ATINER's Conference Paper Proceedings Series
MED2017-0018
Athens, 22 August 2017

**"Ending the "Drug War;" Solving the Drug Problem:
The Public Health Approach**

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ABSTRACT

Many theorists imply that face-to-face communication is the gold standard of communication (Nardi & Whittaker, 2002; Flaherty, Pearce, & Rubin, 1998; Duncan & Fiske, 2015). Mediated communication has been, however, described as more preferable in some situations, particularly where time and geographical distance are an issue. Whilst face-to-face communication relies on the verbal and nonverbal, mobile mediated communication (MMC) engages fewer senses, compared to face-to-face interactions. Fewer engaged senses begets previously untested reliance on verbal content, resulting in the digital nonverbal. The digital nonverbal is being used by MMC users in the absence of face-to-face interaction principles. Inflection, body language, eye behavior—nonverbals that users normally require within the digital system to feel that successful communication is happening. This paper will address how digital nonverbals present in MMC affects interpersonal communication and message understanding between parties.

Keywords: mobile mediated communication, digital, nonverbal, interpersonal communication

Many theorists imply that face-to-face communication is the gold standard of communication (Nardi & Whittaker, 2002; Flaherty, Pearce, & Rubin, 1998; Duncan & Fiske, 2016). Mediated communication has been, however, described as more preferable in some situations, particularly where time and geographical distance are an issue. Whilst face-to-face (FTF) communication relies on the verbal and nonverbal, mobile mediated communication (MMC) engages fewer senses, compared to face-to-face interactions. Fewer engaged senses begets previously untested reliance on verbal content, resulting in the digital nonverbal. Digital nonverbals are being used by MMC users in the absence of face-to-face interaction principles—inflection, body language, eye behavior—that users require within the digital system to feel that successful communication is happening.

Nonverbal communication theory serves as the foundation for the understanding of digital nonverbal; it is important to establish clear definitions of what nonverbal communication includes and how nonverbal communication is similar to and different from verbal communication. Because traditional definitions of nonverbal communication fail to predict the role of emotion in mobile mediated communication, we need to fully examine the ways digital technologies have altered language and communication as a whole. This emerging and on-going shift from face-to-face (FTF) communication as the primary means of communication, to mobile mediated communication (MMC) affects our global society… thus, the impetus behind this project. This paper will first examine the mediated world and the growth of digital conversation, then move toward the technological impact on verbal and nonverbal communication, specifically focusing on interpersonal communication.

The Mediated World & MMC

Today, more than ever, we live in a society constructed at a symbolic level with instruments of media communication. These meanings, built from the vast inventory of words and images in which we live—words and images now delivered mostly through media—constitute what we experience as reality. Manovich (2002) and Thompson (1995) consider that this new revolution is unarguably more profound than the previous ones, such as printing or photography, and that we are just beginning to sense its effects. This postmodern shift of reality construction is a transformation of not only the way we communicate, but how, and therein lies the issue/problem.

We are in the middle of a new media revolution—the shift of much of our culture to not only computer-mediated forms of production, distribution and communication—but the mobile mediated form. In this process of cultural transformation, mobile mediated communication occupies a very important place.

As of June 2007, there were at least 243 million subscribers in the U.S., with a total of $19.2 billion in wireless data revenues (Mitchell, 2007, n.p.). According to the wireless association CTIA, annualized SMS usage exceeded

241 billion messages in 2007 (Mitchell, 2007, n.p.). More than 80 percent of mobile phones users engage in text messaging in Germany, Italy, Spain, and the U.K. (Mahatanankoon, 2007). China Mobile, Ltd., the largest wireless operator in the world, has at least 321 million mobile subscribers with more than 220 billion text messages sent each year (Mahatanankoon, 2007).

The digital media revolution affects all stages of communication, including acquisition, manipulating, storage and distribution; it also affects all types of media—text, still images, moving images, sound, and spatial constructions (Manovich, 2002). MMC, new media and the digital revolution represent a fundamental area of world-wide cultural transformation, one that has a major impact on the manner in which we manipulate, represent and communicate with the world—email, text messaging, short-form video, Skype, Google chat, etc.

Furthermore, digital culture becomes the new paradigm of today's communicative reality, a real and actual presence in communicative life, which directly influences the manner in which reality is conceived and known. According to Tyler Schnoebelen, a linguistics Ph.D. from Stanford, "communication is very visual" and regarding text-based communication, Schnoebelen states: "we're babies." (Read, 2016, n.p.). Schnoebelen explains, if you are talking to someone face-to-face, you do not need an additional word or symbol to express "I'm smiling" because you would, presumably, be smiling. (Read, 2016, n.p.). These 'additional words or symbols' that Schnoebelen mentions need classification… enter the digital nonverbal.

