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Semiotic Representation of Gender in Google Emojis: A Liberal Feminist Perspective

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ABSTRACT

Modern technology has undoubtedly changed the way we communicate. Emoji is the latest development that crosses all language barriers and serves as a global language. The present study seeks to investigate how gender is semiotically represented in Google female emojis. The study is interpretive and qualitative in nature. By using Kress & Leeuwen (2006) the Grammar of Visual Design model, the study analyzed the stereotypical and professional (newly introduced) Google emojis for female and attempted to spot the tenets of liberal feminist movement. The revision of emojis by Google, with a belief that 'this will empower young women and better reflect the pivotal roles women play in the world' bespeaks the flourishing global liberal feminist movement. This acknowledgement is a feather in liberal feminist movement's cap in that gender roles are considered social constructs. The new emojis duly construct women as coming out of the stereotypical womanish stuff and entering into professions that were once male-dominant.

Keywords: Google emojis, semiotics, liberal feminist movement, gender stereotypes

Introduction

The digital media has revolutionized the way of communication. It has invented ways to convey para linguistic features such as emotions, gestures, tone, stress etc. The remarkable development is the introduction of emoticons and emojis. Emojis are the latest development in this regard. Emoji were invented in 1990 in Japan by Shigetaka Kurita but they were added late to the Unicode Standard unit in 2009 (Davis & Edberg, 2015). They are taken as successors to emoticons. Emojis are 'pictographs' of faces, objects, and symbols.

This new hieroglyphic language ---emoticons and emojis—crosses language barriers and serves as an international language. Moreover, it is time saving and worth thousands words. This accounts for its growing popularity in online communication such as text messages and social media (facebook, twitter, instagram, etc). In advertising, with the press release of Chevy fully written in emojis, the use of emoji is emerging. Above all, Oxford Dictionaries for the first time

selected the emoji to be the 'word of the year' (2015).

Since the emojis have become a key form of communication, people started identifying themselves with these. When people couldn't represent themselves in emojis, they criticized them for lack of diversity. Women were at the forefront in this criticism as they were the people who got minimum or stereotypical representation in the existing emojis. Women were depicted in the most traditional roles in emojis such as a bride in white veil, a flamenco dancer in her red gown, a woman getting a haircut, a queen with golden tiara, a pair of ballet dancers, etc. In all these emojis women were represented as delicate, shy, sexy seductress, or dancing or posing for men. It was a limited representation or overgeneralization of female roles. There wasn't anything wrong with using these emojis if you were doing your hair or going to a dance party, etc but when you wanted to tell to your friends that you were doing something other than these stereotypical feminine activities, you were left with none. The 'real' woman engaged in different professions was missing. But this was not the case with male emojis. This disparity between male and female emojis became the battle cry with the publication of an op-ed piece 'Emoji Feminism' in the New York Times by Butcher in March 2016. Butcher, an assistant professor of English at Ohio Wesleyan University, lucidly states the condition of female emojis at that time. She writes:

Yes, there were women's faces, and tiny women's bodies. But for the women actually engaged in an activity or profession, there were only archetypes: the flamenco dancer in her red gown, the bride in her flowing veil, the princess in her gold tiara (Butcher, 2016).

She rhetorically speaks:

Where, I wanted to know, was the fierce professor working her way to tenure? Where was the lawyer? The accountant? The surgeon? How was there space for both a bento box and a single fried coconut shrimp, and yet women were restricted to a smattering of tired, beauty-centric roles? This was not a problem for our male emoji brethren. Men were serving on the police force, working construction and being Santa (Butcher, 2016).

Google responded to these forceful voices by proposing the idea of 13 new gender-inclusive career emoji to the Unicode Consortium in May, 2016. Google states that emojis are an important mode of communication for millions of people around the globe. Yet the professional roles of the people cannot be well communicated with emoji. This is especially true to women. "More than 90 percent of the world's online population use emoji. But while there's a huge range of emoji, there aren't a lot that highlight the diversity of women's careers, or empower young girls", stated by Google on its blog. Unicode approved 11 out of 13 proposed emojis on July 14, 2016 and standardized their encoding for different operating systems. Once a new emoji is approved; Unicode provides the special code that allows platforms like Apple, Android and Google the choice of presenting the image on their devices.

