UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE PHENOMENOLOGICAL EXPLORATION OF ANIMATED GIF USE IN COMPUTER-MEDIATED COMMUNICATION

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By
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Norman, Oklahoma
2018

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THE PHENOMENOLOGICAL EXPLORATION OF ANIMATED GIF USE IN COMPUTER-MEDIATED COMMUNICATION

A DISSERTATION APPROVED FOR THE

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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Dedication

This research study was the culmination of an academic career that has spanned decades. Its successful completion is a monumental moment for me not only because doctoral degrees are challenging to complete but also because the research itself is so far from the norm in my field that I doubted many times whether it was truly worthy of study or I was just seeing inconsequential patterns in the everyday elements of our lives. In the end, I feel as if this research vindicates my early feelings of ineptitude, and I am very proud of the paper that follows. All of this being said, this dissertation would not have been possible without the lifelong contributions of strong, intelligent women in my life. With that, this moment of completion is dedicated to all the women in my life who made it possible.

To my grandmother Elizabeth Gates, who graciously set aside funds that would grow to allow me to pursue my higher education without incurring the crippling debt that plagues so many of the younger generation I have been blessed to study with, I owe a debt I cannot hope to repay but will do my best to pay forward. To my mother Barbara Savery Madden, who fostered in me a sense of the inevitability of my continued studies and always believed in me even when I did not. To my first mentor Tricia D. Williams, JD, who gave me my first career opportunity, protected my livelihood in the face of challenging financial times, provided the flexibility to continue my studies even while working full time, yet always expected my best. To Christi Ann Madden, MPA, my wonderful wife who stands beside me and provides the support necessary for me to find the time to finish. Part-time editor and full-time critic, she has helped me improve time and time again, and I love her deeply for it. If not for her, I would not be where or who I am currently.

Last, the successful completion of this dissertation is dedicated to my academic mentor Patricia L. Hardré, Ph. D., the finest researcher, teacher, mentor, and friend one could ever ask for. Even though she couldn't finish out the journey with me as my chair, she provided a lifetime of mentoring that will serve me for the rest of my life as well as an impeccable model for the type of teacher I strive to be. She was the one who told me to my face that I could, the one who helped me find my path, and the one who championed me as I struggled and trudged through the challenges of all of this. There is no person I respect or admire more. To all these amazing women, I dedicate this small piece of research in hopes that it makes them proud. I know I am.

Abstract

The current study seeks to remedy the lack of scholarly investigation into the use of animated GIFs in computer-mediated communication (CMC). Through phenomenological analysis of in-depth 1-on-1 interviews with individuals engaging in the behavior, one over-arching theme was found with the four underlying sub-themes of: Choice, Meaning, Use and Gratification. Individuals using animated GIFs in their CMC seem to formulate a mental image of an expression they wish to demonstrate and select a GIF that fits a particular context, within a specific conversation, with a specific person. Individuals seem to construct meaning of animated GIFs by reading social cues such as facial expressions and body language presented by the actors in the GIF and combining it with the context of the conversation and the person or persons they are communicating with. Individuals seem to use animated GIFs to actively compensate for the lack of social cue transmission in CMC, and seem do so for the purpose of humor, clarification of message, and to increase saliency. Lastly, this whole process seems to be lubricated by a feedback loop of gratification where in individuals feel their communication is improved and more enjoyable than with just words. The current findings are relevant to theories of communication as well as to online education. Recommendations for future research into their effectiveness for educational purposes are provided.

Keywords: Animated GIFs, Computer-Mediated Communication, Teacher Presence, Humor, Phenomenology

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Chapter 1: Research Problem

Animated GIFs (GIF standing for graphics interchange format, a type of digital image file) have been a hallmark of the Internet since 1995 and are still widely used today (Eppink, 2014). Animated GIFs are essentially digital flipbooks and are comprised of a series of static images presented in a certain order and at a certain speed as defined by the person creating the file. They are used because of their relatively small file size (especially compared to a video that must be streamed) and can be hosted on most Internet sites. Examples of GIFs can be seen on a variety of websites for various audiences: weather-related sites (showing short weather patterns), how-to sites (showing basic steps for completing a task), and commonly on Social Networking Sites (SNS), where they tend to be short clips from popular culture such as movies and TV shows shared as comments on posts. These digital files run the gamut of subjects and contexts, and one need only look at Giphy.com to see there are a variety of animated GIF classifications (e.g., emotions, actions, reactions, movies, anime).

Alexander (2011) notes that a "GIF culture" was forming in 2011, that GIFs are a natural evolution of our need to consume information in smaller chunks, and they are most often pulled from cultural touchstones such as movies and TV shows that people enjoy. The thing that makes them most enjoyable is their nature as a single moment that may have gotten overlooked inside of a broader media artifact such as a full-length movie or TV show episode (Alexander, 2011). The proliferation of animated GIFs on the Internet speaks to their appeal, and they are being used by a variety of people in different contexts and in different ways. Perhaps the most interesting use is a practice that began occurring sometime around 2011 where individuals began using animated GIFs as responses to posts in what are mostly text-based chatrooms and message boards (Eppink, 2014). These GIFs are commonly referred to as *reaction GIFs* and are used by

individuals on a variety of Internet sites such as Reddit.com and Tumblr.com as direct responses to someone else's text or GIF post, sometimes with text qualification, but just as often as the sole response to someone else's comment (Eppink, 2014). More recently, animated GIFs have even been used in official business communication between companies via twitter accounts (see AMD Ryzen, 2017 and NVIDIA GeForce, 2017). This phenomenon of people using animated GIFs in computer-mediated communication (CMC) has been around for more than seven years now and has received very little attention. Therein lies the problem: There is a critical lack of understanding why individuals are using animated GIFs in computer-mediated communication (CMC), and it should be explored.

Significance of the Study

A profound lack of literature about animated GIFs serves as the single most important reason for exploration. Searching library databases and Google Scholar retrieved few results that related to animated GIFs at all, let alone research involving them. The most common results were technical papers or instructions for creating them (Arndt, 2013; Niederst, 2003; Yam, Kruskal, & Larson, 2007) or a mention of them in terms of critiquing web pages (Faraday, 2000). Only ten articles found referencing animated GIFs could be classified as academic (see Bakhshi et al., 2016; Carels, 2015; Chen & Picard, 2016; Chen, Rudovic, & Picard, 2017; Eppink, 2014; Gürsimsek, 2016; Jou, Bhattacharya, & Chang, 2014; Jiang, Brubaker, & Fiesler, 2017; Mckay, 2009; Morgan & Scholma-Mason, 2017; Poulaki, 2015), and none of them deal with why individuals are using animated GIFs in CMC.

Other similar media are being used in CMC and have been studied extensively. Emoticons for example are "[…] visual cues from ordinary typographical symbols that when read sideways represent feelings or emotions" (Rezabek & Cochenour, 1998, p. 201) and have

been viewed by many simply as expressions of emotions (see Krohn, 2004; Rezabek & Cochenour, 1998; Walther & D'Addario, 2001). Unlike animated GIFs, scholars have investigated the communicative functions of emoticons. Work by Walther and D'Addario (2001); Dresner and Herring (2010); and Skovholt, Grønning, and Kankaanranta (2014) all revolved around the communicative function of emoticons in CMC.

The scholarly attention to emoticons and their communicative function lends legitimacy to the idea that similarly functioning media deserve the same attention. Although emoticons and animated GIFs seem similar in how they are used, the differences between them are striking. Animated GIFs are not simple graphics or keyboard characters like emoticons; they are often high-resolution reproductions of film normally from TV shows or movies, often including facial expressions and actions of actors. Though used similarly to emoticons, the differences between the two warrant further investigation.

Last, as more and more education is going online, students and teachers are increasingly communicating in text-only media. Discussion boards, emails, texting, and chatting are all tools used to facilitate communication in online courses, and the use of media such as emoticons or animated GIFs may improve the quality of the communication occurring there. It is for this reason that animated GIFs deserve further investigation as a communicative tool. In this regard, it stands to reason that the best place to start the investigation of animated GIFs in CMC is an exploration of the phenomenon from the bottom up.

Chapter 2: Literature Review

There is a profound lack of literature about animated GIFs. The most information rich article found was a visually arresting piece written by Eppink (2014). In it, the author portrays the entire saga of creation and current use of animated GIFs in painstaking, computer-based artistic detail. Animated GIFs became wildly popular in 1995 as people began looking for ways to increase the visual appeal of the Internet. Today, animated GIFs can be found all over the Internet, and as Eppink (2014) notes, they began to be used as communicative tools sometime around 2011.

The earliest scholarly mention of the animated GIF was a paper on the analysis of the affective nature of animated GIFs as an art form (Mckay, 2009). In it, the author discusses three separate animated GIFs as digital art pieces and addresses the affective components of GIFs, or how they engage peoples' attention as an art form. In primarily a philosophical exploration of the potential affective nature of animated GIFs, the author posited that animated GIFs have power to draw out intrinsic personal engagement and serve as "excellent vehicles for inflecting digital media with the unique and whimsical influence of individual human minds" (Mckay, 2009, para. 36).

Carels (2015) compared the animated GIF as an art form to the *thaumatrope*, a disc with images on each side that could be spun to give the viewer an illusion of movement, and also to *arnothoscopes* or *fantascopes*, discs with up to 16 images that when spun show a repeating image that moves (e.g., a running horse or a dancing elephant). Much like these historical toys of entertainment, animated GIFs repeat on a loop and as an art form are gaining in popularity. Morgan & Scholma-Mason (2017) discussed how the animated GIF is an important piece of

digital culture but looked at only archaeological GIFs specifically for use in explaining archaeological concepts or illustrating archaeological digs.

Poulaki (2015) discussed how the shortness of animated GIFs meets a need for online culture as they can be viewed quickly and easily, and since they repeat, are often viewed more than once. While not the focus of his study, it is important to note that Poulaki (2015) mentions the communicative properties of animated GIFs, indicating that there is more to animated GIFs than just being a piece of digital art. This sentiment was confirmed by Bakhshi et al. (2016), who found that the factors of animated GIFs that cause them to be so popular were similar to those found by Poulaki (2015) but also mentioned that "the storytelling capabilities and utility for expressing emotions were significant factors in making GIFs the most engaging content on Tumblr." (Bakhshi et al., 2016, p. 575).

There are only a few experimental studies looking at animated GIFs to date. The first is a conference paper by Jou, Bhattacharya, and Chang (2014) where the researchers attempted to predict the emotions individuals would perceive when viewing animated GIFs. Using a data set from a website run by MIT that collects user perceptions of specific emotional categories of two opposed animated GIFs, the researchers were able to show that there were specific emotional categories and develop a computational method for predicting emotional perception of viewers (Jou et al., 2014). Further work on the subject was conducted by Chen and Picard (2016), where the researchers were able to achieve better accuracy than that found by Jou et al. (2014). This was followed up by another study by Chen et al. (2017), where the researchers have put forth a method for labeling previously unlabeled animated GIFs on the internet in hopes of increasing autonomous machine learning in the future. Although the results of the studies are intriguing and

establish a link between perceived emotion and animated GIFs, there was no discussion or exploration of why people are using them for communication.

There are only two research studies approaching the phenomenon of people using animated GIFs as a communication tool. The first was an online survey conducted by Jiang, Brubaker, and Fiesler (2017). In it, the authors asked respondents to interpret various animated GIFs and then compared their answers with the emotions participants identified in the GIFs. It was found that people have very different interpretations of animated GIFs. GIFs with longer runtimes had higher degrees of variance in interpretation, and negative GIFs had less variation in interpretation than more positive GIFs (Jiang et al., 2017). Gürsimsek (2016) looked at animated GIFs being produced by fans of the television show *Lost* and found their animated GIFs to be a form of communication that could best be described as a sort of group vernacular. The focus of the research was from a design perspective with a focus on what this means for the media industry in general and was conducted specifically for design considerations (Gürsimsek, 2016). Although these two studies mentioned that individuals are using animated GIFs to communicate, neither specifically looked at how people communicate with animated GIFs.

