The Semantic Structure and Cultural Embodiment of Internet Memes: A Comparative Analysis Based on Memes Scenarios

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Abstract. In the era of social media, China's ecosystem of memes on social platforms presents a tendency of personalization, that is to say, it is centered on users' personal preferences and tastes. It seems that the differentiation and influences of various applications on users' using memes have been weakened. However, western social platforms do not support customized memes. Maybe the difference in memes is related to the difference between Chinese and English itself. English internet slang has been created for years and used by all ages so that people who speak English do not have to use memes to express their feelings. On the contrary, Chinese internet slang exists for just a few years, update frequently, and is not identified by various ages, offering great space for the production of personalized stickers. To compare the usage and meaning-producing mechanism, this study compares both Chinese popular social platforms and English ones.

Keywords: Semantic Structure · Chinese Social Media · Customized Memes

1 Introduction

Social platforms generally can be categorized into three types. First and foremost, on TikTok, WeChat, and QQ, memes are displayed in two ways: classical emoji and personalization stickers. First, classical emoji comes from the phone system and applications. Second, personalization stickers are created personally and can be uploaded to the platform stickers library. Even the original author of sticker sets can be rewarded on WeChat and QQ, thereby forming a positive cycle of "creation-use-reward-incentive to recreate" [1].

In addition, on Twitter, memes are presented in two ways: classical emoji and personalized stickers. First, classical emoji comes from the phone system and applications. Second, a large number of "gif" stickers are available for users to search. It is worth mentioning that "gif" stickers are created by Twitter officials, not users, and Twitter does not support users uploading personalized stickers, let alone users having individual sticker libraries. However, users can upload their own created images in the comment area at once.

On Instagram, memes are presented in one way: classical emojis from the phone software and application. Users are not allowed to upload personalized stickers, let alone

have a personal collection of own-made stickers. Based on the analysis above, social applications are roughly categorized into three types in terms of the support degree of a personalized meme. Above all, self-made stickers are fully supported and users can generate personal sticker libraries, such as TikTok, WeChat, and QQ. Those platforms are named "Fully Support Personalization" (hereinafter referred to as "FSP") applications. Next, represented by Twitter, traditional emojis and official-made stickers are offered, but own-made stickers are not supported. This type is "Semi-Support Personalization" (hereinafter referred to as "SSP"). Last, those not supporting self-made stickers are called "Not Support Personalization" (hereinafter referred to as "FSP") applications, and the typical representative is Instagram. There are quite inspiring comparisons if more detailed memes scenarios are compared, which would be the main task of the following analysis [2–4].

2   TikTok: Version 24.4.0

The scenarios of memes usage in TikTok are divided into three kinds: comment box in the homepage video, chat box, and bullet-comment box in life. TikTok is a short video social platform, entertainment is its major attribute. Users can publish self-made videos in the content interface, and the videos will be pushed to followers or other users randomly, and viewers can like, comment, collect, and share the link. The comment section of the video is the first scene of using memes. In addition, users can also chat with each other, which is the second scenario of memes. And users can also broadcast live, and viewers can also use emojis in the bullet-screen during a live.

First, in the comment area of a homepage video, after users tap the comment box, four icons are displayed in the first line below the input box from left to right: camera, @, emoji, and a plus sign, and the second line is the emoji automatically recommended by the system. Users can use the emoji automatically recommended by the system, upload real-time stickers generated from real-time photos by tapping the camera symbol, tap the emoji to select more platform emoji, or upload stickers stored in the phone's album by tapping the plus sign. Also, tapping on emoji will bring up the emoji store, classic emoji, custom stickers library, gif emoji recommendation, and all sticker series already downloaded from the sticker store.

