



ABSTRACT

Semiotics has complemented linguistics by expanding its scope beyond the phoneme and the sentence to include texts and discourse, and their rhetorical, performative, and ideological functions. It has brought into focus the multimodality of human communication. A growing body of research explores emojis, which are visual symbols in computer mediated communication (CMC). This work applies semiotic approaches to linguistics and nonverbal productions, social institutions and discourses, embodied

WHATSAAPP EMOJIS: DISCURSIVE COMPETENCE AND POWER DYNAMICS IN COMPUTATIONAL SEMIOTICS EXEMPLIFIED

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Introduction

With the widespread application of computing and the development of technology, computer mediated communication (CMC) is infiltrating daily life to a greater extent. As submitted by Bai et al (2019) CMC has many advantages, including enhancing the continuity of individual communication, improving the quality of relationships, and strengthening emotional communication. However, the lack of non-verbal cues such as facial expressions, intonation, and gestures in CMC can affect the transmission of information (Bai et al 2019 quoting Archer and Akert, 1977). To address this problem, communicators have devised new non-verbal cues, such as capitalization as a substitute for shouting, multiple exclamation points for excitement, and expression symbols for facial expressions. These expression symbols make up for the lack of non-verbal cues in CMC and are very well-suited for social media communication. As a result, emojis, which are a set of expression symbols, came into being. Emojis are used more and more frequently in network communication, and the way they are used is becoming more and more diversified as well.

The use of emojis is associated with psychological differences. Some researchers in the field of psychology have also focused on emojis usage to search for the relationship between user's behaviour and personality traits. Emoji is also used in marketing activities to enhance interaction and promote consumers' willingness to purchase. In order to make better use of this symbol, researchers



cognition and communication, and the new virtual realities that have been ushered in by the Internet. This research reviews how Emojis have developed, how they are used differently, what functions they have and what research has been conducted on them in different domains. Data for this research are randomly taken from four WhatsApp groups' chats at Emmanuel Alayande College of Education, (EACOED) Oyo where the researcher is also a participant. The theoretical frameworks used for this analysis are Peirce's and Barthes' semiotic theories.

Keywords: *Emoji, index, icon, symbol, and non-verbal cues.*

from the field of marketing draw on relevant theories in the field of linguistics, especially in rhetoric, to enhance the appeal of emoji in marketing activities. This research therefore, seeks to explore the place of emojis in meaning encoding and decoding with a view to examining the dynamics of the encased discursive load and their relevance to effective communication, using semiotics tools. This research engagement must necessarily accept Oduola's (2021: 145) view of communication as the bedrock of language use, which is the process by which meaning is assigned and conveyed in an attempt to shared understanding. Facilitating such shared understanding at this era of globalisation requires sound knowledge of digitalised communicative channels like emojis that exemplifies internet semiotics.

Statement of the problem

The research on emojis has become a hot topic in the academic field, and more scholars from the fields of psychology, computing, communication, marketing, behavioural science and so on are studying them. Seeing it symbolic phenomenon, Stark and Crawford (2015) acknowledge emojis as emergent permanent feature of western popular culture. Conversely, Davis (2017) would rather accept them as icons of knowledge representation in whatever forms they come. As Hauthal Et al (2018) point out the internet semiotic resources that emojis are; they are essentially deployed cross language, cross-ethnic and cross-cultural communication in the network society. The novelty of this aspect of artificial intelligence, especially, in the third world society like Nigeria, requires a fresh academic vigour that is capable of projecting practical and great cultural values in discursive term. The current study, thus, scrutinises the place of emojis in the field of semiotics in relation to meaning and power dynamics of discursive competence.