These new emojis consist of a set of 11 emojis depicting people at work, including factory workers, chefs, farmers, scientists, computer programmers, singers and teachers. These

emojis are available in male and female versions, as well as in six different skin tones. Moreover, 33 existing emojis are updated with the female versions. Earlier emojis such as "swimmer/surfer" and "spy" were presented as male characters, but now the digital users are able to choose between genders.

Liberal Feminism

Liberal feminism was widespread in the 1950s and 1960s. Liberal feminists claim that gender differences are not biological but exist in the ways of socialization which favors patriarchy and keeps men in power positions. When there is no difference between men and women, then women must be given equal access to political, educational and economic opportunities. Liberal feminists generated and endorsed acts of legislation that challenged the pervasive patriarchal ideologies and aimed at liberating women by demanding equal rights and opportunities. The main concern of the liberal activist has been with the discernable sources of gender discrimination, such as gendered job markets and discriminatory wage scales and with promoting women into influential positions in the society. According to Lorber (1997), liberal feminist politics made use of the important weapons of the civil rights movement -- antidiscrimination legislation and affirmative action -- to fight gender discrimination, especially in the job market. Affirmative action attempted to regulate the gender imbalance in work-places by uplifting men to train for such jobs as secretary, nursing and teaching and women for fieldwork like policing, engineering and construction.

The major contribution of liberal feminism is unveiling how much modern society discriminates against women. In the United States, it was triumphant in breaking down many blockades to women's entry into previously male-dominated jobs and professions, helped to equalize wage rates, and got abortion and other reproductive rights legalized. In a nutshell, liberal feminism asserts that women and men are essentially similar, and therefore women should be given an equal representation in public spheres monopolized by men -- politics, the professions, work and the sciences.

Statement of the Problem

It's not long ago that browsing through the plethora of emojis on our smart phones, it was noticed that female emojis typically depicted women doing their nails, getting a haircut or dancing in a red flowing gown, on the other hand, male emojis showed men in serious professions or active sports. This disparity may seem inobnoxious at the very outset, but given the fact that millions of female season their verbal text with these emojis on a daily basis, these tiny images at once have huge overtones. These tiny images impact the gender norms that shape the worldview of our young generation in that what is expected to do and what is forbidden for a boy and a girl. Moreover, the paucity of emoji options for the professional females was worth probing because it mirrors a social stratagem that still maintains to fortify traditional gender stereotypes.

The recent revision of Google emojis, showing women in different professional roles with their male counterparts is welcomed across the globe. Gender-inequality is the widely addressed issue throughout the world, so the introduction of these emojis is well in time to ensure gender equality. This addition to the existing stereotypical female emojis, reinforce the liberal feminists' claim that gender is a social construct rather than biological. The contrast between the previous and new professional emojis represents the revision of gender roles of women. According to Bertens, feminism from its very inception focused on gender 'because a thorough revision of gender roles seemed the most effective way of changing the power relations between men and women' (Bertens, 2014: 85).

Emojis have been the subject of study since its inception but very few studies have been done from a feminist perspective .The present study is an attempt to fill this gap. The study would address the following questions:

- How female gender is represented semiotically in Google Emojis?
- How liberal feminist's tenets are depicted through these emojis?

Literature Review

The universal nature of emojis makes them worthwhile and ensures a wider cross-cultural comprehension potential even among those who do not share a common language (Gulsen, 2016; Brisson, 2015).

Investigation of the evolution of emojis and their usage have led to the conclusion that they are not a "new" form of language developed by the tech savvy generation, but an extension of older visual language systems that utilize digital technology to create greater layers and nuance in asynchronous communication. They represent an intense human need for visual communication that had been expressed through pre-alphabet communication systems (Alshenqeeti, 2016; Tuttle, 2016).

From a socio semiotic multimodal perspective, emojis are rich semiotic sources that serve in meaning-making besides other linguistic sources. The use of emojis as a new system of codes that seeks to intensify language's emphasis on tone and visual vocabulary is incontestable (Brisson, 2015). Emojis has opened up new avenues of novel communication that go far beyond traditional writing, adding creativity and visual playfulness to language (Danesi, 2016). Emojis on their own are insufficient as a form of written language but offer adequate paralinguistic features and assist online written communication. (SADIA, 2018). They offer more possibilities than text alone (Brisson, 2015). They mostly play the role of an amplifier than a modifier of the message (Tauch & Kanjo, 2016).