In terms of the second scenario, chat, including private chat and group chat. When users tap on the text input box, the recommended emoji does not appear, but the four icons - camera, voice, small expressionless face, and a plus sign still appear. All the functions are the same as those in the comment scenario except the small expressionless face, and a set of bigger platform emoji is added compared to that in the comment scenario. Additionally, when an emoji or sticker is sent in a dialog, the system will automatically guide the user to like, and reply to the meme, and also users are guided to add the memes to their collection, find a similar one, find the whole set as well as share it. Third, in the live screen interface, after users touch the bullet-screen comment box, five symbols will appear in the bottom row from left to right: an often-used platform emoji, a like gesture, a cube, a circle A for the speech-to-text function, and an expressionless small face symbol. Tapping on the last symbol will bring up all platform emojis as well as a few special VIP stickers. Under the live function, viewers can only use platform emojis, emojis that come with the phone system, and several VIP emojis.

Table 1. Emoj and memes in Tiktok

Types	Creation	Reward	Size Expression	Scenario		
				Comment	Chat	Live
Classic emoji	Social Platform and Phone System		Smallest Limited	yes	yes	yes
Sticker collection	Platform users Can be found and downloaded in the platform sticker store		Random Various		yes	
Self-made sticker	Any netizens Cannot be found or downloaded in the platform sticker store, but it can be uploaded into self-collection from the phone photo library		Random Sufficient		yes	

There are three scenarios for using memes in TikTok, and from the perspective of production sources, these memes can be divided into three categories. The first category is classic emoji, which comes from the platform emoji and phone system, its emoji size is the smallest and its expression is limited, but it can be used in three scenarios. The second category is the sticker store, which was created by TikTok users. They are larger in size and richer in content expression, and can be used in the comment area and chats. The third sort comes outside the platform, which is made by netizens and can be uploaded to the private sticker library for repeated use, with random size but the richest expressions, and can be used in comments and chats (Table 1).

3   WeChat: Version 8.0.33

There are three scenarios for using memes in WeChat: chats, moments, and live. WeChat is a communication tool where users can share life with friends? On the moment's page, users can post text, pictures, videos, songs, or links from other websites to share their lives; in a chat, users can text, start a voice call, and start a video call to keep in touch with their friends. On the chat page, there is a small smiley face to the right of the text input box. When a user hits the smiley face, the icons of "Search, smiley face, heart, V gesture, theme sticker" will appear under the texting box, which correspondingly means stickers for online searching, classic platform emoji, custom stickers added by users, saved selfie stickers and sticker sets downloaded from platform sticker store. When a sticker is sent, some guidance, including "add, forward, find related stickers, overlay the original sticker', appears if a user presses the sticker and holds for a second.

Entering the 'Moments' page, users can discover what their WeChat friends post chronologically. Users can like or comment on that post. When commenting, you can

insert classic emojis from the platform and phone system, while stickers are not allowed. Here is a key fact worth mentioning on 23 December 2019, version 7.0.9 was released for WeChat iOS, allowing users to comment with various stickers. This update is only available for iOS users, and Android users cannot participate [5], as shown in Fig. 1 from the author's WeChat moment on 23 December 2019. However, this frenzy lasted only two days before it came to an abrupt end on the evening of 24th December [6]. Perhaps WeChat is more of a political identity platform than TikTok, which is more of an entertainment platform that users aim at getting more likes, resulting in WeChat is not suitable for comment moment posts with stickers.

Entering live, viewers can request to go live video or live audio with the live streamer, and send give and comment by bullet-screen, but only classic emoji are allowed to be sent with the text.

There are three scenarios for using memes in WeChat, and from the perspective of production sources, these memes can be divided into three categories. The first category is classic emoji, which comes from the official platform and phone system. It is available for emojis to be used in chatting, moments, and live. Created by sticker artists, the second category is the sticker collection. Its size is random and can be used only in a chat. But the difference is that the artist can be rewarded by users. The last sort is self-made stickers, which are uploaded to the private sticker library from the phone library album for repeated use, with random sizes but the richest expressions, and can be only used in chats right now (Table 2).

