Semiotic Analysis of Computer-mediated Communication in Selected Instant Messages of Nigerian Students

Godwin Shoki, University of Ibadan, Nigeria
'Wale Oni, Ladoke Akintola University of Technology, Nigeria*

Abstract

This paper examines the signification and social meaning of computer-generated textual signs in online interactions of Nigerian students. Motivated by relatively scanty attention given to cross-cultural use of computer-mediated communication (CMC) systems, it argues that Nigerian student Internet consumers make use of only universal non-linguistic signs and iconic linguistic signs to construct messages in a cross-cultural context enabled by a synchronous system of communication called instant messaging (IM). Using content analysis and relevant aspects of the theories of semiotics, the work analyzes objectively and subjectively the linguistic and non-linguistic signs found in seventy-five purposively sampled instant messages retrieved from the students of two Nigerian universities selected on the basis of convenience. The findings reveal that Nigerian student Internet users largely adopt only universal non-linguistic signs and iconic linguistic signs to communicate a range of shared

* Walegzy@email.com

social meanings in their instant messages. These textual signs include emotive icons (emoticons), emotive texts (emotexts), and abbronyms (multifarious shortenings). By and large, all these signs are observed to have positive implications for effective computer-mediated discourse. This study hopes to provide insights into a new type of language contact and communication in this digital age, especially in a developing country.

Introduction

Studies on computer-mediated communication (henceforth CMC) have focused more on the «process approach», which seeks to determine the effect of messages on people, and the uses and gratifications they put messages to (Fiske, 1990). These studies cover a wide range of disciplines such as sociology (e.g. Herring, 1994; Ortega, 1997; Jaffe *et al*, 1999; Darhower, 2002), psychology (Tannen & Wallat, 1987; van der Meij *et al*, 2005), communication arts (e.g. Donohue *et al*, 1983; Rafaeli, 1986; Walther, 1995; Oni, 2002; Chu, 2004), education (Bates, 1995; Gonzalez-Bueno, 1998; Järvelä & Häkkinen, 2003; Simpson, 2005; Klerften, 2007), computer sciences (e.g. Burnett, 2000; Jones, Ravid & Rafaeli, 2004; Farrell, 2002; Hirst, 2006) and linguistics (e.g. Gruber, 1998; Herring, 1999, 2001; Sjoberg, 2001). Within linguistic studies, CMC has been widely studied under discourse analysis (e.g. Chun, 1994; Warschauer, 1996; Chech & Condon, 2004) and pragmatics (e.g. Gruber, 1998; Odeneye, 2007; Oni & Osunbade, forthcoming).

In semiotic studies, which shares the scholastic boundary between language and communication studies, CMC has only received attention from the historical perspective (e.g. Codognet, online). Elaborating on this, Cutler (1996) mentions that «current literature surrounding CMC is almost entirely task-based and focused on cost, efficiency, and productivity, with little attention given either to the changes affected on people or to the social relations created from using the communication technologies». Given that few studies have addressed this issue, as well as how meanings are produced and interpreted in the context of CMC taking into account the cross cultural nature of the CMC interactions, we have decided, in this study, to engage in a structuralist/social semi-

otic approach. Therefore, against the relevant semiotic theories and content analysis of the selected instant messages of Nigerian students constructed mainly in Yahoo! IM program™, the study aims to answer the following research questions:

RQ1: To what extent do linguistic signs and non linguistic signs feature in the Instant Messages of Nigerian students?

RQ2: How prominent are culture-specific non linguistic signs compared with universal non linguistic signs in the Instant Messages of Nigerian students?

RQ3: What are the syntagmatic and paradigmatic structures of linguistic and non linguistic signs in the Instant Messages of Nigerian students?

Theoretical Framework

In this study, we have adopted a semiotic approach to the study of texts as found in a growing genre of synchronous computer-mediated communication (SCMC). The semiotic framework for the analysis will be based on Saussurean structuralist semiotics. The aim of structuralist semiotics is to determine the value of signs as objects of communication. According to Saussure, the value of a sign depends on its relations with other signs within the system. His conception of meaning is purely *structural* and *relational* rather than referential: primacy is given to relationships rather than to things; that is, the meaning of signs is seen as lying in their systematic relation to each other rather than deriving from any inherent features of signifiers or any reference to material things (Chandler, 1994).