The Concept of Sign

Ferdinand de Saussure and Charles Sanders Peirce are the two dominant contemporary models of what constitutes a sign. According to Chandler (2007), signs take the form of words, images, sounds, gestures and objects. Peirce declares that nothing is a sign unless it is interpreted as a sign. Anything can be a sign as long as it is 'signifying' something or referring to or standing for something other than itself. Saussure defined a sign as being composed of a signifier and a signified. Contemporary commentators tend to describe the signifier as the form that the sign



takes and the signified as the concept to which it refers. Saussure makes the distinction in these terms:

A linguistic sign is not a link between a thing and a name, but between a concept [signified] and a sound pattern [signifier]. The sound pattern is not actually a sound; for a sound is something physical. A sound pattern is the hearer's psychological impression of a sound, as given to him by the evidence of his senses. This sound pattern may be called a 'material' element only in that it is the representation of our sensory impressions. The sound pattern may thus be distinguished from the other element associated with it in a linguistic sign.

The signifier is now commonly interpreted as the material (or physical) form of the sign – it is something which can be seen, heard, touched, smelled or tasted. A sign must have both a signifier and a signified.

Peirce on the other hand offered a triadic model consisting of, the *representamen*: the form which the sign takes (not necessarily material, though usually interpreted as such) – called by some theorists the 'sign vehicle'. An *interpretant*: not an interpreter but rather the sense made of the sign and an *object*: something beyond the sign to which it refers (a referent). In other words, the representamen is something that enters into relation with its object, the second component of the sign. The semiotic object is not identical to the 'real' object, because Peirce is of the opinion that our knowledge is never absolute. The interpretant relates to and mediates between the representamen and the semiotic object in such a way as to bring about an interrelation between them at the same time and in the same way that it brings itself into interrelation with them. Therefore, the interaction between the representamen, the object and the interpretant is referred to as 'semeiosis' or semiosis.

Semiotics

Semiotics studies the similarities and differences of different kinds of signs and meanings (Sonesson 2015). Semiotics is the study of signs and codes, signs that are used in producing, conveying, and interpreting messages and the codes that govern their use (Moriarty 2005). It is the study of how words and other symbolic systems of communication make meaning. Jakobson (1974) used a broad definition when he says that semiotics is the communication of any messages whatever. Messages, therefore, can be seen as made of signs and conveyed through sign systems called codes - in communication; meaning is derived only to the degree that the receiver of the message understands the code. Umberto Eco (1976) stated that "semiotics concerns everything that can be perceived as a sign". Signs constitute printed and spoken words, images, sounds, gestures, and objects. Individuals interpret signs as "signifying something."

From all these definitions and views of different scholars, it is discovered that semiotics cuts across different disciplines and the notion of a relationship between the sign and object or signifier and



signified is very important to the two proponents of semiotics i.e. Saussure and Peirce. Different scholars have described this relationship in different ways. Saussure for example explained the symbolic nature of signs by dividing them into two structural components: the signified and the signifier while Peirce used another triad- iconic, indexical, and symbolic, to explain the nature of the relationships he identified for signs.

The major strength of semiotics is that it is a sophisticated analytical tool for explaining how signs make sense (Rose, 2001 cited in Achi 2010). From Danesi's (2015) submission, the objective of semiotics is to study the production and comprehension of signs and sign systems as they manifest themselves across cultures, contexts, media, channels of communication, and even species. The main goal of semiotics is the investigation of signification patterns and structure in texts, identifying and analyzing them. This goal is aptly captured by Jakobson (1971) quoted by Achi (2010) that:

Every message is made up of signs; correspondingly, the science of signstermed semiotics deals with those general principles which underlie the structure of all signs, whatever, and with the character of their utilization within message as well as with the specifics of the various sign systems and of the diverse messages using those different kinds of signs.

Face As Semiotic Sign

According to Makolkin (2015), face is the best example of a sign that serves as bridge between nature and culture: Being a part of a living human body, it is a natural sign while serving as a cultural sign as well. Facial expressions, features, colours and shapes naturally signify important information to humans. Sebeok (2001) buttresses this by saying, "facial expressions, pouting, the curled lip, a raised eyebrow, crying, flaring nostrils, constitute a powerful, universal communication system, solo or in concert". He added further that eye work, including gaze and mutual gaze, can be particularly powerful in understanding a range of quotidian vertebrate as well as human social behaviour.