Similar Media

Given the lack of scholarly investigation of animated GIFs being used in communication, it is necessary to relate animated GIFs to other media artifacts that share commonalities. In this regard, emoticons are the most similar in their form and function and have received a fair amount of scholarly attention. According to Krohn (2004), the first emoticon was used in a Carnegie Mellon message board by the computer scientist Scott E. Fahlmon. The official definition of the emoticon was first established in a paper by Rezabek and Cochenour (1998) as "[…] visual cues from ordinary typographical symbols that when read sideways represent feelings or emotions"

(p. 201) and is the definition cited and quoted in research up to the present day. Park, Baek, and Cha (2014) used Twitter data to determine differences in emoticons between cultural groups and found that individualistic cultures prefer sideways emoticons (e.g., :-)), whereas more collectivist cultures prefer inline emoticons (e.g., >.<).

As opposed to animated GIFs, most of the literature on emoticons relates to their power as communicative devices. Walther and D'Addario (2001) looked at the effects of three common emoticons on the interpretation of messages in computer-mediated communication (CMC) and found that although they have some effect, the textual component of the messages outweighed the effect of any emoticon use except where negative messages were concerned. In negative messages, either the presence of a negative textual component or a negative emoticon component causes the interpretation of the message to be more negative. Alternatively, in an article by Wang et al. (2014), emoticon use specifically in instances of negative feedback situations found that positive emoticons could change the interpretation of the message as long as the feedback was specific and not general in nature.

Whereas earlier literature viewed emoticons as simply expressions of emotions (see Krohn, 2004; Rezabek & Cochenour, 1998; Walther & D'Addario, 2001), more recent literature has focused on expanding that interpretation. In an article by Dresner and Herring (2010), researchers argued that the definition of emoticons as expressions of emotions is too simplistic. To address this, the authors logically connected the power of emoticons to speech act theory in the discipline of communication, specifically the concept of *illocutionary force*. Illocutionary force pertains to the way the speaker intends his or her message to be interpreted and is mediated in face-to-face conversations through a person's tone of voice, facial expressions, or body language (e.g., sarcastic tone, smirks, or hand gestures). Dresner and Herring (2010) argued that

emoticons are a method of injecting illocutionary force into CMC. Work by Skovholt, Grønning, and Kankaanranta (2014) provided further evidence for this theory when they found that emoticons in workplace emails serve three functions: (1) indicating attitudes of the sender of a message, (2) qualifying statements meant to be taken as humorous, and (3) adding emphasis to positive messages and mitigating negative messages. Additional work by Derks, Bos, and von Grumbkow (2008) found much the same using a very large sample of individuals leading to the interpretation that emoticons are not just a substitute for facial expression in CMC and serve more functions than just delivering emotions. Furthermore, while investigating content in the Usenet platform in the early days of the internet, MacKinnon (1995) found that emoticons were in fact a form of user compensation for the limited nature of a text-based communication environment. It is likely that animated GIFs are being used in a similar fashion.

In CMC, context plays a factor when individuals communicate. According to Derks, Bos, and von Grumbkow (2007), "people use more emoticons in socio-emotional contexts than in task-oriented contexts" (p. 846), indicating that people have a preference of whom they use them with. Furthermore, the study found that negative task-driven contexts had the least amount of emoticon use, whereas positive socio-emotional contexts had the same amount of emoticon use as negative socio-emotional contexts. Therefore, it is not only whether the communication is positive or negative but also the context that is important leading the authors to state "social context matters in CMC." (p. 847).

In all the emoticon research reviewed, there is the underlying theme that emoticons are primarily used in conjunction with text and typically are used to inform the recipient of the intentions of the sender. Emoticons do not seem to be used on their own; rather, they are coupled with text qualification or even as a form of punctuation (Dresner & Herring, 2010). Animated

GIFs, on the other hand, are often used as a standalone response to a message, sometimes without any clarifying text (Eppink, 2014). Moreover, animated GIFs are often high-resolution reproductions of actors performing facial expressions and actions from movies or TV shows, leading Jiang et al. (2017) to posit that "animated GIFs may be a more nuanced form of nonverbal communication than emoticons and emoji" (p. 1726). It is therefore reasonable to assume that the nonverbal behaviors of human beings actively portrayed in animated GIFs are an integral part of why and how they are used.

Nonverbal Aspects of Communication

People convey meaning in many ways in nonverbal communication. One major way is through the expression of emotions in the face. Smiling, frowning, or baring one's teeth in a snarl all convey information as to the emotional state of a person. Paul Ekman (1992) believed there is a set of basic emotions—families of expressions that have been affected by human evolution—that have specific facial cues that can be identified, categorized, and interpreted easily by others. Much like Ekman, Izard (1990) approached the idea of basic emotions from an evolutionary viewpoint and purported that there are several basic emotions that are universal to humans (e.g., happiness, sadness, contempt, anger).

Alternatively, Barrett (2006) believed the terms commonly deemed emotions (e.g., happy, sad, angry) have no biological basis, are likely creations of the person perceiving the emotions, and are likely nothing more than placeholders or categories on a continuum she called *valence*. Valence is seen as a continuum where all human emotions simply range from unpleasant to pleasant. Barrett and other researchers also identified another continuum at work in human emotion: the arousal continuum, which indicates the presence or intensity of an emotion (Alvarado, 1997; Barrett, 2006; Feldman, 1995; Kensinger & Schacter, 2006).

Regardless of whether human emotional expression is a universal, evolutionary byproduct or is experienced on a continuum, individuals using animated GIFs as communicative devices are using them to convey emotional content within a typically text-only medium (e.g., text messages or discussion boards). By selecting GIFs that represent an emotion (e.g., happy, sad, angry), individuals can interject emotional content into their initial posts or responses with GIFs serving as the delivery mechanism for that meaning. Emoticons have been viewed this way by many CMC scholars (see Krohn, 2004; Rezabek & Cochenour, 1998; Walther & D'Addario, 2001); therefore, animated GIFs deserve the same attention. Furthermore, it is possible that GIF users are conveying more complex emotions than just happy or sad, as seen in emoticons, because GIFs lend themselves to lengthier demonstrations of experiences of emotion and may therefore allow for more nuanced communication.

The context of a conversation and, therefore, the context in which an animated GIF is used may influence the interpretation of the GIF. There has been some study about the effects of context, including on the emotional attribution of facial expression. Levaco (1974) detailed the life and accomplishments of Lev Kuleshov, a Russian filmmaker in the early 1920s who ran a series of informal experiments to see if facial expressions would be perceived differently depending on the type of stimulus with which they might be paired. Kuleshov paired neutral facial images of actors with other images that could be considered positive, negative, or neutral. What he discovered was that the same neutral image was perceived as more positive or negative depending on the image that preceded it. For example, viewers who rated the neutral facial expression after seeing a positive picture (e.g., a smiling baby) rated the neutral face as more positive, whereas viewers who rated the neutral face after a negative picture (e.g., a coffin) viewed the neutral face as more negative. In film, this has been dubbed the *Kuleshov effect* and

was foundational to research psychologists later conducted to determine the nature of a contextual effect on emotional attribution of facial expressions.

The Kuleshov effect was specifically studied by Mobbs, Weiskopf, Lau, Featherstone, Dolan, and Frith (2006) using facial expression images paired with emotionally laden film clips while subjects were scanned using fMRI. The authors substantiated the Kuleshov effect and demonstrated that peoples' perception of facial expression and their subsequent emotional attribution is affected by contextual framing. Furthermore, Marian and Shimamura (2012) investigated the effects of context in emotional attribution as well using a well-known work of art depicting two identically represented figures (i.e., same facial expression and same body movements) presented one behind the other and of differing sizes. Using image manipulation techniques, they presented a variety of derivatives of the original work and found that subjects attributed very different emotions to the various images (even though the facial expression was the same). The study is a good example of how a context presented in media elicits different emotional attribution from subjects even when the facial expression does not change.

Animated GIFs are used in a variety of ways in conversations. Sometimes they are used alone as responses, sometimes they are paired with qualifying text, and sometimes they are used back-to-back or in a series. It is quite likely that the context of the GIF's presentation will have ramifications on how it is interpreted by individuals communicating with them. In this manner, the interpretation of context by communication partners using animated GIFs in CMC may be an important part of the experience of using them.

Nonverbal communication is not limited to the interpretation of facial expressions. There are also other actions that can express meaning involving more than just the face. Things like body language—bodily movements (e.g., head nods, arm waving, leg kicking) or even stances

(e.g., crossed arms, leaning back)— can all have different interpretations depending on context and communication parameters. Kiesler, Siegel, and McGuire (1984) recognized that the "lack of nonverbal involvement is a critical dimension of electronic communication" (p. 1131) and described how things like nodding, eye contact, and distance provide methods for communication partners to control, manage, or change interpretation during face-to-face conversations. In this regard, they note that "electronic media do not efficiently communicate nuances of meaning and frame of mind" (p. 1126).

Sproull and Kiesler (1986) brought up the idea of social context within CMC regarding the use of email in organizations. According to the authors, the "social context influences information exchange through perception, cognitive interpretation, and communication behavior" (p. 1495) and that the social context in communication is interpreted by the individual through the perception of *static cues* and *dynamic cues*. Sproull and Kiesler (1986) described static cues as physical things typically in the environment and dynamic cues as originating from people's nonverbal behavior that changes throughout a conversation (e.g., nodding, smirking, head-shaking). When individuals pick up on these cues, they can trigger mental interpretations or states of emotion, which may then prompt them to change their words based on their interpretation of the conversational situation and the meaning they made of the perceived social context. In addition, although individuals may have perceptions of the social context from other sources, there are few dynamic cues that can be used and therefore less social context within a text-based communication environment (Sproull & Kiesler, 1986).

The ability of a communication medium to transmit social context is largely dependent on its ability to convey the dynamic cues that provide social context information. The logic predicated by Sproull and Kiesler (1986) is that face-to-face communication would be the

communication medium that allows for the most dynamic cues and therefore would contain the most social context information. Other communication media would have diminished ability to convey dynamic cues and therefore diminished ability to convey social context depending on which channels the media transmits. According to the authors, telephones provide diminished dynamic cues compared to face-to-face communication, as telephones do not allow for the transmission of visual dynamic cue information such as eye contact, head movements, or facial expression. The telephone does include an audio channel; therefore, it does provide greater ability to transmit dynamic cues than, say, email, as tone of voice is considered a dynamic cue (Sproull & Kiesler, 1986). In effect, the authors saw communication media on a continuum of social context representation that is governed by the media's ability to transmit dynamic cues. Furthermore, a medium's capability to transmit communication information channels such as visual, audio, and text is what determines its ability to transmit dynamic cues. Therefore, due to the presence or absence of communication information channels in each medium, face-to-face communication is highest in dynamic cue transmission ability, and email is lowest in dynamic cue transmission ability.

Due to a lack of dynamic cues in CMC such as email, texting, or discussion boards, the amount of social context that can be conveyed or felt within a text-based communication environment is diminished. Perhaps individuals using animated GIFs in CMC are attempting to insert social context into their CMC by using animated GIFs to simulate missing dynamic cues that would be present if the conversation were conducted face-to-face. According to Reid (1991), words can be ambiguous when we do not have the nonverbal information of traditional face-to-face speech interactions as when communication is purely text-based. Therefore, inserting an animated GIF might be an attempt on the part of a communicator to insert the dynamic cues that

would normally be used in a face-to-face communication context. If used this way, the GIF should increase social context by increasing dynamic cues, which may then clarify meaning or intent or even help to create a shared context for communication partners.

Theories of Communication

Uses and gratifications theory. There are several theories in the communication literature that may be applicable to the phenomenon of individuals using animated GIFs in CMC. The first is the uses and gratifications theory proposed by Katz, Blumler, and Gurevitch (1974). The terms *uses* and *gratifications* in the theory pertain to the reasons why individuals use a type of media and the gratifications they receive from doing so. There are many possible psychological motives people may have for consuming mass media, and the most basic is the need that people have to express themselves and connect with others (McGuire, 1974). According to uses and gratifications theory, consuming media may help meet that need by providing vicarious gratification when hearing or seeing others expressing themselves. Furthermore, perhaps individuals imagine themselves doing the same thing, sharing the same opinion or feeling, or feeling connected to the characters within. Additionally, individuals may share the experience of the mass media with one another, and it may provide positive gratification in their personal life.