This notion in Saussurean semiotics informs the principle of arbitrariness between the *signifier* and the *signified*; with the degree of signification being described in terms of motivation and constraint of the sign. So, it may be of more help to consider the distinction between arbitrary and iconic signs or between symbols and icons/indexes as a scale, not as separate categories. At one end of the scale we have the purely arbitrary sign, the symbol. At the other end we have the notional pure icon, which cannot, of course exist in practice. Fiske (1990) illustrates this scale as follows:

Figure 1. Scale of Motivation

However, since the Peircean distinctions are most commonly employed within a broadly Saussurean framework, we have, in this study, incorporated this dimension only to analyze the referential potential of the signs. The Saussurean framework will also include the *paradigmatic* and *syntagmatic* analyses of the signs. The syntagmatic analysis of a text (whether it is verbal or nonverbal) involves studying its structure and the relationships between its parts. Structuralist semioticians seek to identify elementary constituent segments within the text – its syntagms. The study of syntagmatic relations reveals the conventions or «rules of combinations» underlining the production and interpretation of texts.

Whereas syntagmatic analysis studies the «surface structure» of a text, paradigmatic analysis seeks to identify the various paradigms (or pre-existing sets of signifiers) which underlie the manifest content of texts. This aspect of structural analysis involves a consideration of the positive or negative connotations of each signifier (revealed through the use of one signifier rather than another), and the existence of «underlying» thematic paradigms (e.g. binary oppositions such as yes/no, public/private). Paradigmatic relations are the oppositions and contrasts between signifiers that belong to the same set from which those used in the text were drawn.

In this study, the various dimensions of communication; sign, signification and interpretation are provided for in the analysis of the instant messages of Nigerian students. Our discussions so far are meant to prepare the ground for the forthcoming analysis of the data.

Studies on the Nature of CMC Interactions

The nature of CMC interactions is that which has spurned various researches across the length and breadth of varied disciplines like anthropology, psychology, linguistics, sociology and even computer sciences. In language studies, it has generated debate upon debate especially in comparison with offline communication. Scholars, since the inception of CMC in the early 1970s have been studying patterns of communication in this context from out of which various perspectives and theories on its implications are articulated, mostly, in view of the *process* approach. Important among the early perspectives of CMC is the *cues-filtered out* (CFO). The cues-filtered out perspective is an umbrella term for several related theories such as *social presence* theory (Short, Williams & Christie, 1976). The underlying perspective in these theories is that the lack of nonverbal cues in CMC causes it to be more impersonal than face-to-face (FTF) interaction. Also in this direction is the *media richness* theory (Daft & Langel, 1986). It focuses on CMC's predominantly lexical mode of interaction, deeming it a «lean medium» compared to FTF interaction, which has multiple cues and a high degree of personalization.

More recently, due to the increasing use of the Internet for social purposes, anecdotes of online encounters have shown that people can have intimate relationships in the CMC environment. Theories such as the *social identification/deindividualization (SIDE)* model (Spears & Lea, 1994), the *social information processing (SIP)* theory (Walther, 1992); which asserts that all communicators experience similar needs for uncertainty reduction and affinity, regardless of medium have been articulated. In another words, the SIP theory holds that CMC users adapt existing communicative cues, within the constraints of language and textual display, to serve the processes of relational management. This approach is also supported by research (Sherbloom, 1988) suggesting that interactants adapt computer-generated textual signals for specific relational purposes. In addition, another theory has been articulated that is an extension of both SIDE and SIP perspectives. Walther's (1996) *hyperpersonal communication model*, which introduces factors that explain how the CMC environment can allow the individual to experience a level of closeness above the norm of the FTF condition.

Some studies on CMC have tended to focus on the interactional problems caused by the properties of text chat, such as interactional incoherence caused by multiple parallel threads (e.g. McGrath, 1990; Herring, 1999). For example, Smith, Cadiz and Burkhalter (2000) found that one of the significant features of text chat was «the lack of control over turn positioning». In view of the interactional problems in text chat, Herring (1999) reviewed the literature on CMC and found that although CMC might be described as interactionally incoherent because of the loose inter-turn connectedness, overlapping exchanges, and persistence nature of the text chat which makes it possible for interactants to participate in multiple threads without too much confusion because of their availability on screen. Garcia and Jacobs (1999) also compared the turn-taking system in text chat to that in FTF conversation with the use of video recording of participant's computer screens during chat sessions. They found that the turn taking system in text chat is different to that in FTF due to the technological provisions of the medium as interactants often simultaneously post messages therefore making sequential ordering of turns unrealistic, leading to *phantom adjacency pairs*. They however conclude that this turn-taking system results in a different form of interaction to oral conversation and does not mean that it is impaired, as some scholars have argued.