Prior to listening and speaking, one sees and studies the face of the interlocutor, starting to interpret its multiple meanings from the perspective of one's particular sociocultural code or idioculture while creating one's own special model of face interpretation. We daily read faces, consciously or subconsciously, with or without any purpose. Human face is one of the most vital natural signs, the omnipresent visual sign that exercises an enormous control over our feelings, thoughts, and behaviour. Faces often enchant, please, comfort, arouse love, rage, compassion, hatred, frighten, intimidate, fool and deceive.

The first mirror is the smiling face of an observer, signifying a semiotic process, a possibility of a face to the face nonverbal dialogue. Prior to the invention of the mirror and discovery of the facial self, the face of the other, facing the one serves as a proto-mirror. "Eye to eye ball", "face to face", "oju loro wa" are the metaphors, the linguistic traces, preserving the memory of the visual encounter and its significance, recreating the drama of the most natural semiotic act—seeing and perceiving the other through the face. "Eyes are mirrors of the soul", "faces say more than words", "written on their faces", "seeing is believing", are proverbs or utterances that reflect the actual focus of the observer during the process of interpretation of the face of the other, display the



process of perception, the greater role of seeing as opposite to saying and prevalence of the visual image over the verbal one. Eyes usually reflect the exact emotional state, be it anger, want, contentment, hunger, plea for food, or desire of attention. Tears and quite distinct cry easily mediate change in the mood and emotional state.

According to Aristotle or through the lenses of his culture on the Face-Sign as quoted by Makolkin (2015) gleamy eyes stand for courage, blinking eyes- for cowardice, pale and vacant eyes for dullness of senses, wide-open eyes for impudence, drooping eyes may signify softness, as well as dejection and low spirits, snarling grin for surliness (irritability) small, lustrous, lewd eyes signify slyness and lasciviousness, small eyes also stand for small-mindedness as well as impropriety.

Thus, it is important to know that emoji is a kind of sign that represents facial expressions of one's feeling, mood and emotion. It is an iconical sign, perhaps also an indexical sign.

Theoretical Frameworks

Peirce's classification of signs in terms of icon, index and symbol and Barthes' semiotics theories of connotation and denotation are used for this study. What are icon, index and symbol? An **Icon** is a sign that signifies by virtue of the fact that it shares at least one 'character' or quality with the object it represents, whether that object exists or not. An icon, simply put, is a sign that is linked to a signifier through similarity in appearance e.g. a portrait, a cartoon. An **Index** is a sign which refers to the Object that it denotes by virtue of being really affected by that Object. An excellent illustration of an index is a photograph. An indexical sign ties the signifier to the signified; the index has been described as visible sign which points to the invisible, though this may be too general. The indexical sign can be described as the registration of the real; the sight of smoke, for example, can indicate fire, the sight of tears suggests sadness, sorrow, even joy at times as we will see in the use of emojis. A **Symbol** is a sign which refers to the Object that it denotes by virtue of a law, usually an association of general ideas, which operates to cause the Symbol to be interpreted as referring to that Object. A symbol links the signifier and the signified in a purely arbitrary or conventional way; unlike the icon or index, the link is not physical or logical. Examples of symbol are numbers, traffic lights and national flags.

Barthes on the other hand has extended the concepts of signified and signifier to include connotation and denotation. Denotation is the direct, specific, or literal meaning we get from a sign while connotation is meaning that is evoked by the object, that is, what it symbolizes on a subjective level. Barthes' theory is that there is a first and second level of meaning. Denotation is the starting point; meaning making then shifts to the second level where connotation takes over and delivers a richer experience of the meaning by engaging Peirce's interpretants. Denotation and connotation are both used in visual communication.

