prominent content code for smiles (*Action*) and one for frowns (*Affection*). There are four reasons for using codes that occur frequently in both unlengthened and lengthened codes. First, selecting codes that overlap with un/lengthened emoticons rather than the divergences centers the scope of the focus groups directly on identifying pragmatic functions of lengthened emoticons, which requires direct comparison with unlengthened emoticons. Next, in regard to corpus analysis findings, the focus groups come with a time constraint that would not allow for both investigation into the pragmatic functions of emoticon lengthening as well as code divergences. Third, selecting overlapping codes permits exploration of lengthened emoticons' usage in contexts where it may not necessarily be clear in the corpus analysis (i.e., both unlengthened and lengthened emoticons occur here, so what do the lengthened ones achieve?). Finally, it is impossible to completely remove context, but using overlapping codes keeps un/lengthened tokens as directly comparable as possible regardless of context.

Next, the reason for using two tokens per content code is to include one token with a smile emoticon and one with a frown emoticon. An exception was made for *Affection*, where

most tokens contained frowns (n=43 out of 45). In this case, I chose the two most frequently occurring phrases from those tokens: “I love you” and “I miss you.”

To examine the impact of lengthening has on the interpretation of a token, I also considered the effect of emoticon valence. Therefore, I manipulated the emoticons in the discussion tokens by lengthening and unlengthening, and by using both smile and frown emoticons. Additionally, I included versions without an emoticon to establish a baseline for comparison. All tokens used in the focus groups are displayed in Table 4, with original versions labelled with “O” and manipulated versions labelled with “M” at the end of their identification number. Because it was unlikely that participants would be able to discuss all eight token sets in a one-hour window, two PowerPoint presentations, each with a different token order, were prepared to ensure equal coverage across all focus groups. If one group was only able to cover four token sets, which was the minimum per group, then it would be ensured that the next group would start with the remaining four.

A set of open-ended questions (Table 5) was used to elicit participant interpretations of the discussion tokens. These questions were followed by follow-up questions to expand on participant interpretations and contributions.

Table 4 – Discussion Token Sets⁸

Content Code	Set 1	Set 2
Action	(50a) Come watch my partner build a cactus farm (50b) Come watch my partner build a cactus farm :) (50c) Come watch my partner build a cactus farm :))) (50d) Come watch my partner build a cactus farm :((50e) Come watch my partner build a cactus farm :((((TW1386)	(51a) we should omg (51b) we should omg :) (51c) we should omg :))) (51d) we should omg :((51e) we should omg :((((TW581)
Affection	(52a) i love you (52b) i love you :) (52c) i love you :))) (52d) i love you :((52e) i love you :(((	(53a) i miss you (53b) i miss you :) (53c) i miss you :))) (53d) i miss you :((53e) i miss you :(((
Fact1	(54a) I just had iced coffee cause I'm a glutton for pain (54b) I just had iced coffee cause I'm a glutton for pain :) (54c) I just had iced coffee cause I'm a glutton for pain :))) (54d) I just had iced coffee cause I'm a glutton for pain :((54e) I just had iced coffee cause I'm a glutton for pain :((((TW857)	(55a) i lost all my bookmarks (55b) i lost all my bookmarks :) (55c) i lost all my bookmarks :))) (55d) i lost all my bookmarks :((55e) i lost all my bookmarks :((((TW1461)
FactEx	(56a) wtf this made my night (56b) wtf this made my night :) (56c) wtf this made my night :))) (56d) wtf this made my night :((56e) wtf this made my night :((((TW1266)	(57a) This art block be really hitting at wrong times (57b) This art block be really hitting at wrong times :) (57c) This art block be really hitting at wrong times :))) (57d) This art block be really hitting at wrong times :((57e) This art block be really hitting at wrong times :((((TW1110)

⁸ For clarity, all future references to any token on this table will retain the number assigned here.

Table 5 – Focus Group Questions

Content Code	Questions
<i>Icebreakers</i>	Do you use social media or messaging platforms? How often? Do you use emoticons or emoji when using these platforms? How often? Do you have a favorite emoticon or emoji? Which one and why?
<i>Tokens</i>	Bare: How would you interpret this message if you received it? Unlengthened: Now how would you interpret this message if you received it? Does the use of an emoticon change the meaning at all? Lengthened: Now how would you interpret this message if you received it? Does the new emoticon change the meaning at all?

4.1.2 Participant Recruitment and Data Collection

This research received approval from the Research Ethics Board under protocol number HE2023-0168. Participants were recruited through on-campus posters and social media, with a \$10 Tim Hortons gift card offered as compensation. Twenty-four university students and staff members took part in seven focus groups during the fall of 2023.

Focus groups were conducted via multi-participant Teams video calls, each lasting approximately one hour. All sessions were video and audio recorded. The goal for each group was to discuss a minimum of four token sets (i.e., one token set per code), with the possibility of addressing the remaining four sets if time allowed. Initially, experimental tokens were presented to participants individually, but participants in the first focus group preferred discussing all items within a set together for direct comparison. Consequently, each emoticon variant in the first token set was individually presented to participants to introduce them to the format of the token sets and discussion, and then all emoticon variants were revealed at once for the following token sets. Additionally, they were encouraged to reference other tokens and engage in relevant digressions as they saw fit.

4.1.3 Data Coding

The initial transcript for each focus group was generated by Microsoft Teams' auto-transcription feature. Later, both the video recordings and the transcripts were reviewed to ensure accuracy, make necessary corrections, and redact potentially identifying information.

Participant names were replaced with a code representing the focus group in which they took place (A, B, C, D, E, F, G) and a number.