McGuire (1974) also mentioned that using mass media may provide individuals with labels and interpretations for ephemeral emotional states as well as an outlet for inferring the mental states of others based on their actions. In this manner, individuals may engage in the consumption of mass media to vicariously experience emotional states conveyed by the actors and that they do this through a process of emotional interpretation that is likely realized through the interpretation of vocal tone, facial expressions, and physical actions or dynamic cues. It could

be that individuals have a need to hone their interpretive skills, and mass media provides an easy manner for doing so.

In the beginning, uses and gratifications theory focused on mass media such as television and radio. The underlying assumption held at the time was that individuals consciously chose the media they wanted to consume and did so to meet their social and psychological needs. Ruggiero (2000) provided a powerful argument for why uses and gratifications theory should and does apply to current technologies and CMC in particular and believed that the power of advancing technology would result in new methods of communication. Most animated GIFs on the internet are pulled from various pieces of mass media content. It could be that the very nature of animated GIFs as a piece of mass media makes them gratifying in a variety of situations for a variety of psychological needs. When individuals use an animated GIF, they may be expressing themselves, sharing a piece of mass media with another individual to connect with them, or practicing emotional inference or interpretation. Furthermore, it is possible individuals are using animated GIFs to convey emotional states as they perceive them expressed by actors' facial expressions and overt actions represented. Last, as foretold by Ruggiero (2000), it seems that animated GIF users have created a new way to communicate. Understanding why they do it and how it works would provide solid support for the uses and gratification theory in CMC research.

Media richness theory. Another potential theory in the field of communication that can be used to explore animated GIF use is media richness theory. Media richness theory is an organizational theory proposing that individuals select communication media of sufficient richness to meet the needs of particular communication tasks. Those tasks that are considered more ambiguous, such as negotiation, require more media richness than unambiguous tasks, such as reporting accounting numbers (Daft & Lengel, 1986; Daft, Lengel, & Trevino, 1987).

According to media richness theory, communication media are on a continuum of richness, with face-to-face seen as the richest method of communication and text-only as least rich. Richness is mitigated by the number of possible communication channels a particular form of media allows, so those that allow for words, audio, and visuals are richest and decrease in richness as channels are removed. Furthermore, the authors of media richness theory believe that communication failures can largely be blamed on a mismatch between the media (and its level of richness) and the communication task for which it is being used. If individuals attempt to tackle a highly ambiguous task (e.g., negotiation or conflict resolution) using media that are low in media richness (e.g., email), communication failure is likely (Daft & Lengel, 1986; Daft, Lengel, & Trevino, 1987).

An important part of media richness theory is the idea that individuals consciously evaluate media for richness and select media that are most appropriate for given communication tasks (Daft & Lengel, 1986; Daft, Lengel, & Trevino, 1987). This seems to be the most common criticism of media richness theory, as many scholars disagree that individuals consciously choose the media they use to communicate based on its richness; instead, there are other factors the theory does not consider (Fulk, Schmitz, & Steinfeld, 1990). In the case of animated GIFs being used in CMC, individuals are not choosing different media based on richness, as they are using what Daft, Lengel, and Trevino (1987) considered non-rich media (e.g., discussion boards and text messaging) and are using them for communication tasks of all kinds. Animated GIFs are visual in nature, and by including them, individuals consciously increase the available channels used to create meaning and therefore increase the richness of the media they are using to communicate. According to media richness theory, this should lead to better fit and better communication as a result.

Social presence theory. Another communication theory in the same vein as media richness theory is social presence theory. Originally conceptualized by Short, Williams, and Christie (1976), social presence theory is the idea that individuals consciously evaluate the level of social presence media convey and choose the one that fits their need best. In simple terms, social presence is how present a communication partner is perceived to be. How much social presence is required for a communication task is based on "the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationship" (Short et al., 1976, p. 65). In this manner, individuals assess how interpersonal a communication task needs to be and consciously choose media that will provide the requisite amount. Therefore, the larger the number of communication channels (e.g., visual, auditory, and textual) media allow for, the more interpersonal they will be perceived, and, therefore, the more social presence they can convey. When media allow for the transmission of tone, facial expression, and dynamic cues, they should be perceived as high in social presence, whereas media that do not should be perceived as low in social presence.

Social presence theory, like media richness theory, has received the same type of criticism concerning its insistence that individuals consciously choose the media they use based on their perception of its ability to convey social presence (see Fulk et al., 1990). In this regard, individuals seem to be choosing what both social presence theory and media richness theory consider low-functioning media (e.g., Walther, 1996) when they choose to communicate in text-only media, and it would be naïve or even wrong to assume they are doing so because they do not tackle ambiguous communication tasks or desire to engage in interpersonal conversations with their communication partners. Research has already shown that individuals can and do

engage in interpersonal communication and that low-functioning media can facilitate a limited amount of this type of content (Rice & Love, 1987).

In the past, media have not been as versatile as they are now. Individuals now have the ability to enhance their messages with more than just text in what have typically been text-only environments as demonstrated by individuals using animated GIFs in CMC. It could be that the ideas of media richness and social presence are not necessarily only aspects of the media but also aspects of the CMC user in the form of motivations or drives. It is possible that users of animated GIFs in CMC want to increase the richness of media they choose to communicate with and seem to have a desire to increase the amount of social presence in their chosen communication medium. Because of these connections, both media richness theory and social presence theory may be enhanced by a different viewpoint. Research into why individuals are using animated GIFs in CMC could provide more perspective on these two influential theories of communication, and the fact that no scholarly research has been published on the subject is the single greatest driving force of why it is important to discover the essence of using animated GIFs in CMC.

Research Purpose and Question

The purpose of this research is to determine the essence of the phenomenon of individuals using animated GIFs in CMC. To address this, there is one research question used for this study: What is the essence of the phenomenon of people using animated GIFs in computer-mediated communication? To clarify what *essence* might entail, the following questions are provided for elaborative purposes: How do people perceive this as a form of communication? What are they doing and thinking about while they do it? Why do people do this?

Chapter 3: Methods

Theoretical Framework

To study the essence of animated GIF use in CMC, I must get at the lived personal experience of individuals engaging in the behavior. Therefore, for this inquiry, the constructivist perspective is the best fit. Crotty (1998) summarized the constructivist perspective as one in which individual people construct meaning on a purely personal level. This is juxtaposed with the constructionist perspective, which Crotty (1998) summarized as a belief that knowledge is socially constructed and ultimately influenced by the culture in which one is reared. I do not deny that humans are greatly influenced by their cultures and do indeed make meaning collaboratively with others in their cultures; nevertheless, people are individual beings and ultimately come up with their own personal meanings for everything. This is why individuals can change the religious beliefs into which they were enculturated or through self-reflection can come to view an issue or thing from a perspective they had not considered before.

Because I am most interested in the personal meaning that people construct about the animated GIFs they use in a communicative way and their personal reasons for doing so (a constructivist epistemological stance), phenomenology is the most logical theoretical perspective to follow. Crotty (1998) summarized phenomenology as the aim to find the essence of a thing and specifically relates phenomenology to the constructivist stance when he stated that phenomenology "requires us to engage with phenomena in our world and make sense of them directly and immediately" (p. 79). This is exactly what I seek to do with individuals' use of animated GIFs in CMC. I seek to understand why people are engaging in this behavior and to tease out the essence of what the behavior is and what it means to the individuals doing it so that

I can describe the phenomenon to better understand what it is, why it occurs, and how it could be harnessed in useful ways.

Research Design

My epistemological stance and theoretical perspective as outlined above guided the orientation and direction of this research; therefore, a phenomenological qualitative study is most appropriate for the research question chosen. According to Creswell (2013), the purpose of phenomenological research is to get multiple perspectives from a group of individuals to get at the essence of the phenomena in which they are engaging. To do this, I will need to interview many people who use animated GIFs in their CMC and distill the essence of the experience from their professed beliefs about the phenomena. To do this, I must be vigilant of my preconceived biases and notions. To understand the essence of the thing from the perspective of individuals, I will need to acknowledge and set aside my personal feelings about the thing I seek to study. Because I use animated GIFs in CMC, I have ideas of why people use them and how using them can make people feel. I will need to use a great deal of self-reflection and determination to identify my own thoughts and feelings about it and continually set them aside in a process called *bracketing* (Creswell, 2013). Then and only then will I be able to listen to others who engage in the behavior and get their unfiltered and unfettered opinion on the matter.

According to Creswell (2013), when conducting phenomenological research, I need to ask grand-scale, open-ended questions to get at individual experiences of the phenomena. In this vein, unpacking individual personal experiences about the phenomena should allow me to discover why people do it, how they feel about it, what it means to them personally, when they do it, with whom they do it, and the thought processes they engage in while they do it. These are all questions I must answer to get at the essence of this intriguing phenomenon.

Participants

Participants were recruited using a criterion sampling method. According to Creswell (2013), criterion sampling is a sampling method of finding individuals who meet a specific set of criteria or individuals who have the experience necessary to answer the research questions. As the purpose of this study was to find the essence of using animated GIFs in CMC, it was necessary to identify, recruit, and interview adults who engage in this phenomenon on a frequent basis. For the current study, 15 adults were identified and interviewed. Their detailed demographic information is presented in Table 1 below.

Table 1

Participant Information

Alias	Gender	Age	Race/Ethnicity	Work	Location
David	Male	38	Caucasian	Professional	Ozark, MO
Lance	Male	25	Caucasian	Professional	Broken Arrow, OK
Eric	Male	30	Caucasian	Media Professional	Ontario, Canada
Ben	Male	28	AA/Caucasian	Media Professional	New York, NY
Darren	Male	24	Caucasian	IT	Boise, ID
Carol	Female	22	Caucasian	Movie Theater	Norman, OK
Amanda	Female	19	Caucasian	Retail	Norman, OK
Eva	Female	20	Caucasian	Athletics	Norman, OK
Ellie	Female	21	NA	Music Instructor	Houston, TX
Roxy	Female	19	Caucasian	Gymnastics Coach	Oklahoma City, OK
Renée	Female	19	Caucasian	Retail	Edmond, OK
Kent	Male	21	Caucasian	Student	Norman, OK
Kendra	Female	20	Caucasian	IT	Norman, OK
Martha	Female	22	Caucasian	Student	Tulsa, OK
Bertha	Female	21	AA/NA /Hispanic	Food Service	Stillwater, OK

Note. AA= African-American, NA= Native American, IT= Information Technology

Data Collection

Data were collected using a single semi-structured one-on-one, face-to-face interview with each participant. Interview lengths ranged from 19 to 65 minutes, and the average time was 36 minutes. The interviews were conducted in participant homes, in a conference room at the

researcher's work, and online using web-conferencing software. All interviews were audio-recorded and then transcribed. Interviews included prepared questions, such as "Tell me about your use of animated GIFs" and "Describe your experiences when using GIFs in your conversations," that were designed to answer the guiding research question. Spontaneous probing questions were used to gather further data from comments made by participants during the interviews. See Appendix A for the full interview protocol.

Data Analysis

The analytic approach used for this study was a slightly truncated version of phenomenological analysis method as proposed and explained by Hycner (1985). Hycner's method is a 15-step process that begins with transcription. Once transcribed but before analysis began, I wrote down all my thoughts and feelings concerning the phenomenon being studied in order to understand and set aside any bias or pre-conceived notions, a process labeled *bracketing*. Once completed, I then listened to the recording of the interview to get a sense of the whole experience for each participant.

Once the audio was reviewed several times, the transcript was analyzed line by line, and any unit of meaning was extracted. According to Hycner (1985), "this is a process of getting at the essence of the meaning expressed in a word, phrase, sentence, paragraph or significant nonverbal communication" (p. 282). Moustakas (1994) referred to units of meaning as *horizonalizations* and indicated that "each statement in horizonalizing holds equal value and contributes to an understanding of the nature and meaning of [the phenomenon being studied]" (p. 122). When extracting units of meaning, every complete thought from the participants was pulled out as a whole and set aside for further analysis. In all, 1,242 units of meaning, or horizonalizations, were identified for all 15 participants.

Once all units of meaning were extracted, I went through each one and compared the unit of meaning to the research question to determine if the unit pertained to the research question. Units that pertained to the research question were kept, and units that did not pertain thereto were discarded. Once this process was completed, the units were reviewed again for redundancy. When duplicate units were found, the unit that best expressed the essence of the unit was kept, and the duplicate was discarded. The units that remained are referred to by Hycner (1985) as *units of relevant meaning*, or *invariant constitutes* according to Moustakas (1994). After this process, 999 units of relevant meaning remained, and the process of clustering began.