The Development of Emoji

Emoji originated from smiley, which first evolved into emoticons, followed by emoji and stickers in recent years. Smiley first appeared in the 1960s and is regarded as the first expression symbols. Smiley is a yellow face with two dots for eyes and a wide grin which is printed on buttons, brooches, and t-shirts. By the early 1980s, this symbol had become widespread, emerging as a permanent feature of western popular culture (Stark and Crawford, 2015). As defined in the English



Oxford Living Dictionaries (2017), emojis are small digital icons used to express ideas or emotions in electronic communication. These icons, which now number over 3,000 since their introduction in 1999, can also represent faces, weather, vehicles, buildings, food and drink, animals, plants, feelings, and activities (Davis, 2017). According to Isaac (2019), Emojis, which were first encoded in Unicode (a worldwide character-encoding standard) in 2010, are now built into multiple devices and applications. As a result, these digital icons are popularly shared by users from varying countries, cultures, and demographic groups. Despite being encoded in Unicode, however, emoji renderings tend to differ across platforms because of varying fonts (Lu et al., 2016). Isaac (2019) submits that major fonts include Apple (used on Messages on iOS and WhatsApp), Google (used on Android interfaces, Google Hangouts, and Gmail), and Facebook (on Facebook and Facebook Messages). Social media platforms like Instagram, Twitter, and Snapchat also have their own emoji languages.

To buttress the submission above, Huang (2021) says that from the initial emoticon to more colourful and diverse kaomoji, and then to Emojis adopted by the two Internet giants of apple and Google, this process is accompanied by the gradual maturity of online social networking in the Internet age. When Emojis are incorporated into Unicode coding system, it has almost become a popular coding in line with international standards. As an important symbol used in cross language, cross-ethnic and cross-cultural communication in the network society, Emojis not only have practical value such as symbolism and communication, but also has great cultural value.

Therefore, Emojis are pictorial symbols that replace words or concepts, especially in electronic messages (Hauthal Et al 2018). The term *emoji* is a loanword from Japanese. The beginning *e* (絵) means “picture” and *moji* (文字) approximately means “written character” (Unicode Consortium 2018). They are small colour images that can be used with text in computer mediated communication. Some of the most frequently used emojis show a human facial expression like a smile, wink, or frown, as can be seen below. Some of these are:



Emojis are also used to form sentence(s).

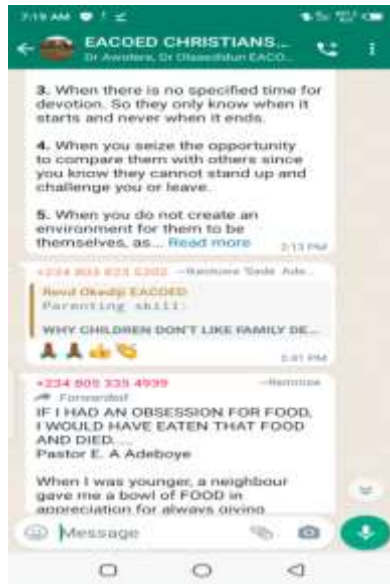
Data Presentation

Data for this research are randomly taken from four whatsApp groups' chats, namely; *EACOED CHRISTIANS* which comprises of the Christian staff of the college, *COEASU EACOED* that has teaching

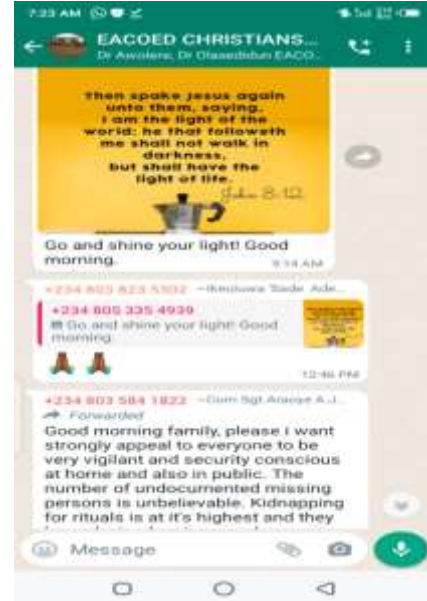


staff as participants, *English Edu. Finalist*, its participants are 400 level students of the department of English at EACOED and SLAN ACADEMIC STAFF. The data comprises of about 34 different Emojis altogether. Below are the screen shots of the chats in which the Emojis were used.