Following transcription, all videos were destroyed, and transcripts were uploaded to DelveTool, an online software for coding qualitative data. The transcripts underwent multiple passes using both deductive (i.e., identifying patterns to form conclusions) and inductive coding (i.e., testing conclusions with data) (Corbin & Strauss, 2015; Saldaña, 2016). The first pass involved sorting responses by token, emoticon variant (i.e., lengthened smile, unlengthened smile, lengthened frown, unlengthened frown), and content code (i.e., *Action*, *Affection*, *Fact1*, *FactEx*). Subsequent passes aimed to identify general recurring themes in the transcripts (e.g., emotion expression, joke, sarcasm) and to detail the data further, ensuring that codes were thoroughly applied and creating narrower analysis codes for nuance. Additionally, while broad analysis codes were sorted into *pragmatic*, *non-pragmatic*, and *disliked*⁹ categories, this thesis focuses on the *pragmatic* and *non-pragmatic* categories. The *pragmatic* category encompasses the functions of emoticon lengthening, or how lengthening an emoticon can be used to change a message's meaning. While the primary focus of this research is on how lengthening an emoticon changes the meaning of a token, it was deemed necessary to code for non-pragmatic themes as well. Some explanations for changes in meaning cannot be separated from sociolinguistic considerations, as in age, formality, pre-existing relationship between user and recipient, and the user's typing style. *Disliked* findings, while insightful in considering why individuals may reject lengthening emoticons, were determined to be beyond the scope of this thesis. An account of pragmatic codes for transcript analysis is shown in Table 6, and all codes are included in Appendix C.

⁹ The *disliked* category is reflected in Appendix B.

Table 6 – Transcript Analysis Framework

Non-/Pragmatic	Themes and Broader Codes	Detailed Codes
Non-pragmatic	As gesture	
	"Extending the message"	
	Socio	Share in emotion Support Age Device&platform Formality Over time People used with Social media used Style
	"Singsongy"	Heyyy
	Interaction/relationship maintenance	Compulsion Friendly/polite Mitigate
	Command	
	Recurring	
	Exaggerate	
	About situation/context	
	"Miss"	
Pragmatic	Intensification/emphasis	
	Invitation	
	"Don't want to be there"	
	Laugh at	
	Clarify/add tone	Regret Heart warmed Playful Happiness Gratitude Plead-y Serious or flat Bittersweet Excited Proud Genuineness
	Joke	Sarcasm "laugh with"
	Sad umbrella	Self-deprecation Actual sadness/distress "smile through the pain" "Florence Pugh frown"

4.2 Functions Identified in Focus Groups

This section discusses the findings from the focus groups, with particular attention on nuancing how lengthening impacts interpretations compared with unlengthened emoticons. Section 4.2.1 discusses the interactional functions of emoticon lengthening. Section 4.2.2 elaborates on the role of emoticon lengthening in expressing emotions, while Section 4.2.3 focuses on its intensification function. Finally, Section 4.2.4 contrasts how lengthening is employed for mitigation with that of unlengthened emoticons.

4.2.1 Interactional Functions

Interactional functions manage the user-recipient relationship or the exchange in some capacity. This section demonstrates how emoticon lengthening's use in informal environments and close relationships is associated with intimacy. In particular, lengthening can lean into this associated intimacy to avoid the interpretation that the user is meeting an obligation and, instead, show sincerity, and can also be used to ask for support.

To begin, emoticon variants are accepted at different formality levels, with lengthened emoticons at the least formal. Participant E3's explanation of their emoticon use in relationships illustrates this finding:

I do put the single colon and parentheses in an email, for example, to a prof that I'm close with [...] I don't know if I would do the multiple mouths, especially, you know, it feels a little bit more casual to me. But like, so with that community of people who are technically in an authoritative role above me, I would use it. It depends on the prior relationship [...] I would pretty much use all of these options pretty quickly into a friendship [...] In terms of authoritative, I think it's almost a way of kind of leveling the playing field in how I would perceive it [...] But other than that, yeah, I don't use multiple mouths for like a more authoritative thing just because [...] it is kind of singsongy and it feels pretty casual.

In other words, lengthening is acceptable only when talking with friends or other close relationships. This interpretation is reaffirmed by participant C1, who explains that the use of the unlengthened smile emoticon in (51b)¹⁰ indicates that the user-recipient relationship is familiar but not close, while the lengthening in (51c) suggests that they are close friends.

(51b) we should omg :) (TW581M)

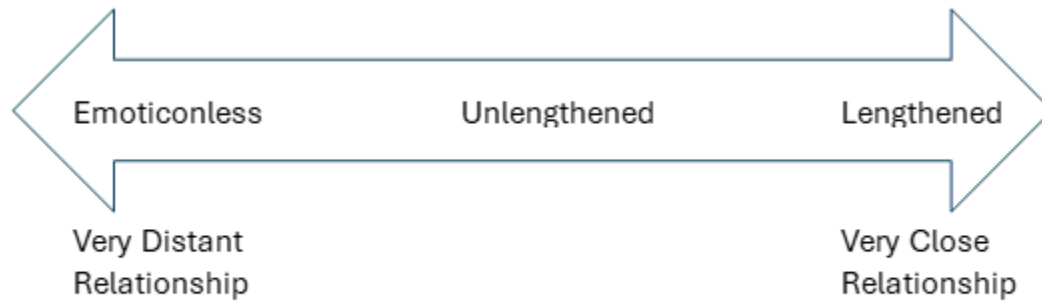
(51c) we should omg :))) (TW581M)

Further, participants indicated that lengthened emoticons would be too familiar or informal to be used with anyone in an authoritative role, such as a professor, although unlengthened emoticons would be acceptable in these exchanges. Konrad et al. (2020) argue that conventionalized features tend to be perceived as more formal than innovative variants, which is reflective of the respective findings for unlengthened and lengthened emoticons. Additionally, though unlengthened emoticons have been increasingly acceptable in select formal situations, this does not necessarily come without tradeoffs. Marder et al. (2019) show that using an emoticon in professional (or formal) settings can increase warmth and likability, but at the risk of perceived incompetence. Due to their informality, this effect would likely be even stronger with a lengthened emoticon – provided that the emoticon is first considered acceptable in the interaction.

With this first finding, we can place the emoticon variants on the intimacy spectrum in Figure 3. Progressively, the emoticonless version is the only option acceptable in very distant relationships, unlengthened emoticons begin to be acceptable midway, and lengthened emoticons are only acceptable in close relationships.