Emojis reflect the living conditions of the people of a community (Moschin, 2016; Ljubešic & Fišer, 2016). Moschini (2016) adopting a socio-semiotic multimodal approach, decodes the semiotic layers of the 2015 "Word of the Year" emoji, with a special concern on the context of cultures out of which it emerges. The author states that this 'pictographic

word' is to be taken as a marker of the mashing up of Japanese and American cultures as a result of the widespread of digital discourse. Ljubešic & Fišer (2016) made the first attempt at investigating the global distribution of emojis. They performed the analysis of the spatial distribution of emojis on a dataset of 17 million geo-encoded tweets containing emojis by running a cluster analysis .They concluded that emoji usage depicts a real picture of the living conditions in different parts of the world.

The use of emojis can either explicates or obscure the receiver because they carry emotions but the sender is absent. Therefore, their interpretation is subjected to the focus of the message, the relationship of the interlocutors and the social context (Dresner & Herring, 2010). These emoticons and emojis do not share a single universal meaning. They do not carry any meaning but can adopt different meanings depending on the textual context and the mood of the interpreter of the message (Kelly, 2015). Moreover, there are varying interpretations of emojis on different platforms. A significant potential for miscommunication, was found both for individual emoji renderings and for different emoji renderings across platforms (Miller et al., 2016).

Distribution of emojis across different social platforms is not the same. The most widely used emojis in one social app is not as popular in the others. Emojis sentimental polarity in Twitter was greater and overall number of emojis was less than facebook (Tauch & Kanjo, 2016). The sentiment analysis of the emojis draws several interesting conclusions. It turns out that the popular emojis are positive. The sentiment distribution of the tweets with and without emojis is significantly different. The inter-annotator agreement on the tweets with emojis is higher. Emojis tend to occur at the end of the tweets, and their sentiment polarity increases with the distance. No significant differences exist in the emoji rankings between 13 European languages (Novak et al., 2015).

Men and women have differences in their use of emojis in terms of their frequency and variety. Females send more messages with emoticons and males use a more diverse range of emotions (Tossel et al., 2011; Dresner & Herring, 2010). The younger generations who have grown up with ICTs are more adaptable to the changes, for example, they enrich their text messages with innovative use of emojis (Krohn, 2004). However, these generational differences are not backed up by a strong evidence (Nishimura, 2015). Rather, they seem to be hanging on other factors such as the exposure to and experience of technology.

Although the above mentioned studies have generated significant findings on emojis yet there is much to be investigated about these tiny images. Very few studies have done from a feminist's perspective. The present study emerged in response to fill this gap. The study is significant as it will provide insights for studying emojis from a gender perspective.

Methodology

The present study is interpretive and qualitative in nature. Kress & Leeuwen (2006) The Grammar of Visual Design model served as the analytical tool for the study. This model focuses on mapping the meaning-making potential of semiotic resources that have become widespread

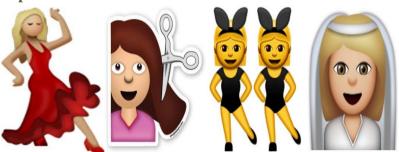
in present times (visual, spoken, gestural, written, three-dimensional, etc.). By providing the basics, it develops innovative methods for the analysis of visual data. For this reason, the social semiotic framework propounded by Kress & Leeuwen (2006) has been widely used by the researchers to analyze visual data such as paintings, cartoons, pictures, advertisements, drawings, emojis, websites, etc.(Riaz & Rafi, 2019; Pratiwy & Wulan, 2018; Sadia, 2018; Brady, 2015; Xin, 2012). It well suited the present purposes as emojis are one of the semiotic modes that have gained popularity in this digital age.

The data consist of Google female emojis--- 4 previous stereotypical emojis (group A) and 4 new professional emojis (group B). The sampling technique adopted for the study was nonrandom. Due to the limited scope of the study; the following 8 emojis were selected for analysis.



Results & Discussions

Analysis of Group A



Group A consists of four stereotypical female emojis. It includes a Dancer, a Haircut, Women with Bunny Ears and a Bride with veil.

The woman dancing in red gown was approved under the name of 'Dancer' (Emojipedia). The interactive meaning of the image represents it as an 'offer' picture. The gaze is absent . Here the viewer becomes the subject of the look and the represented participant (Dancer) becomes the object of the viewer's dispassionate inquiry. The image of woman dancer is 'offered' to the male viewers as an object of examination and an item of information placed in a shop window. It implies the commodification of women by men.