Table 2. Emoj and memes in WeChat

Types	Creation	Reward	Size Expression	Scenario		
				Comment	Chat	Live
Classic emoji	Social Platform and Phone System		Smallest Limited	yes	yes	yes
Sticker collection	Platform users Can be found and downloaded in the platform sticker store	Yes	Random Various		yes	
Self-made sticker	Any netizens Cannot be found or downloaded in the platform sticker store, but it can be uploaded into self-collection from the phone photo library		Random Sufficient		yes	

Table 3. Emoj and memes on Twitter

Types	Creation	Reward	Size Expression	Scenario		
				Tweet	Chat	
Classic emoji	Phone System		Random Various	yes	yes	
Stickers	Official Platform		Random Various	yes	yes	
Self-made sticker						

4   Twitter: Version 9.49

There are two scenarios for using memes on Twitter: posts, and chats. On the content page, there is a '+', plus icon, on the bottom right. Hitting the icon brings users to a page, which allows users to tweet. Seven icons show up in the bottom line. The third one is a square with a 'gif' in it. Users can search for GIFs provided by Twitter to add some gifs to a post. What is more, emojis of the phone system can be added as text when users tweet. Users can add gifs and emojis when quoting a tweet. Similarly, users can reply to tweets in the comment area with provided gifs and phone emojis. When entering one's homepage, users can see an envelope icon to the right of an avatar. Users can start a message by touching the 'envelop'. In the second scenario, users can send emojis as well as gifs. A picture, a square with GIF in it, and a "paper plane" are under the message box. GIFs can be searched for on the "GIF" page. As for the creation source, these memes, including gifs and emojis, are provided by the official platform. Users cannot use self-made stickers, let alone have their own stickers collection (Table 3).

5   Instagram: Version 274.0

There are three scenarios for using memes on Instagram: story, chat, and comment in posts. Instagram is a social networking software for sharing photos [7]. Users can share lives through "stories" and "posts", and chat with each other. Users can enter the story page by pressing their avatar on the content page. On the story page, there are four icons in the top right: the "Aa" letter, smiley faces, stars, and apostrophes, meaning texting, adding a sticker, applying effects, and other functions differently. The stickers provided by its officials on the story page are limited though those stickers can be adjusted to some extent. It is worth mentioning that classic emojis can be added as text in stories. On the chatting page, there are three icons on the right of the message box: a microphone, a picture, and a smiley face, referring to "hold to talk", "send pictures" and "stickers". After clicking the smiley face, users can search for stickers and gifhy, which can be sent in a chat. Besides, emojis provided by the phone system can be sent in a chat as well. In the third scenario, users can comment on each other with emojis provided by the phone system, while stickers are unavailable. From the perspective of production sources, these

Table 4. Emoj and memes on Instagram

Types	Creation	Reward	Size Expression	Scenario		
				Comment	Chat	Story
Classic emoji	Phone System		Random Various	yes	yes	yes
Stickers	Official Platform		Random Various		yes	yes
Self-made sticker						

memes, including gifs and emojis, are all provided by the official platform. Users cannot use self-made stickers let alone have their own stickers collection (Table 4).

6 Categorization

According to the descriptions above, Classical emojis, coming from phone systems and applications, can reinforce the meaning and avoid anxiety. For example, the "facepalm" icon can enhance the feeling of helplessness; the "doge" icon can express the additional meaning of irony and kidding when people text messages, and it can also avoid the anxiety of being misunderstood when people make jokes. On the contrary, personalized stickers, created by netizens, can replace text messages, escape the individual social emptiness, seek and awaken consistency from others, and find a sense of belonging in an imagined community. Kefan Cao, a host of Shanghai TV Channel, once tasted a dish called "Braised Pork Intestines" with an original smelly flavor in a gourmet TV show. Due to the bad taste, he was relatively angry. Since then, the screenshot of his angry expression was made as a sticker by netizens to convey anger instead of words [8]. Once the first batch of accurate users was available, netizens seeking consistency with others would learn about the origin of the emoji packs and join the army of using them based on their approval [9]. Take Cai Xu-kun as an example again, the netizens who use Cai Xu-kun's black picture as an emoji pack naturally have the same position - hating Cai Xu-kun. In this process, the netizens who jointly use Cai Xu-kun's black picture emoji pack form an imaginary community and find their group in empathy, and their sense of belonging is satisfied. The first group of users using the sticker somehow became key opinion leaders, and the two-step flow of communication starts [8]. Those who seek consistency with others begin to learn about the origin of the sticker and spread the sticker based on their agreement with others. Taking Xukun Cai as another example, netizens who use his ugly picture as stickers naturally have the same stance - they dislike Xukun Cai, hence, they form an imagined community based on the agreement and their sense of belonging is satisfied.