As a side note, emojis are only acceptable at an even higher level of informality. Participant G4 explicitly highlighted this in that “if it were maybe someone [they] work with like a coworker, or like a boss, [they] would just use maybe like text smiley faces, but [they] wouldn't use the yellow emojis.” An unlengthened emoticon would be acceptable with a coworker or even a boss, but an emoji would be considered unacceptable in this environment. The increased acceptability of emoticons in more formal or distant interactions, especially compared with emojis, is more evidence for Konrad et al. (2020)'s assertion that emoticons have been conventionalized.

¹⁰ For clarity, numbers for tokens presented in Chapter 4 were originally assigned in Table 4 in Section 4.1.1.

Figure 3 – Emoticons on Intimacy Spectrum

Second, lengthening an emoticon can show sincerity, thereby avoiding the interpretation that the user is fulfilling an obligation. This finding is illustrated in (51b)-(51c), where the unlengthened smile in (51b) is included when the user is obligated to support someone in an action or event external to the exchange, but (51c) expresses sincere excitement rather than obligation. Participant B2 further explained for (51b)-(51c) that:

the more the extra smiles, the more the person is happy and excited about it, because I personally do that. So yeah, you know how I said that with just one single smile I would consider that as a compulsion and without the smile I would see that you know the person is actually interested. But in the multiple smile cases, I would say that that's when the person is the most interested.

In other words, the user indicates their sincerity in (51c) by using the lengthening on the smile to both invoke the closeness in their relationship and to express the intensity of their excitement, compared with the unlengthened smile that fulfills an exchange-external commitment. More generally, the lengthening on the emoticon taps into the user-recipient relationship to add another layer of meaning to the message. Interestingly, this function aligns with the pilot finding that lengthening can intensify an emotion so much that it must be sincere (as in excitement), though contrasts with the observation that lengthening can also show obligation and insincerity.

Finally, a user can also include a lengthened emoticon to ask for support in the *FactI* and *Affection* tokens, and both unlengthened and lengthened emoticons can be used to empathize or show support. For instance, participant C1 explained the support request function in that:

the one with the one mouth kind of like upset face [(54d)], it's kind of like, "I kind of don't want to go through this, but I'm going through it," kind of thing. And for the multiple [(54e)] it's like, "Please help me, like, I need an alternative please, like, cheer me up or something."

The unlengthened frown in (54d) solely indicates distress, but the lengthened frown in (54e) is also used to further help the recipient discern that the user is also asking for help or something to "cheer [them] up." Additionally, in cases where the user includes a lengthened or unlengthened emoticon to empathize with the recipient, participant F2 explained that in (52d) "either the [recipient] is away or maybe something kind of sad has happened, so you're just like reiterating that you do love them, even while also acknowledging that the circumstance is not happy right now or something." In this explanation, the user includes the unlengthened frown (52d) to engage with an emotion previously shared by the recipient, as well as to simultaneously acknowledge the bad circumstances and offer support.

(54d) I just had iced coffee cause I'm a glutton for pain :((TW857M)

(54e) I just had iced coffee cause I'm a glutton for pain :((((TW857M)

(52d) i love you :(

4.2.2 Emotion Expression

This section focuses on the uses of lengthened emoticons to reaffirm the emotion expressed by the emoticon, and discusses how the lengthened frown specifically can be used to show an overwhelmingly positive response. I also present the cases where both unlengthened and lengthened emoticons perform the same functions, that is, to avoid a negative interpretation and to share in an experience, which demonstrate the potential broadening of emoticon lengthening's role in CMC.

To begin, lengthening can be used to reaffirm that the emotion added by the emoticon is sincerely experienced. This observation is especially apparent when frowns show sadness or upset by removing any sort of sarcasm or joke that a smile might add, and then lengthening that frown stresses that that upset is real. For instance, *Fact1* tokens (54d)-(54e) were described as "normal sad when it's one bracket, but like when it's there like more mouths [...] that's like 'Oh,

I'm actually kind of low key sad''' (G1). The seriousness of the sadness increases with the lengthened frown in (54e), whereas the user in (54d) with the unlengthened frown is simply sad. To note, the emoticonless version is the most serious and indicative of distress while communicating that "something is actually wrong" (A2). This finding is expected because while mixing emoticon and text valences can be used to signal jokes and sarcasm, matching these valences can be effective in reinforcement or showing the intensity level (Derks et al., 2007; Filik et al., 2016; Thompson & Filik, 2016; Yus, 2014). Further, because of the gravity of these interpretations, participants responded that they would want to respond supportively.

(54d) I just had iced coffee cause I'm a glutton for pain :((TW857M)

(54e) I just had iced coffee cause I'm a glutton for pain :((((TW857M)

Frowns are not only used to create negative meanings, but also to show an overwhelmingly positive response or emotion in *Affection* and *Fact* tokens. Participants named frown emoticons included for this purpose "Florence Pugh frowns" (FPF) after a deep frown made by the celebrity Florence Pugh, and they attributed the emotions of gratitude and feeling heartwarmed to its use. The FPF is illustrated in (52e) as "more of like the 'Aww' like 'That's really cute' or like 'You're the best.' Or like maybe my friend gave me a really, really thoughtful gift or sent me a really thoughtful message. It's like 'I love you'" (E1) and:

(52e) i love you :((((TW1141M)

[(52e) is] more like in my opinion like the heartwarming kind weirdly enough. I feel like these are more heartwarming when someone does something really nice for you and we are like "Aww, thank you so much. I love you." [...] Like it's more like "Aww, thank you so much for doing" [...] when someone does a favor for me. I'm like not actually sad but like happy in a way that they did it for me (A2).

This interpretation is an especially salient example that both an emoticon (including smiles) and its lengthening are gestural cues in CMC, as indicated in previous research (Hsieh & Tseng, 2017; Kaye et al., 2016; Markman & Oshima, 2007; McCulloch, 2019; Yus, 2014).

That is, the frown emoticon is used to emulate a frown produced in face-to-face communication, and adding extra mouths shows that frown deepening. Further, this observation supports the

pilot finding that emoticon lengthening maps onto the face, particularly on expressive and dynamic components.

