Oppan Internet Meme Style: A Case Study of Internet Memes through Digital Artifacts on Social Media

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ABSTRACT
Internet memes became what defines a current generation of Internet culture. The term Internet meme has often been used to explain the phenomena that invite netizens to voluntarily participate in the creation and spread of a culture through cultural genes (i.e., memes). We broaden the understanding of Internet memes with a case study of “Gangnam Style,” one of the most widely spread and shared Internet memes in recent years. After gathering 335 memes of “Gangnam Style” from various social media, we analyzed their level of variation based on how they adopted each component of the original source. We identified four features of creative practices on digital artifacts that could be helpful to understand the way Internet memes evolve through social media and useful to develop creativity support tools in the future.

Author Keywords
Internet memes, Internet culture, medium

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION
Internet meme is an idea, style, or action that spreads, often as mimicry, from person to person via the Internet, as with imitating the concept, such as the “Harlem Shake” dancing video and “Chocolate Rain”. Dawkins explained Internet memes as things deliberately altered by our creativity [7]. The spreading mechanism for Internet memes is largely centered around the memes posted on social networks and Internet bulletin boards that are preserved, traceable, and analyzable for study. It gives us an opportunity to understand the production of digital artifacts and the behavior of those who created them in the digital environment in which we live.

In this paper, we provide an analysis on digital artifacts on social media through a case study of “Gangnam Style” (Figure 1), one of the most widely spread Internet memes in recent years. The purpose of this paper is not to talk about how popular “Gangnam Style” was but to explain it in the context of digital artifacts that surfaced through the participatory process of nonprofessional creators. Through this study, we show how the diversified nature of the ecosystem on the Internet delivers various methods of evolving “Gangnam Style.” We contribute an analysis of the social creativity embraced by the community to provide a deeper understanding on the appropriation of the digital technology to deliberately develop and improve upon the cultural meme on the Internet. We gathered 335 memes related to “Gangnam Style” from various social media and analyzed them with respect to the degree of variation from the original meme and its components. Then we identified notable behaviors in the practices of creating digital artifacts around Internet memes and how they were appropriated and reflected in the artifacts by nonprofessional creators, which are as follows: (1) imitation from original sources was conducted selectively, (2) alteration from sources was conducted selectively, (3) the fusion process was conducted through cooperation with other sources, (4) and in terms of contextualization, memes did not need to imitate/alter the original to be a meme.

RELATED WORK
Internet memes recently provided a conceptual background and building blocks of cultures that are networked together, such as the Internet. For example, researchers [1, 3] applied the concept of meme to understand the contemporary culture in a time when content flows through media as described as a convergence of media platform by Jenkins [2]. Burgess and Green, in their recent book, concentrated on YouTube, examining the public debate surrounding it and demonstrating its usage in depth [4]. Meanwhile, Shiftman reexamined and defined the concept of meme in the context of digital culture, addressing the problem by suggesting three memetic dimensions (i.e., content, form,

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and stance) in the case of Leave Britney Alone [6]. She also covered characteristics of memetic videos uploaded on YouTube. Assembling 30 prominent clips, she revealed that there are six common features: ordinary people, flawed masculinity, humor, simplicity, repetitiveness, and whimsical content (which are also identified in the “Gangnam Style” MV) [5].

Although those previous studies have covered the Internet meme issues in earnest, especially in YouTube-uploaded videos, the close evolutionary relationship between the original meme and other sources in various social media has gotten less attention. In relation to digital artifacts on social media, selecting “Gangnam Style” as the most distinct example of an Internet meme, we tried to analyze the contents itself in detail and reveal how its components are duplicated or altered through the relationship. We also expanded our research range to important social media sites, not just YouTube but also Reddit, 9GAG, Wikipedia, etc., which contain various digital artifacts of nonprofessionals comprehensively.

DATA COLLECTION AND METHODOLOGY
Our data collection methodology was chosen to collect and analyze various types of digital artifacts. First, we collected various artifacts from famous social media networks. We chose YouTube, Know Your Meme, 9GAG, Reddit, and Wikipedia, considering their popularity and reputation. In spite of their important role in the sharing and diffusion of social media, we did not include Twitter, Facebook, Tumblr, and 4chan for our research scope because of their privacy and accessibility issues.