7 Analysis

The richness of scenes in which Western media (e.g. Twitter and Instagram) use emojis is much weaker than China's media (e.g. WeChat and Tiktok), because various English idioms play the same role as memes, and it is acknowledged by different ages. On the contrary, Chinese, as a language, has fewer daily idioms that play the same role as memes, which provides great space for the production of stickers. Because these expressions do not have a wide social identity from different age groups, a generation gap occurs in understanding memes.

7.1 In the English World

In the real English world, many expressions are abbreviated into first-letter combinations, and those play the same semantic effect as emojis. This internet slang is stably used, and citizens of different ages have an agreement on the meanings. For example:

LMAO—"laughing my ass off".

LOL—"laughing out loud", or "lots of laughs" (a reply to something amusing).

JJ or JK (j/k)—"just joking", "just kidding".

OMG—Exclamation, "Oh my God!!".

GOAT—Greatest of All Time.

ROFL (or ROTFL)—"rolling on the floor laughing" (a reply to something extremely amusing).

(See more on: https://www.ruf.rice.edu/~kemmer/Words04/usage/slang_internet.html).

7.2 In the Chinese World

Similar expressions of Chinese usually rely on other linguistic units, the sub-ideographic units have to be upgraded into some expressions by different grammatical rules created by netizens, to play the same role as memes. According to incomplete statistics, the internet slang grammar rules include Chinese abbreviations, pinyin abbreviations, Rome numbers, Cantonese, English, and Japanese abbreviations, and mixed abbreviations of pinyin, numbers, and English letters [7] (Table 5).

However, practically speaking, there is always a gap in the use of Chinese Internet terms. Due to the generation gap, different ages assign different values to "xs". "xs"

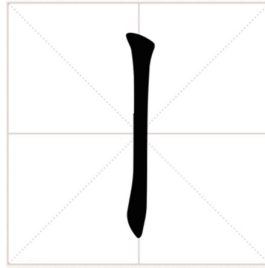**Fig. 1.** An Indexing component of Chinese Characters

Fig. 2. An Indexing component of Chinese Characters

stands for Xiao si (laughing to death), but "xs" is also a combination of the first pinyin letter of Xing shi (nice to meet you). Post-00s usually use "xs" to greet new friends online.

Due to the complex grammar rules, there are different schools of understanding some internet slang. "yyds" does not only mean "GOAT" as introduced before but also means "forever single", because Yong yuan dan shen (forever single) can be abbreviated as "yyds" as well according to "first pinyin letter combination" rules. Apart from that, "nsdd" does not only mean "you're right", but also means "you're a little brother", comparable to "You are so lame; You suck" in English. Because Ni shi di (You are little brother) also conforms to "first pinyin letter combination" rules. But in this case, "nsdd" is used when someone looks down upon another.

