

The Variation of the Meaning of Emojis Taking WeChat's stickers as an Example

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Abstract: The study of the semantics of emoji is, in general, considered from a static perspective. Even when emoji are studied from a dynamic perspective, generational differences are rarely taken into account. An analysis of five typical and controversial emoji in this paper reveals a significant age gap of the usage of emoji.

Keywords: emoji semantics, age differences, emoji analysis and search

1. Introduction

Emojis are significant in online communication, providing conversational cues in a computer-mediated communication process that has certain lexical characteristics. Such lexical features have been demonstrated in previous studies through a variety of circumstantial evidence, but exactly what kind of conversational cues emoji can provide has not been discussed in full [1-3].

The provision of conversational cues by Emoji presupposes that both parties to the communication interpret emoji in a similar way, otherwise a degree of misunderstanding will develop.

However, emoji is not a universal language. We can find that differences in the understanding of emoji are actually common in our lives. Studies have shown that even within the same cultural context, there is often disagreement in the interpretation of emoji by users. This has been attributed to several factors, including the way emoji are presented on different platforms, inherent ambiguity of form, individual differences and so on [3,4].

Little consideration has generally been given to the potential explanatory factors of demographics for the causes of differences in emoji understanding, particularly the different understanding of emoji due to age and generational differences. Whereas people of different ages and generations have well-documented differences in the use of emoji, the question arises as to whether social media users of different ages have different understandings of emoji use, and if so, to what extent.

2. Previous Work

To date, despite numerous reports of age differences in emoji use, the demographics of recipients have received little attention in studies of either semantic or pragmatic interpretation, and if any have revolved more around gender differences. For example, women are more frequent users than men, have more positive attitudes, and so on [5,6].

Reports examining the impact of age on emoji use have also started mainly through frequency of use. In a large-scale analysis of emoji used on Facebook between 2007 and 2012, gender and age were found to significantly and strongly predict the total number of emoji posted, and younger users and females posted more emoji than older users and males. Through interviews with 1320 US adults aged 18 and older who use the Internet, it was found that frequent emoji users tend to be millennials [7,8].

Some studies have also found differences in the understanding of the meaning of emoji between age groups, with mainstream media suggesting that adults over 30 do not understand the rules of emoji use [9]. Among the more representative studies, an online survey was used to investigate how Facebook users interpreted emoji in a direct discourse context and to examine whether there were age differences.

There have also been articles that have removed the discourse context and investigated the relationship between online users' lexical understanding of emoji that exist alone and their age [10,11]. Both articles used online surveys to assess Internet users' dominant expected interpretations of the emotions expressed by facial emoji presented in isolation on websites.

Notably, in the study with mainland Chinese subjects, no overall differences were found in the ability of mainland Chinese people of different genders and ages to discriminate between the dominant emotions conveyed by different emojis.

3. Method

3.1. Participants

Based on the prevailing view that adults over 30 do not understand how teenagers use emojis and the general criterion that people over 60 are elderly, the age of internet users was divided into three levels: under 30, 30-60 and over 60 [9]. Three participants in each age group were randomly selected to complete the questionnaire.

3.2. Stimulus Material

The emoji used in this study were from WeChat and these were made into a questionnaire (Table 1) after initial screening.

3.3. Experimental Procedure

A questionnaire was used to collect the views of three people in each age group, and to explore whether there is any variation in the meaning of emoji as such between age groups in relation to differences in age.

4. Results

From the survey results (Table 2), the frequency of use of emoji for the under-30 and 30-60 age groups, in general, did not differ much. And the frequently and infrequently used emoji of participants over 60 years old have a large difference from those under 60 years old, except '😂' and '😏'.

Table 1: Questionnaire of WeChat emoji usage status.






Age	Emojis	Emoji definition	Question	Answer
Under 30 [] 30-60 [] Over 60 []		Smile	Do you often use this sticker?	Yes[] No[]
			In what scenarios would you use this sticker?	
			What do you think this emoji sticker?	Positive [] Neutral [] Negative []
		Sleep	Do you often use this sticker?	Yes[] No[]
			In what scenarios would you use this sticker?	
			What do you think this emoji sticker?	Positive [] Neutral [] Negative []
		shocked	Do you often use this sticker?	Yes[] No[]
			In what scenarios would you use this sticker?	
			What do you think this emoji sticker?	Positive [] Neutral [] Negative []
		Bye	Do you often use this sticker?	Yes[] No[]
			In what scenarios would you use this sticker?	
			What do you think this emoji sticker?	Positive [] Neutral [] Negative []
		whimper	Do you often use this sticker?	Yes[] No[]
			In what scenarios would you use this sticker?	
			What do you think this emoji sticker?	Positive [] Neutral [] Negative []

Table 2: Results of WeChat emoji frequency of use.






Age	Under 30	30-60	Over 60
Do you often use this sticker?			
	Yes[3] No[0]	Yes[3] No[0]	Yes[3] No[0]
	Yes[2] No[1]	Yes[3] No[0]	Yes[0] No[3]
	Yes[3] No[0]	Yes[3] No[0]	Yes[3] No[0]
	Yes[2] No[1]	Yes[3] No[0]	Yes[1] No[2]
	Yes[3] No[0]	Yes[3] No[0]	Yes[3] No[0]

Table 3: Results of WeChat emoji scenarios of use.



