

# Study of the Multimodal Emotional Metaphors Contained in Cat Meme Video

**Kailin Chen**<sup>1,\*</sup>,

**Zijian Sun**<sup>2</sup>

<sup>1</sup> School of Humanities, Zhuhai College of Science and Technology, Zhuhai, 519040, China

<sup>2</sup> College of International Studies, Yangzhou University, Yangzhou, 225009, China

\* Corresponding author:  
chenkailin@stu.zcst.edu.cn

## Abstract:

A cat meme is a kind of multimodal internet meme. It often spreads through videos with pictures, words, and audio. Although this meme is popular, there is relatively little research on the topic. This study uses qualitative research to analyze high-volume cat meme videos on Bilibili, a famous video platform in China. Therefore, the study can explore how these multimodal videos achieve emotional metaphors through different modalities. The study shows that cat meme videos achieve metaphor by human-like expressions and behaviors, as well as emotional audio and text. Therefore, cat meme videos can fulfill narrative and communicative functions.

**Keywords:** Meme; Multimodality; Emotional Metaphors; Cat Meme Video.

## 1. Introduction

According to Dawkins, a meme is an idea, behavior style, or usage that spreads from person to person within a culture [1]. With the development of internet memes, Shifman gave the definition of internet memes: having a sharing content, form, and/or stance; being disseminated, imitated, and/or transformed by internet users; creators are aware of each other's presence [2]. The cat meme has recently appeared and become popular on the internet. Cat meme videos stand out for their rich visual experiences and diverse content compared to other memes. They showcase unique charm in the current internet world and gradually serve as an important choice for video makers to share personal experiences and emotions. The research aims to study how video makers achieve metaphors and convey emotions to other users through multimodality elements of cat meme videos. Therefore, the article uses "cat meme" as the keyword to search for high-volume videos on the

well-known Chinese video platform "Bilibili" as the research subjects. In terms of research methods, the study depends on qualitative research methods, using the Metaphor Identification Process (MIP) to analyze the features of text, illustration, and sound effects in cat meme videos. This method helps to have a deep insight into the characteristics of multimodal expressions in cat meme videos.

This study includes six chapters. The first chapter introduces this study from a macro view, including the background of the study and the methodology. In the second chapter, recent studies are introduced and analyzed in multimodality, metaphors, and memes. Based on it, this study also discusses the practical application of multimodal metaphors in emerging Internet memes. To ensure the argument's reliability in chapter four, the third chapter showcases the theory of multimodal metaphor and the research process. Examples of cat meme videos are provided in the fourth chapter. In this chapter, the study also analyzes how metaphorical effects can be achieved through

modalities such as images, text, and sound. The fifth chapter points out the functions of cat meme videos from two aspects. The final chapter will summarize the viewpoints in chapters four and five. The study also gives a macro conclusion.

The study focuses on the following research questions: which kind of modality is included in cat meme videos, how do cat meme videos achieve emotional metaphors, and what functions do cat meme videos have?

## 2. Literature Review

### 2.1 Multimodality

El Refaie and Elisabeth believed that human beings use all kinds of bodily actions, such as speaking, gesturing, mime, and dancing, and both natural and human-made materials, including images, music, and clothes, in order to communicate with one another [3]. This type of text transmits information through multiple sensory channels, enhancing the richness and depth of expression.

Okonski, Lacey, Raymond W. Gibbs, and Elaine Chen argued that although metaphorical thought and language are typically believed to map information from an embodied source domain into more abstract target domains, we argue that creative multimodal performance emerges from people's very ordinary yet still highly metaphorical, conceptualizations of mundane bodily experiences [4]. The authors explore multimodal creativity not just by seeking metaphors as manifested in different domains (e.g., music, art, dance) but also by the ways people talk about creative expressions and understandings.

Naciscione and Anita mentioned that Observation and analysis focus on multimodal creative use of stylistic patterns: extended metaphor, metonymy, visual pun, allusion, hyperbole, and personification. Multimodal discourse reveals the capacity of the human brain to express figurative thought in various semiotic modes [5].