There is one case where participants did not distinguish between unlengthened and lengthened emoticons: either can be used to share in or co-experience an emotion or co-experience with a recipient. For instance, the user is happy reminiscing (53b)-(53c) or excited about their partner building a cactus farm (50c), and the user is inviting the recipient to co-experience the emotions with them in both tokens. Participant B2 explained that “with the smiles I would be more like, you know, maybe they are just sharing a good memory, a good photograph or something, and then they're like, ‘You know what, I miss you.’” Additionally, in (50c), participant F3 reported that “the [...] one where there are three smileys and there are happy faces, that is something you can say ‘OK, it is something different, but it is something interesting,’ and someone is really sharing their happiness with you.” These cases highlight the stylistic role in lengthening, as well as how the role of lengthened emoticons have potentially broadened (that is, expansion beyond shared functions).

(53b) i miss you :)

(53c) i miss you :)))

(50c) Come watch my partner build a cactus farm :))) (TW1386M)

4.2.3 Intensification

Focus group findings reaffirm that intensification is a major function of emoticon lengthening (Park et al., 2013; Yus, 2005), and that the amount of lengthening can indicate the level of intensity, which contrasts with Yus's (2005) observation that increased lengthening cannot intensify past a higher than default level. Participants illustrated these observations in that “when you add the more happy face or frowny face, I feel like it just takes the original emotion and amplifies it, so the amount of excitement increases” (G3) and “the level of excitement determines how many brackets go in that smile” (F2). For example, in *Action* tokens (50a)-(50e), the unlengthened emoticons add happiness (50b) and reluctance (50d) about the partner building a cactus farm. When the smile is lengthened in (50c), the happiness about the partner building a cactus farm turns into excitement, while lengthening the frown (50e)

intensifies the reluctance so that the user is now attempting to convince the recipient to join them, as well as expressing that they do not wish to go. Participant A3 explains:

I would say like the baseline one, no emoticon, is just kind of like no emotion. You can't really tell how they feel about it, but once you have the single smiley face you can kind of tell they're happy about it, like they want you to come see. I would say I'd send like the multiple smiley faces if I was excited about it, was like, "Hey," like, "you should come see this." The sad face I would say you really don't want to do it, so you're trying to drag somebody else in with you. Like, "Please come do this with me because I don't want to do it." And the multiple sad face is like, "Please, please come because I do not want to do this" (A3).

Thus, what the lengthening on the emoticon accomplishes in (50c) and (50e) is further modifying what emotion is expressed, which mirrors the observation that lengthening in words can be used to express or intensify an emotion (Brody & Diakopoulos, 2011; Giachanou et al., 2016; Giachanou & Crestani, 2016).

- | | | |
|-------|--|-----------|
| (50a) | Come watch my partner build a cactus farm | (TW1386M) |
| (50b) | Come watch my partner build a cactus farm :) | (TW1386M) |
| (50c) | Come watch my partner build a cactus farm :))) | (TW1386O) |
| (50d) | Come watch my partner build a cactus farm :(| (TW1386M) |
| (50e) | Come watch my partner build a cactus farm :(((| (TW1386M) |

At the same time, the intensity that lengthening an emoticon creates exaggerates an emotion to humorous effect. For instance, participant B3 explained that in (51e) "the more the frown, the more exaggerated that situation probably is." The intensity created by lengthening the frown emoticon is not meant to be taken literally, but, instead, as hyperbolically for fun or for play.

- | | | |
|-------|--------------------|----------|
| (51e) | we should omg :(((| (TW581M) |
|-------|--------------------|----------|

Further, rather than intensifying, lengthening emphasizes the emotion expressed by an emoticon. For instance, both unlengthened and lengthened smile emoticons in (55b)-(55c) can be included when a user is truly distressed to some degree but accepts the situation. Multiple

participants called this use “smiling through the pain” or humorous. Participants further elaborated that the use of the smile emoticon in (55b) shows resignation in a distressing situation, so the choice of emoticon paired with the text affects what sort of emotion is present. However, it is the lengthening of the smile in (55c) that brings that resignation to the forefront of the message without necessarily making that emotion stronger. On the other hand, including and lengthening the frown in (55d)-(55e) simply strengthens the distress or “more sad” in the message. Thus, this example demonstrates that while the emoticon may still be what selects the emotion, lengthening the emoticon can bring that emotion to the forefront of the message.

(55a) i lost all my bookmarks	(TW1461M)
(55b) i lost all my bookmarks :)	(TW1461M)
(55c) i lost all my bookmarks :)))	(TW1461M)
(55d) i lost all my bookmarks :(	(TW1461M)
(55e) i lost all my bookmarks :(((	(TW1461M)

Finally, intensification through lengthening can affect the tone of the message, particularly where the different emotions expressed across un/lengthened smile and frown emoticons in *Action* tokens are directed at the message content (as in the cactus farm building) as per Yus (2005; 2014). For instance, this effect is observed in *Action* tokens (50d)-(50e), where the lengthened token in (50e) intensifies the message to create a “plead-y” tone. Participants described (50d) with the unlengthened frown as the user trying to convince the recipient to join them in solidarity despite not wanting to, and lengthening the emoticon in (50e) strengthens the attempt. Participant A3 explained that the user “really [doesn't] want to do it, so you're trying to drag somebody else in with you. Like ‘Please come do this with me because I don't want to do it.’ And the multiple sad faces like ‘Please, please come because I do not want to do this.’” In other words, the unlengthened frown is simply trying to convince the recipient to join them, but the lengthened variant is more intense to the point participants call it “plead-y.”

4.2.4 Mitigation

Focus group data support the use of lengthened emoticons in mitigating the illocutionary force, as previously observed with unlengthened emoticons (Dresner & Herring, 2010; Filik et al., 2016; Thompson & Filik, 2016; Yus, 2014). While many of the mitigation functions overlap

between unlengthened and lengthened emoticons, lengthening is found more effective at further mitigating or nuancing the interpretation of the message. This section illustrates how lengthened emoticons are preferred in lessening literality, indicate that a message is a joke, soften a command into an invitation, and mitigate the seriousness or transform the nature of affectionate declarations.