Because of the lack of face-to-face interaction principles—inflection, body language, eye behavior—MMC users utilize the digital nonverbal. This allows users to create paralanguage within the digital system to feel that successful communication is happening. Therefore, the term digital nonverbal will be applied to those conventions unique to MMC, directly aiding the sender in feeling more accurately represented and understood.

The digital nonverbals specific to this paper include (1) digital *kinesics*— the digital replacement for facial expressions, body language, and eye behavior—or emoji; (2) digital *vocalics* include digital textual elements relating to the digital voice, such as pitch, emphasis, and intensity. These elements manifest in MMC as typed laughter, repeated letters, excessive capitalization and punctuation. And (3) digital *chronemics*—wait time, punctuality, and duration, etc.

For those who may have underestimated the pervasiveness of digital culture, text messaging language and emojis are no longer a mere fad for teenagers. In the 2016 article, "The Deeper Meaning of Emojis: What You Need to Know on How Social Media Is Changing Communication," Read writes, "[i]t's no longer just teenagers or younger people who are using emoji's, hashtags and neologisms – they've reached the mainstream." According to Sternbergh (2014),

> "emoji have also proved to be popular with the least techno-literate and ironic among us, i.e., our parents. Many people I spoke to relayed that their

moms were the most enthusiastic adopters of emoji they knew. One woman said that her near-daily text-message-based interaction with her mother consists almost entirely of strings of emoji hearts" (n.p.).

Caspar Grathwohl, President of Oxford Dictionaires, avoided using emojis altogether until recently because he worried he would be seen as an uncool outsider, trying to get in on teen culture: "I felt inauthentic. But I think there was a tipping point this year. It's now moved into the mainstream" (Cocozza, 2015).

MMC & the Nonverbal Impact

Traditional nonverbal functions that directly correlate to mobile mediated, digital nonverbals include: (1) repeating what is said verbally; (2) substituting for portions of the verbal message (partially or entirely), (3) complementing or clarifying the verbal message; (4) contradicting the verbal statement; (5) emphasizing (i.e. pointing or yelling) or elaborating on the verbal message; (7) accenting or moderating verbal messages and regulating verbal and nonverbal messages (Ekman & Friesen, 1969; Knapp & Hall, 2002).

Krohn (2004) stresses "traditional definitions of non-verbal communication failed to predict the employment of emotions in computer mediated communication" and "none of the traditional non-verbal communication theorists foresaw the introduction of emoticons as nonverbal communication… they failed to envision nonverbal communication in electronic communication" (pp. 321, 322). Overall, there is a critical need for a deeper and richer understanding of communication styles and strategies utilized in mobile text messaging. Text messaging is popular, it is prevalent, and, therefore, it is pertinent to scholarship.

The effects of MMC on texting, currently a primary method of communication, could be discussed indefinitely; however, this project focuses on MMC's elimination, or perhaps transformation, of traditional nonverbals. Because of this change, the receiver does not receive full understanding of what the sender intended. The receiver obtains only the "verbal" message—the words. They cannot hear the sender's tone, see her facial expressions, or observe her body language. Various adjustments have been made in MMC—particularly within texting—to help add nonverbals back into the conversation, laying the groundwork for application and translation of nonverbal elements into mobile mediated communication.

Having established some key principles of nonverbal communication, including definitions and applications, we move toward demonstrating the potential translation of traditional nonverbal into the realm of MMC. How do digital nonverbals function in MMC? By actually following traditional nonverbal communicative rules and properties.

Rules

Burgoon, et al. (1996) note the presence of display rules demonstrates evidence that there are rules managing nonverbal behaviors, "each culture can easily articulate what behaviors are considered appropriate or inappropriate for use in various contexts" (p. 154). Illustrators, for example, are movements directly tied to speech, which illustrate what is being said verbally (Burgoon, et al., 1996). Illustrators, like emblems, repeat, substitute, and contradict a word or phrase (Ekman & Friesen, 1969). Littlejohn and Foss (2011) offer a few examples of emblems: making the "V" sign for victory, making the "peace" sign with one's fingers, or giving someone a thumbs-up). Scholars believe illustrators are intentional, although a speaker may not always be aware of his or her usage of them, stating that illustrators "may be informative or communicative in use; occasionally they are interactive as well" (Littlejohn and Foss, 2012, 128; Burgoon et al, 1996). However, illustrators differ from emblems in that most illustrators do not have independent meaning apart from words.