After bracketing again, the units of relevant meaning were clustered based on their similarity of meaning. Once this process was completed, I determined themes from the various clusters of meaning. All the steps outlined above were completed for each interview one at a time to get a sense of the essence of the phenomenon for each participant. Once completed, a comparison between the themes for all interviews was conducted to determine the common themes across all participants as well as those that are unique to each participant. The final steps of Hycner's (1985) process—the contextualization of themes and the composite summary—are the process of writing up the findings of the analysis and are evident in the findings section.

Trustworthiness and Bracketing

Hycner (1985) has two steps in his process that are specifically designed to increase the trustworthiness of a phenomenological analysis. The first is to train independent judges to verify the units of relevant meaning. In this regard, five of the interviews contained in the current study were verified by an independent judge, and the units of relevant meaning were confirmed with 100% agreement. Although it would have been most beneficial for the same judge to have reviewed all the interviews, time constraints did not allow for it, but the number of interviews

reviewed represents 33% of the interviews conducted in the current study. The second step is to have the participants check the summary and themes, a process called member checking. One of the interviews was member checked, but none of the other interviews went through this process due to time constraints. Finally, to increase the trustworthiness of the current study, the process of bracketing was conducted faithfully and is further detailed below.

I am a user of animated GIFs for communicative purposes, so I have ideas and biases about why I engage in this behavior and what I am doing when I do it. To combat against biased or incorrect assumptions, I took great care to not interject, lead, or otherwise influence participants' opinions or experiences of the phenomena during interviews, and I was consistent in my bracketing activities prior to any data analysis procedures. I would review my findings before each interview and would then write down all that I had found. I would then place them out of my mind to approach each interview with a fresh perspective as if I were doing the first interview on the subject each time. During the interview process, I took great care to speak only when necessary. I wanted to make sure that the participant was sharing their own ideas and that they were not unduly influenced by any statements from me. I never told them what I thought about an answer and never told them how or why I engage in this behavior; in fact, I never brought up any aspect of the process of using animated GIFs or my own personal experience until after the interview was concluded. I did all of this to make sure that I was getting only individual participants' ideas and lived experiences. Although some of my preconceived notions and biases about the use of animated GIFs were indeed confirmed in the findings of the current study, there were an equal number of findings I had not foreseen or thought about prior to finishing the complete data analysis. This bracketing process provides strength to the trustworthiness of the current study.

Chapter 4: Findings

Through the process of data analysis, one main theme emerged from the data: *A picture is worth a thousand words*. This idiomatic expression is a complex idea that reflects the intricate nature of the essence of using animated GIFs in CMC. To better understand and explain the theme, it is helpful to view it as comprising multiple moving parts that come together to form the essence of the phenomenon of using animated GIFs in CMC. The pieces that come together to form the essence of the experience can be thought of as sub-themes and are Choice, Meaning, Use and Gratification. To illustrate how these sub-themes coexist and work together, the following figure is presented:

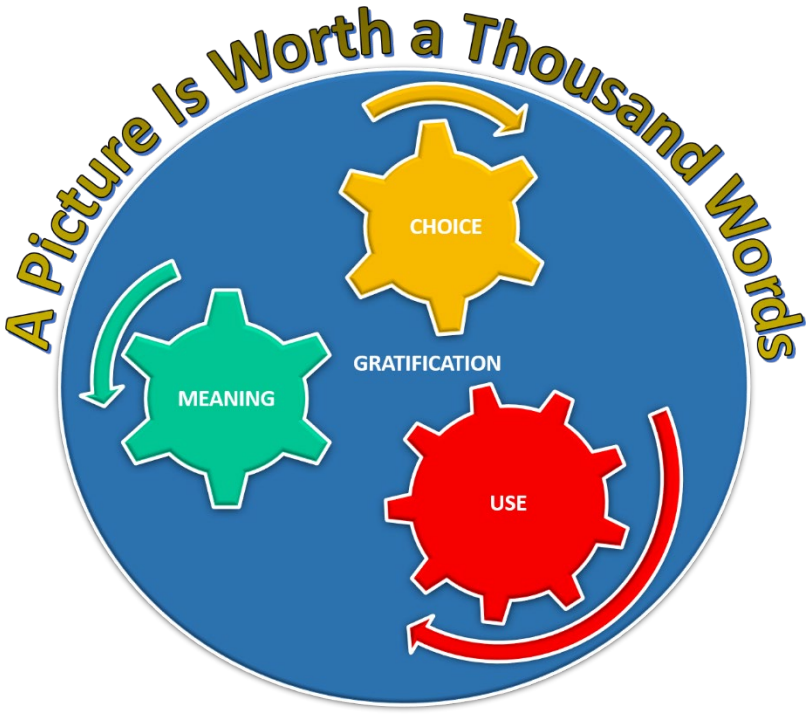

Figure 1. "A picture is worth a thousand words."

The use of gears in the image is purposeful and used to express that the sub-themes are underlying mental processes that work together and are surrounded and lubricated by a process

of gratification, reinforcing the experience for the user. The sub-themes are explained in greater detail in subsequent sections.

Choice: Match Between Mental Representation and Context

According to participants, the process of choosing a GIF to send in CMC largely comprises two parts: (1) a mental representation or imagined response they wish to convey and (2) interpreting the context of the conversation (i.e., who the person is they are conversing with, what they are talking about, etc.). All participants expressed this idea in one manner or another, but Carol expressed it most concisely when she stated:

> [I choose a GIF] basically if it is the reaction that I am thinking of in my head, like how I would react to them personally. Like if they were face to face in front of me, that is what I would use, that is, and as long as the context is right, the facial similarities are right, and the actual words itself—if it has words—are correct, and I would use it.

Ben also did a nice job of combining the explanation of mental representation with the need for contextual fit when he stated, "From there, it's again just… deciding, like which one makes me laugh internally or externally the most when I imagine it as my response. So whichever one is funniest and most relevant, I'll go with."

Some participants were less concise and ended up splitting the two components when talking about how they choose animated GIFs. Eva expressed the two components separately beginning with the idea of choosing a mental representation of what she was trying to convey as expressed when she said, "And then I guess I just pick one that… resembles how I'm actually feeling or what I think is appropriate for what I'm trying to convey." She followed this idea later with the other component, the context of the conversation in which she wants to use it, when she

expressed, “I search for one and pick one that I think would best fit the conversation or that my friend might understand the most, and then I make sure it works, and I send it.”

Eric also separated the two components and in fact compared the mental representation portion of choosing an animated GIF to how he would normally respond during a face-to-face conversation when he stated, “I will then go and pick a GIF of someone laughing or someone reacting in a certain way depending on how I would kind of react in conversation with a face-to-face conversation.” He followed that sentiment up with the contextual fit component when he said, “Something happened at work that day, and I found a GIF of something specific online, and that seemed to fit the situation that me and the co-worker both experienced.”

As described, the process of choosing a GIF to use in a conversation seems to be a multi-layered process that involves identifying context and then matching a mental representation of a desired reaction or response to that context. This process seems to be a meaning-making process wherein the GIF user has a meaning they wish to convey, imagines it in their head, and then selects the GIF they feel expresses the meaning they wish to get across for the conversation at hand. This leads to the next sub-theme to be discussed: *Meaning*.

Meaning: Within GIFs Context & Outside GIFs Context

When individuals use animated GIFs as part of their CMC, they appear to go through a process of meaning making to make sense of the GIFs they send as well as the GIFs they may receive. To construct meaning from a GIF, all participants mentioned several things that they look for. The first factor is the face of the actor in a GIF. All participants mentioned the importance of the emotional expressions presented in the GIFs they use. Eva expressed the importance of the face when she stated:

> I guess it… mainly if I am doing it, I look for a movie I know, or if I can just obviously see in their faces—"Oh, yeah, they definitely look angry"—you know, I just feel like that is what I'm looking for. Like eyebrows pointed down. Eyes kind of squinted. Face in a very angry frown.

Furthermore, the meaning making when reading the faces presented in GIFs seems to be based on a learned sense of emotional attribution. Participants seem to be attributing emotion based on the faces portrayed by the actors in the GIFs, and they construct their interpretation based on their own personal understanding of how to read faces. Ben talked about it this way:

> I get that out of a GIF in the same way that I would get that out of a person, so when you see the emotion in a person's face or in their actions, so too you see them in the GIF. So I just associate the subject's behavior in the GIF with what I already know just from my personal experience either in life or just like from the subject matter.

It is not just the facial expression of the actor in a GIF that individuals use to make meaning when using GIFs in CMC. Individuals who use GIFs in CMC also seem to infer meaning based on nonverbal cues such as the physical actions and behaviors of the actors portrayed in the GIFs they use. Lance expressed the importance of these cues when he explained:

> If (roommate's name) were to respond, if he just were to say NACHOS in all caps, like Ok, or "Nachos" in just proper way, capital N and all that stuff, it's like, OK, he just… he wants nachos. That's awesome, but then he sends me a GIF of Chris Pratt doing some punches and kicks, yelling, "NACHOS!" I know he's super-pumped about nachos. I really feel the sense of excitement that he is telling me about NACHOS!

A few participants were able to succinctly pair the two aspects of facial expressions and nonverbal cues that allow for emotional meaning making. Bertha expressed how she makes

meaning when she said, “Because it is a little animated thing, so you’ll just see them, like, their face contorting in anger or, like, them using their hands.” Renée was similarly succinct when she described how she made meaning of a GIF: “I think the facial expression of the person in the GIF and what they’re doing.**”** Darren also said a lot with few words when he expressed that his meaning making is “based on the actions or facial expressions that happen by the end of a GIF.”

Although facial expressions and nonverbal cues are essential for making meaning of GIFs, it also appears that individuals infer the meaning portrayed in a GIF by considering the context of the conversation. Amanda explained this connection when she stated:

> [The meaning of the GIF is determined by] the context. So if I said, like, “This class is killing me,” like—and then someone—maybe a response to that would be, what response would that be, oh, “Is it a lot of hard work?” and then you would send that [a GIF of a child passed out on top of a piece of luggage being pulled by an adult] like, “I’m so done with it”, like, “Ugh! It’s exhausting.”

Amanda went on to further describe what she meant by context:

> [Context means] the surrounding texts, the person. GIFs are really open to interpretation when it’s nonspecific things, so I think the receiver kind of picks their own context. If it doesn’t quite fit or if it fits specifically, then I think the context is inherent—like, it absolutely fits with the surrounding text. It’s—it fits with [the] person who sent it; it fits with the receiver.

Roxy expressed the importance of context in meaning making much like Amanda when she said:

> Like, it’s kind of like if I was texting someone—or I wasn’t texting someone; they just sent me a random GIF, I’d be like, “What? That’s so random,” but if it correlates to what we’re talking about, then it would be fitting, and the expression that maybe I was making

when I read the text before something or whatever they were talking about and if that's a face that I would make or that I was making, and then they send the GIF that matches what I was doing or thinking or saying, "That is funny," I guess, and it's fitting.

Context seems to have increased importance in the meaning-making process when the same GIF is used to mean different things. Eric was able to succinctly explain the importance of context in meaning making when he stated, "I'd say the context of the conversation dictates what's the difference of the meaning, and I think the other person can pick up on the meaning by the context of the conversation." Renée also indicated the importance of context when she shared, "There's been times—because I'll send some of them to my dad, and then I'll use it in a different conversation with somebody else. It does have different meanings depending on the conversation. Yes, that's true."

Meaning making seems to be an essential part of how animated GIFs are used in CMC, and the process that individuals use to construct the meaning surrounding the GIFs they use is largely personal and internal. By ascribing meaning to the actors in the GIFs themselves, individuals seem to feel that they are conveying this meaning to their communication partner during conversations using animated GIFs. Furthermore, they are inferring meaning not only from the facial expressions or actions in the GIF but also the context of the conversations in which they are taking part. This meaning-making process is also related to how and why individuals use animated GIFs in their CMC, which leads us to the next sub-theme, *Use*.