From the foregoing, we can deduce that the genres of CMC have made it such that they draw constant comparison between them and the face-to-face interpersonal communication. Hence, CMC, in the characteristics of communication studies, has drawn on works in linguistics and sociology; in an attempt to observe how language is used in computer-mediated settings (online discourse environments) or human use digital media (computers) to form, support and maintain relationships with others (social cues) (see McElhearn, 2000; Hunnicutt & Magnuson, 2001; Hian *et al*, 2004).

Another area of research which characterizes CMC involves the ways in which gender and culture are related to CMC (Tannen, 1990, cited in Hian *et al*, 2004; Wood, 1993). Three dimensions of study are however identified from this kind of study. They are: *relational*, *language/communication style*, and *context comparative*.

For example, the study of Hian *et al.* (2004) is in line with the relational dimension. Their findings indicate that «males and females individually did not experience significant differences in the level of intimacy felt with their partners, nor did the genders differ across CMC». Previous research in this direction is by Selfe and Meyer (1991) cited in Jaffe *et al* (1999). They analyzed the relationship of gender-based communication patterns and pseudonym use in a longitudinal, panel study.

Jaffe *et al* (1999) however focuses on the second dimension, that is changes in gender-based language or communication style accompanying the use of pseudonyms. It is worthy of note that several gender-CMC studies have only extended the theories patterns of face-to-face conversation to CMC modes (Soskin & John, 1963; Lakoff, 1975; Eakins & Eakins, 1978; Tannen, 1990). Herring, (1993) Kaplan and Farell, (1994), Aune, Buller and Aune (1996), Soukup (1999) all also account for this dimension. Communicative style has been studied because it qualifies as an information cue used in interpersonal evaluation, which is an ongoing process in relationships (Adkins, 1995, cited in Hian *et al.*, 2004)

The third dimension, context comparative CMC studies, tends to view communication between members of both genders in the CMC and the conventional FTF environments with respect to the difference in the interactional processes that occur in the two environments. Notable among works in this direction are Kiesler, Seigel and McGuire, (1984, cited in Dennis & Kinney, 1999) and Herring (1993). As Jaffe *et al.* (1999) put it, CMC has been described as «democratizing» because it neutralizes one's social status cue. It enables a person to exhibit different personae in relative anonymity and safety (We, 1993).

In addition, CMC, in recent times, has been used to discuss aspects of developmental communication and social practices. The use of CMC as an agent of social change has been concretized by some recent happenings in the world over. The way people converge in CMC environments has since provided an outlet for discussion and deliberation. With the systems of CMC, individuals who have divergent worldviews and methods have been able to coordinate in short term goals.

Lastly, in the light of the process approach to the study of CMC, are the pedagogical studies. Here, CMC is studied in relation to language

use as medium of instruction (in teaching/learning a second/foreign language, mostly English) in networked or stand-alone environments (see Chun, 1994; Wang, 1994; St. John & Cash, 1995; Warschauer, 1996; Ortega, 1997; Beauvois, 1998, cited in Gonzalez-Bueno, 1998). The notion that CMC systems can be used to regulate information flow underscores this dimension of study.

It suffices to say that there is a dearth of literature on the semiotic approach to the study of CMC systems. Among the few works existing is Codognet's (online) historical/semiotic analysis of the *Web*, where he retraces the history of the «universal language of computer» and links it to that of the «universal language of images». His semiotic analysis treats the trichotomy of sign as presented by Peirce's model of meaning. In view of this, we, in this study, aim to examine the signification and social meaning of CMC texts as they occur in the Instant Messages of Nigerian students. This we hope will shed light on the process of meaning construction and interpretation in this genre.

Methodology and Database of the Study

In this study, both qualitative and quantitative research approaches are used. For the qualitative research method, semiotics is adopted. However, since semiotics does not lend itself to quantification, and is often criticized as «nothing more than an abstract and 'arid formalism' which is preoccupied with classification» (Chandler, 1994), we adopted content analysis for the quantification of the manifest signs. The method involves the studying and analysis of communication messages for the purpose of measuring variables (Kerlinger, 1986). The design was appropriate for the study which was aimed at selecting units of messages, categorizing such and subsequent measuring and quantifying of the qualitative data generated. With this, we are presented with the perspective that quantification of units of messages can show ideology at work and demonstrate that «reality» can be challenged.