As far as the interactive meanings of the Haircut, Women with Bunny Ears and Bride are concerned; these three emojis are presented as demand pictures. These emojis address the viewer directly, smiling at the viewer. According to Kress & Leeuwen (2006) this direct gaze of the represented participant demands something from the viewer. The girl in pink getting haircut is approved under the name 'haircut'. It is shown as a girl smiling, with scissors shown open next to the hair on her head. She demands admiration and identification from the viewer. Two Bunny Girls with smiling faces was approved under the name "Woman with Bunny Ears'". This emoji is often used as an expression of friendship, fun, party-making. It is a demand picture as the bunny girls gaze at the viewer directly with a smile. Here the demand from the viewer (playboy) is to develop a relationship of admiration and identification. The Bride dressed in white wedding gown and white veil demands the viewer woman to develop a relationship of admiration and identification. It echoes the pervasive patriarchal ideology that all women must become wives and mothers and care for husbands, homes and children. Those who remain single are looked down upon in the Western world as leading a 'lesser' life.

The Dancer and women with Bunny Ears are shown from medium shot; the whole figures are visible. This distance allows the viewer to come close to the Dancer and Bunny girls though in imagination. The purpose of this kind of projection could be to attract the male partner for dance. The close shot of the Haircut and Bride indicates intimate relationship. This close distance combined with direct gaze at the viewer conveys that 'I am a part of your world'.

All the four stereotypical female emojis are pictured from a frontal angle, as part of our world. It indicates that these roles of woman are very much the part of our world. The frontal angle indicates the involvement of the image producer and the viewer. Vertically the Dancer and the Bunny girls are represented from a low angle that gives an impression of exaltation and triumph and shows them superior and awesome over the viewer. It implies that this is the high status of women to be sassy and sexy to the satisfaction of men's desires. However, the Haircut and Bride are shown at eye level, so the relationship between these emojis and the viewer is that of equality which is quite symbolic. The viewer is given the same status as that of the Bride and the Haircut thus indicating that all women have the same lot/choice to be married to a man or doing their hair to tempt male partners.

The perspective of these emojis is subjective, with a built-in opinion. Placed in a constructed rather than natural world, the viewer is subjected to what is propagated/imposed by the emojis. A particular point of view is imposed by the stereotypical limited representation of women. The Dancer is represented as a sexy, sassy and bold woman vigorously dancing wearing a glamorous flowing red dress .All that is getting dressed up, celebrate and dance at a party, showing off her ankles like a Victorian minx. Bunny ears are usually associated with "showgirl". Costumes, dancing and bunny ears go a long way to under -represent the 'real women'. The representation of Bride is highly subjective propagating that woman is made to comfort man by getting married to him. Moreover, the bride is wearing a Western traditional wedding dress; it's again a limited representation of brides worldwide.

The use of different colors in the emojis depicts different communicative meanings as colors are associated with different symbols in different cultures. So the colors are used wisely to render a certain representation to women. The red color of Dancer's gown and shoes symbolizes love, passion, temptation, sexual desires and lust. The implication is that the only business of the women wearing red gown and shoes in a dancing posture is to tempt/seduce their male counterparts. The Haircut is dressed in pink. The pink color stands for delicacy, romance, femininity politeness, tenderness, sweetness, etc. Pink color is often associated with girls. The pink color was first established as a female gender signifier in the 1940s (Paoletti, 2012). Now it has become a stereotype for girls. The Bride in white gown and white veil symbolizes Western traditional bride.

Overall all the four emojis of group A seem horribly stereotypical and represent a limited range of female interests. It is a partial representation of female gender. A flamenco Dancer, a girl in pink Haircut, Bunny girls and a Bride in white----it's not all about women, it's not all the women do. These emojis subtly amplify the societal restrictions that have been imposed on girls for generations.

Analysis of Group B









Group B consists of four newly introduced professional female emojis. It includes a doctor, a technologist, a scientist and a teacher.

From the point of view of the interactive meaning all the four professional female emojis are demand pictures. They address the viewers directly, smiling at them. According to Kress & Leeuwen (2006) this direct gaze of the represented participant demands something from the viewer. Here the demand from the viewer is to develop a relationship of admiration and identification with these newly acknowledged female gender roles of scientist, technologist, teacher and doctor.