MMC users may engage in what Riggio (1992) offers as a coding system because of the difficulty of nonverbal cue control, especially as digital communication uses have a unique ability to "create more intentional messages and avoid unintentional cues" (Walther, 2006). Riggio (1992) divides nonverbal communicative elements into three categories: expressivity (encoding), sensitivity (decoding), and control (ability to regulate nonverbal displays.) We will see later in the project how these categories link specifically to elements of kinesics, vocalics, and chronemics, and can be directly translated to digital nonverbals of emojis, typed laughter, and excessive capitalization and punctuation.

Properties

Littlejohn and Foss's (2011) description of the structural properties of nonverbal communication is helpful as we look toward the translation of the tradition into the digital. The four properties are as follows:

1. Nonverbal codes are analogic; they form a spectrum or range.
2. Nonverbal codes possess iconicity; they resemble, or mimic the thing being symbolized.
3. Nonverbal codes elicit universal meaning (such as crying or smiling).
4. Nonverbal codes enable transmissions of several messages simultaneously.

The first property, nonverbal codes are *analogic*, meaning they form a spectrum or range, is applicable to the area of digital nonverbals. This paper will demonstrate the variety within digital nonverbal codes and how there are direct translations but also infinite combinations and unlimited interpretations. The second property, nonverbal codes are *iconic*, will be especially translatable to digital nonverbals concerning emojis. The third property, nonverbal codes

elicit *universal meaning*, is applicable to the area of MMC because it similar to the universal meaning of textspeak. In addition, the fourth nonverbal coding property, *simultaneous transmission*, is applicable as the MMC user can use multiple codes at a time.

Formerly referred to as "digital affiliation cues," in computer mediated communication (CMC) (Sherman, Michikyan, & Greenfield, 2013) "digital vocalics" becomes the term for nonverbal and paraverbal elements communicated on mobile devices. Sherman, Michikyan, and Greenfiled (2013) found that textual affiliation cues like emoticons (☺, ☹), typed laughter (LOL, HAHA), excessive letter capitalization and/or punctuation (HEY R U THERE?!?!?!), and letter repetition (I am sooooo bored) may be used to convey emotion and emphasis in text based environments.

Text-based messages, commonly used in computer-mediated communication (CMC) have unique characteristics, and though technically 'written' text messages do not share the same features as traditional written communication and contain more characteristics of verbal communication. Vocalics encompass "any vocal-auditory behavior except the spoken word" (Burgoon, et al. 1996, p. 58). There are numerous ways to construct an auditory sound or a vocal sound into text messaging leading to numerous interpretations, which is why Trager's (1969) classification system is helpful in understanding how nonverbal vocal behavior is applicable to MMC.

According to Trager's (1969) vocalization classification, vocal characterizers and qualifiers translate well to digital conversation; digital vocal characterizers include "LOL," "HAHA," for laughing; words typed in all capitals for yelling (such as "NO WAY"); and typed groans or whines such as "Ugh," or "Argh," and "Meh" respectively. Furthermore, in addition to excessive capitalization, excessive punctuation can also simulate yelling, a vocal characterizer, or perhaps even represent a vocal qualifier, featuring intensity or pitch (Trager, 1969; Jaffe & Feldstein, 1970).

When considering intentionality and digital vocalics, Burgoon, et al. (1996) notes, "[a]s with other codes, intentionality is not always certain, but vocalics seem to be used intentionally more often than many other codes" (p. 66). This principle of face-to-face vocalics translates to MMC because of the creativity and effort the user must put forth to demonstrate pitch, tone, intensity, etc.

The conclusions reached by Burgoon, et al. (1996), Trager (1969), Devito (1989), and Jaffe and Feldstein (1970) form essential ground for the translation and application of vocalics to MMC. There is much to be said regarding the nonverbal coding element of vocalics and the application to digital nonverbal, and perhaps the most difficult aspect is understanding how intentionality and authenticity work within digital conversation.

The Digital Conversation

The advent and exponential growth of new technology and its subsequent application to varying stages of communication is not new. Ong (1982) called this movement the concept of secondary orality. Based on Ong's work, Soukup (2004) and Farrell (2000) expanded the focus toward oral mediums of communication like that of radio, television, and telephones, particularly examining how new forms of communication build on old forms. Now the secondary orality lives in technology, mediated by mobile devices.

As stated previously, the two most common forms of communication are direct, or face-to-face communication and mediated communication. The clearest distinction is in locale. Direct, face-to-face communication requires that the speakers and hearers be in the same physical location. Mediated, on the other hand, allows the speaker and hearer to be in differing physical spaces, using technology to communicate—internet, telephones, television, etc.