The data for this study were natural one-to-one instant messaging (IM) exchanges on *Yahoo! Messenger* program™ retrieved from undergraduate students of two Nigerian universities who were taking courses in Use of English. The two universities were University of Ibadan,

Ibadan, Nigeria and Ladoke Akintola University of Technology, Ogbomoso, Nigeria. These two institutions were selected on the basis of convenience. The subsets (mostly year one students with science background) were purposively selected for the study. The choice of student population for the study is informed by research which reports that students constitute more than 70 percent of the Net users in Nigeria (Oni, 2002). These subjects were persuaded by the researcher, who also happened to be their full and part-time lecturer to forward, as an attachment, logs of their chat conversations on *Yahoo!* IM program to the e-mail account of the researchers for language and media research purposes. The choice of an attachment format as against the regular copy-paste-and-save method was to retain all the textual features of the interactions which were vital to the analysis. The retrieval rate was high, and in the first two weeks of the announcement, over 150 logs of instant messages on diverse topics and of various lengths, were downloaded. These were exchanges between/among Nigerians and English speaking net users around in the world. The log-files were printed and the exchanges numbered to differentiate each distinct line of discourse. For the ease of analysis (due to the size and formulaic nature of the exchanges) 75 instant messages, representing half of the exchanges retrieved in the first two weeks of announcement, were purposively selected and subsequently sampled for the task of the study. This data gathering procedure facilitates anonymity of the subject and, consequently, reliability of the data because most of them construct pseudonymous identities for e-chat and their e-mail addresses.

Data Analysis

Research Question One

To answer the first research question, instances of abbronyms (after Odebunmi, 1996) which include acronyms, abbreviations, and other multifarious shortenings (such as alphabetism and alpha-numeric surrogates) were counted across the whole data. These represent the linguistic signs. The findings are presented in table 1:

Table 1. Showing results of quantitative analysis of signs

NON LINGUISTIC SIGNS		LINGUISTIC SIGNS	
Emoticons, Emotexts & Vowel Extension (vexts)		Abbronyms (Acronyms, Abbreviations & Other Multifarious Shortening of Lexemes	
Freq. of Occurrence	Av. Freq. of Occurrence per message	Freq. of Occurrence	Av. Freq. of Occurrence per message
207	2.95	729	9.72

From table 1 above, we found that abbronyms had the highest number of occurrence featuring at the average rate of 9.72 per message. Of the total number of messages sampled (seventy five messages) it occurred 729 times. Emoticons, emotexts and vowel extension, on the other hand, occurred at the average rate of 2.76 per message, each occurred at 62 times, 59 times and 86 times respectively, with average of 1.61 per message for the two of emoticons and emotexts (average of 1.14 per message for vowel-letter extension) times respectively. The frequency of occurrence for the non linguistic signs was 207 times. This means that the total average frequency of occurrence for all the IM textual signs is 12.48. Based on these findings, we can infer that computer-mediated communication has its peculiarities in the use of textual signs such as emoticons, emotexts, vowel/letter extension and abbronyms, even in an ESL country like Nigeria. Nigerian students thus construct and interpret messages with the shared background knowledge of these CMC signs. One can also conclude that a text constructed by an average Nigerian student would reflect predominance of lexical signs (abbronyms) over visual signs (emoticons). Some of the instances of the linguistic and non linguistic signs are presented, as extracts, as follows:

Exchange 1
      westsideoutlawzus2p: hi wats up
      smart_4u_smart: sky
      smart_4u_smart: als plz
      smart_4u_smart: asl plz
5   westsideoutlawzus2p: 20
      smart_4u_smart: m or f ?