Table 5. A list of Chinese Expressions

| Homophonic Expressions | Have similar pronunciations with Rome numbers and English letters | 555: Since the three number "5" in Chinese reads like *Wu* (Crying whimper), it is used to express crying, aggravation, pouting, and sadness. The more "5" are quoted, the sadder that someone feels.
666: The Chinese pronunciation of the number "6" is similar to *Niu* (Fantastic, wonderful, great, amazing, awesome), hence "666" is used to express greatness, which is a kind of exclamation and praise to people. The more "6" are quoted, the higher degree of praise that someone would like to convey.
886: Since the Chinese pronunciation of "88/886" number is similar to saying *Baibaile* (Bye-bye), it is used to express "See you next time".
3Q: The Chinese pronunciation of "3Q" is similar to "Thank you", so China's netizens use "3Q" to express gratitude.
U1S1: "U" reads similar to *You* (Have), "1" reads similar to *Yi* 一 (One), and "S" is the first letter of *Shuo* (Speak). U1S1, abbreviated from *You yi shuo yi*, means "Objectively speaking".
V587: Since the Chinese pronunciation is similar to *Wei wu ba qi* (Arrogant, domineering, and overbearing), it is used to describe someone powerful even overwhelming. |
| | Have similar pronunciations with Cantonese | Bhs: It is a combination of the first pinyin letter of *Bu hai sen*(Unhappy), which is homophobically translated from Cantonese.
yjgj: It is a combination of the first pinyin letter of *You ju gang ju* (To be honest; To be fair), which is homophobically translated from Cantonese. "yjgj" is similar to "u1s1". |

(*continued*)

Table 5. (*continued*)

Chinese abbreviation	A combination of the first pinyin letter of each Chinese character.	Bdjw: It is a combination of the first pinyin letter of *Bu dong jiu wen* (Just wondering, let me ask), which is a helpful transition phrase used to introduce a question. Bhys: It is a combination of the first pinyin letter of *Bu hao yi si* (I am sorry, excuse me). It can be used when someone asks for forgiveness, and when someone wants to start a conversation or inquiry. Blx: It is a combination of the first pinyin letter of *Bo li xin* (Snowflake, sensitive), describing someone who is emotionally fragile and vulnerable. Dddd: It is a combination of the first pinyin letter of *Dong de dou dong* (People sharing similar experiences and values can see). Comparable to English, it means that people who are privy to what's going on will certainly understand. It is often used as sarcasm for those who disagree with the speaker. Dbq: It is a combination of the first pinyin letter of *Dui bu qi* (I am sorry). Nbnhhsh: It is a combination of the first pinyin letter of *Neng bu neng hao hao shuo hua* (Please say it nicely and clearly). It is usually used when a quarrel is about to happen. Nsdd: It is a combination of the first pinyin letter of *Ni shuo de dui* (You are right), and is generally used to endorse or approve of what someone has said. However, it can also be used to brush someone off by hastily agreeing with them if the speaker doesn't wish to continue the conversation. Gnps: It is a combination of the first pinyin letter of *Guan ni pi shi* (None of your business). Plgg: It is a combination of the first pinyin letter of *Piao liang ge ge* (Pretty brothers). Chinese netizens generally use it to compliment boys having good looks. Specifically, "plgg" is typically used to describe stereotypically feminine men. Pljj: It is a combination of the first pinyin letter of *Piao liang jie jie* (Pretty sisters). Chinese netizens generally use these phrases to compliment beautiful girls. RNB: NB is a combination of the first pinyin letter of Niu bi (It rocks; Someone is awesome) []. "R" is the first letter of "Real". Hence, RNB means extremely wonderful. Ssfd: It is a combination of the first pinyin letter of *Se se fa dou* (Trembling with fear). Sk: It is a combination of the first pinyin letter of *Sheng kuai*, short for *Sheng ri kuai le* (Happy birthday). Srds: It is a combination of the first pinyin letter of *Sui ran dan shi* (Though…someone or something still is…). For example, "Though she gets elder, she is still attractive", comparable to "Srds she is stunning" in Chinese Internet slang. Woc: *Wo* (I, me) is a noun, and "c" is the first pinyin letter of *Cao* (fuck). "Woc" is used to convey a feeling of anger, shock, panic, questioning, happiness, and any other exciting feelings. Xs/Xswl: It is a combination of the first pinyin letter of *Xiao si* or *Xiao si wo le* (laughing to death). It is used by speakers to respond to something really funny, comparable to LOL in English. Yyds: It is a combination of the first pinyin letter of *Yong yuan de shen* (Eternal Godlike), describing an outstanding person or a great thing. It's similar to the saying GOAT (Greatest of All Time) in English. The phrase is often used to praise one's idols or simply to describe something people are fond of. Zqsg: It is a combination of the first pinyin letter of *Zhen qing shi gan* (With true feelings, sincerely, earnestly). It describes an emotionally touching or heartfelt situation and is generally used to comment on movies or TV dramas.
English abbreviations	A combination of the first letter, but originally it is English words	NBCS: "Nobody cares" is abbreviated by China's netizens into "NBCS". It is widely used in China but it is not typical English internet slang. lllb: It is an abbreviation of "lay back". The more "l" is quoted, the more out-of-date someone is.

