The Anatomy of Memetic Stickers: An Analysis of Sticker Competition on Chinese Social Media

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Abstract

The creative and complex ways users employ memetic stickers to engage in sticker competitions raise challenges for theoretical understandings of sticker use as well as for the design of graphical elements and social media platforms. This study focuses on a single, popular Chinese social media platform, adopting content analysis to examine the common features of memetic stickers used in sticker competitions. Through employing meme as an analytical tool, six types of features are identified: While 'flawed masculinity', 'humor' and 'repetitiveness' observed in this study align with the extant literature on Internet-based memes, 'mass media characters' goes against the grain of available research. Moreover, the identified 'cuteness' and 'erotic content' transcend the current meme literature. This study proposes explanations for these findings in terms of user practice and sticker affordances and culture, then offers recommendations for the design of graphical elements and social media platforms.

Introduction

Researchers of computer-supported cooperative work (CSCW), human-computer interaction (HCI) and computer-mediated communication (CMC) stress that graphical icons or graphicons (i.e. emoticons, emoji, stickers) have become an integral part of communication in "a digital world that is visually driven, emotionally expressive, and obsessively immediate" (Steinmetz 2015). Within the relevant literature, a distinct new line of research observes that social media users have begun to appreciate, and take good advantage of, the versatility of stickers (e.g., stickers' capacity to convey humor or express personality) (e.g., Konrad, Herring, and Choi 2019). Rich and robust sticker affordances and proficient user practices are fully exhibited in this emergent phenomenon on Chinese social media (e.g., WeChat, QQ): the use of memetic stickers to engage in sticker competitions. Memetic stickers refer to a form of graphicons produced through derivative work (e.g., parody,

pastiche, remix). A sticker competition refers to a form of playful interaction occurred in an online group chat: two or more users employ only stickers to communicate with each other; the person who can maintain the interaction by presenting the best collection of stickers is acknowledged by other group chatters as a winner. Memetic stickers that enable and shape such sticker competitions are the focus of this study.

The emergent practice of using memetic stickers to form playful competitions raises challenges for the theoretical and practical understanding of sticker use as well as for the design of graphical elements and social media platforms. Unlike emoticons and emoji, stickers on Chinese social media – especially those of the general user-designed category – allow users to engage in different kinds of derivative work. While professionally produced stickers often feature the combining of art imagery with the personal style of the sticker designer, user-generated ones are largely memetic stickers; their creation is based on users' personal experiences but are also often inspired popular TV shows and current events. Importantly, sticker and social media platform affordances foster creativity and visual literacy among users. Previous studies show that WeChat users tend to use distinct and up-to-date stickers in order to present their identities as creative, tasteful, and fashionable (Wang et al. 2019), while they make use of sticker competitions to collectively create stories (Zhou, Hentschel, and Kumar 2017). Thus, the design of graphicons and social media platforms needs to be grounded in an understanding of memetic stickers at the structural level – that is, of the key signifiers that entice users to engage in sticker competitions. Existing sticker literature mainly focuses on the functions and social uses of stickers, while references to sticker competitions are limited to those on Chinese social media (e.g., Konrad, Herring, and Choi 2019; Wang et al. 2019; Zhou, Hentschel, and Kumar 2017). The role of memetic stickers in sticker competitions remain unexplored.

By adopting the meme as an analytical tool (Shifman 2011), this study aims at dissecting the structure of memetic stickers used in sticker competitions, and more specifi-

cally, identifying their common features. 斗图网 (Dou Tu Wang), China's indigenous sticker competition website, lends itself well to memetic sticker analysis. The website facilitates users to create and employ a large array of memetic stickers which then form the basis of sticker competitions. By focusing on China, whose culture fosters an especially high rate of memetic sticker use (Wang et al. 2019), this study advances current CSCW, HCI and CMC literatures, while also providing new insights which can inform the future design of graphicons and social media platforms.