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        westsideoutlawzus2p: nigeria
        westsideoutlawzus2p: f
        smart_4u_smart: m or f
10      smart_4u_smart: cam ?
        westsideoutlawzus2p: no
        westsideoutlawzus2p: asl
        smart_4u_smart: 15 m india
        westsideoutlawzus2p: wow dats nic
15      smart_4u_smart: y ?
        westsideoutlawzus2p: lets get talkin
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Exchange 15
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        bjrealme: hw sister?
        bjrealme: na you i should ask
        bjrealme: una no c each orda?
        westsideoutlawzus2p: stop postin me joo
5       westsideoutlawzus2p: na me supose ask u dat
        bjrealme: ahhhhhhhhhhhhhhhhhhhhhh
        bjrealme: 8-x
        bjrealme: you funny ohhh
        bjrealme: no be ur babe
10      bjrealme: you go dey contact each orda now
        westsideoutlawzus2p: wel no b say i no dey here 4rm her but jst 2 ask abt her welfare
        bjrealme: she should be in good condition
        westsideoutlawzus2p: aw abt ur admision
15      bjrealme: you don finish exams'
        westsideoutlawzus2p: yes
        bjrealme: we just go do post jamb
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In the extract from Exchange 1 above, West opens the transaction with Smart by greeting and subsequently asking for Smart's personal data through abbronyms (ASL; age, sex and location). Smart, also with shared background knowledge of the abbronym, equally responded appropriately. Almost the same type of abbronyms runs through the extract (moves 1 – 14) except in some few moves where we have monosyllabic responses in full words. The same goes for extracts 2 (Exchanges 15). Move 7 Exchange 15 shows an instance of emoticon, moves 14, 19, and 20 show instances of abbronyms peculiar to Instant Messages which interactants may have shared knowledge of.

It suffices to say that findings from the sampled text corroborate results of earlier studies on some systems of CMC, especially the email and newsgroup. It has been found that email and e-chat have a peculiar linguistic structure stemming from the use of multifarious word formation processes, emoticons and abbronyms being part of this. These signs make CMC text in Instant Messaging program to appear more like speech than writing communication (Hunnicut & Magnuson, 2001; Sjoberg, 2001; McElhearn, 2000).

Research Question Two

To answer the second research question, the range of animated emoticons found in the sampled instant messages of Nigerian students were counted and compared with the ones commonly found in the IM program of *Yahoo! Messenger* (fifty four of them). The results are then cross-checked against earlier findings from studies on facial displays as universal nonverbal communication behaviours. These are *anger*, *disgust*, *happiness*, *sadness*, *surprise*, and *fear*.

Table 2. Showing percentage distribution of the universal non linguistic signs

EMOTICONS N = 62		Freq. of Occurrence	% Freq. of Occurrence
Smiling	:) or ☺	14	22.58
Laughing	:))	8	12.90
Winking	;)	6	9.67
Big grin	:D	5	8.06
Waiting	:-w	17	27.41
Crying	:(or ☹	4	6.45
Angry	X(	3	4.83
Sad	:(or ☹	5	8.06

Table 2 shows that of the 54 facial expressions present as a range of emoticons in the *Yahoo!* IM program (see figure 2) only eight (8) or 14.81% of the entire paradigm of emoticons are being used regularly by Nigerian Net users. These facial expressions are «smiling», «laughing»,

«winking», «big grin», «waiting», «crying», «angry», and «sad» respectively. These are universal facial expressions. The remaining 48 emoticons are culture-specific and indicate various human communication behaviours and ideologies typical of the Western culture. Examples of such behaviours and ideologies are «drooling», «nail biting», «hypnotized», «daydreaming», «clown», «angel», «kissing», etc. This means that Nigerian «netizens» identify only with universal non verbal communication behaviour in accordance with earlier studies on non verbal communication that «Western cultures and primitive tribes alike use the same basic facial displays for certain primary emotions» (Ekman & Friesen, 1969, 1971, 1984; Ekman & O'Sullivan, 1988).

Research Question Three
Paradigmatic Analysis: Linguistic Signs

This relationship relates to the substitutability of semiotic items or signs. It operates with the principle of only X or Y; that is there is a paradigm when X and only X is chosen at once from the pool of signs. In this analysis, we shall examine this relationship from the purview of linguistic and non linguistic CMC signs.

To construct messages in the context of CMC samples, users had to draw from the pool of available abbronyms. At such a linguistic level, a referent from the same set or class can only be used at once. In the pool or paradigm, there are two sets or classes of signifiers; the symbolic signifiers and the iconic signifiers. The choice of symbolic abbronyms over an iconic abbronyms in the context of CMC is examinable against the semiotic scale of meaning. Thus, the more iconic an abbronym, the higher its chance of being chosen as an indication of the right intent. An iconic abbronym is that which when pronounced, means its signified. In the pool of abbronym signifiers, only nineteen of such were found in the data. The choice of any in this set is thus informed by the communicative intent of the user. These iconic signifiers and their signified intents are as follows:

Signifier		Signified
'a' or 'r'	-	are
'ao'	-	how
'av'	-	have
'b'	-	be
'b4'	-	before
'bcos'	-	because
'c'	-	see
'cud'	-	could
'd'	-	the
'gr8'	-	great
'gud'	-	good
'i c'	-	I see
'l8r'	-	later
'n'	-	and
'o i c'	-	oh, I see
'u' or 'yu'	-	you
'ur' or 'yur'	-	your
'y'	-	why
'u'	-	you

The symbolic abbronyms are those which share no phonological resemblance with their referent or signified, but are only initial letter(s) of the constituent word(s). However, messages sampled for analysis contained more symbolic-iconic abbronyms than purely symbolic abbronyms. In the first ten sets of conversation, the ratio of occurrence is 1 : 10.

For iconic abbronyms with more than one paradigm the choice of which to select over the other ones in the same pool of paradigms is a function of intentionality and «closeness» in signification. This notion of «closeness» is in line with Eco's semiotic term. Eco (1976) described as «closed» those texts which show a strong tendency to encourage a particular interpretation – in contrasts to more «open» texts. In this class are:

Sign		Meaning
BC	-	Because (Open text)
BCOS	-	Because (Closed text)

Users are able to select «BCOS» in the pool of abbronymic signs over «BC», which is an abbronymic representation of the two constituent syllables BE-CAUSE. Thus, in the context of CMC, closed text/abbronym has a higher chance of substitutability than an open text/abbronym.

In the pool of the paradigm of open abbronymic texts are also those which have more than one form of possible choice (SYNONYMS). These abbronyms mean the same and any of the paradigms can serve the exact purpose. In this class are:

Sign		Meaning
Any of:		
ASL or A/S/L	-	(what is your) age, sex and (geographic) location
Any of:		
BBL	-	(I will) Be Back Later
BRB	-	(I will) Be Right Back
BBS	-	(I will) Be Back Soon

Substitutability of either of these paradigms is a function of intentionality only. The choice of the lexeme «later» over «soon» in the paradigm of adverbial and «soon» in the third category, is a function of the interactants' intention.

Paradigmatic Analysis: Non Linguistic Signs

At a non linguistic level, paradigmatic choices are made when certain objects or things are selected at once given the constraint imposed by context. The non linguistic signs under study are the emoticons and emotexts being used as non verbal cues. In the pool of paradigm on *Yahoo!* Instant Messenger program, fifty four (54) of such animated emoticons exist. The «frozen» paradigms of animated emoticons as they occur in the *Yahoo!* Instant Messenger program are presented in figure 2:

Figure 2. Showing paradigm of animated emoticons (54 of them) on *Yahoo! Messenger*

The choice of any of these signs excludes the other in the paradigm. The choice of any of the emoticons, just like in the case of the linguistic signs (abbronyms), is informed by the communicative intent of the interactants. Emoticons are used in the capacity of words, phrases, or sentences. No two emoticons mean the same thing and none can replace the other in signifying the same intention.

In the group of emoticons denoting mood such as «happy» or «sad» one can have a class of synonymous and antonymous paradigms. For example,

A: Smile/Grin/Laugh/winking/
B: Sad/Angry/Crying

The choice of either in the set A/B will exclude other members of the same class. For example if smile is chosen, grin/laugh and winking are left out. Also, if sad is chosen over others in this set, it becomes the paradigmatic choice while the other ones are left out. The ability to combine more than one set of facial-expression-denoting emoticons portrays their being used instead of nonverbal acts. They are a clear indication that synchronous CMC systems like Instant Messaging permeable to an array of nonverbal behaviours.

In the category of emotexts, the pool of the paradigm is inexhaustible. However, since only the exclamation and question marks as well as constituent vowel members of the lexeme are extended, we can have a set of paradigms in the available vowel sounds. These are /a/, /e/, /i/, /o/, and /u/. Any of these can be extended to indicate the vocal cues. In most instances, vowel extensions come as the last vowel sound. Few instances are seen in the front vowel and middle vowel sounds.