Use: Delivering Emotion, Humor, and Self-Image

A major reason all participants shared for using animated GIFs in CMC was a desire to express emotion. For some participants, this idea was addressed in a straightforward manner. Kent expressed the idea that animated GIFs are a tool for expressing emotion when he said,

"Personally, they're easy to use tools to express emotion." For Martha, "it's a fun way to convey emotions." Other participants went even further, indicating that the emotional expression was a major reason, but beyond that, the animated GIF helped them to express their emotions better than with just text. Kendra succinctly expressed this when she stated, "I think they help get meaning across better, feelings across better." David had much more to say on the subject and explained his reasons for using animated GIFs to express emotion thusly:

> I think it—for me, it's expressing an emotion that I just can't do via text message whether it's being very excited about something, very disappointed, frustrated, a strong desire to go do something, whatever… whatever it is. I'm looking for a way to communicate that beyond just a text message, and I don't want to or don't have the ability to or the time to pick up the phone and make a call. So for me… I think it stems from the inability for me to interact with someone in a more preferable way: face-to-face, videoconference, telephone call, anything else that are other than text-based… I want to express emotion, or I want to connect better and be able to get my emotion or my feelings across, and so I'm looking for a way to do that again in a very limited vehicle and the vehicle being text messaging.

It is likely that a desire to express emotion is a large reason for why people are using animated GIFs in CMC.

Another reason individuals seem to be using animated GIFs is for humor. Ellie expressed her use of animated GIFs for humor when she said:

> And just to make people smile is the other part. Because if I can really speak to someone through a GIF and really make them laugh, literally LOL, then it's totally worth the time to sit there and look through all of these GIFs and find the perfect one.

Amanda also succinctly explained her use of animated GIFs for humor when she stated "[I use GIFs] to be funny. To show that I'm taking part, actively, in a conversation but mostly to try to convey a sense of humor."

For a few participants, however, using animated GIFs for humor went beyond just a driving force of behavior and seemed to be connected to how they want to be perceived. Roxy explained it this way:

> They are something that I occasionally use as a way to... I use them as a way to make other people laugh. That's something I really value is bringing sunshine to the people, so maybe it's like my GIF that I add is something that will make them smile or make them laugh, so that's probably the meaning behind it more so than anything else is just to get someone else's positive reaction to whatever I send.

Lance was also quite direct when he detailed his reason for using animated GIFs in CMC. For him, humor seems to be the primary reason he uses them but not just for the joke itself. It seems to also be tied to the gratification he receives from it. He described it this way:

> It's mainly for humor to really strike at the fact that it's like, "Hey, look! I can be funny!" Here's this GIF that shows that I'm quick and witty. I guess that's kind of the things that I grab at for that.

In this way, humor appears to be a major reason why individuals are using animated GIFs in CMC and seems to be connected to participants' meaning making and the gratifications they receive from it. It is likely that humor or being perceived as humorous is a pleasurable experience and one that seems to drive a lot of animated GIF use in CMC. More on this in the gratification section below.

Another reason individuals seem to be using animated GIFs in CMC is to clarify the meaning of a message or the intention of the person sending it. Eric described how the meaning attributed to or perceived in a message can be clarified:

> You could say something via text, and it can come across two ways. It can come across that they're kidding, or it can come across that they're being serious. Sometimes, I feel GIFs, as emojis do, can help the reader understand what the sender is feeling or what they're trying to portray.

Carol elaborated on how animated GIFs can be used to clarify the meaning of a message:

> […] I see them as like how the people would react if they were right in front of me instead of saying, "Oh, my gosh," because that could be... O.M.G. could be taken in so many different directions. It can be surprise, it can be horror, it could be disgust, it could be laughter, whereas if I see an O.M.G. GIF that [...] has the person's face or has like the emotion of it is showing me, I can understand absolutely what they were trying to portray and stuff like that, so that is a benefit of it.

Martha seemed to describe a similar idea:

> [Animated GIFs are] a fun way to show what you're trying to mean. So if you're trying to be like Sasha Fierce and just own it, you can be like me on Wednesday walking into my exam. So I think it gives a picture to your description. So it's kind of nice.

Darren explicitly explained how animated GIFs help with clarification of message:

> I do it because I value clear and concise communication as one of the most important things in my life and in human existence as a means of connections, as a means of storytelling, and as a means of trying to achieve perfect telepathy, which I think is basically goal of language and communication. But sometimes, words just aren't enough,

> so we have facial expression. But sometimes words in facial expressions aren't enough, so we have body language, and sometimes that isn't enough, so we have sets with props and scenarios that are ridiculous and silly and exaggerated.

It is likely that due to the ambiguous nature of words in a text-only environment, having a visual depiction of the facial expressions or actions of a person may help clarify the meaning behind the communication and seems to be a major driving force of using animated GIFs in CMC.

Finally, it appears that a major reason of use for animated GIFs in CMC is motivated by a need to compensate for a lack of socioemotional or nonverbal information in CMC. The individuals interviewed mentioned that the text medium reduces cues typically used to convey accurate meaning. Words can be ambiguous and obscure the original intent of the sender. Animated GIFs, with their ability to transmit meaning made about the emotions expressed within them, should allow for better transferal of emotion and seems to be a very prominent reason why individuals use them. Amanda expressed this idea quite clearly:

> I feel more connected when using it. It's more like a face-to-face conversation. I don't want to say texting is impersonal, but occasionally it can be. I feel like GIFs kind of bring back the personal side to it because you can see facial expressions even if it's not from the person who sent it to you. It is—even if you don't see the person sending it, you know that it's from the person sending it to you, and you can see more than just letters. You can see faces or actions.

Eva gave a lengthy description of the phenomenon and even included an example of how this happens:

> I guess they just mean another way of just conveying how you're feeling or something you're thinking to someone else instead of just through words alone. Like if being able to

> see a picture that may show a little more emotion about what you're saying because if you say, "LOL," someone can be thinking you're sarcastic just by the text message, but if you send a picture of someone actually laughing and enjoying something, then I think that would help show, "Oh, they actually think it's funny." No, they're not being sarcastically, like "Oh, yeah… that's funny."

Renée also had a good description of how animated GIFs can be used to compensate for the lack of social cue transmission:

> Because I think with texting, which, obviously, it's not your face in the GIF, you're not the person doing whatever it is, but with texting, sometimes it's hard to express any emotion because you can't see anything. I think that GIFs are a good way to show people a little snippet of what you're meaning or the emotion behind what you're saying if that makes sense.

Finally, David felt the limitations of the text-only medium and indicated it is a major reason for his use of animated GIFs:

> For me, I think about them as a way for me to express emotion to someone in a text message that I just can't do. I can't re-create that verbal piece. I can't do the body language piece with them, so that's really where… why I like them.

These insights by the participants in the study paint a rich picture of the use of animated GIFs seemingly being a response to the limiting nature of the texting medium and their desire to increase their ability to get their meaning across.

Participants gave many reasons for using animated GIFs in CMC, and it was no different in terms of the feelings or emotions they feel surrounding the experience itself. There is a reason they are doing this, and it seems that it provides the participants with particular types of

gratification that likely support and/or drive their use of animated GIFs in CMC. This connection is examined in the final sub-theme: *gratification*.

Gratification: Pleasant Emotions, Social Bond, and Self-Image

There seem to be several indicators that individuals are deriving gratification from using animated GIFs in their CMC. The first and most basic is that using animated GIFs in CMC is a positive experience for all participants. Kent stated simply, "[I feel] joy or—like, depends on the circumstances. Like, yeah, probably joy based off the what I pick for GIFs." Lance described it this way: "It's definitely a positive emotion. Definitely. Funny. Happy. That's definitely the two emotions that typically come along with GIFs in my experience." Kendra indicated her enjoyment in saying, "I get kind of happy. I just think they're really fun, you know?" Bertha was very matter of fact when she stated, "I feel relaxed, and, like, it's fun, and it brings me pleasure." Finally, David expressed his pleasure in using animated GIFs when he declared, "I find enjoyment in doing it." In all, it seems that individuals using animated GIFs in CMC see it as an enjoyable experience, and it is likely that the positive experience they are having is driving their use of GIFs in CMC, is driven by their use of GIFs in CMC, or is a reciprocal feedback loop comprised of both.

Another indicator that individuals seem to be deriving gratification from using GIFs in CMC is likely from a shared connection to a particular type of media or person. As GIFs are most often pop-culture pieces from movies or TV shows, participants seem often to want to share them with others who may like the same media. Eva expressed this shared connection to media:

> My friend and I have a conversation about a movie scene or something like that, and if we're all of a sudden talking about that scene in the text message, I may be just funny and

> bring in a GIF from that scene from that movie and send it to her, and we just have a laugh about it.

Carol also expressed the importance of a shared interest in a particular type of media:

> If [...] I know the person likes them and will respond back with them, I will use them. Mostly, I will use them when it is something really shocking or if I am nerding out, you know, and stuff like that. I will send, like, a quote from a TV show that my friend and I like with a GIF, and they will fangirl with me—you know, kind of stuff like that. They will participate in my fun and stuff that I am having and all because of a GIF form.

However, not only the media itself but also the connection with other individuals can provide a sense of gratification through a shared experience. Martha reminisced on how a shared connection with an old friend can lead to animated GIF use:

> That is a specific one for one friend. Basically, probably four or five weekends out of the summer, in middle school, we would go to her lake house. She was a competitive water skier. So we got to see her do the tricks, and then we got to try it with her dad driving the boat. Then we went to different high schools, so we're still friends but it's—obviously, I don't see her all the time. So I guess the water skiing was a memory that I had with her and our friends from middle school. That would make me want to send that to her [GIF of squirrel water skiing] because we would do that activity. Even though we're not the bestest [*sic*] of friends now, we're still friends.

This shared experience of animated GIF use can also create a sense of closeness. Ellie explained it this way:

> Or it's a… a reassurance that they kind of understand me in a weird way. But it's just really funny. And it shows me that they want to make me laugh and smile, and they want

> to have a good conversation that's witty and not just "Hi, how are you today? That's cool, bye." It shows me that they want to actually engage with me as a person and not just on a surface level.

Kent explained the shared experience of gratification most succinctly when he stated, "It's kind of a cultural moment, a bond with the person you're communicating with." The gratification received from sharing specific content with a person close to the participant seemed to be a driving force in why the experience is so positive.

A final indicator that individuals seem to be deriving gratification from their use of animated GIFs in CMC is an expressed desire to portray themselves in a certain way or be perceived a certain way by others. Ben elaborated on this desire while also making meaning:

> I just… I love them. I love the joke they provide. Like, everyone can be its own type of laugh for not just myself but for whoever I'm conversing with but without necessarily losing my voice in this this discussion, so being able to kill two birds with one stone by responding to a question or making a point to some degree while still being funny, like I like to be.

Lance also expressed this idea of coming across a certain way when he responded to a question of how using animated GIFs in CMC makes him feel:

> I typically feel cultured is one way I feel. It's like, "Oh, look what I know; look what I pulled out of my hat and threw out at you right there." And funny, so maybe a little resourceful.

For Ellie, it was all about being perceived as witty or smart. This is clearly expressed when she stated:

> I'll usually feel pretty witty, like I said earlier, if I can make a GIF, like, the whole package. Like, it's funny, it pertains to the situation, and this person has back knowledge that pertains to this GIF itself, then I'll feel pretty good about myself. Pretty smart, pretty witty.

Amanda expressed the gratification of being perceived a certain way:

> I tend to think of people who use GIFs in conversation as more clever [*sic*] because they're like, "Oh, I'm going to use that there," because they have something on their mind instead of just a normal response. And that's something that I don't really think about with emojis either. For some reason, I tend to think people who use GIFs are more clever than people who use emojis just because I feel like they go through more work to find a fitting response.

All these various gratifications, including positive experiences using GIFs, the shared experience of a particular type of media with a specific person, and the desire to be portrayed or perceived a certain way, seem to drive and support the process of using animated GIFs in CMC. It is likely that these gratifications are a major part of the "worth" in the overall theme of A Picture Is Worth a Thousand Words.