In what follows, this paper first develops this theme in relation to stickers, after which it provides background information on using the meme as an analytical tool. It then describes its dataset, which consists of memetic stickers published by Chinese social media users for engaging in sticker competitions, and also reviews the analytical procedures followed. Overall, this study found that all of the memetic stickers were analyzable as having the common features, supporting the premise that these stickers share key signifiers required for replication and competition. While 'flawed masculinity' and 'humor' derived from this study align with the extant literature on Internet-based memes, 'mass media characters' goes against the grain of previous studies. Moreover, the identified 'cuteness' and 'erotic content' go beyond existing meme literature. Based on these findings, this study advances recommendations for grounding graphicon design and social media platforms in user practices.

Background

Stickers

Compared to emoji, stickers are "larger, more elaborate, character-driven illustrations or animations to which text is sometimes attached" (Konrad, Herring, and Choi 2019, p.1). Previous work has contributed, to a degree, to our general understandings of the utility of stickers on social media, exploring how stickers function, their social (and to less extent commercial) uses, as well as user intention. The first line of this research highlights that stickers are more playful, expressive and elaborate than emoticons and emoji. These studies reveal eight main ways stickers are used (that potentially overlap); they are, to: 1) express emotion; 2) convey behavior, action and attitude; 3) open and close conversations; 4) convey something specific; 5) add cuteness; 6) convey humor; 7) convey acknowledgement; 8) soften a message; and 9) place emphasis on a message (e.g., Kato, Kato, and Ozawa 2018; Konrad, Herring, and Choi 2019; Wang et al. 2019; Zhou, Hentschel, and Kumar 2017). Additional functions were identified by (Herring and Dainas 2017) in a study of graphicons on Facebook,

e.g. 'reaction', 'riffing', and 'action'. Moreover, sticker use allows for enhancing interpersonal relationships, fostering social connectedness between users, expressing personality, and increasing perceived intimacy (e.g., Konrad, Herring, and Choi 2019; Wang 2015). In examining branded e-stickers, Lee (2017) finds that sticker use in the marketing context positively influences purchase intentions and brand attitudes. Finally, other scholars note that ease of use, perceived usefulness, cognition, hedonic and social integrative affect college students' intention to use stickers (Al-Maroof, et al. 2019).

In contrast, research focusing on sticker competitions, as well as on memetic stickers at a structural level, is sparse, although several studies do touch upon these issues. Zhou, Hentschel, and Kumar (2017) suggest that sticker competition is a special practice that has evolved through sticker use on WeChat. Sticker competition aligns with what other researchers call visual expression competition: Users first need to have a unique and rich collection of stickers; then when competing, they must grasp the meaning of each sticker presented, quickly finding a matching one from within their own personal sticker gallery (Wang et al. 2019). This line of research also mentions some characteristics of stickers that somewhat relate to their common features. In examining graphicon use on Chinese social media, de Seta (2018) specified the variety of visual genres, such as mascots Bubble Pups, Korean actor Kim Woo-bin, and Cantonese slang terms. Other authors pointed out that Chinese users tend to use humorous and erotic stickers (Zhou, Hentschel, and Kumar 2017). Nevertheless, no study has systematically analyzed the common features of memetic stickers used to form sticker competitions.

Sticker Memedom

The term 'meme' refers to small cultural units of transmission which are spread by imitation or replication (Dawkins, 2016). Memes are replicable forms of signs (e.g., texts, images) manipulated to create "an informational duplicate or derivative version of another act or meaning" (Spitzberg 2014 p.312). In other words, a meme is any given text or image that can be copied, altered, repackaged, or mimicked. This description applies well to how memetic stickers are produced through sticker competition – that is, the making of customized stickers by replicating or altering text and/or images. Importantly, successful memes have staying power; they compete for the attention of hosts and spread through social selection and ideological fitness (Gleick 2012). Drawing on this notion, this study argues that memetic stickers used in sticker competitions must be distinct and memorable, and suitable to users' socio-cultural environments.

The field of memes has generated a heated academic debate between passionate supporters and dismissive doubt-

ers (Shifman 2011). By following Shifman (2011), this study employs the meme as an analytical tool without embracing the whole set of related conceptualizations developed over the years. Drawing on the concept of fitness in evolution theory, Spitzberg (2014) identified the adaptive factors contributing to meme diffusion: distinctiveness, reproduction, simplicity, media convergence, and media expressivity/richness. In examining memetic YouTube videos, Shifman (2011) revealed the common features of those that generate a high volume of derivatives; they depict: ordinary people, flawed masculinity, humor, simplicity, repetitiveness, and whimsical content.