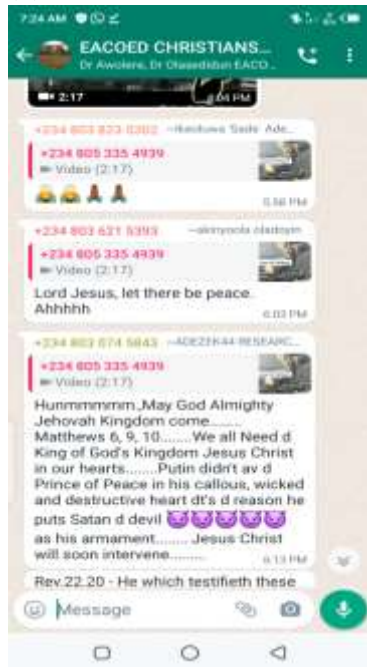
(A)



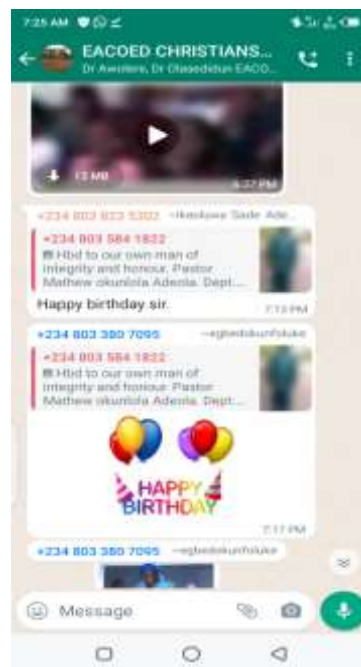
(B)



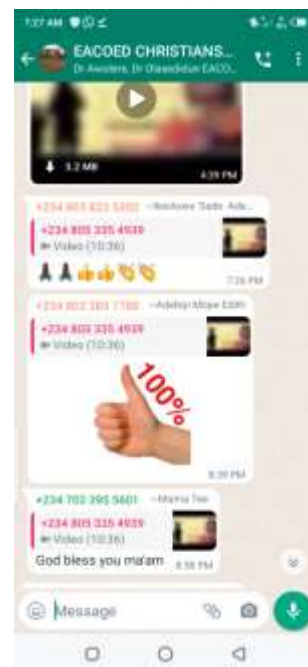
(C)



(D)



(E)