The Essence of Using GIFs in CMC

The sub-themes discovered during this study can be grouped into two different types of description of the essence of using animated GIFs. The first is the textural description. Both *choice* and *meaning* present as the textural description of the essence of animated GIF use, as they are the *what* of the experience. Both themes involve the creation of meaning through the context of a conversation, and the themes seem to reinforce each other. People seem to choose animated GIFs to use in conversations by deciding on a mental representation they wish to

convey and then selecting the GIF that fits into the context of the conversation as the individual perceives it. To do this, of course, the individual goes through a process of meaning making, reading the context of the conversation and the facial expressions and social cues they imagine conveying and then matching both of these to a particular GIF they choose to send. In this way, what individuals are doing when they choose, send, and interpret GIFs is in and of itself a reciprocal reinforcing process.

The second type of description is the structural description made up of the *use* and *gratification* sub-themes. Both of these sub-themes deal with the *how* and *why* of the experience of using animated GIFs in CMC. Individuals seem to be using animated GIFs not only to better express their emotions largely for humorous purposes but also to clarify their meaning as a form of compensation for the limiting nature of CMC. So *how* they use animated GIFs drives the experience of using them, and this engenders certain feelings of gratification, which is *why* they use them. For example, using animated GIFs for humor seems to provide both feelings of enjoyment and self-image reinforcement for many participants. Lance expressed it this way:

> It's mainly for humor to really strike at the fact that it's like, "Hey, look! I can be funny! Here's this GIF that shows that I'm quick and witty." I guess that's kind of the things that I grab at for that.

In the above quote, Lance indicates that he uses animated GIFs not only to add humor and levity to the conversations he has but also to portray himself to others as "quick and witty". This reinforcement of a self-image is a large part of the gratification process and seems to be a major driving force for sustaining their use in CMC. For a concise view of the types of significant statements that resulted in the creation of all four sub-themes in the current study, please see Appendix B.

Finally, the overall finding of this study and the answer to the research question of the essence of using animated GIFs in CMC seems to be that it is a complex meaning-making process involving the selection of visual media for better expressing emotional content in a primarily text-based environment that provides individuals with feelings of gratification that likely reinforce and drive the process. In the end, the essence of using animated GIFs in CMC was summed up quite succinctly by Eric when he said, “Well, they say a picture is worth a thousand words. How much is an animated picture worth?” The answer to that question, it seems, is quite a lot.

Chapter 5: Discussion

The findings presented in the previous chapter are for a media that is just now beginning to be studied, and there are no theories or specifics about animated GIF use in CMC in the existing scholarly literature. However, there is a wealth of literature on communication and similar media that seems to correspond to the findings of the current study. Although the essence is a combined process, there are ways in which the sub-themes described can be connected to existing literature that is similar in nature. To provide some structure to the discussion, the sub-themes were grouped in pairs based on the type of description they represent.

Textural Description: Choice and Meaning

Much of the essence of using animated GIFs in CMC, specifically the *what* of the experience, centers on the selection and attribution of meaning to visual representations of facial expressions and actions. There is a large body of literature on the importance of the face in emotional attribution as a predominant feature that human beings use to infer emotion (e.g., Ekman, Freisen, & Ancoli, 1980; Izard, 1990). Furthermore, according to one of the preeminent scholars in the field of facial expression and emotional attribution, there are basic recognizable emotions (anger, fear, enjoyment, sadness, and disgust), and they are most commonly expressed through the look of the face (Ekman, 1992). It seems that individuals using GIFs in CMC are inferring the emotion represented by the facial expressions of the actors in the GIFs themselves and are using those facial expressions to both infer and express the same emotion as if they were the actor in the GIF when they send and receive GIFs in CMC.

This type of meaning making has grounding in the communication literature as well, and the nonverbal behaviors and actions portrayed by people when communicating are often called *dynamic cues*. According to Sproull and Kiesler (1986), dynamic cues are used during a

conversation to transmit meaning and portray the social context of the conversation above and beyond what is being said in the words themselves. Furthermore, according to McGuire (1974), we make inferences of other's internal states based on overt actions or behaviors. Another way this has been described in the literature is as contextual factors. Contextual factors of individuals such as clothes, location, bearing, and self-expression are important in meaning making in interpersonal interactions (Ekman, Friesen, O'Sullivan, & Scherer, 1980; Mehrabian, 1972). It is likely that individuals who use animated GIFs in their CMC are making meaning based on these contextual factors or dynamic cues they see in the GIFs they choose and are using these cues to express the meaning they are trying to get across to their communication partners.

Structural Description: Gratification and Use

The *use* and *gratification* sub-themes represent the *how* and *why* of the experience of using animated GIFs in CMC. In this way, they are intricately related and, in many ways, represent a feedback loop wherein use begets feelings of satisfaction or enjoyment, which then reinforces use, and so on. By using animated GIFs to communicate with others about shared interests in media, individuals seem to be tapping into the uses and gratifications theory, first presented by Katz, Blumler, and Gurevitch (1974). According to the uses and gratifications theory, individuals use media to connect to others. McGuire (1974) went further to indicate that there is gratification in the shared interest in a particular type of media, such as a television show or a movie. It is likely that part of the reason that individuals use animated GIFs is that they want to share their enjoyment of a particular kind of media, and animated GIFs provide an easy method for doing so.

By using animated GIFs in their CMC, individuals seem to find enjoyment in expressing themselves and are looking for a way to get more of themselves and their personality to come

across in their text conversations. McGuire (1974) indicates that people get gratification by expressing themselves, and one such way these individuals express themselves seems to be through their use of animated GIFs. Furthermore, when discussing the use of CMC systems, Rice and Love (1987) stated that "CMC systems can support socioemotional communication and the communication reflects the inherent communication traits of the users" (p. 102). Individuals using animated GIFs seem to be gaining enjoyment by expressing themselves using GIFs in CMC, and it is probable that part of that enjoyment stems from their perception that they are better able to express their own personal communication traits by using animated GIFs and thereby enhance their perceived self-image through GIF use.

The absence of nonverbal communication aspects is a major issue in CMC in large part because CMC does not convey "nuances of meaning and frame of mind" (Kiesler et al., 1984, p. 1126). Furthermore, words can be ambiguous when we do not have the nonverbal information of traditional face-to-face speech interactions, such as when communication is purely text-based (Reid, 1991). Sproull and Kiesler (1996) echoed this, indicating that text-based CMC reduces dynamic cues such as smiling while nodding indicating agreement or baring of teeth and waving arms indicating anger. Although there is no research specifically concerning GIFs to indicate that they are being used as a form of compensation, there is mention of emoticons being used this way. In researching CMC, MacKinnon (1995) found that emoticons were a method of compensating for the lack of social cues in written communication. It seems quite likely that a major reason that individuals are using animated GIFs in their CMC is to compensate for the lack of social or dynamic cues to better express their emotions. Furthermore, animated GIFs likely do a better job at this than emoticons or emoji, as GIFs are predominantly visual representations of

actual human faces and behaviors as opposed to textual or pictorial representations of human expression.

Limitations

The single greatest limitation to this study is the homogeneity of the sample. Although the sample is relatively balanced with 40% males and 60% females, the original intention of getting half of the participants from the undergraduate research pool at the researcher's university and the other half from online forums such as Reddit.com was not fulfilled. Individuals on Reddit were difficult to recruit, with many people simply not responding and still others who agreed to do the interview not returning future communication attempts to set up the interview. The other notable limitation included was the one mentioned in the Methods section, a lack of time for getting participant feedback on relevant statements. Although some may view the number of interviews as a limitation, saturation of the overarching theme as well as individual sub-themes was achieved by the fifth interview. Subsequent interviews provided further evidence of the same type, and the total is within the range recommended by Creswell (2013) for phenomenological inquiry.

Last, the findings of the current study were limited in scope to only the positive aspects of the GIF experience with no clear consensus of what constitutes, causes, or has an effect on negative experiences with GIFs. It would be a major oversight not to consider the potential negative aspects of communicating this way, especially when encouraging their use in online learning contexts. The current study provided solid evidence that animated GIFs can be used to benefit communication, but the limitations or what instructors should be wary of with this new type of communication technology are currently unknown.

Implications for Education

Humor. A major reason provided by participants in the current research study for their use of animated GIFs in CMC was expressing humor. Beyond simply being an enjoyable human experience, humor has been shown to be useful in many ways, especially when it comes to education. Wandersee (1982) posited that it is generally accepted that humor can be used intentionally to increase learning in the classroom, and Check (1997) remarked that "there is a strong indication that there is a high positive correlation between effective instruction and the amount of humor that is used in the classroom" (p. 165).

Even more in depth was a narrative-analysis by Banas, Dunbar, Rodriguez, and Liu (2011), wherein researchers reviewed 40 years of literature concerning humor in instruction and distilled several recommendations for instructors. They found that "positive, non-aggressive humor has been associated with a more interesting and relaxed learning environment, higher instructor evaluations, greater perceived motivation to learn and enjoyment of the course" (p. 137) and that there is solid evidence that humor when used properly can increase recall and assist learning. Perhaps most interesting and pertinent to the current research study was the call to other researchers in the future directions section of the review wherein Banas et al. (2011) called for research into the link between technology and humor and stated specifically that "future research is needed to examine the interaction of humor and technology on instructional outcomes" (p. 138).

As a major finding of the current study is that individuals seem to use animated GIFs to interject humor into CMC, it follows that they would serve as a perfect vehicle for answering the call for future research put forth by Banas et al. (2011). If used appropriately in accordance with recommendations, then animated GIFs could be a powerful tool for increasing humor in an educational context. With the increased use of CMC in online courses, animated GIFs seem ripe

for scholarly inquiry regarding their use as devices for injecting humor. Humor is not the only area of educational research where animated GIFs seem to be poised to make an impact, however.

The findings of the current study are that individuals using animated GIFs seem to be using them as a method to enhance the emotional impact of their messages with conversation partners and, they select and send GIFs that display the visual nonverbal behavior they would want to convey if they were having a traditional face-to-face conversation. In this manner, it could be argued that individuals using animated GIFs are increasing the amount of richness or social presence being conveyed by using new communication technology to send the nonverbal communicative aspects traditionally missing from text-only CMC. There is one particular realm, in which individuals are constantly searching for ways to enhance the communication taking place, in which predominantly text-based CMC has become increasingly common. Online education is one such place where finding ways to enhance CMC would be of particular value, and there is one phenomenon in the field that seems to fit quite readily with findings of the current study: *teacher presence*.

Teacher presence. Much of the communication in online courses is predominantly text-based, facilitated using discussion boards, email, chat programs, and feedback fields inside learning management systems. As mentioned previously, much of the early scholarship concerning the effects of text-only communication was conducted by scholars in the field of communication. Short, Williams, and Christie (1976) were some of the first to explore the effects of text-only communication and came up with the social presence theory. Taking the concept of social presence and pointing its lens at education, Garrison, Anderson, and Archer (1999) developed the community of inquiry model for learning in the online environment. The

community of inquiry model is made up of social presence, cognitive presence and teaching presence, all of which are necessary for creating a quality online educational experience (Garrison et al., 1999).

Cognitive presence is explained as the more academic aspects of the model, whereas social presence deals with emotional expression and group cohesion. Teaching presence deals with things like management of instruction, helping students to build comprehension and directly instructing students (Garrison et al., 1999). In a follow-up article, Anderson, Rourke, Garrison, and Archer (2001) defined teaching presence "as the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (p. 5). Furthermore, they described online teaching as incredibly complex, that the tool itself (e.g., discussion board, chat program) can do nothing without an engaged instructor, and that much of the challenge "is to develop compensatory behaviors for the relative lack of nonverbal and paralinguistic communication in a text-based medium" (Anderson et al., 2001, p. 14).

Teaching presence was quickly picked up by other scholars who began to explore the concept. Aragon (2003) suggested prescriptions for increasing teaching presence using discussion boards. The discussion board takes the place of typical verbal interaction between teacher and students in the face-to-face classroom; therefore, it is an important place for an instructor to be present. A few of the prescriptions given were to use humor, use emoticons, provide feedback, strike up a conversation, be prompt, and share personal stories (Aragon, 2003). According to Mandernach, Gonzales, and Garrett (2006), the keys to increasing instructor presence are to take an active role in the facilitation of discourse and to maximize instructor visibility. On the measurement front, Shea, Fredericksen, Pickett, and Pelz (2003) began working

on a method for measuring teaching presence. They piloted their first version of a Teaching Presence Scale (TPS) including items for measuring three components from the perspective of both instructors and students: instructional design and organization, facilitating discourse, and direct instruction (Shea et al., 2003).