Exchange 55
    toyin ajao: what d'you do
    telsumbini: student
    toyin ajao: thats cooooool. You are from which school?
    telsumbini: bhs jos
5   toyin ajao: Sorry, whats bhs?
    toyin ajao:
    telsumbini: baptist high school jos in nigeria

toyin ajao: Are u a science, art or comm student?
telsumbini: science
10   toyin ajao: oh! thats so lovely. I'm also a science stu
toyin ajao: Whats ur best subject?
telsumbini: Further Mathematics
toyin ajao: whats ur dream course and univ?
telsumbini: electrical engineering in harvard
15   toyin ajao: soooooo lovely
toyin ajao: what class are u?
toyin ajao: u must be rich

Syntagmatic Analysis: Linguistic Level

The abbronyms as our linguistic signs have an unconventional syntax, whether purely symbolic or symbolic-iconic. For purely symbolic abbronyms, the initial letters of the constituent words are chosen as representative sign for the words. This may however bring about a pronounceable sign since the syntagmatic pattern of the letters goes from left to right, just like in the normal English orthography. In the pool of abbronyms presented in table 4.3, there are only 13 of such instances. These are presented as follow:

Abbronyms		**Meaning**
AFAIK	-	as far as I know
ASAP	-	as soon as possible
CUL		see you later
GRA	-	go right ahead
HAND	-	have a nice day
IMO	-	in my opinion
JIC	-	just in case
LOL	-	laughing out loud
OTOH	-	on the other hand
SYS	-	see you soon
SYL	-	see you later
TIA	-	thanks in advance
WU	-	what's up?

The constituent letters cohere syntactically to bring out a pro-

nounceable linguistic sign which may only function as a mnemonic rather than indexing the referents or suggesting their meanings in any sense. The case of the fifth member in the above list is even worse; its structure has semantic import in the word «hand» with which it bears no semantic relationship!

However, the syntactic arrangement of the symbolic-iconic abbronyms coheres meaningfully to indicate the word which they are substituting. It functions to meaningfully combine alphabets and numeric to arrive at semantically possible signs. These are a few of their instances:

Abbronyms		Meaning
B	-	be
BCOS	-	because
B4	-	before
OIC	-	oh, I see

As mentioned earlier, the meaningfulness of abbronyms can only be achieved syntactically when constituent letters are processed from left to right. The choice of representative letters is restricted only to the constituent letters of the beginning of words. No other letters will function meaningfully, especially for the symbolic-iconic abbronyms in stead of the initial letters.

Syntagmatic Analysis: Non Linguistic Level

The syntagmatic relations in emoticons occur at two spatial levels: within the signs as a distinct entity and between/among other signs as they are arranged to convey meaning within the sentence. At the first level, that is emoticons as distinct signs, syntagmatic relationships exist among the constituent parts that make up the signs. For example in the case of static keyboard-generated characters sequences that are used to invoke the animated emoticons, the character are sequenced artistically to resemble any of the facial expressions or objects they stand for. In the smiling facial expression the prominent elements within the sign will be the eyes and the mouth spread across in an upward bow. The character sequences which stand for human eyes are the colon [:] and the semicolon

[;] – the colon represents two widely open eyes while the semicolon stands for winking eyes. When the signs for the eyes (a colon or semicolon) are combined with a hyphen and any of the opening or closing parenthesis (which of course are shaped to bows), the two characters taken together from left to right appear as human facial expressions when rotated (mentally) 90° clockwise. The facial expression these characters denote is however a function of the parenthesis chosen. The opening parenthesis suggests a smiling face while a closing parenthesis suggests a sad face. The «physical» syntagmatic arrangement of the sign is thus from left to right but it requires «mental» processing up to down to make a useful meaning (we refer our attention back to Figure 2).

The three characters (or punctuation marks) semicolon, hyphen and closing parenthesis constitute the elements within the paradigm. They form a symbolic relationship with the human facial expression connoting winking. This becomes more obvious when the eyes begins to behave accordingly (winking) and in the case of smiling, when the mouth moves interestingly up and down. Consequently, the syntagm formed by the character sequence, written conventionally from left to right, becomes iconic mentally when the syntagm changes from above to below or up to down.

In the *Microsoft* keyboard-generated static emoticons (smiley and sad), a third element beside the elements in the paradigm of keyboard character exists; a circle is substituted for the hyphen in the syntagm to decrease the convention and increase the motivation of the constituent elements. This enclosure makes the whole elements to be symbolic-iconic.