Walter Ong challenged scholars to ask questions of transformation and medium incorporation but asking those questions in the contemporary conversation specifically regarding MMC and the digital conversation requires that we reflect on what is happening *in* our communication. Soukup (2004) commented:

> *Modern, electronic communications help us in yet another way to understand what is going on with texts. The sense of immediacy of electronics gives readers a sense of proximity to events reported. That too, occurs with texts. With a text that works well, readers enter into the text, 'into the immediacy of the writer's experience' (p.499). But electronic communication also reveals that this immediacy is highly mediated and thus somewhat artificial (pp. 18-19).*

It is this sense of artifice and the unreal that messes with areas of interpretation and comprehension. As we continue to emerge in an age of digital transmission of information, we must ask questions about hermeneutics. While we understand much of what we see on the front end of mobile mediated communication, the ability to understand *how* we arrive at transmitting such information is important. It is a challenge, but the process of interpretation cannot be overlooked.

Capurro (2000) focused on hermeneutics situated in the process of information storage and retrieval, as well as encoding and decoding information; this structure of interpretation, however, changes as new technologies emerge. Because of the organic nature of digital communication, social structures are changing as well, directly impacting the health of interpersonal communication.

The IPC Shift & Authenticity

Several scholars, seminal to the field of interpersonal communication, believe good conversation to contain both intentionality and authenticity (Knapp, 1984; Gottman & Levinson, 1988; Altman & Taylor, 1973). However, one of the most widely acknowledged problems/issues with mediated communication is authenticity. For Martin Buber (1970), author of *I Thou*, the existence of technology in the process of communication is not especially relevant for the distinction between the mediated and the authentic, or immediate. Instead, the distinction provides terms for describing a relationship as either as an 'I–Thou' relationship or an 'I–It' relationship. Buber's distinction is most appropriate for this project, and the realm of interpersonal communication and the impact of MMC on relationship. What constitutes an I–Thou or an I–It and how do we maintain these [authentic] relationships in a mobile mediated world? Understanding Buber's distinction can offer a truly textured hermeneutic—interpretation through experience and interpretation through encounter.

I–It

In the I–It relationship we interact with the world (It) through experience and collect data, analyze it, classify it, and theorize about it. The communicative relationship of I–It is objective, one is on the outside of the conversation. When relating to people in their social roles, conversations are often superficial and impersonal—normal, everyday communication with salespeople, clerical staff, servers in restaurants, etc. The I–It relationship accounts for many of our communicative interactions; interaction may be guided by role, i.e., teacher and student, talk may be personal while the private self is still hidden.

I–Thou

In I–Thou communication we enter into a relationship with the object (Thou) encountered, we participate in something *with* that object, and *both* the I and the You are transformed by the relation between them. Buber considers I–Thou communication the highest level of human interaction. When communicating at this level, we move beyond social roles and into the uniqueness of the individual. In I-Thou dialogue, trust is assumed and conversation opts to disclose deeper, more private aspects of ourselves. I-Thou communication patterns are found between lovers, between parent and child, among siblings and in very close friendships.

The essential characteristic of authentic relationship is, for Buber, the absolute immediacy. The I–Thou relation is immediate, unmediated by any category of thought. The old adage "actions speak louder than words," reverberates because nonverbal communication is often more trusted than verbal. (Especially if there is contradiction between the two forms). Mehrabian

(2008) points out components of communication, with percentages split between nonverbal and verbal with this total impact: .07 verbal + .38 vocal + .55 facial. He reaffirms this communicative impact through his research, showing that analytical and intuitive findings do not so much conflict as complement each other. Because language can be used to communicate almost anything and nonverbals are often limited to feelings, likings or preferences, the nonverbal customarily reinforces or contradicts things communicated verbally (Mehrabian, 2008; Burgoon, et. al. 2006).

Nonverbal communication serves to establish trust between communicators (Ekman & Friesen, 1969; Hall, 1959; Knapp & Hall 2002; Burgoon, Buller, & Woodall, 1996). Used effectively, nonverbals enhance verbal messages and while we communicate to transmit information, data, impressions, points of view, we know *any* message, regardless of relationship (I-It or I-Thou) transmits content. Said 'content' is rich and textured, carrying concepts, information, opinions, judgments, feelings, emotional states, expectations and anticipations. But, at the same time, said 'content' has a tendency to develop, simultaneously, a certain relationship between the interlocutors. As a result, communication is both an opportunity for transmission and exchange of information *and* meaning between interlocutors, but also instituting and maintaining relations of goodwill between individuals (Burgoon, Buller, & Woodall, 1996).