These professional emojis are presented from a close personal distance that indicates an intimate relationship between the viewers and the represented professional women .This close distance combined with direct gaze at the viewers conveys that 'we are part of your world'. The implication is that these professional female emojis present the true picture of our society today where women have made their mark in every profession.

The perspective of these professional emojis is subjective, thus imposing a particular point of view on the viewer. The viewer is placed in a world that is a semiotic construct. These

revised female gender roles are an externalization of the liberal feminism's tenets. They have eliminated the traditional female stereotypes that prevailed in the emoji world earlier.

The female professional emojis are photographed from a frontal angle. It indicates the involvement of the image producer and the viewer. Vertically the emojis are at eye level, so no power difference is involved. The relationship between the professional emojis and the viewer is that of equality which is quite symbolic. It implies that all women are equal to these professionals, the female doctor, teacher, technologist and scientist are very much a part of their world. In fact, it is the true representation of the women.

All the professional emojis are represented as adequately dressed up and equipped as per the profession they belong to. The female scientist in white laboratory coat and gloves in hands is in line with her profession. A tube in her hand filled with a substance and her safety glasses further enhance her professional looks. The teacher is formally dressed up and is wearing eyeglasses. The board at her back and a pointer in her hand show her a real teacher. The technologist is shown working on her computer. The doctor in white coat and a stethoscope around her neck meets the requirement of her profession.

Different colors stand for different symbols in different cultures. So the colors are used wisely to represent different communicative meanings. Overall blue color is prominent in the professional emojis. In most cultures blue is the color of official business, wealth and trust. The color blue stands for dignity, decorum and is used for uniforms in many countries.

On the whole, the incorporation of female professional emojis is a reconsideration of the socially constructed stereotypical gender roles of women. Previously through emojis the only people representing jobs were men, while the women were limited to brides and princesses. It's a landmark achievement of the liberal feminist movement that now women are seen as engaged in different professions besides men even on the small screens. The professions that were unwelcomed to them have now become their territory.

Conclusion

The present study investigated the semiotic representation of gender in Google female emojis. The study analyzed the gender roles of women in stereotypical and newly introduced professional Google emojis with an attempt to trace the tenets of liberal feminism. The study concluded that the stereotypical representation of women in emojis (the dancer, the bride, the haircut girl, and the bunny girls) is actually a manifestation of detrimental patriarchal ideology. The emoji world conspicuously under-represented women in professional roles. It was not the whole truth about women but a half truth.

The newly introduced professional female emojis (doctor, scientist, teacher, and technologist) are hailed all over the world as they represent the 'real' women. Wherever we look, women are gaining visibility and recognition, so it was high time that female emoji should also reflect the reality. The social roles of women have changed over time and this change is highlighted by revising female emojis on our small screens. Revision of female emojis by Google is actually the revision of gender roles to embrace equality among genders. The revision

of emojis by Google, with a belief that 'this will empower young women and better reflect the pivotal roles women play in the world' bespeaks the flourishing global liberal feminist movement. The major concern of the liberal feminism was to fight gender discrimination especially in the job market and finally it was triumphant in breaking down many barriers to women's entry into previously male-dominated jobs and professions. The addition of professional female emojis to the existing stereotypes is a feather in liberal feminist movement's cap in that gender roles are considered social constructs. The new emojis duly construct women as coming out of the stereotypical womanish stuff and entering into professions that were once male-dominant.