A lengthened emoticon is preferred over unlengthened emoticons in lessening the literality and gravity of *Fact* tokens. Part of the lessening occurs in allowing an emoticon at all; if the context or topic were even more grave, an emoticon would likely not be included. Given this consideration, it is also unsurprising that the more informal option (i.e., the lengthened emoticon) is preferred. That is, individuals would be more likely to send such messages to close relationships, and leaning into informality would help downplay an upsetting situation such as losing bookmarks in (55b)-(55c). For instance, the user in (55b)-(55c) adds an unlengthened or lengthened smile to lessen their sadness, thereby signaling that the recipient should not be upset as well. Though both emoticons are acceptable options to achieve this effect, lengthened versions like (55c) are reported as more effective.

(55b) i just lost all my bookmarks :) (TW1461M)

(55c) i just lost all my bookmarks :))) (TW1461M)

Similarly, lengthened emoticons were reported as more effective at signaling a joke by mitigating serious or distressed interpretations, particularly in *Affection* and *Fact* tokens. For instance, in (54c) participant A3 reported that “the smiley face just lightens the mood, and they might be in pain but it's not a big deal and they're kind of joking around a little bit” when contrasted with unlengthened smiles, which show more seriousness. This lightheartedness comes in part from what participants describe as a prosody change in tokens with lengthened emoticons. In particular, they compare emoticon lengthening to lengthening in words such as “heyyy,” as well as mimicked the intonation change during discussion¹¹. Participant E3 elaborated on the lengthening in (54b)-(54c) in that:

¹¹ The observation that a lengthened smile can change the prosody of a message is also noteworthy because word lengthening has been observed to be an increasingly visual cue in CMC, though not having completely lost the prosodic aspect (Kalman & Gergle, 2014; Lamontagne & McCulloch, 2017). This assertion is based on inarticulate lengthening increasing in English over time, and this lengthening likely extends to emoticons as well. As it is, this is a case of inarticulate lengthening affecting message prosody, which requires further investigation in both emoticons and words.

the single mouth almost seems more serious, because [...] with the multiple mouths for the happy side it does have kind of [...] like a singsongy quality. And I relate to that because I think it's almost more of a bit of like a jokey thing. Like [...] if somebody sent me all lowercase “hey” with one “y” for example, I would think it was more serious than if somebody went “heyyy” but that's- and I even say it differently when I'm like really repeating it, you know- it's like “heyyy” with three “y”s. I think the more of that extension of the single word or the sentence, the more calm and casual I feel like it is.

- (54a) I just had iced coffee cause I'm a glutton for pain (TW857M)
- (54b) I just had iced coffee cause I'm a glutton for pain :) (TW857M)
- (54c) I just had iced coffee cause I'm a glutton for pain :))) (TW857M)

Next, unlengthened and lengthened smiles can be used in *Action* tokens to soften a literal command into an invitation, and lengthened smiles specifically may also turn a command into a “negative” (B4) or sarcastic invitation, which contrasts with unlengthened smile's interpretation as a sincere invitation. Participant F2 highlighted the sarcastic use of lengthened smiles in that:

it can be you're genuinely inviting the person to come watch them, actually watch, build the cactus farm, or you're just being super sarcastic and you're like, “You have nothing else to do with your time? Well, come watch this super potentially boring activity.”

Whereas only lengthened smiles can produce sarcastic invitations, both unlengthened and lengthened smiles in (50b)-(50c) mitigate the illocutionary force in the imperative “Come watch my partner build a cactus farm” (50a) to create sincere interpretations. Participant G4 illustrates this function in that “the smiley face is like more of an invitation. And then without the emoticon at all, maybe like commanding, maybe like, ‘Come watch my partner build a cactus farm now.’”

- (50a) Come watch my partner build a cactus farm (TW1386M)
- (50b) Come watch my partner build a cactus farm :) (TW1386M)
- (50c) Come watch my partner build a cactus farm :))) (TW1386M)

With *Affection* tokens such as “i miss you,” lengthened smiles are more effective than unlengthened smiles in lessening the seriousness of an affectionate declaration from “devastating” to “more fun.” This observation is directly illustrated by participant D2:

[the unlengthened smile emoticon in “i miss you”] makes it seem like kind of less serious, right? Like the “I miss you” seems very serious and [...] like “Oh, I miss you so much.” But then [...] the other “miss you,” things like “Ohh, you miss the person,” but it's a little bit more fun and not as [...] devastatingly you miss that person.

Similarly, in emphasizing closeness with the recipient, a user can lengthen an emoticon to mitigate the type of affection expressed without lessening the affection itself. This function is effective in avoiding a possible romantic interpretation in favor of a clearly platonic or familial one. Participant F1 highlighted this in that:

an “I love you” with the smile, that doesn't mean an actual “I love you.” That means like you love him or like him, or probably you're showing affection. This kind of “I love you” is probably for like parents, like for siblings, for friends [...] Like probably I'll be sending the longer one to my best friend, but like lesser one to my normal friend or probably my sibling.

The emoticon in (52c) does not necessarily lessen the affection overall, but rather circumvents a possible romantic interpretation in favor of a still just as sincere and affectionate platonic or familial interpretation. This observation reflects the finding in Section 4.2.1 that the inclusion of repeated parentheses on the smile explicitly expresses closeness with the recipient. However, an unlengthened smile does not necessarily mean a more distant relationship. This is described by E1 in that:

“I love you” with the one smiley face [(52b)], it's either like to a new romantic partner or it's like to a friend that you don't know that well that's like “I love you.” [...] Those multiple smiley faces [as in (52c)], I send this to my closest friends. That's “like I love

you” like “you're lovely” [...] It's like “aww, I love you. You're so great to work with” you know. That's like very nice and sweet.