Nonverbal cues are essential to healthy interpersonal communication. MMC is prevalent, and it is predominant. How can MMC be successful and function well with a lack of nonverbal cues? It cannot. Nonverbals have not disappeared from the mobile conversation. They have simply been recreated, translated. MMC users adapted to the medium and created ways to communicate as clearly, effectively, vividly and colorfully as face-to-face communication. Emojis replace facial expressions, eye behaviors, gestures, and body movement. Vocalic styling such as typed laughter, repeated letters, and excessive capitalization and punctuation were employed to create varied and complex conversations. Even the keyboard, a seemingly basic tool, has been elevated. MMC has been situated to provide possibilities for a more authentic communication experience.

Theorists believe the lack of nonverbal cues in digital medium could result in "meager social meaning and limited value," (Walther, 2006, p. 461). Yet scholars also suggest digital communication encourages users to be hyperpersonal and work through the relative lack of nonverbal cues (Walther, 2006; Walther & Burgoon, 1992). "CMC is as capable as FtF communication of sharing impressions and managing relational communication, based on the substitutability of verbal and nonverbal cues in the service of social functions" (Walther, 2006, p. 466).

Just as the telephone was one step removed from face-to-face conversation, removing the opportunity for evidence of nonverbal behaviors, telephone interlocutors rely solely on vocalic nonverbal codes and cues. MMC interlocutors have simply one more step removed in the communicative

process—participants now rely on the digital nonverbal—as both nonverbal kinesics and vocalics are removed.

When we draft a text message, we engage in a complex cognitive process, recalling resources such as relationship type/history/interaction patterns/ personality of the intended recipient. This creative and advanced thinking is applied to message creation—specified, unique, perfectly suited to relationship—perhaps undertaking more advanced conversation management than face-to-face communication requires. Yvvyan Evans, a linguistic professor from Bangor University states:

There's a lot of prejudice against emojis…A lot of people think they are a backward step, but this misunderstands the nature of human communication… emoji are conforming to the same principles of communication that underpin the *spoken* language [and] emojis are fulfilling the same function in digital speech…They are a way of smiling in the face of limited time and limited space to let people know you are digitally happy. (Cocozza, 2015, n.p.)

Sternbergh (2014) notes, "[d]ecoding pictures as part of communication has been at the root of written language since there was such a thing as written language" (n.p.). Although emoji may seem simply endearing and fun, they are not simply an afterthought to MMC users. This is evidence of Riggio's (1992) principle of "expressivity," or the encoding skill, includes the ability to send "readable" nonverbal cues.

Examples of expressivity (encoding) include the appropriate integration and coordination of verbal and nonverbal signals; as well as the ability to select and implement communication a socially appropriate manner. "Sensitivity," or decoding, includes the ability to accurately interpret nonverbally expressed emotions, interpersonal intentions, discernment and detection of sarcasm, joking, and discrepancies in both nonverbal and verbal messages. While this may happen without any thought or conscious manipulation/effort by the participants in face-to-face communication, the same cannot be said of MMC participants.

Conclusion

Nonverbal and paralanguage do manifest in mobile-mediated communication. Modern culture and text messaging cannot be separated. MMC users are not simply reading mediated communicative messages and wallowing in confusion. With 97% of smartphone owners in America using text messaging, and texting being the most widely-used basic feature or app for the smartphone; it is also the feature that is used most frequently (Pew Research, 2015). It comes as no surprise that digital communication principles have since been developed, adopted, and even standardized, aiding in communicative understanding; digital nonverbals contribute to more authentic communication through mediated mediums.

The cognitive and creative process behind authentic MMC use requires forethought, especially regarding relationship status, desired outcomes,

intention and expectation. The MMC user's conscious effort demonstrates that mediated communication need not negatively impact interpersonal communication. However, relatively new technologies allow MMC more opportunity for breaking formerly staunch face-to-face communicative rules. The rules and relationships between these digital nonverbal cues and the relationship between these cues and the feelings, personalities and attitudes of the users, and the subsequent qualities of these interpersonal situations, requires work. Perhaps more than people are wont to put forth.

MMC does necessitate a more conscious effort in order to convey a clearer message, but interpersonal relationships need not suffer because of MMC. Mahatanankoon (2007) writes, "[t]ext messaging requires more effort than face-to-face conversations or telephone calls" (p. 977). Walther (1992, 2006) adds that the mediated communicative process frees users from the need to attend to one's own nonverbal behavior, as well as attending to partners' nonverbal affect, information, or conversation management cues. Rather, mediated communication users recapture cognitive resources normally allocated to those processes and apply them instead to message creation, allowing for further expressive selectivity. (Walther, 2006, p. 465).

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