### 2.2 Metaphor Theory

According to Lankoff and Johnson, metaphor is a means of poetic imagination and rhetoric, and it is an extraordinary language rather than an ordinary language [6].

With the development of pure language metaphors and the digital information age, more and more attention has been paid to multimodal metaphors. Because of the complexity of the concept of "multimodal," many factors should be considered comprehensively to define it. According to Forceville, "multimodality" refers to various approaches and theories to correct this bias by studying how sight, music, and sound contribute to meaning creation [7].

Mortimer and Tiberghien combined multi-modal social semiotic theory with joint action theory in teaching to better explain how teachers use embodied semiotic models when presenting science content to the class and strengthen classroom habits related to knowledge interpretation [8]. Y Fang used the perspectives of cognitive and pragmatic studies to build a persuasive model of multi-modal representation of metaphor in advertising applications and explored an effective way to take into account people's cognition, emotional experience, and cultural context [9].

### 2.3 Meme

Since the term "meme" was first proposed by British scholar Dawkins in his book *The Extended Selfish Gene*, memes have received more attention in recent years with the popularization and development of the Internet, as well as the fidelity, fertility, and permanence of replication. Mehta, kaghuxaxapy, and Pathak propose a Bayesian optimism-based Enhanced Molecular screening (MEMES) machine learning framework for efficient sampling in chemical Spaces [10]. Razzaq, Shao, and Quach conceptualized meme marketing, defined meme marketing by reference to speech act theory and consumer value theory, and distinguished meme marketing from related digital marketing structures [11].

Cat memes are one of the types of Internet memes that have emerged in recent years. YouTube blogger "OhCrayZ" uses cat memes to create short stories of life, resulting in interesting multimodal videos, and Bilibili blogger "Charming Kitten meme" video showcases the most popular cat memes on the web, conveying metaphors through images and text.

### 2.4 Conclusion

In general, due to the late appearance of cat memes, the research on this kind of memes is not perfect, and the past metaphorical research lacks the research on informal context and the research on short online videos. Therefore, this paper attempts to fill the gap by analyzing the emotional metaphors in cat meme videos. Based on the theory of multimodal metaphor, this paper analyzes how cat meme video achieves a metaphorical effect through multimodal metaphor. This combination will help reveal how cat meme videos can convey richer metaphorical meaning through different modes.

This research will help to understand the characteristics of language and cultural transmission on the Internet, how contemporary digital art conveys complex emotions and messages, and how users use memes to generate collective identity. The results of this study will expand the application of emotional metaphor theory and promote the

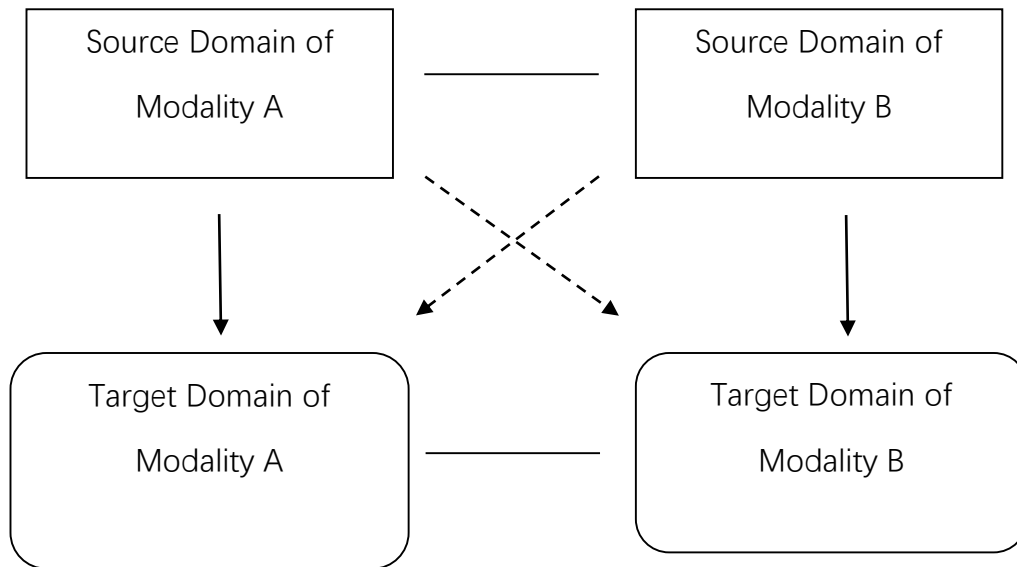
application of memes in cultural communication, business activities and education.