References

- Alshenqueti, H. 2016. Are Emojis Creating a New or Old Visual Language for New Generations? A Socio-semiotic Study. *Advances in Language and Literary Studies* 7 (6): 56-69.
- Been, R., Bleuel, N., Fonts, A. and Davis, M. 2016. *Expanding Emoji Professions: Reducing Gender Inequality*. Retrieved on August 2, 2019 from http://unicode.org/L2/L2016/16160-emoji-professions.pdf
- Bertens, H. 2014. Literary Theory: The Basics. London and New York: Routledge.
- Bleuel, N. 2016. *Promoting gender equality through emoji* .Google blog. Retrieved on August 2, 2019 from https://blog.google/topics/causes-community/promoting-gender-equality-through-emoji/
- Brady, C. K. 2015. A Multimodal Discourse Analysis of Female K-pop Music Videos. *Unpublished PhD Thesis*) Birmingham: *University of Birmingham*.
- Brisson, C. M. 2015. *Hieroglyphs at Our Fingertips: Language, Semiotics, and Communication through Emoji.* Detroit: Wayne State University
- Butcher, A. 2016. *Emoji Feminism*. The New York Times. retrieved from http://www.nytimes.com/2016/03/13/opinion/sunday/emoji-feminism.html
- Danesi, M. 2016. *The semiotics of emoji: The rise of visual language in the age of the internet*. London: Bloomsbury Publishing.
- Davis, M., and Edberg, P. 2015. *Unicode Emoji*. Technical Report 51. Retrieved on August 2, 2018 from http://unicode.org/reports/tr51/
- Dresner, E., and Herring, S. C. 2010. Functions of the nonverbal in CMC: Emoticons and illocutionary force. *Communication theory* 20 (3): 249-268.
- Gülşen, T. T. 2016. You tell me in emojis. In *Computational and cognitive approaches to narratology* (pp. 354-375). IGI Global.
- Kelly, C. 2015. Do you know what I mean>:(: A linguistic study of the understanding of emoticons and emojis in text messages. *Bachelor Thesis*. Sweden: Halmstad University.
- Kress, G., and Leeuwen, T. V. 2006. *Reading Images: The Grammar of Visual Design*, London and New York: Routledge.
- Krohn, F. B. 2004. A generational approach to using emoticons as nonverbal communication. *Journal of technical writing and communication* 34 (4): 321-328.
- Ljubešić, N., and Fišer, D. 2016, August. A global analysis of emoji usage. In *Proceedings of the 10th Web as Corpus Workshop*, Berlin: Association for Computational Linguistics. 82-89.

- Lorber, J. 1997. *The variety of feminisms and their contributions to gender equality*. Oldenburg university speeches. Oldenburg: Bis.
- Miller, H. Thebault-Spieker, J, Chang, S. Johnson, I., Terveen, L. and Hecht, B. 2016. "Blissfully happy" or "ready to fight": Varying Interpretations of Emoji. *Group Lens Research*, University of Minnesota Minneapolis, MN 55455, USA.
- Moschini, I. 2016. The Face with Tears of Joy Emoji. A Socio-Semiotic and Multimodal Insight into a Japan-America Mash-Up. *HERMES-Journal of Language and Communication in Business* 55 (1): 11-25.
- Nishimura, Y. 2015. A sociolinguistic analysis of emoticon usage in Japanese blogs: Variation by age, gender, and topic. *AoIR Selected Papers of Internet Research* 5 (1): 1-17.
- Novak, P.K., Smailović, J., Sluban, B., and Mozetič, I. 2015. Sentiment of Emojis. *PloS one* 10 (12): e0144296.
- Paoletti, J. B. 2012. Pink and blue: Telling the girls from the boys in America. Bloomington: Indiana UP.
- Pratiwy, D., and Wulan, S. 2018. Multimodal discourse analysis in Dettol TV advertisement. *KnE Social Sciences* 3 (4): 207-217.
- Riaz, M., and Rafi, M. S. 2019. Gender-Based Socio-Semiotic Analysis of Honour Killing in Pakistani Paintings. *Pakistan Journal of Women's Studies* 26 (1): 125-148.
- Sadia, J. O. 2018. A Socio-Semiotic Multimodal Analysis of Emojis as Used in Text Messaging (Doctoral dissertation, University of Nairobi).
- Tauch, C., and Kanjo, E. 2016, September. The roles of emojis in mobile phone notifications. In *Proceedings of the 2016 acm international joint conference on pervasive and ubiquitous computing: Adjunct* (pp. 1560-1565). ACM.
- Tossell, C.C., Kortum, P., Shepard, C., Barg-Walkow, L.H., Rahmati, A., and Zhong, L. 2012. A Longitudinal Study of Emoticon Use in Text Messaging from Smartphones. *Computers in Human Behavior* 28 (2): 659–63.
- Tuttle, E. C. 2016. The Past, Present and Future of the English Language: How Has the English Language Changed and What Effects Are Going to Come as a Result of Texting? (Doctoral dissertation).
- Xin, W. A. N. G. 2012. A Multimodal Discourse Analysis of the First Movie Poster of Titanic (3D). *Overseas English* 13 (1): 1-17.