The extant literature focuses primarily on aspects and common characteristics of memetic images that result in their replication and dissemination. An emergent phenomenon, memetic sticker competition, remains unexplored.

Methodology

A review of the literature shows that the use of memetic stickers in sticker competitions is an interactive process that involves engaging with different forms of derivative work. Building on the successful conceptualization of meme (Shifman 2011), a working premise of this study is that memetic stickers used in competitions incorporate textual 'hooks' or key signifiers that entice users to actively select and employ them. To identify those textual hooks used to build derivatives, this study aims to address the following research question:

RQ: Do memetic stickers used in sticker competitions share common features? If so, what are they?

Data

For several reasons, the sticker competition website or Dou Tu Wang (http://www.bbsnet.com/) provides a suitable data source. First, users are versatile in their memetic sticker use; they draw upon and alter each others' stickers, evolving them with different images or concepts, and employing them to produce fun and competitive interactions. Moreover, the Dou Tu Wang platform offers users a wide range of sticker categories and an engagement system (i.e. number of views, comments, financial incentives), all of which can facilitate and motivate users for participation. Finally, unlike WeChat and QQ, the website provides researchers with an open access to data collection. This study first manually collected 30 threads of sticker competition presented on the first's page (http://www.bbsnet.com/doutu). Next, it screened them and selected 26 threads of actual memetic sticker competition based on the definition of memetic stickers (i.e. a form of graphicons produced through derivative work such as parody, pastiche and remix). The longest thread consisted of 50 stickers, the shortest one just 3 stickers. In total, 476 memetic stickers were collected. This size is considered effective for a manual coding study (Kolbe and Burnett 1991).

Method of Analysis

This study adopted two-phase content analysis that is necessary to analyze the structure of memetic stickers used in sticker competitions, and more specifically, identifying their common features. The first phase aimed at identifying overall structural categories of the sample memetic stickers by focusing on their essential components. There are: 1) static and animated image; 2) image only and a combination of text and image; 3) content or the appearances presented in their totality (i.e. people, animals, cartoon characters, objects); and, 4) a list of topics (e.g., relationship, money, sex, social power). A sample set comprising 100 stickers was coded by the author as well as by a Chinese scholar. The Cohen's Kappa for coding content was 0.91, indicating solid agreement (Cohen 1960). The remainder of the data were then coded by the author. Building on the structural categories derived from the previous phase, the second phase applied the principles of thematic qualitative analysis (Lindlof and Taylor 2002) to analyze and identify common features of the sample memetic stickers that are of relevance to the meme concept.

Findings

Analysis of the data shows the sample users largely initiate sticker competitions by publishing memetic stickers, promoting other users to join in through the imitation, alteration or remix of the original stickers. In what follows, the identified common features of these memetic stickers are presented first, followed by examples illustrating these features.

Mass Media Characters

The first feature of the memetic stickers is reflective of the well-known attribute of Chinese social media: their focus on popular mass media characters. These include actors/actresses of popular TV shows (especially Chinese and Korean productions) and cartoon characters (i.e. human and animal figures). It is usually the case that the first sticker used to initiate a competition is an image consisting of a screenshot from a TV show or of a cartoon character with text superimposed by users. Other users then participate in the competition by creating derivatives in the following ways: 1) copying the initial, or previous, sticker; 2) using the previous screenshot as is, but altering its text; 3) using another screenshot of the same TV show; and 4) editing the previous screenshot (see Example 1). A key question, then, is why does this dynamic spur an expanding number of derivatives.

By drawing on efficacy criteria of memes (Spitzberg 2014), one can see that memetic stickers featuring mass media characters are potentially influential in terms of: *popularity* (i.e. number of users adopting the stickers of particular character), *velocity* (i.e. the rapidity of memetic sticker diffusion), *longevity* (i.e. persistence or duration of the content of memetic stickers), and *fecundity* (i.e. the degree to which social network adopters replicate memetic stickers by transmitting them to others). Another key factor may be related to what might be described as protagonist imagery; that is, popular mass media characters can potentially make memetic stickers distinctive and memorable. (However, as the following section will reveal, such protagonists are almost always men). Last but not least, it is reasonable to view a sticker competition as encompassing a community, where users are able to share similar interests and values, thereby creating affiliation.