### 3. Methodology

#### 3.1 Theoretical Framework

According to Forceville, the modality is a symbolic system understood through specific perceptual processes [7]. In other words, the modality is usually closely linked to

humans' five senses: visual modality, including images, written language, and gestures; auditory modality, including spoken language, sound, and music; olfactory modality, including flavor; tactile modality, including touching. Multimodal metaphors refer to metaphors that involve two or more modalities. There are three types of mappings: cross-modal mapping, unimodal mapping, and multimodal mapping. Figure 1 illustrates how three mapping methods are established between different modalities.



**Fig. 1 Three Mapping Methods [13]**

As shown in Figure 1, cross-modal mapping refers to the dashed arrow. More specifically, it is the process of mapping from the source domain of modality A to the target source of modality B or from the source domain of modality to the target domain of modality A. Unimodal mapping refers to the process of mapping from the source domain of modality A and B to the target domain of modality A or B. In this case, some modalities play an auxiliary role, which do not construct metaphors. Furthermore, if the unimodal mapping of modalities A and B are used at the same time, multimodal mapping can also be achieved. To ensure the thoroughness of multimodal emotional metaphors in cat meme videos, the study incorporates all three of the mapping patterns in its scope.

#### 3.2 Research Methodology

To analyze how multimodal emotional metaphors are constructed in cat meme videos, the study uses a qualitative research method and chooses high-volume videos on the website Bilibili as research subjects. Given that the emotional metaphors in cat meme videos belong to stereoscopic multimodal metaphors, which are formed by

multiple media, the study will use MIP to identify metaphors in these videos [14]. The process of identifying is the following:

Using “cat meme” as the keyword to search the high-volume videos on the video platform “Bilibili.”

Watching these videos and ensuring that they have more than 2 types of modalities.

Ensuring the emotions of every cat meme video.

Ensuring the source domain of cat memes and their target domain in the video.

If cat memes have both the source domain and the target domain, the study will identify them as metaphors and involve them in analysis.

### 4. Emotional Metaphors in Cat Meme Video

#### 4.1 Happiness in Emotional Metaphors

As posited by Yang Youwen and colleagues, happiness is significantly correlated with physical pleasure and comfort and represents the profound emotional state that aris-

es when individuals accomplish their desired objectives [15]. Such positive affect is typically manifested through a range of behaviors, including physical activity and the use of upbeat music and language.



**Fig. 2: Bathing cat meme [16]**

In Figure 2, the video's author employs the 'bathing and dancing cat meme' with a textual caption, simultaneously utilising image, speech, and vocal modalities. Dance performances can evoke emotions, as evidenced by the use of dynamic cat pictures of swinging hands and wriggling hips in the video as a metaphor for how happy emotions make people want to dance [17]. Furthermore, the 'bathing dance cat meme' is frequently accompanied by bathing songs. These employ the specific act of cleansing the body and thus obtaining a soothing experience as the source

domain and the generic happy mood as the target domain. This latter concept may also be regarded as a metaphor for the author's happy mood in a specific situation.

#### 4.2 Questioning in Emotional Metaphors



**Fig. 3: Fresh brother meme [16]**

In Figure 3, the video's author employs the 'Fresh Brother meme' with a textual narration, combining the pictorial, verbal, and vocal modalities. The facial expression represents one of the most potent, innate, and pervasive non-verbal means through which humans convey their emotional states and intentions during communication [18]. The 'fresh brother meme' originated as a representation of a cat observing cat food. Employing the cat to observe the food as the source domain and question expressions and emotions as the target domain can be interpreted as a metaphor for the leader's questioning of the employee's use of pop culture elements. Furthermore, the 'Fresh Brother Meme' is frequently accompanied by music characterized by a sense of tension, which intensifies the emotional impact.