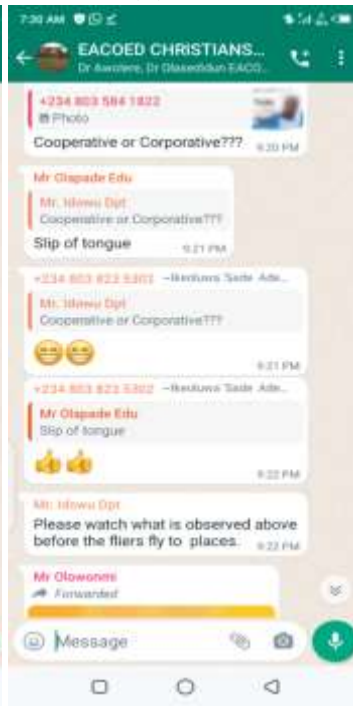




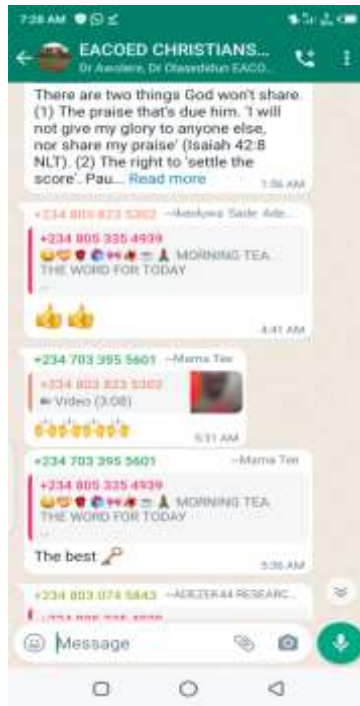
(F)



(G)



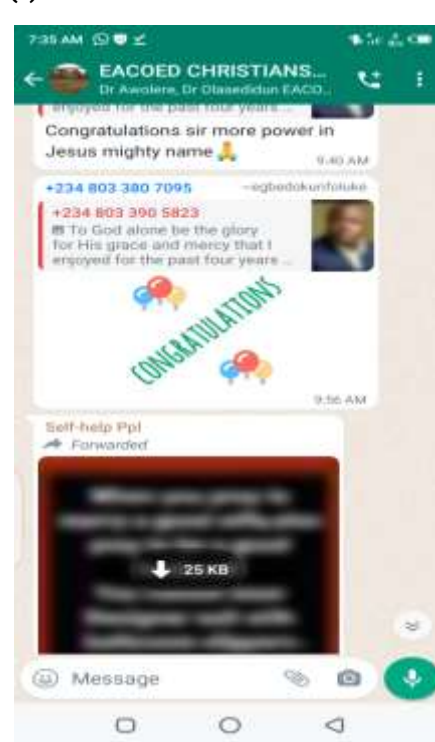
(H)



(I)

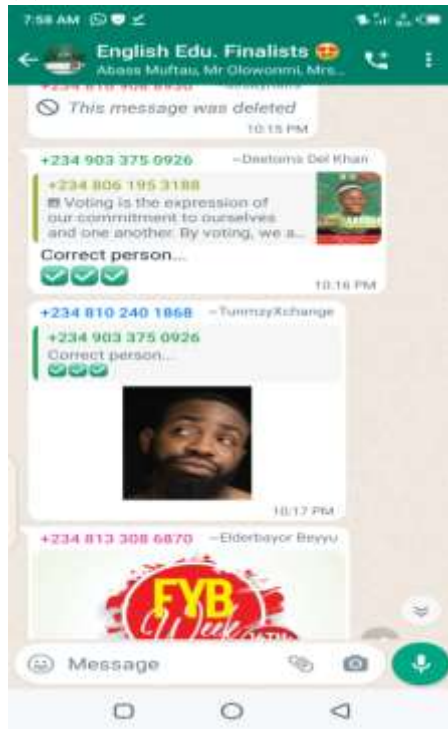


(J)





(K)



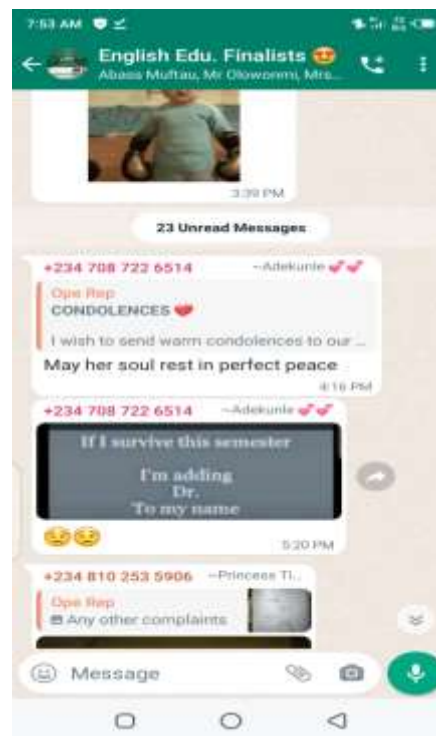
(L)