Age	Under 30	30-60	Over 60
In what scenarios would you use this sticker?			
 (smile)	<ul style="list-style-type: none"> Disdain for the other Feeling speechless Trying to tell that be offended 	<ul style="list-style-type: none"> Feeling speech less Expressing wordless Expressing speechless 	<ul style="list-style-type: none"> Expressing friendliness Means smile to each other Showing courtesy
 (whimper)	<ul style="list-style-type: none"> feel sorry for him or her, but actually feel he or she deserves it Expressing sarcasm Trying to sound bitter in tone 	<ul style="list-style-type: none"> For pretend pitying others Expressing wordless Expressing sarcasm 	<ul style="list-style-type: none"> Feeling pity and sorry for other Requesting others Ask for the help of others

Table 3: (continued).













 (bye)	<ul style="list-style-type: none"> Expressing speechless Want to end a talk quickly Too embarrassing to want to say goodbye to the world 	<ul style="list-style-type: none"> Expressing wordless Expressing wordless Expressing embarrassed 	<ul style="list-style-type: none"> Good bye Good bye Good bye
 (shocked)	<ul style="list-style-type: none"> Think there is something wrong with each other "What's wrong with you?" Talking about words and actions that make me confuse 	<ul style="list-style-type: none"> For expressing confusion Expressing wordless Expressing Confusion 	<ul style="list-style-type: none"> Feeling confused Expressing Surprise Expressing Confusion
 (sleep)	<ul style="list-style-type: none"> So embarrassing that I wish I was dreaming When sharing an embarrassing experience Trying to sleep 	<ul style="list-style-type: none"> Feel sleepy Expressing that I'm tired Saying good night to someone else 	<ul style="list-style-type: none"> End the chat with a good night To say good night Expressing that I'm sleepy

Table 4: Results of understanding of WeChat emoji.

Age	Under 30				30-60				Over 60			
What do you think this emoji sticker?												
😬	Positive [0]	Neutral [0]	Negative [3]		Positive [0]	Neutral [0]	Negative [3]		Positive [3]	Neutral [0]	Negative [0]	
😲	Positive [0]	Neutral [0]	Negative [3]		Positive [0]	Neutral [0]	Negative [3]		Positive [0]	Neutral [3]	Negative [0]	
😬	Positive [0]	Neutral [0]	Negative [3]		Positive [0]	Neutral [0]	Negative [3]		Positive [0]	Neutral [3]	Negative [0]	
😲	Positive [0]	Neutral [0]	Negative [3]		Positive [0]	Neutral [0]	Negative [3]		Positive [0]	Neutral [3]	Negative [0]	
😬	Positive [0]	Neutral [3]	Negative [0]		Positive [0]	Neutral [3]	Negative [0]		Positive [0]	Neutral [3]	Negative [0]	

In contrast, the difference in the use of  is great between participants under and over 30 years old. Between participants under 60 years old, those who under 30 years old, the use of  to express emotions was stronger, but not significantly, and differed little from participants over 30 years old in the use of , , and . Participants over 60 years of age differed more from those under 60 years of age in the use of , , and . Although the use of  are not significantly different from Table 2, can be seen from Table 3, which shows that the emotional tendencies expressed by the two are different.

5. Discussion

Popular opinion in mainstream media suggests that adults over the age of 30 are less likely to use emojis and are unaware of how teens use them [9]. It says that teens have devised "sophisticated Hammurabi social media guidelines to govern their interactions" those adults know nothing about, However, through the survey results, this is not the case.

According to the survey results, the use and understanding of emojis is relatively similar between those aged 30-60 and those under 30. It is the use and understanding of emoji that differs to a greater degree between those over 60 and those under 60, meaning that the age gap in emoji use occurs between those under 60 and those over 60.

The use and understanding of emoji by people over 60 years old is closer to the original meaning of emoji itself, the semantic of emoji used by young people that has changed. From the example of 🤔, we can generally see that the change in the meaning of emoji starts with young people under 30 years old, and it takes some time for this change in meaning to become popular among young people before it gradually becomes a commonly used connotation among people under 60 years old. The reason why there is a generation gap in the use of emoji is that people over 60 years old find it difficult to adapt to this change in the meaning of emoji. First, from the physiological and psychological point of view, as the elderly age, their cognitive ability is going downhill, for example, the decline of memory, the lack of attention, and even the reduction of hand-eye coordination, all of which will affect their reception of new information. Secondly, older people have a long social experience and have accumulated many positive or negative experiences, so they have their own subjective attitudes towards objective things, and these subjective attitudes are difficult to be changed by new things, including emoji.

6. Conclusion

In basic agreement with social stereotypes and expectations, the change in the meaning of emoji has been largely led by young people, and the use of emoji by older people has been unaffected by this change. However, middle-aged people aged 30-60 performed differently than expected in this survey, reflecting a good acceptance of the change in the meaning of emoji.

Interestingly, the five emoji meaning changes in the survey were largely from positive or neutral meanings to negative ones. This may reflect some patterns of word changes, or the psychological state of contemporary people.

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