The second level of syntagm is the one formed by the emoticons with other texts in the messages. It suffices to say that emoticons alone can substitute for words, phrases or sentences inasmuch as they can also be accompanied by texts to increase interpretation of texts or decrease ambiguity of texts, especially in written communication. The following are instances of emoticons used to accompany texts to increase interpretation of texts:

Exchange 11
     walegzy4all: catch ya pal
     sundeepnagpal: k

walegzy4all: and greet ur girlfriends :x
	sundeepnagpal: no
5	sundeepnagpal: what about u
	walegzy4all: what ?

Exchange 63
	brittany_23czvjz: hi
	mcgabson_don: hi
	brittany_23czvjz: how are u?
	mcgabson_don: Fucking cool
5	brittany_23czvjz: wana talk? :)
	mcgabson_don: and u
	brittany_23czvjz: 22/F/us here.. you?
	mcgabson_don: 23 nigeria
	brittany_23czvjz: hmm.. wanna see me on a
	webcam? now? you do not need a cam.

The two sampled exchanges above present instances where emoticons are used to end a move of conversation. In Exchange 11 dialogues between Waleg and Sundee, Waleg shows his emotion through an animated emoticon coming right after his statement. He is teasing his co-communicator with the verbal text and only adds the emoticon to augment his reader's interpretation of the message. In the fifth move of exchange 63 above, Brittany asks with delight if Mcgabson wants to talk. The genuineness of the desire to interact with him/her (as the gender is not indicated here in the extract) is seen through the use of the emoticon behind the text.

Based on the sampled texts, there are no strict conventions guiding the use of emoticons in the texts. They are free to be used alone, together with the same or different emoticons simultaneously, in the middle of the text, and in most cases, at the end of the text. In the second level of syntagm, emoticons can then be said to be fluid, unconventional signs.

Vowel/letter extension has the same syntagm structure with emoticons in that they either appear alone or end a move of conversation. It follows almost the same pattern in oral communication where accentuation of vocal cues can act as substitute for words, phrases or sentences. However, the meaning is closed when used along with other texts com-

pared to when used alone. A useful example is contained in one of the extracts where the participants share the same cultural background of the codes used in communication:

olly (9/2/2006 11:50:08 AM): is the food alright
fizzyisback (9/2/2006 11:52:52 AM): yup thanks
fizzyisback (9/2/2006 11:53:00 AM): and T-money ate it
together
fizzyisback (9/2/2006 11:53:07 AM): and one other guy for cafe
5   olly (9/2/2006 11:55:18 AM): who be t money
fizzyisback (9/2/2006 11:55:35 AM): dat guy wey do wedding
olly (9/2/2006 11:55:55 AM): and one guy wey dey shop my food
olly (9/2/2006 11:56:05 AM): they don't even fear
fizzyisback (9/2/2006 11:56:19 AM): yeap
fizzyisback (9/2/2006 11:56:19 AM): abi ooooooo
10   fizzyisback (9/2/2006 11:56:27 AM): yes oooo
fizzyisback (9/2/2006 11:56:43 AM): na my friends
olly (9/2/2006 11:56:59 AM): am jut kidding
fizzyisback (9/2/2006 11:57:04 AM): u shuld be happy they took from it
fizzyisback (9/2/2006 11:57:04 AM): i told them my wife got it forme
15   fizzyisback (9/2/2006 11:57:08 AM): LOL
fizzyisback (9/2/2006 11:57:11 AM): i know

In the 10th and 11th moves of the above exchange, Fizzy accentuates the word «o» twice to indicate his feeling. Ordinarily the Yoruba word «abi» may be taken as a request but here with the extension of the vowel /o/ of the Yoruba phonology, it indicates an approval of the subject of discourse. The spatial positions of /o/ sound in the two moves, coming at the end of the words and moves of conversation empowered its meaningfulness and effect in this medium.

Conclusions

From the foregoing, it is clear that emoticons, emotexts and abbronyms enhance meaning-making, as an aspect of communication, in online discourse environment such as instant messaging system. With the level of meaning-making engendered by the use of emoticons and multifarious shortenings, Nigerian students leverage on the CMC system of Instant

Messaging to socialize actively, form, develop, and sustain relational intimacy with their online counterparts. The range of emoticons put into use by Nigerian net users is another confirmation of the universal nature of some facial expressions and the socio-cultural ideologies present therein. Thus, the use of linguistic and non linguistic signs in CMC is within socio-cultural frames. Moreso, it is evident, from the percentage frequency of these textual signs in their messages, that emoticons and IM abbronyms are not only compensating for the sloppiness of CMC media, but also a means of adapting signs needed in a face-to-face interaction.

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