In a follow-up validation study, Shea, Li, and Pickett (2006) collected data from a much larger sample, and the TPS validation resulted in only two components: (1) the instructional design and organizational component and (2) the directed facilitation component, which was a combination of the direct instruction and facilitating discourse components found previously. Arbaugh and Hwang (2006) attempted to validate the original pilot scale (Shea et al., 2003) and, using factor analysis, seemed to find evidence for the original three components of the TPS. However, an examination of the methodology showed that statistical analyses were run with questions assigned to incorrect components, thereby casting doubt on the validity of the analysis. For example, in the correlation matrix, Arbaugh and Hwang (2006) grouped a facilitating discourse question with the instructional design and organization questions when running correlations.

In a follow-up verification study, Arbaugh (2007) ran further analysis finding support for the two-component structure of the TPS as presented by Shea et al. (2006). Furthermore, it was found that it might be more appropriate to call the phenomenon *teacher presence* rather than *teaching presence*, indicating it is more about the student perception of the person teaching than student perception of the teaching itself (Arbaugh, 2007). Other scholars have adopted this stance, and a good definition for the concept of teacher presence is well articulated as "the virtual 'visibility' of the instructor as perceived by the learner" (Baker, 2010, p. 5).

With a pedigree built from some of the earliest work in CMC, further theoretical development by scholars in education, and validated measures with evidence for distinct components, teacher presence appears to be a verifiable educational construct and is "an emerging research area for the field of online learning" (Baker, 2010, p. 5). Not only does teacher presence exist, but it also appears to have powerful effects on student experiences in online courses. Teacher presence can have a positive effect on the learning, thinking, and educational motivation of students (Baker, 2010), and instructor presence is significantly impactful on perceived student learning and student satisfaction in online courses (Gray & DiLoreto, 2016). Furthermore, in online courses, it is important for an instructor to post frequently, invite student questions via multiple channels, respond quickly to student feedback, and demonstrate caring to students as it can increase student performance (Jaggars & Xu, 2016).

With the promise of increased student performance, learning and motivation, scholars are actively trying to increase teacher presence in a variety of ways. As teacher presence is grounded in the idea of social presence theory, many researchers are attempting to increase the communicative channels in their online courses to increase their teacher presence in online environments. One method for doing so is the inclusion of audio in online courses in the form of instructor recordings in discussion boards and feedback events (Dringus, Snyder, & Terrell, 2010; Ice, Curtis, Phillips, & Wells, 2007). Although the study by Dringus and colleagues (2010) was just a pilot with a very small sample size, students indicated that the inclusion of audio in the discussion boards was a welcome addition. In a similar study by Ice et al. (2007), it was found that audio feedback instead of text-only feedback was perceived to be more effective for conveying nuance, was associated with feelings of more involvement and better interactions, was associated with better retention of information and that the instructor was perceived as caring

more about the student. Furthermore, audio comments increased the rate at which students applied the content in class projects by 300% and significantly increased the level at which students applied the content. In the end, it was found that audio made the class more real for students as it decreased social distance (Ice et al., 2007).

Another method of increasing the communicative channels in online courses is using asynchronous video to increase teacher presence. Borup, West, and Graham (2012) found that the inclusion of asynchronous video in online courses had a substantial impact on how visible and present students perceived their instructor to be. The reasons that students gave for why the video increased teacher presence were that students felt that the instructor's emotional expression and humor were transmitted and therefore felt more real (Borup et al., 2012). In addition, Risquez and Sanchez-Garcia (2012) noted the importance of increasing teacher presence through the inclusion of images, emotional expression, and humor.

By increasing the communication channels used, instructors can make themselves more visible to students in their online courses and therefore increase their perceived teacher presence. As learning management systems get more technologically advanced, more methods for communicating with students will be created, but instructors will have to adapt as well. Indeed,

> as CMC continues to change and evolve with the development of new ways to communicate […] practitioners will continue to find new ways to adapt how they communicate in order to project themselves as being "real" and to connect emotionally and socially with others (Lowenthal, 2009, p. 133).

This statement is at the heart of teacher presence concerns in online environments, and as demonstrated in the current study, animated GIFs seem a candidate for doing just that.

Of course, the when and where of GIF use in online courses is something that will require scholarly investigation. They could conceivably be quite useful for clarification of instructor messages to students in discussion boards or perhaps for softening critical individual feedback to students. Other ways instructors could use them might be as icebreaker images in announcements within a learning management system (LMS) or adding levity and humor to lectures. If chat functionality is available within the LMS, then GIFs could provide a powerful method for instructors to enhance their sense of presence when communicating with students. That being said, there are no clear-cut guidelines for how many GIFs are appropriate, in what situations they would be of most benefit, or how often they should be used. Frequency and appropriateness are both aspects of using animated GIFs that should be explored in future research to truly understand their power and limitations in online educational environments. Indeed, it is quite possible that too many GIFs, too frequent of usage, or even inappropriate usage could decrease student attention and learning or cause students to not take the course seriously.

It is not just traditional online educational settings however, as the same sort of concerns remain for other types of educational efforts as well. Professional development trainings as well as continuing education online contexts have the same considerations with regards to digital communication when conducted online. As demonstrated by AMD Ryzen (2017, August 10), animated GIFs are already being used in the professional realm, it stands to reason they should be studied there as well.

There are other aspects of education that animated GIFs may affect that should be studied as well apart from solely communicative functions. Whether or not animated GIFs may affect student motivation, whether their use causes undue cognitive load inside lessons, or when used in presentations, and whether or not their usefulness as methods for expressing emotion will affect

student learning are all educational considerations that deserve further study. The potential effects of animated GIFs in educational settings are almost limitless and as such deserve inclusion in future educational research. More work in this area should focus on how much and at what point animated GIFs are most beneficial and when too much animated GIF use detracts from educational pursuits in order to develop guidelines for best practices of animated GIF use for education.

Finally, the current study found no consensus of negative experiences with animated GIF use, which presents a significant gap of some import, especially when considering their use as a method for injecting humor or social presence into online instruction. It is quite possible that there are negative experiences not captured in the current study, which could negatively influence student attention and learning. Furthermore, the type of self-image creation of instructors using animated GIFs has the potential to create problems in terms of professional expectations and communication norms in higher education. Care should be taken by instructors using animated GIFs in their online courses, especially when considering the potential negative sides of humor (Banas et al., 2011).

Implications for Theories of Communication

In answering the research question of what the essence of using animated GIFs in CMC is, it seems likely that it is done to compensate for the lack of social or dynamic cues to better express emotions. This has potential ramifications for two prominent theories in the communication literature: media richness theory and social presence theory.

Media richness theory is a theory that individuals consciously choose a CMC medium that has the desired amount of richness to match with the ambiguousness of a particular communication task (Daft & Lengel, 1986; Daft, Lengel, & Trevino, 1987). Media richness is

seen as a continuum with face-to-face communication being the richest (i.e., conveys the most information) and text-only communication being the least rich. According to the theory, individuals will choose a medium that provides the necessary richness to handle a specific communicative task. Communication tasks lie on a continuum of ambiguity on which tasks such as negotiation are seen as more ambiguous, whereas face-to-face would be a more desirable medium than disseminating procedural steps, where email would be more appropriate (Daft & Lengel, 1986; Daft, Lengel, & Trevino, 1987).

A similar theory by Short, Williams, and Christie (1976) called *social presence theory* posits that individuals consciously choose a communication medium that matches the desired level of social presence they feel a task requires and that the level of social presence of a medium is determined by the perception of the individual. Much like media richness, it is the number of social cues perceived to be required by users that can be transmitted through a certain medium that determines the amount of social presence a medium can convey. Therefore, individuals will choose a medium for communication they deem as having the necessary social presence to convey the message they want to send (Short et al., 1976).

Since those that use animated GIFs in CMC are primarily using the text messaging medium, as many people do today, they are likely not consciously choosing the medium based on its inherent ability to convey social presence or matching the medium itself with an appropriate communication task. Rather, they are likely compensating for the lack of inherent social presence and media richness by adding it themselves. In this manner, the desire for social presence and media richness does not seem to drive users' choices of communication media as the communication theories surmise; instead, it seems to be an internal desire of individuals. Individuals using animated GIFs seem to want to increase their virtual presence and, ultimately,

they have found ways to satisfy this desire by adding the social or dynamic cues any way they can, including using new communicative tools in their preferred medium. It is an important distinction that may have ramifications for the current theories of media richness and social presence and is another reason that animated GIFs should be studied in more depth.

Future Directions for Research

Two major areas in need of future research are whether animated GIFs can be used in CMC contexts to increase instructional humor and whether the use of animated GIFs in online classrooms will indeed affect perceptions of teacher presence. These two ideas are highly related, and studies should be conducted to determine if those instructors that use animated GIFs in their communication with students are perceived as being more present and more humorous than those instructors who do not. Based on the findings of the current study, animated GIFs seem well suited for not only increasing the perception of teacher presence, as they seem to be able to convey more social cues and thereby increase the quality of the communication occurring in CMC environments, but also injecting humor into online classrooms. Rigorous experiments with control groups and treatment groups could provide needed quantitative evidence of the value of animated GIFs in increasing perceived teacher presence and humor.

Care must be taken, of course, as inappropriate usage could create problems in online courses where none currently exist. Depending on the appropriateness of GIFs, their impact in the online environment, while potentially positive, could just as easily cause issue. Therefore, just as the potential benefits of using animated GIFs should be studied, so too should research into the negative aspects of GIF use be conducted. Furthermore, the findings relating to the self-image seem ripe for further investigation. Instructors using animated GIFs in online courses may

have a vested interest in being perceived a certain way by their students, and both the positive and negative aspects of this phenomenon should be explored.

Another direction of potential future research stems from a reason of use provided by two individuals in the study that needs to be discussed. For two participants, a reason of use not mentioned by any other participants was that the animated GIF itself seemed to act as a buffer between the participant and the receiver of the message. Ben explained this idea thusly:

> One of the benefits is largely that if I use a GIF maybe to capture my response to something, I'm not putting as much of myself out there. […] There's less risk involved that way if I am not the… if, like, I'm not sharing my actual, like, thought to word feelings on things but instead using these GIFs, and they don't go over well, well, then, it was the GIF that didn't go over well. It wasn't my thought or feeling that didn't go over well.

Martha's description of this was slightly different but nonetheless clear:

> [I use GIFs when…] if there's an awkward pause in the conversation, and then sometimes if I don't want to respond to a question, like a group text, I'll just send a GIF and hope that I won't have to respond for another little bit if it's a question I don't want to answer.

She clarified further by saying:

> Yes. I've definitely done that [used a GIF to discourage further discourse]. I'm horrible with confrontation, so when a confrontational question is asked in a group text, I'm more likely to send a GIF rather than my exact response just because I think there's better ways to handle that than in a group text, and that has happened a few times.

For Ben, it is very likely that he had this reason whereas the other individuals did not because he was the only individual to discuss his use of animated GIFs with strangers on Facebook and message boards. When using them with strangers, he seems more likely to have this as a reason of use than if he is using them with friends, where his intention is for the message to come from and be attributed to him. Martha, on the other hand, does this with friends, family members, and the like, so the phenomenon does not seem to happen only when individuals are communicating with strangers. This idea of creating distance between self and message is present in the literature where CMC interactions "redirect attention away from others and toward the message itself" (Kiesler et al., 1984, p. 1126). In future research, in which participants describe more diverse communication media, this reason of use may be more widespread than in the current sample.

A final area of research that should be conducted is for the exploration of GIF cultures that have popped up on the internet. On the Reddit.com website, there is one subreddit that has formed a culture in and of itself. The HighQualityGIFs subreddit (http://reddit.com/r/highqualitygifs) is home to a fully functioning GIF tournament wherein only GIFs created, edited, and transformed by the participant may be submitted. The community seems to have a rich culture wherein individual users are called out by name and regular conversations between high-profile users lead to a wealth of incredibly self-referential and quite stunning pieces of GIF art that are voted on by the community. An ethnographic study of this culture would provide many insights into the building and maintaining of digital cultures and is therefore worthy of study.