Example 1 Memetic stickers featuring mass media characters

The person shown here is Xiaosu Ling, an actor in the TV series *Home Temptation*. A free translation of the text in the top sticker is "you are very coquettish". It is repeated four times in the bottom picutre.

Flawed Masculinity

Data analysis shows that leading mass media characters are almost always male celebrities. However, this circumstance cannot simply be explained by male hegemony, at least not in the conventional sense. Several female characters featured in the sample data adhere to beauty standards prevalent in China (e.g., slender body, fair skin, big eyes). In sharp contrast, most of the male characters fail to meet conventional masculine expectations, either in appearance or behavior. For instance, the sample users often employed editing software to manipulate images (e.g. adding makeup on men's face, making men behave like women) (see Example 2), to make image subjects look feminine.

The assemblage of 'flawed masculinity' in the sample memetic stickers can be seen as an extreme manifestation of contemporary representation of men in some mass media genres, particularly popular TV drama series. Stereotypes of Chinese masculinity continue to be informed by martial arts film stars such as Bruce Lee, Jet Li and Jackie Chan; they have usually portrayed characters who are physically strong, patriotic heroes that will fight to the death for their country and the pride of Chinese culture. Dissimilarly, most popular TV drama series are romantic comedies where Chinese men have more multifaceted identities and are also good-looking. The influx of J-pop and K-pop culture has also influenced the growing interest in androgynous male beauty norms in China (Quek 2018).

Example 2 A memetic sticker featuring flawed masculinity

A translation of a word in this sticker is 'eh?'.

Cuteness

Cuteness is another common feature derived from this study's analysis of memetic stickers. This finding aligns with previous sticker studies showing that users often employ stickers to add cuteness to their messages (e.g., Kon-

rad, Herring, and Choi 2019). In this study, cuteness refers to the structural appearances of appealing and endearing objects or characters (Gn 2018). The sample data shows that users often employ children's facial expressions and body gestures, as well as anthropomorphized animals, to convey cuteness (see Example 3). Moreover, this performative aspect of cuteness goes beyond surface embellishment. It underlines cuteness as an appeal for human affection (Gn 2018). The identified cuteness can be explained by the concept of 'memetic cuteness' (Dale et al. 2016), reflecting cute cultures developed by memetic sticker users. It also relates to *velocity* (i.e. the rapidity of meme diffusion) – one of the efficacy criteria of memes (as mentioned above) (Spitzberg 2014). By drawing on the social media engagement literature, one can argue that cute memetic stickers often evoke users' sense of affection, prompting them to share the stickers with others.

Example 3 A memetic sticker featuring cuteness

Loose translation of the Chinese text in Example 3 might be, for the upper sticker, 'I, a charming perosn, showed up again.', and for the lower sticker, 'I will deal with you after my factial treatment.'

Humor

As might be expected, this study found that humor continues to be a key feature of memetic stickers: all of the sample sticker competitions entailed robust use of humorous content. Three complementary humor theories – i.e. relief, incongruity, and superiority humor (Morreall 2008) – help explain the prominence of humor embedded in memetic stickers. Specifically, relief humor allows people to release nervous energy, overcome communication anxiety, and disclose difficult information. This notion is consistent with anthropological studies of memes; people who might be shy about expressing their own values and opinions often turn to memes instead (Miller no date). According to the incongruity theory of humor, comic effect derives from something unexpected and surprising as a result of violations of what is agreed to be normal or expected. Various forms of incongruity were found in the sample, such as man wearing makeup and a dog with a human head (see Example 4). Superiority humor suggests that humor occurs as a person portrays him- or herself to be superior to (especially relative to the perceived weakness of) others. However, this study observed that users often deprecate themselves or others while responding to a previously presented sticker; that is, they will employ self-deprecating humor.
As Miller (no date) explains, memes often assert one set of values while criticizing others.

Example 4 Memetic stickers featuring humor

A free translation of the text in the first picture of Example 4 is: 'I am recently short of cash.' (The text in the second picture repeats that of the first.)