(52a) i love you

(52b) i love you :)

(52c) i love you :)))

Finally, there are three cases where participants agreed that both unlengthened and lengthened emoticons are acceptable with little difference in meaning, and the choice of a lengthened emoticon may simply be stylistic. These cases demonstrate that lengthened emoticons still fulfill some shared functions (as seen with co-experiencing emotion in Section 4.2.2), and illustrate the expanded uses of lengthened emoticons. First, both unlengthened and lengthened emoticons can show that a joke is self-deprecating in *Fact* tokens. For instance, participant F2 explained that using either smile, as in (54b)-(54c), communicates, “You already know I am going to be complaining about a tummy ache all day. Thank you for being my BFF and being here to listen to my complaints.” The user knows that the choice to buy an iced coffee is not necessarily a good one (that is, it will cause them pain), but they flippantly and humorously embrace the decision with either an unlengthened or lengthened emoticon.

In the second case, both unlengthened and lengthened emoticons can be included to mitigate a serious message by inviting the recipient to laugh with the user about a situation. Participant E3 compared this type of invitation from the unlengthened emoticon (54b) with the serious emoticonless message (54a):

it's like self-aware about being kind of funny. Like I think the one with the smiley face [emoticon] is kind of like ‘Oh yeah, you can laugh with me,’ you know. Whereas with the one without it is kind of like ‘Oh my god, I am in crisis,’ you know.

The emoticonless version (54a) indicates actual distress experienced in consuming the iced coffee. With the smile emoticon in (54b), as with the lengthened smile in (54c), the user is not only laughing about their impending pain, but they are also inviting the recipient to laugh along with them. This finding recurs alongside self-deprecation and creating a joke; not only does the user circumvent the distressed interpretation, but they push the message even beyond an assertion and into the user themselves becoming the joke.

Finally, a smile emoticon, whether lengthened or unlengthened, can be used to simply avoid any negative interpretation in tokens like (51a)-(51c). Participant F1 elaborated for these tokens that:

if we don't use [emoticons] in this kind of situation, it also gives a negative impact in such a way like he said, "OK." He said, "Oh, OMG we should," and I was like, "OK," and probably think like-probably my OK that's a sarcastic one. So sometimes we use [emoticons] to just make our word OK. "Yeah, for sure. This."
(F1)

Since an emoticonless version (as in (51a), for instance) could be read negatively, the user then includes an emoticon not necessarily to express a certain emotion, but to avoid an undesirable interpretation. Participants equated this use with sending just an "OK," particularly as a bare "OK" in CMC can be interpreted as curt, cold, or angry (McCulloch, 2019). Additionally, participants noted that emoticons can be used to match the recipient's emoticon use, a strategy known as accommodation (Giles et al., 1991), to express friendliness and politeness, and prevent the message from being interpreted as cold or negative.

- | | | |
|-------|--------------------|----------|
| (51a) | we should omg | (TW581M) |
| (51b) | we should omg :) | (TW581M) |
| (51c) | we should omg :))) | (TW581M) |

Chapter 5: Conclusion

In this thesis, I have conducted the first in-depth analysis of the pragmatic functions of emoticon lengthening. Building on previous acknowledgements that lengthened emoticons intensify (Yus, 2005) and emphasize (Park et al., 2013), the main objective of this thesis was to explore further pragmatic functions of lengthened emoticons by the following research questions:

1. In what kinds of contexts do lengthened :) smile and :(frown emoticons most commonly appear? How do these contexts compare with those of unlengthened smiles and frowns
2. What pragmatic functions do lengthened emoticons fulfill, especially compared with unlengthened emoticons?

A corpus analysis of 1,831 tweets reveals important contextual differences between unlengthened and lengthened emoticons. Lengthened smiles appear more frequently in friendly and intimate contexts, whereas unlengthened smiles are more commonly associated with expressions of gratitude. Lengthened frowns tend to occur in messages of solidarity and support, while unlengthened frowns are often found in questions. These divergences are further explained by focus group data. Participants indicated that lengthened emoticons are informal and intimate, and generally reserved for close relationships. Given that emoticons are typically used in socio-emotional contexts (Derks et al., 2007), it is expected that the informal, intimate lengthened variant would be more prevalent in these contexts.

When compared with unlengthened emoticons, focus group data show that lengthened emoticons direct recipients to different interpretations of messages. Specifically, this thesis identifies four overarching functions: intensification, relationship or interaction management, emotion expression, and mitigation. First, results reiterate the intensification role of emoticon lengthening, as identified by earlier studies (Yus, 2005; Park et al., 2013), and this finding also aligns with research on the function of lengthening in words (Brody & Diakopoulos, 2011; Giachanou et al., 2016; Giachanou & Crestani, 2016). Second, for relationship or interaction management, lengthened emoticons are found to be more informal than unlengthened ones. The informality created by lengthening evokes a sense of closeness in the user-recipient relationship, leading to interpretations that express support, solidarity, and shared emotions. Third, while an unlengthened emoticon can convey emotion, lengthening it can indicate that the emotion

expressed in the message should be interpreted as sincere or literal. Additionally, lengthening a frown can convey its depth (that is, the FPF), which illustrates that emoticon lengthening can also serve as a gestural cue. Finally, as lengthened emoticons can be interpreted as mimicking spoken intonation, they are more effective at mitigating a message than unlengthened ones. Previous research (Kalman & Gergle, 2013; Lamontagne & McCulloch, 2017) has considered the lengthening on unpronounced characters to be purely visual. However, this thesis shows that lengthening has extended to inarticulable characters and that this contributes to the prosodic effect of messages.

These findings suggest a potential change over time, as studies conducted over ten years ago indicate that emoticon lengthening intensified (Yus, 2005) and emphasized (Park et al., 2013). However, we must be cautious, as by focusing exclusively on intensification and emphasis these studies may have overlooked other functions of lengthening. Future research could track the historical evolution of emoticon lengthening to determine whether these findings truly indicate a change.