### 4.3 Fear in Emotional Metaphors



**Fig. 4: Timid cat meme [16]**

In Figure 4, the video's author employs the 'timid cat meme,' combining pictorial and vocal modalities. Silence, as a non-verbal phenomenon, can convey many representational meanings [19]. These include discursive privilege, characterized as conflictual; internal monologue, characterized as unmitigated, and empathic listening attitudes. The term 'meme' is derived from the image of an ordinary cat that loves to purr. In the context of cat modelling, it is typically used to convey a sense of resignation and admission of wrongdoing, reflecting the author's concern and fear. It can also be seen as a metaphor for the caution and anxiety of employees in the face of questioning.

### 4.4 Summary

All three cases employ images as the primary means of expressing emotion, and each case comprises a combination of at least two modalities (image + text or image + text + sound) as a means of enhancing emotional expression. Concurrently, textual descriptions were employed to furnish situational context and to assist the audience in comprehending the import of the metaphors. In all instances, multimodal resources were effectively leveraged to convey particular affective states. The three cases illustrate the effective integration of multimodal resources,

namely the combination of images, text, and sound, to enhance the transmission of emotions. This demonstrates the capacity of the cat meme to express a range of emotions, from positive to negative, and to convey different dimensions of emotion. The metaphor's significance is reinforced by constructing a particular scenario, enabling the audience to swiftly comprehend and empathize. Even when not utilizing all available modalities (e.g., Figure 3), the cat meme can effectively convey emotion through the complementary roles between the image and the accompanying text. The distinction lies in the emotions depicted. Figure 1 portrays positive emotions, specifically happiness and joy. In contrast, Figures 2 and 3 illustrate various facets of negative emotions, with Figure 2 focusing on stress and Figure 3 on caution and unease.

## 5. Functions of Emotional Metaphors in Cat Meme Video

By analyzing high-volume cat meme videos, the study finds that the majority of cat memes are metaphorical, which requires people's cognitive abilities to understand the feelings of these memes; the metaphors of cat memes are closely linked to people's daily experiences, especially for facial expressions and body languages.; after widespread dissemination, cat memes have stable metaphorical meanings, leading most users to have similar feelings when they receive the same meme. Therefore, the study believes that cat memes can play an essential role in the narration and communication of internet users.

### 5.1 The Narrative Function of Cat Meme Video

Internet narration differs from offline narration because it is difficult for online users to capture emotions through facial expressions and intonations. Additionally, some users avoid sharing their personal information online to protect their privacy. For the features of cat memes, cat memes can compensate for the lack of emotional expression in textual narration. Besides, the vivid and diverse physical actions of cat memes enable video makers to accurately reconstruct their stories without relying on real people. In summary, cat memes help internet users better share their stories.

### 5.2 The Social Functions of Cat Meme Video

Globalization poses greater challenges to people's social skills, particularly their internet social skills. People have to express and understand their emotions and intentions in limited conditions, which requires more diverse and efficient ways of communication. Cat memes, due to their multimodalities, ensure that they can convey meanings

even if one or more modalities cannot be understood. Moreover, the stories shared in cat meme videos can resonate with users with similar experiences, thereby encouraging them to write comments in the video comment sections. This driver further communication, enhancing the social function of cat meme videos.

## 6. Conclusion

The advent of short-form video culture has led to the proliferation of videos pertaining to feline subjects, which have become a significant aspect of Internet meme culture. However, research on this particular form of meme remains limited and in urgent need of further development. This paper employs an analytical approach to examine the emotional metaphors conveyed in cat meme videos with high playback. It illuminates the ways in which users employ text, sound, and image to evoke specific emotional responses and engage in dialogue with the public, thereby forming collective identities. Furthermore, it expands the scope of existing research on the multimodal communication of Internet creators and the dissemination of language in the digital age. The application of the theory of emotional metaphors provides new perspectives and ways for people to understand the multimodal communication of Internet creators, explore the characteristics of the language of the Internet and its dissemination, and analyse the characteristics of contemporary digital art in conveying complex emotions and information.