At each site, we entered the common query “Gangnam Style” and reviewed the search results. Then we sorted them out based on their popularity scores or view counts. In the case of Wikipedia, we gathered all the cases described in the “Gangnam Style” page. We tried to collect as many memes as possible regardless of their medium, considering that existing Internet meme studies tend to focus on the video form of artifacts. We have eliminated duplicates and collected a total of 335 digital artifacts. (YouTube: 63, KnowYourMeme: 144, Reddit: 86, 9GAG: 18, Wikipedia: 24 – Image: 84, Video: 167, Gif: 87, Audio: 2, Text: 1)

After collecting various types of memes around “Gangnam Style,” we performed our quantitative analysis on the artifacts. We broke down the music video into five components: character, music, dance, scene, and sequence (Table 1). Three coders analyzed each digital artifact to identify which components were borrowed in each creation and see whether adopted components were directly duplicated (imitation) or intentionally altered (alteration) from original sources. Also, we analyzed whether each creation had relationships with other exterior contents or not (fusion). We expected that our content-based approach on memes would give more analytical power than medium specificity approaches. As Jenkins noted, the content flows swiftly from one medium to another. Nowadays [2, 6], examining mediums would be too simplistic and provide limited explanations for exploring various creative practices across different types of mediums.

<table>
<thead>
<tr>
<th>Components (Imitation/Alteration)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character (76/145)</td>
<td>PSY (the main character), other characters (the yellow suit guy, the elevator guy, PSY’s girlfriend, etc.)</td>
</tr>
<tr>
<td>Music (205/9)</td>
<td>Music of “Gangnam Style” is a fast-paced dance pop, including a repeating chorus like “Oppa Gangnam Style” and “Hey, sexy lady.”</td>
</tr>
<tr>
<td>Dance (79/82)</td>
<td>Besides the symbolic invisible horse dance, some other notable dances such as the lasso dance, pelvic thrusting by the elevator guy, etc.</td>
</tr>
<tr>
<td>Scene (115/39)</td>
<td>A number of hilarious ones such as horses in stalls, a parking garage with flying trash, inside a sauna chess, an outdoor yoga session, the elevator guy scene, etc.</td>
</tr>
<tr>
<td>Sequence (25/30)</td>
<td>A series of scenes that construct a simple form of a narrative arc.</td>
</tr>
</tbody>
</table>

Table 1. Five components of “Gangnam Style” music video and frequency of imitation/alteration from each component

FINDINGS
We could characterize how nonprofessional creators utilize existing memes to create new digital artifacts. We found that creators adopt certain components selectively to imitate or alter. Also, we could ascertain that a lot of digital artifacts were created with other contents or memes. Lastly, we found that memes do not need to imitate/alter the original to be a meme when the meme spreads so widely that it becomes a social phenomenon and creates shared contexts. Here is the detailed description of four characteristics that we found through analysis.

1. **Imitation from original sources was conducted selectively.** We found that people tend to choose and take representative components from the original meme to imitate. Among the collected artifacts, 64.1% of them imitated the dance components of “Gangnam Style,” mostly the invisible horse dance and the sidewalk leg shuffle, without any alteration (205/335) (Table 1). Also, people enjoyed discovering similar references to the “Gangnam Style” dance moves from totally irrelevant sources (Figure 3). When people accidently stumbled upon some objects resembling the dance moves from “Gangnam Style,” they shared these references with others. Furthermore, there were tutorials that helped people learn and practice the dance moves more easily. In addition, the scene component was duplicated in a significant number of memes (115/335, 34.3%). Impressive scenes like that of the invisible horse dance of the elevator guy were captured and made into unaltered images or animated images.
By examining the imitation, we could find that the dance and scene components were imitated much more frequently in user-created artifacts than other components. We assume that the unique dance moves and the hilarious scenes of “Gangnam Style” has been recognized as the most notable characteristics of “Gangnam Style,” which could appeal to anyone without any explanation or understanding. Therefore, creators would need to keep the dance and scene components intact to make their creations easily associated with “Gangnam Style” and recognizable by anyone. In short, the most notable components of memes usually remain unaltered in nonprofessional digital artifacts. Also, those components play a vital role in increasing the visibility of the meme during its early diffusion stages.

2. Alteration from sources was conducted selectively.
Nonprofessional creators chose the components not only to imitate but also to alter them in order to reflect their own purposes in their creations. Although alteration has something in common with imitation in terms of the appropriation of the original sources, it usually involves the process of repurposing and transforming. The most frequently altered component was the character. In the data collected, 43.3% of the memes (145/335) (Figure 2) altered the character component. The general public, celebrity, or famous animation/game characters stood in the role of PSY and the other characters. Especially, we could observe that members of various groups from several universities to military services participated in producing their own version of “(name of organization) Style” music video. For example, in MIT Style (Figure 4. (a)) and NASA Style, members of each organization acted as the characters of the music video in premises often recognizable by others. In these kinds of video, creators kept imitating the dance moves and following the initial sequence of the “Gangnam Style” music video, but they made adjustments to their characters and backdrops to show their identities.

Also, a number of creators altered the music components too. The music component was altered by 24.5% of the collected memes (82/335). Musical alteration took place in the form of a cover. Acoustic and drum versions of songs are typical examples of such. Or sometimes users modified the lyrics to express their political agenda, criticism, etc. For example, in Kim Jong Style and Mitt Romney Style, creators altered the lyrics of “Gangnam Style” to express political satires.