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Appendix A: Interview Protocol

Introduction

Thank you so much for agreeing to participate in my research. The purpose of my research is to get at the essence of people using animated GIFs in text-based communication. Ultimately, I am interested in why people do it and how they perceive it as a form of communication. If you find any of my questions to be general or abstract, please answer them in any way you can; after all, I am really interested in *your* perceptions of this phenomenon. You may refuse to answer any question at any time, and you may terminate this interview at any time you wish. Do you have any questions for me before we get started?

Interview Questions

1. Tell me about your use of animated GIFs.
    a. Where do you use GIFs in text conversations (Reddit, SMS, etc.)?
    b. With whom do you use GIFs in text conversations?
    c. Do you have GIFs that you associate with particular people?
    d. How long have you been using GIFs in text conversations?
    e. How often do you use GIFs in text conversations?
    f. When do you use GIFs in text conversations?
2. Walk me through a scenario where you would use a GIF, and explain to me how it works or how you do it. (Explain your mental processes).
    a. What criteria do you use when you choose a GIF to use?
    b. What causes/makes/prompts you to use GIFs?
    c. Once you have decided to use a GIF, how do you decide which one to use?
3. Describe your experiences when using GIFs in your conversations
    a. What emotions do you feel when you use animated GIFs?
    b. What sort of responses do you get to GIFs you send?
        i. Is it different based on your familiarity with the person and, if so, how?
    c. Is the experience different when you send them versus when you receive them and, if so, how?
    d. Have you ever sent a GIF to someone who had never seen one and, if so, what happened?
    e. Is there a sense of GIFs working and not working? Can you provide examples?
        i. How do you know if it worked or did not work?
        ii. Can you describe a good experience?
        iii. Can you describe a bad experience?
        iv. Tell me about your experiences where you sent “wrong” or “right” GIFs or received confusing/out-of-place GIFs.
4. Can GIFs have multiple meanings and, if so, can you provide me of examples where you have experienced that?
    a. How is the difference in meaning determined?
5. What meaning do GIFs have for you? Why do you do this?
    a. How do you classify GIFs emotionally?
        i. How do you decide which one is which?
    b. Not thinking about the GIFs themselves, how do you feel using GIFs?
    c. What motivates or drives you to use GIFs in text conversations?

    d. What are the benefits and/or downsides to communicating this way?
        i. How is it different?
    e. What is your favorite GIF?
    f. Give me an example of a scenario in which you would use it.
6. Are there people that you communicate with via animated GIF that would be interested in talking with me about it? (snowball sampling)

Closing

Thank you so much for your time. Do you have any questions you want to ask me? Here is my contact information if you would like to contact me again. I may need your contact information if I have additional questions or need clarification once I have had a chance to transcribe the interview recording. Would you be willing to give me your contact information?

Appendix B: Significant Statements and Formulated Meanings

Table B1

Choice Sub-theme Statements and Meanings

Theme	Significant Statement	Formulated Meaning
Choice	From there, it's again just… deciding, like which one makes me laugh internally or externally the most when I imagine it as my response. So whichever one is funniest and most relevant I'll go with.	
	Like I said in how I've gotten to the point where I'm using GIF's in replace of emojis so where I will laugh to myself or with most people would send a smiley face or whatever I will then go and pick a GIF of someone laughing or someone reacting in a certain way depending on how I would kind of react in conversation with a face to face conversation.	Individuals using animated GIFs seem to imagine the response they wish to convey and choose a GIF they feel matches that response.
	And then I guess I just pick one that… resembles how I'm actually feeling or what I think is appropriate for what I'm trying to convey.	
	Well, when you look them up, you can just use a word. If you were saying sorry or something, you could look up that word and find one that fits with what you're trying to express and then just choose that and use it.	
	So then I'll go to Reddit. And from reddit probably into the reactiongifs subreddit which is like a treasure trove of reaction gifs and I'll just sort of hunt around for a few minutes, find a few at first and then pick which one out of those I think is the most fitting to sort of express how I feel in my reaction to that person's initial comment.	Individuals using animated GIFs seem to read the context of a conversation and use that context when deciding what GIF to choose that they feel would best fit.
	or if it's timing in particular, say with a co-worker, something happened at work that day, and I found a GIF of something specific online, and that seemed to fit the situation that me and the co-worker both experienced. Then it gets that camaraderie going or whatever	
	I search for one and pick one that I think would best fit the conversation or that my friend might understand the most and then I make sure it works and I send it.	
	Just if it fits in conversation.	

Table B2

Meaning Sub-theme Statements and Meanings

Theme	Significant Statement	Formulated Meaning
Meaning	I think that they can like project emotion better than just sometimes the words can because when you're sitting down face to face talking to someone, you can see their face. You can see kind of their emotions, what they're, you know, not only what they're saying with their words but with their face and maybe even their gestures.	Individuals using animated GIFs seem to ascertain the meaning of an animated GIF through a process of attribution based on the facial expressions and non-verbal actions of the actors in the GIF.
	I qualify them based on the actions or facial expressions that happen by the end of a gif.	
	[I determine the meaning of a GIF through]I think the facial expression of the person in the GIF and what they're doing.	
	Because it is a little animated thing so you'll just see them like, their face contorting in anger, or like them using their hands.	
	There's been times, because I'll send some of them to my dad, and then I'll use it in a different conversation with somebody else. It does have different meanings depending on the conversation. Yes, that's true.	Individuals using animated GIFs seem to ascertain the meaning of the GIF from the context of the conversation they are having.
	[The meaning of the GIF is determined by] the context. So, if I said, like "This class is killing me," like and then someone, maybe a response to that would be, what response would that be, oh, "Is it a lot of hard work?" and then you would send that [a GIF of a child passed out on top of a piece of luggage being pulled by an adult] like, I'm so done with it, like "Ugh! It's exhausting."	
	I'd say the context of the conversation dictates what's the difference of the meaning, and I think the other person can pick up on the meaning by the context of the conversation.	
	Like it's kind of like if I was texting someone or I wasn't texting someone they just sent me a random GIF, I'd be like, "What? That's so random," but if it correlates to what we're talking about, then it would be fitting, and the expression that maybe I was making when I read the text before something or whatever they were talking about, and if that's a face that I would make or that I was making and then they send the GIF that matches what I was doing or thinking or saying that is funny I guess, and it's fitting.	

Table B3

Use Sub-theme Statements and Meanings

Theme	Significant Statement	Formulated Meaning
Use	Personally, they're easy to use tools to express emotion	Individuals using animated GIFs seem to use them out of a desire to express their emotional state.
	It's a fun way to convey emotions	
	I just use them to better express the emotion that I'm having whenever I'm sending a text to somebody and just because I think they're fun.	
	I think they help get meaning across better, feelings across better	
	[I use GIFs] to be funny. To show that I'm taking part, actively, in a conversation, but mostly to try to convey a sense of humor.	Individuals seem to use animated GIFs often for the purpose of adding humor into the conversation they are having.
	And just to make people smile is the other part. Because if I can really speak to someone through a GIF and really make them laugh, literally lol, then it's totally worth the time to sit there and look through all of these GIFs and find the perfect one.	
	but they can be used multiple places or just to like make someone laugh.	
	I usually use them in the form of jokes as I mentioned before	
	For me I think about them as a way for me to express emotion to someone in a text message that I just can't do, I can't re-create that verbal piece I can't do the body language piece with them so that's really where… why I like them	Individuals seem to use animated GIFs to actively compensate for the lack of social cue transmission in CMC.
	A lot of times just to see the reaction or get a reaction from someone for using it, but again, sometimes it's because it can portray an emotion to something or a reaction to something better than words or whatever, especially through text messaging, which can be very dry or very hard to pick up emotion of someone and how they're feeling.	
	Because I think with texting, which obviously it's not your face in the GIF. You're not the person doing whatever it is, but with texting sometimes it's hard to express any emotion because you can't see anything. I think that GIFs are a good way to show people a little snippet of what you're meaning or the emotion behind what you're saying, if that makes sense.	
	And, they're pictures, so I mean, a picture's worth a thousand words, which is an overused statement, but it really applies in this instance. So you can get a whole lot out of one picture, one moving picture, too. 'Cause sometimes they're screaming, or whatever. And it just portrays a lot of emotion and a lot of ... And it can have a lot of back meaning to it that you couldn't necessarily put in words.	

Theme	Significant Statement	Formulated Meaning
Use	[animated GIFs are] a fun way to show what you're trying to mean. So if you're trying to be like Sasha Fierce, and just own it, you can be like me on Wednesday walking into my exam. So I think it gives a picture to your description. So, it's kind of nice.	Individuals seem to use animated GIFs in order to clarify the meaning of their messages.
	[GIFs are better than just typing out words] I would say because I know I've personally gone through confusion through words alone because someone can mean one thing by the message but I take it a different way and think "Well are you meaning this?" and they'll be like "No I meant this" so I think using the GIFs kind of helps them explain what they're meaning in a way. Like [...] let's just say they're saying LOL or something about something. I mean for the most part we always see people just not laughing when they're actually typing LOL but with the gif it kind of helps you see oh […] they do think that's funny.	
	I like to use them so that way I can […] sometimes it is portraying the right message instead of portraying the wrong one. Like instead of ill will you know it's like I have positive intent in this.	
	Another positive would have to be the aforementioned. It can be used to enhance the meaning or weight of something you say via text conversation.	

Table B4

Gratification Sub-theme Statements and Meanings

Theme	Significant Statement	Formulated Meaning
Gratification	And I feel relaxed and like it's fun and it brings me pleasure.	Individuals using animated GIFs seem to derive gratification or pleasure from doing it and find it to be an exclusively positive experience.
	I think so because I put a lot of effort into finding them, which I don't know if that's a good thing or a bad thing because I just kind of enjoy it.	
	It can send you down this whole path of just nonsense, but related nonsense. And that just makes me really happy. Yeah	
	How do I feel using them? I enjoy it, I find happiness in it.	
	My friend and I have a conversation about a movie scene or something like that and if we're all of a sudden talking about that scene in the text message I may be just funny and bring in a GIF from that scene from that movie and send it to her and we just have a laugh about it.	Individuals using animated GIFs seem to derive pleasure from the shared experience of either the particular media the GIF was taken from or the person they are communicating with.
	If [...] I know the person likes them and will respond back with them I will use them. Mostly I will use them when it is something really shocking or if I am nerding out you know and stuff like that. I will send like a quote from a TV show that my friend and I like with a GIF and they will fangirl with me you know kind of stuff like that. They will participate in my fun and stuff that I am having and all because of a GIF form.	
	Let's see. Good GIF experience. Well, I can use my patriotic example relatively. It might be too personal, but I don't really mind. So the boy I'm taking to the date party I think is really cute, so the fact that he went out of his way to find an American GIF to match, he's like, "Oh, the party's this week, I'm really excited," and sent the GIF. It's more than just a text, you know, or that he even thought to do that I guess.	
	Or, it's a ... A reassurance that they kind of understand me in a weird way. But it's just really funny. And it shows me that they wanna make me laugh and smile, and they wanna have a good conversation that's witty and not just hi, how are you today? That's cool, bye. It shows me that they wanna actually engage with me as a person, and not just on a surface level.	

Theme	Significant Statement	Formulated Meaning
Gratification	I love them. I love… the joke they provide. Like every one [...] can be it's own type of laugh for not just myself but for whoever I'm conversing with. […] But without… but not necessarily losing my voice in this, like in this discussion. So being able to kill two birds with one stone by responding to a question or making a point to some degree while still being funny like I like to be.	Individuals using GIFs seem to derive gratification from their perception that others will view them a certain way.
	I tend to think of people who use GIFs in conversation as more clever, because they're like oh, I'm going to use that there, because they have something on their mind instead of just a normal response. And that's something that I don't really think about with emojis either. For some reason, I tend to think people who use GIFs are more clever than people who use emojis, just because, I feel like they go through more work to find a fitting response.	
	I'll usually feel pretty witty like I said earlier, if I can make a GIF like the whole package. Like it's funny, it pertains to the situation, and this person has back knowledge that pertains to this GIF itself, then I'll feel pretty good about myself. Pretty smart, pretty witty. Yeah, that's basically all I feel about that.	
	[When I use GIFs] I typically feel… cultured is one way I feel. It's like oh look what I know, look what I pulled out of my hat and threw out at you right there. And funny. So… maybe a little resourceful.	