Therefore, this paper assists those who are engaged in the study of the Internet in gaining insight into the ways in which Internet creators utilise multimodal communication to create and disseminate Internet culture. Furthermore, it contributes to the expansion of the theoretical scope of affective multimodal metaphors and emotional metaphors. It assists those engaged in the field of internet practice, education, and business to enhance their utilization and benefit from the culture of memes. The limitation of this study is that the research object is confined to a narrow set of highly broadcast videos on a single video platform. This approach does not fully capture the nuances of netizens' engagement with emotional metaphors through cat memes, nor does it encompass the full spectrum of usage patterns. As global network culture continues to evolve, researchers will be able to further examine the metaphorical nuances of the cat meme in diverse cultural settings. In particular, they will be able to investigate the exchanges and variations in cross-cultural communication, which will contribute to a deeper understanding of cultural flows and symbolic communication in the context of globalisation. Furthermore, the multimodal expression of the cat meme is frequently employed to construct and reinforce

the identity of an individual or a group. Further research could examine how memes assist users in forming individual and collective identities through diverse modalities in cyberspace, particularly in the construction and expression of identities within social movements or subcultural circles. Additionally, with the advent of AI-generated memes, the future may witness the emergence of automated content creation that aligns with multimodal metaphors, investigating how AI can emulate and generate novel cat memes.

### Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

## References

- [1] Dawkins. *The extended selfish gene*. Oxford University Press, 2016.
- [2] Shifman, L. *Memes in Digital Culture*. MIT Press, 2013.
- [3] El Refaie, Elisabeth. «Analysing metaphors in multimodal texts.» *The Routledge handbook of metaphor and language*. Routledge, 2016, 798-805.
- [4] Okonski, Lacey, Raymond W. Gibbs, and Elaine Chen. *Metaphor in multimodal creativity. Performing Metaphoric Creativity across Modes and Contexts*, 2020, 19-41.
- [5] Naciscione, Anita. *Multimodal creativity in figurative use. Performing Metaphoric Creativity across Modes and Contexts*, 2020, 249.
- [6] Lakoff G, Johnson M. *Shaping Entrepreneurship Research*. Routledge, 2020, 475-504.
- [7] Forceville C. *The Routledge handbook of metaphor and language*. Routledge, 2021, 676-687.
- [8] Moro L, Mortimer E F, Tiberghien A. *The use of social semiotic multimodality and joint action theory to describe teaching practices: Two cases studies with experienced teachers. Classroom Discourse*, 2020, 11(3): 229-251.
- [9] Fang Y. *Multimodal theories used in advertisement application*. Atlantis Press, 2019, 325-329.
- [10] Mehta S, Laghuvarapu S, Pathak Y, et al. *Memes: Machine learning framework for enhanced molecular screening. Chemical science*, 2021, 12(35): 11710-11721.
- [11] Razzaq A, Shao W, Quach S. *Towards an understanding of meme marketing: conceptualisation and empirical evidence. Journal of Marketing Management*, 2023, 39(7-8): 670-701.
- [12] Molina, Maria D. *What makes an internet meme a meme? Six essential characteristics*. Routledge, 2020, 380-394.
- [13] Kress, G., & Leeuwen, T.M. *Reading and writing with images: a review of four texts. Reading Images: The Grammar of Visual Design. Computers and Composition*, 2001, 85-87.
- [14] Group, P. *MIP: A method for identifying metaphorically used words in discourse. Metaphor and symbol*, 2007, 22(1): 1-39.

[15] Yang Youwen, Xie Jia, Zuo Yuhan. A Multimodal Metaphor Study on Positive Emotions in Emojis. Journal of Xi'an Foreign Languages University (01), 2023, 21-24.

[16] China Maritime Safety Administration. After two years at Maritime, the leadership has finally given me the official account. Bilibili, 2024.

[17] Li Jinyun. Performance Psychology. World Publishing

Corporation, 2007.

[18] Zhang Haifeng. Research on facial expression recognition based on multi-feature fusion. University Of Science And Technology Of China, 2020.

[19] Li Cunting. Research on the Phenomenon of Silence in College Classrooms. Qinghai Normal University, 2020.