Future research can further build on this study in different ways. Surveys could be used to gather demographic data on emoticons' users and determine who drives and who resists the use of lengthening, as well as investigate the frequency of lengthening usage. Corpus analysis could extend beyond the contexts in which lengthening occurs and, instead, explore how frequently lengthened emoticons occur with the identified functions. Experiments can employ tokens with different amounts of repeated characters to assess whether the degree of lengthening can communicate the strength of the function's effect on the interpretation (e.g., whether the number of mouths can indicate how intensified or mitigated an emotion or message is). Also, future work should explore the syntax of lengthened emoticons by testing the constraints of where lengthened emoticons can occur in a message and which characters can be repeated. As Schnoebelen (2012) and this thesis find that noses and mouths can be omitted or repeated, respectively, on the basis of expressiveness in simple eyes-mouth emoticons, future research could explore which characters are repeated in more complex emoticons (e.g., >:(angry face, :'(cry, ;) wink) and kaomoji (e.g., ^_^ smile, ㄟ(ˊˋ)ㄏ shrug). This type of analysis would extend the scope of how individuals approximate non-verbal communication in CMC, particularly to include other expressive features (e.g., eyebrows), actions (e.g., crying), or even abstract ideas

(e.g., heart). Finally, in addition to construction constraints, future research should also explore the pragmatic functions of emoticons and kaomoji outside of the simple :) smile and :(frown.

Overall, this thesis contributes to linguistic literature on informal online language by being the first analysis focused on contrasting the functions of unlengthened and lengthened emoticons. By identifying interaction and relationship management, emotion expression, and mitigation as functions of emoticon lengthening, this thesis demonstrates that the role of emoticon lengthening extends beyond solely intensification, which may be a case of broadening.

References

- Aldunate, N., & González-Ibáñez, R. (2017). An integrated review of emoticons in computer-mediated communication. *Frontiers in psychology*, 7, 231860.
- Brody, S., & Diakopoulos, N. (2011). Coooooooooooooooooolllllllllll!!!!!! using word lengthening to detect sentiment in microblogs. In *Proceedings of the 2011 conference on empirical methods in natural language processing* (pp. 562-570).
- Corbin, J., & Strauss, A. L. (2015). *Basics of qualitative research techniques and procedures for developing Grounded Theory* (4th ed.). Los Angeles, CA: SAGE.
- Derks, D., Bos, A. E., & Von Grumbkow, J. (2007). Emoticons and social interaction on the Internet: the importance of social context. *Computers in human behavior*, 23(1), 842-849.
- Dresner, E., & Herring, S. C. (2010). Functions of the nonverbal in CMC: Emoticons and illocutionary force. *Communication theory*, 20(3), 249-268.
- Filik, R., Turcan, A., Thompson, D., Harvey, N., Davies, H., & Turner, A. (2016). Sarcasm and emoticons: Comprehension and emotional impact. *The Quarterly Journal of Experimental Psychology*, 69(11), 2130-2146.
- Giachanou, A., & Crestani, F. (2016). Opinion retrieval in Twitter using stylistic variations. In *Proceedings of the 31st Annual ACM Symposium on Applied Computing*, (pp. 1077-1079).
- Giachanou, A., Harvey, M., & Crestani, F. (2016). Topic-specific stylistic variations for opinion retrieval on twitter. In *Advances in Information Retrieval: 38th European Conference on IR Research, ECIR 2016, Padua, Italy, March 20–23, 2016. Proceedings 38* (pp. 466-478).
- Giles, H., Coupland, N., & Coupland, I. U. S. T. I. N. E. (1991). 1. Accommodation theory: Communication, context, and. *Contexts of accommodation: Developments in applied sociolinguistics*, 1.
- Herring, S., & Dainas, A. (2017). “Nice picture comment!” Graphics in Facebook comment threads. In *Proceedings of the 50th Hawaii International Conference on System Sciences*, (pp. 2185-2194).
- Herring, S. C., & Dainas, A. R. (2020). Gender and age influences on interpretation of emoji functions. *ACM Transactions on Social Computing*, 3(2), 1-26.

- Hsieh, S. H., & Tseng, T. H. (2017). Playfulness in mobile instant messaging: Examining the influence of emoticons and text messaging on social interaction. *Computers in Human Behavior*, 69, 405-414.
- Kalman, Y. M., & Gergle, D. (2014). Letter repetitions in computer-mediated communication: A unique link between spoken and online language. *Computers in Human Behavior*, 34, 187-193.
- Kaye, L. K., Wall, H. J., & Malone, S. A. (2016). “Turn that frown upside-down”: A contextual account of emoticon usage on different virtual platforms. *Computers in Human Behavior*, 60, 463-467.
- Konrad, A., Herring, S. C., & Choi, D. (2020). Sticker and emoji use in Facebook Messenger: Implications for graphicon change. *Journal of Computer-Mediated Communication*, 25(3), 217-235.
- Lamontagne, J., & McCulloch, G. (2017). Wayyy longgg: Orthotactics and phonology in lengthening on Twitter. In LSA 2017 Annual Meeting.
- Marder, B., Houghton, D., Erz, A., Harris, L., & Javornik, A. (2020). Smile (y)–and your students will smile with you? The effects of emoticons on impressions, evaluations, and behaviour in staff-to-student communication. *Studies in Higher Education*, 45(11), 2274-2286.
- Markman, K. M., & Oshima, S. (2007). Pragmatic play? Some possible functions of English emoticons and Japanese kaomoji in computer-mediated discourse. In *Association of Internet Researchers annual conference*, 8, pp. 1-19.
- McEnery, T., & Hardie, A. (2011). What is corpus linguistics? In *Corpus Linguistics: Method, Theory and Practice* (pp. 1–24). chapter, Cambridge: Cambridge University Press.
- McCulloch, G. (2019). *Because internet: Understanding how language is changing*. Random House.
- Myslín, M., & Gries, S. T. (2010). k dixez? A corpus study of Spanish Internet orthography. *Literary and linguistic computing*, 25(1), 85-104.
- Park, J., Barash, V., Fink, C., & Cha, M. (2013). Emoticon style: Interpreting differences in emoticons across cultures. In *Proceedings of the international AAAI conference on web and social media*, 7(1), pp. 466-475.