(M)

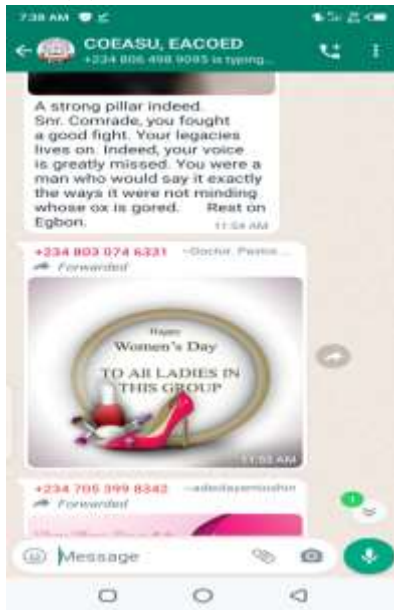


(N)





(O)



(P)



(Q)



(R)



Analysis and Discussion

Meanings are encoded with the use of Emojis on WhatsApp group pages depending on members of the group or the participants. The 34 emojis used in the data are presented below.



S/N	EMOJIS	NO. OF TURNS	EMOJIS LOCATION IN THE PICTURES
1	Closed palms	8	A, B, C, E, J, M, R, & H
2	Thumb up	4	A, E, G, & H
3	Clapping hands	2	A, E
4	Sobering posture	1	C
5	Human head with horn	1	C
6	Smile face	2	G, H
7	Blomblous	3	D, I, J
8	Hand thumb up with 100%	1	E
9	Waving hand	1	H
10	Teary face	1	F
11	Hands on head	2	F, P
12	key	1	H
13	Head bond	1	H
14	Pass mark	1	K
15	Frown face	1	N
16	Dancing female	1	L
17	Love/wink face	1	L
18	Tea cup	1	H
19	Wine cup	1	L
20	Wine bottle	2	O, L
21	Musical instruments	1	L
22	Broken heart	2	M, N
23	Joined open palms	1	M
24	High heel Shoe	1	O
25	Wide open eyes	1	R
26	Smile face with droplets	2	P, R
27	Running images	2	Q, R
28	Box	1	H
29	Rose	1	H
30	Pink heart with ribbon	1	H
31	Nail paint	1	O
32	Mirror	1	O
33	Lipstick	1	O
34	Face brush	1	O

From the above pictures and the table of analysis, it was discovered that the use of emojis cuts across all categories of people; young and adults, male and female because data for this work are taken from both teaching staff, non teaching staff and the students. 8 closed palms are altogether used as shown in the above table, 3 (A, E, R) symbolises appreciation while the remaining 5 (B, C, H, J & M) signifies prayer and amen. There are 4 thumb ups (A, E, G, H), one pass mark (K) and one



hand thumb up with 100% inscription (E) in the data, all symbolise agreement and support except the one in (H) which connotes appreciation or a sign of “you do well”. From the table also, 2 clapping palms are discovered and they indicate applause and compliment. One frowning face that shows or expresses surprise or disbelieve is seen in picture (N). It connotes a surprise or disbelieve in this context because it was a response to a 400 level student who aspired to be addressed as Dr. after the completion of his B.Sc programme.