Repetitiveness

Most memetic stickers in the sample incorporate a single, simple element that is then replicated throughout the sticker competition. Users often reuse either the text or image incorporated into the previously presented sticker (see Example 5). Drawing on the concept of meme, this study explains that repetitiveness plays an important role in encouraging active user participation in the re-making of memetic stickers. Importantly, the effectiveness of meme diffusion demonstrates a persuasive power grounded in its own replicability (Spitzberg 2014). Moreover, repetitions enhance memorability and longevity (i.e. duration of a meme's original and derivative forms), both of which are important factors of successful memes (Spitzberg 2014). Drawing on this notion, this study asserts that memetic stickers featuring repetitiveness can encourage users continuously participate in sticker competition.

Example 5 Memetic stickers featuring repetitiveness

A free translation of the texts in Example 5 might be, from top to bottom: 1) 'Dear, are you there?'; 2) 'Are you there?' and 3) 'There?'

Erotic Content

Memetic stickers featuring erotic content is a surprising finding. It aligns with 'erotic stickers' on WeChat identified in recent research (de Seta 2018; Zhou, Hentschel, and Kumar 2017). This development can be explained by referencing previous work on viral content in China, which reveals that sextual content, or 'sextual' connotation is one of the elements in viral worthiness (Wu 2013). Drawing on the efficacy criteria of memes (Spitzberg 2014), this study asserts that memetic stickers featuring erotic content can experience increased velocity. Moreover, Zhou, Hentschel, and Kumar (2017) note that the use of custom stickers for pornographic communication is apt since the medium allows for versatile pictorial representations.

Discussion and Conclusion

Research Question Revisited

The results of the research question (i.e. what are the common features of memetic stickers used in sticker competitions), support the assumption of this study that these stickers have 'textual hooks' or 'key signifiers' that entice users to participate in sticker competitions. While the identified 'humor', 'repetitiveness' and 'flawed masculinity' align with previous studies on memetic videos (e.g., Shifman 2011), other results differ from the current literature. For instance, Shifman (2011) found that 'ordinary people,' rather than 'mass media celebrities,' is the most prominent attribute of YouTube memes. The study, however, provides an opposite finding which can be explained by China's celebrity culture. Whereas YouTube users are mostly viewing and responding to ordinary people setting achievable goals for others (Shifman 2011). Chinese (especially young generations) are largely influenced by Asian pop stars (e.g., their lifestyle and value), often regarding them as role models. Referencing the literature on memes (Spitzberg 2014), it is reasonable to state that memetic stickers featuring 'mass media characters' can draw users' attention and facilitate them to express their values and opinions.

The use of children and animals to convey 'cuteness' suggests that Chinese users appreciate and endorse cute culture – i.e. items, humans and nonhumans that are charming, vulnerable, shy, and childlike (Dale et al. 2016). What is perhaps more surprising is the finding regarding erotic content. The dissemination of pornographic content is not allowed in China, either online or off. However, customized stickers are not monitored by Tencent and thus users are free to create and share stickers on WeChat. It is, however, unclear why the sample website, which does not belong to Tencent, is able to accommodate erotic content. A possible reason might be that the memetic stickers (at least in the sample data) show pornographic visual elements in a delicate way, such as through sexual element connotation. To conclude, the finding identified by this study support the notion that "while some memes are global, others are more culture specific, shaping collective actions and mindsets" (Shifman 2011 p. 189). For memetic

stickers to be successful or/and chosen by participants for use in competitions, they must be suitable to their socio-cultural environment. At this juncture, a fundamental question worth considering is why the practice of creating and using memetic stickers to initiate and engage in sticker competitions is particularly prevalent on Chinese social media.

One way to address this question is to examine economic, social and cultural logics of participation (Shifman 2011). Economy-driven logic stresses that contemporary society is based on an 'attention economy' – the most valuable resource in the information era is not information itself but the attention people pay to it. Drawing on the concept of meme, one can argue that user attention can be directly linked to derivatives of memetic stickers. The social logic of participation would suggest that memetic stickers involved in sticker competitions are highly compatible with the age of 'networked individualism'; people construct unique identities, then simultaneously seek out like-minded communities at the same time (Wellman, et al. 2013). On the one hand, engaging in memetic sticker competitions allows users to demonstrate their creativity and visual literacy; on the other, endorsing and responding to memetic stickers may relate to affiliating and connecting to – sharing – common ground. Finally, the cultural logic of participation draws on the notion that memetic sticker competition serves as the building blocks of complex cultures which entice users to engage in the cultural practices surrounding them (Burgess and Green 2018).