- Pérez-Sabater, C. (2019). Emoticons in relational writing practices on WhatsApp: Some reflections on gender. *Analyzing digital discourse: New insights and future directions*, 163-189.
- Pesch-Johnson, M. (2021). *Is there an amount of brackets that's like "I can't come," but you can tell you didn't want to come in the first place? A Pilot in Emoticon Lengthening* [Unpublished manuscript]. Department of Linguistics, University of Manitoba.
- Prada, M., Rodrigues, D. L., Garrido, M. V., Lopes, D., Cavalheiro, B., & Gaspar, R. (2018). Motives, frequency and attitudes toward emoji and emoticon use. *Telematics and Informatics*, 35(7), 1925-1934.
- Provine, R. R., Spencer, R. J., & Mandell, D. L. (2007). Emotional expression online: Emoticons punctuate website text messages. *Journal of language and social psychology*, 26(3), 299-307.
- Rafaeli, S., & Sudweeks, F. (1997). Networked interactivity. *Journal of computer-mediated communication*, 2(4), JCMC243.
- Rafaeli, S., Sudweeks, F., Konstan, J., & Mabry, E. (1998). ProjectH: A collaborative quantitative study of computer-mediated communication. In *Network and netplay: Virtual groups on the Internet* (pp. 265-281).
- Saldaña, J. (2016). *The coding manual for qualitative researchers*. London, UK: SAGE
- Savicki, V., Lingenfelter, D., & Kelley, M. (1996). Gender language style and group composition in Internet discussion groups. *Journal of Computer-Mediated Communication*, 2(3), JCMC232.
- Schnoebelen, T. (2012). Do you smile with your nose? Stylistic variation in Twitter emoticons. *University of Pennsylvania Working Papers in Linguistics*, 18(2), 14.
- Tang, Y., & Hew, K. F. (2019). Emoticon, emoji, and sticker use in computer-mediated communication: A review of theories and research findings. *International Journal of Communication*, 13, 27.
- Thompson, D., & Filik, R. (2016). Sarcasm in written communication: Emoticons are efficient markers of intention. *Journal of Computer-Mediated Communication*, 21(2), 105-120.

- Vareberg, K. R., & Westerman, D. (2020). To:-) or to ☺, that is the question: a study of students' initial impressions of instructors' paralinguistic cues. *Education and Information Technologies*, 25, 4501-4516.
- Vidal, L., Ares, G., & Jaeger, S. R. (2016). Use of emoticon and emoji in tweets for food-related emotional expression. *Food Quality and Preference*, 49, 119-128.
- Waseleski, C. (2006). Gender and the use of exclamation points in computer-mediated communication: An analysis of exclamations posted to two electronic discussion lists. *Journal of Computer-Mediated Communication*, 11(4), 1012-1024.
- Yus, F. (2005). Attitudes and emotions through written text: The case of Spanish Internet chat rooms. *Pragmalingüística*, 13, 147-174.
- Yus, F. (2014). Not all emoticons are created equal. *Linguagem em (Dis)curso*, 14(3), 511-529.

Appendices

Appendix A – Full Content Code Distribution for Unlengthened and Lengthened Emoticons

Code	:) Emoticon				:(Emoticon			
	Length-ened (n)	% of Length-ened :)	Unlength-ened (n)	% of ngth-ened :)	Length-ened (n)	% of Length-ened :(	Unlength-ened (n)	length-ened :(
Action	7	10.3	11	16.2	16	8.3	13	6.7
Affection	1	1.5	2	2.9	24	12.5	18	9.3
Apology	0	0	0	0	6	3.1	5	2.6
Challenge	0	0	0	0	0	0	0	0
Coalition	1	1.5	5	7.4	18	9.4	4	2.1
De-flame	0	0	1	1.5	0	0	0	0
Emotion	5	7.4	2	2.9	10	5.2	7	3.6
Fact1	11	16.2	14	20.6	27	14.1	27	14
Fact2	5	7.4	4	5.9	1	0.5	4	2.1
Fact3	4	5.9	1	1.5	15	7.8	14	7.3
FactEx	11	16.2	10	14.7	27	14.1	45	23.4
Friendly	11	16.2	3	4.4	1	0.5	2	1
Flame	0	0	1	1.5	3	1.6	0	0
Hypothetical	0	0	0	0	3	1.6	2	1
Joke	2	3	1	1.5	0	0	2	1
Question	2	3	5	7.4	10	5.2	18	9.4
Reaction	3	4.4	1	1.5	6	3.1	14	7.3
Sarcasm	0	0	0	0	0	0	0	0
Thanks	4	5.9	7	10.3	5	2.6	1	0.5
Wish	1	1.5	0	0	20	10.4	16	8.3
Total*	68	100.4	68	100.2	192	100	192	99.6

*Due to rounding, percentage totals may not equal exactly 100.

Appendix B – Full Qualitative Coding Framework for Transcripts

Largest Category	Mid Category	Subcategory
Non-Pragmatic	As gesture	
	"Extending the message"	
	Socio	Share in emotion
		Support
		Age
		Device&platform
		Formality
		Over time
		People used with
		Social media used
		Style
	"Singsongy"	Heyyy
Pragmatic	Interaction/relationship maintenance	Compulsion
		Friendly/polite
		Mitigate
	Command	
	Recurring	
	Exaggerate	
	About situation/context	
	"Miss"	
	Intensification/emphasis	
	Invitation	
	"Don't want to be there"	
	Laugh at	
	Clarify/add tone	Regret
		Heart warmed
		Playful
		Happiness
		Gratitude
		Plead-y
		Serious or flat
		Bittersweet
		Excited
		Proud
		Genuineness
	Joke	Sarcasm
		"Laugh with"
	Sad umbrella	Self-deprecation
		Actual sadness/distress
		"Smile through the pain"
		"Florence Pugh frown"
Disliked	Unfinished	
	Too much	
Other paralinguistic cues	Emoji	

	Capitalization	
	Graphicons used	
	Emoticon vs emoji	
	Punctuation	
Emoticon variables	Frown	
	Smile	
	Unlengthened	
	Lengthened	
	Emoticonless	
	Other emoticons	
	Replacements/changes	
Speech acts	Action	Action1 – cactus farm Action2 – we should
	Affection	Affection1 – ilu Affection2 – imu
	Fact1	Fact11 – iced coffee Fact12 – bookmarks
	FactEx	FactEx1 – made night FactEx2 – art block
Questionable context	-	-
No difference	-	-
Closing thoughts	-	-