Table 5. (*continued*)

Japanese abbreviations		Ky: it is abbreviated from *Kuuki ga yomenai* (spoil one's fun). It is used to describe someone who is not sociable and observant, saying something inappropriate to kill the speaker's mood.
Indexing component of Chinese characters	An indexing component is upgraded as an independent Chinese character unit to express something.	Fig 1: It is usually used as a part of Chinese characters. For example, it is the indexing component of *Cao* (grass). As an individual, it is pronounced as "cao" as well, which sounds similar to *Cao* (fuck). And it is easier to write the simple one. Hence, it can be used to substitute fuck to convey "what the fuck, holy shit, bloody stuff". Fig 2: It is usually used as a part of Chinese characters and it is also an ancient surname in China. For example, it is the indexing component of *Jiu* (Old). As an individual, *Gun* (Through the top to the bottom) reads the same as *Gun* (Get out). And it is easier to write it than the complete writing of that word. Hence it can be used to substitute Chinese words in Chinese to present "go away".
Emoticon	Created by special signs	QWQ/QAQ/QVQ/TOT/TAT: V, A, and O represent the open mouth when crying, W represents the state of closed mouth when aggrieved and strong, and Q and T represent the eyes like tears. However, these characters do not mean sadness and grief but rather represent the meaning of crying cutely, including pampering and cute. AWA: It is used when someone acts cute. "A" looks like widened starry eyes, and "W" looks like a smile with a curved mouth, therefore AWA can indicate request or happiness, especially when someone behaves in a spoiled manner.
Some internet slang is created without grammatical rules but they are widely quoted		233: This is the 233rd emoji of China's online community "MOP". The original picture is a pounding and laughing emoji, which is similar to the English "LOL" or "ROFL". Hence, it is used to express laugh and loud. The more "3" are used, the louder that someone laughs. + 10086: This is the customer service number of China Mobile, which in Internet terms means the same as " + 1" (meaning "agree" or "count me in"), but it expresses a much deeper and more positive attitude.

Because of the same pronunciation, "87" can be interpreted as not only "powerful", but also "idiotic". Because "idiotic" in Chinese is Bai chi (fool, stupid), which reads similarly to it in Chinese. Even the same Internet slang, has different interpretations due to the application of different Internet slang grammar rules. From the perspective of the "Emoticon", "zzz" means "asleep"; while from the perspective of similar pronunciation, "zzz" reads like "tsk tsk", meaning "look down upon".

8 Conclusion

It seems that the differentiation and influences of various applications on users' using memes have been weakened. However, western social platforms do not support customized memes. It is argued that the difference in memes is related to the difference between Chinese and English itself, while the usage scenario plays an important role. English internet slang has been created for years and used by all ages so that people who speak English do not have to use memes to express their feelings. On the contrary, Chinese internet slang exists for just a few years, update frequently, and is not identified by various ages, offering great space for the production of personalized stickers.

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