Furthermore, one each of smile face (G), open palm (M), eyes wide opened (R), box (H), heart with ribbon (H), rose flower (H), tea cup (H), wine cup (L), face brush (O), nails’ paints (O), mirror (O), lady’s shoe (O) and lipstick (O). Each represents or signifies as the case may be, happiness, position of prayer in an islamic way, surprise, gift, showing affection, love connotation, time indication (morning), celebration, ladies affair (in Os) depending on the context respectively. Two smile faces signifying mockery or making jest in (G) and happiness (H). The first is interpreted as a mockery or jesting because it was a response to a colleague’s comment pointing out a spelling error committed by another colleague as in “cooperative or corporative”. After the smiling face response was another comment which says “slip of tongue” sounding sarcastic (because they are writing not talking), and the same person who responded with smiley earlier then responded again with thumb up showing agreement. Which means, they both made jest of the writer. The second connotes happiness because the user used it to start a devotion write-up with other emojis like box with ribbon, heart with ribbon, rose flowers, tea cup etc. these shows love, happiness and as well good morning.

Moreso, there are also 2 hands on head emojis (F, P) that signify horror and surprise respectively. The first was a response to a gory picture of some accident victims while the second was a response to a comedy film where a young man pushed an herbalist away from the road. There are smiling faces with droplets in two pictures and running images, all connote being funny, sarcastic and running away before one is being caught by the one at the receiving end. There are emojis that signify sadness and sorrow as found in M, N and F i.e. broken heart and teary face. Emojis which signify celebration are also part of the data, they are in form of wine bottle, musical instruments, blombulous with congratulations written either on top, in between or at the bottom and dancing images. Lastly, there is an emoji of human head with horn to signify satan or the devil, infact the person who used the emoji write “devil” after the emoji and another one with wink and love beside mouth. Winking emoji has referent happiness, indicating some relationship with the interlocutor (used on women’s day by a male colleague on the page) that is; it adds a secretive or perhaps jocular nuance of emotionally pertinent implying that there is a romantic intent or relationship involved.

Summary of findings

In the final analysis the be-all of this study is that globalisation by the means of which the world has been shrinked into a global village has greatly revolutionalised global communication system through digitalisation. This accounts for the birth of computer mediated communication and its permeating influence on human daily activities. Without prejudice to what could be termed as the 21st century ‘bruises’ of such revolution, our investigative line has, on the whole touched on:



- (i) Whatsapp emojis are universal computational semiotic resources by which 'impressive language users' display their discursive competence through digital coding system;
- (ii) Such digitalised coding provides appropriate analytical platform for the specialist-discourse analysts to handle the real life emoji-texts vis-à-vis the various operational communicative contexts that produce them;
- (iii) Emoji-texts constitute aspects of the authentic product of human interaction which concretises the abstractness of human communication. In other words, these 'internet semiotic resources encase certain shared information that, doubtless, elicit reactions. They are, basically, globalised aspects of linguistics which show humans as users of language to do things and depict identities.

By implication, the analyses of Whatsapp emojis in this study have revealed the inherent potential and power dynamics of computer mediated communication in:

- (i) enhancing the continuity of individual communication,
- (ii) improving the quality of relationships, and
- (iii) strengthening emotional communication.

Conclusion

The use of "little yellow face" with various expressions in Emojis in online social networking obviously implies the speaker's expression and emotion. Emoji, as one of the digital footprints, also implies the discourse style and expression characteristics of performers. It was discovered that the participants have a shared background knowledge, that is, they have mutual conceptual beliefs. Some of the Emojis are used in reference to events such as the use of blombloss, cake, wine bottle, flower etc for birthday wishes and the use of lady's shoes, and cosmetics to, among other things, make reference to ladies or women (on women's day, for instance). Certain emojis can have different meanings depending on the context and situation. Lastly, the different details in facial representation add semantic nuances that shape their ultimate meanings, and these tend to have a cultural coding effect (Danesi 2017).

Recommendations

Further studies in regard of emoji, stickers and other computational or internet semiotic resources will, unarguably foster more diversified network communication system that is capable of facilitating stronger emotive and discursive competence in social media communication. Such breakthrough is capable of birthing unabashed illuminations for rewarding digital skills training such as graphic design expertise, professional digital marketing through a virile Global System of Media Communication and Information Communication Technology.

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