By exploring the alteration of memes, we could observe that the character and music components were altered relatively frequently. This result suggested that the alteration of the character and music components allows creators a more direct form of engagements, self-expressions, and effective delivery of their message beyond mere imitation. By starring themselves in the videos instead of PSY, community members could show their identities to a large number of people effectively. Furthermore, they could deliver their message, as Greenpeace (Figure 4. (b)) took advantage of Greenpeace Style to promote their campaign for public awareness. Also, by performing the cover version of “Gangnam Style,” they could exhibit their musical talents globally. In other words, while the imitation of the dance and scene components plays a central role in increasing visibility, the character and music components often give room for flexible adaptation in various ways.

3. The fusion process was conducted through cooperation with other sources.
Beyond the imitation and alteration processes of the components of the original meme, we found that various other sources were all intertwined and mixed together with “Gangnam Style.” In our collection, 43.3% (145/335) were incorporated with at least one source from other contents: animation, game, music, movie, and other memes. Since an Internet meme is maintained by a participatory culture of communities, it is common for communities to recycle various elements of previous memes or contents to make the idea accumulative, instead of creating something original. The highly mimicable nature of “Gangnam Style” has made it something easy to evolve upon by fusing and cooperating with others. For example, characters from “My Little Pony”, “Pokémon” (Figure 5) and scenes from 007 movies were used as templates to create “Gangnam Style” memes. Also, incorporating “Gangnam Style” with other popular memes like “Forever Alone” and here [xxx]” could be the easiest way to produce memes for nonprofessional creators since various websites like memegenerator.net provide handy tools for making memes quickly by just typing the captions on images.

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4. Contextualization: Memes do not need to imitate/alter the original to be a meme.
Additionally, we could find that a number of artifacts did not adopt any parts of the original meme, even though they were collected and recognized as memes related to “Gangnam Style.” Their contents and forms had nothing to do with any parts of “Gangnam Style.” Most of this type of memes appropriated the irrelevant footages or images, but they did come under the collection of “Gangnam Style” memes. This tendency could be defined as the contextualization of memes, which means the memes can only be understood relative to their context. As “Gangnam Style” became tremendously popular and widespread, people began to have a shared cultural experience, which yielded the “shared contexts” around “Gangnam Style.” Thus, some creators started to produce memes to express their shared emotions and experiences as well as focus on imitating or altering the original meme components.

The interesting characteristic of these types of memes is that they focused on gaining a bond of sympathy by capturing the shared contexts. The shared emotion that was mostly frequently found around “Gangnam Style” was excitement. The animated image about a woman dancing fanatically was titled “Just heard ‘Gangnam Style’ on the radio” (Figure 6. (a)). Also, the footage of a baby who reacted to “Gangnam Style” by waking up from sleep and dancing with joy (Figure 6. (b)) could be one of the examples. In addition, shared experiences around “Gangnam Style” became the subject of memes too. For example, one creator made a cartoon using the “Forever Alone” meme to give attention to the difficulty of singing “Gangnam Style” because the lyrics of “Gangnam Style” provoked creators to produce memes. When the view count of “Gangnam Style” surpassed that of Justin Bieber’s “Baby” and became the number one most viewed video on YouTube, people began sharing the footage of the NASA staff (Figure 7. (b)) cheering for the successful landing of Curiosity to express their amazement and excitement. In these cases, the artifacts do not contain any components of the original meme.

CONCLUSION AND FUTURE WORK
The contribution of this paper lies on the results of the analysis of the “Gangnam Style” Internet memes, where we revealed and characterized how people make digital artifacts on social media. After collecting 335 memes from various websites, we developed our own coding scheme, which was helpful to explore the diverse aspects of creative practices. As a result of the analysis, we found that the imitation and alteration processes on the original meme selectively progressed. While the imitation of the dance and scene components was selected to increase visibility of memes, the character and music components were preferred for flexible adaptation in various ways. Also, we observed that the fusion process was conducted through cooperation with other sources. Lastly, we discovered that the shared feelings and experiences could also be memes even though they did not contain any portion of the original meme. We believe this research could be beneficial in understanding the creative practices of users. We hope that the findings could inform the development of creativity support tools for nonprofessional creators.

There are three limitations in this study: (1) First, while we have analyzed various Internet memes of “Gangnam Style,” we did not investigate the creators’ intentions. In future works, we will contact the creators and conduct in-depth interviews to reflect their own purposes in their creations. (2) Second, as mentioned above, we did not cover social network services such as Facebook and Twitter because of several issues. We will improve our data collection methods by introducing automatic data crawling in the follow-up study. (3) Third, the findings of the study make it rather difficult to make a generalization about Internet memes. We plan to conduct a comparative study by applying the results to other memes. Also, in terms of the reliability of the qualitative research, we will supplement the methodological issues in data coding scheme.

REFERENCES