Theoretical Contributions

First, this study broadens CSCW, HCI and CMC literatures by examining an emergent user practice on Chinese social media. It specifically enriches sticker-focused literature by identifying the common features of memetic stickers that entice users to engage in sticker competition. As the literature review shows, previous studies have primarily focused on the functions and social usages of stickers while stickers' structural features have remained unexplored. Second, this study contributes to meme analysis by applying it to examine a phenomenon newly emerged from within Chinese social media. Third, it advances the concept of graphicons by adding to this category memetic stickers as a specific type of graphical means of communication. Fourth, this paper's results can inform future research aimed at better understanding the emergent uses of stickers on social media. Finally, the methodological approach employed here is transferable, meaning this paper's research method can be applied to the study of sticker use in other contexts.

Design Implications

Based on its empirical findings for memetic sticker use in sticker competitions, this study provides several implica-

tions for encouraging graphicon use across social media platforms. First, participation in memetic sticker competitions can be learned. This potential appears to be an important in a variety of contexts, such as the use of stickers to show one's visual literacy and creativity. Therefore, this study suggests that that social media platforms can facilitate their users to learn about and make use of graphicons by providing ones that are up-to-date and user preferred. To this end, they should encourage not only third-party professional designers but also average users to design user-friendly graphicons. Currently Chinese social media platforms are more advanced than their counterparts. For example, both Facebook and WeChat allow the use of keywords to search through each site's respective sticker database. However, the simple search (e.g., happy birthday) does not guarantee user satisfaction. The available stickers might either be dated or lack user-preferred features. If this occurs, users may give up on using stickers and employ text instead. Dissimilarly, WeChat allows average users to create and upload their self-designed stickers and encourage other users to provide financial incentives when they like, and wish to support, certain designs.

Further, this study's findings also suggest that while designing graphicons, professional designers should take the ideas of flexibility, personalization and customization into account. Third, both designers of graphicons and of social media platforms should support context-aware online communication. This study observed that memetic stickers used in sticker competitions are responsive to different situations. Last but not least, the results derived from this study echo the literature on non-WEIRD (short for "western, educated, industrialized, rich and democratic") contexts in the HCI/CSCW community (e.g., Wang et al. 2019), in that they highlight the importance of cultural sensitivity in designing for non-WEIRD contexts.

Limitations and Future Research

As the first attempt at systematically examining memetic sticker use to form sticker competitions, this research of course has its limitations and so must suggest fruitful directions for future work. First, the data were primarily coded by the author. While confirming the coding scheme with an additional coder added reliability, such a one-person approach is limited in terms of objectivity and providing multiple perspectives. However, this process allowed for consistency of method (Fereday and Muir-Cochrane 2006) and permitted the researcher to systematically identify common features of memetic stickers involved in sticker competitions. Second, this research analyzed memetic stickers on a sticker competition website, which may limit the generalizability of its findings, e.g., its users might be more creative when crafting memetic sticker creators than other users. However, the sample website is in fact an influential platform centered on memetic sticker competition;

as such, this study's focus on this one site can be seen as best practice.

Despite these limitations, the findings of this research provide compelling evidence of an emerging complexity of sticker use on Chinese social media, a topic which should be further explored in future research. Chinese social media platforms provide an ideal research environment due to the high level of social media engagement through stickers found within. But perhaps a focus of further inquiry could be to test the findings derived from this study in other national contexts, or as found on different social media platforms. Such research would shed light on the impact of the affordances and 'use culture' of these platforms as well as on the national cultures of the various users. Further, by understanding memetic stickers used in sticker competitions, this study has helped define and describe the research domain. Future studies can build on its findings, for example by examining the role of sticker competitions in user interactions, which would further shed light on stickers' social usages.

Acknowledgments

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