| **RESEARCH ARTICLE**

A Relevance-theoretic Approach to Multimodal Discourse Analysis: A Case Study of Emoji Advertising

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| **ABSTRACT**

With the development of the internet and mass media, emojis are not only frequently used in daily internet-based communication but have become important marketing tools. Based on the relevance theory, this paper will take emojis in advertising as the research object. From the perspective of implicit/explicit information, contextual construction, and implicated conclusion, it aims to explore how this multimodal resource in advertisement helps the audience to get the advertiser's communicative intentions and obtain optimal relevance. This study concludes that emojis serve as a tool of ostensive communication, conveying the message with the presumption of relevance; emojis help consumers construct new cognitive context; and they are complementary with other modalities, which increase the ostension of information and save cognitive effort, and promote the audience find the optimal relevance path.

1. Introduction

Emoji is a small image, either static or animated, that represents not only facial expressions but also an entity and concepts such as celebration, weather, animals and plants, or emotions, feelings, and activities. It is a series of graphic symbols and ideograms (Novak et al. 2015) produced in the digital information era. With the development of the internet and mass media, emojis are not only frequently used in daily internet-based communication but have been penetrating all fields of daily life, such as marketing, law, health care, education, and other fields. It is not merely used on communication platforms for instant information exchange but serves as a powerful tool in practical application (Bai&Dan,2019:1). As an emerging visual language symbol, the research on emojis has become a hot topic in the academic field.

Present studies on emojis are done across various languages and platforms like Instagram (Barbieri,2018), Twitter (Parkwell,2019), Facebook (Alshboul & Rababah,2021), WeChat (Hu,2017) and Weibo (Yuan,2021). As for the research perspectives, computer science and communication are the top two studying emojis. Yang (2022) uses computer methods and a series of algorithms for semantic disambiguation and sentiment analysis on emojis to improve the accuracy of natural Internet language. Dunlap et al. (2015) reviewed emoji use in online learning and suggested that such symbols could improve communication, enhance social presence, and build a sense of community among students. And the linguistic field also sees a growing number of papers, ranging from semantics, such as Danesi (2016) on the semantic influence of emojis on accompanying text, syntactic studies, such as Hasyim (2019) in his study concluded that emojis are part of the grammatical elements of language in communicating on social media, to pragmatic studies focusing on the pragmatic functions of emojis like Yus(2014), Herring& Dainas(2017), but few studies are conducted from a cognitive perspective. Besides, as emojis are widely used like McDonald's uses emojis in advertising, PepsiCo prints emojis on its product packaging, IKEA and Coca-Cola launch brand customized emojis（Zou, 2022:106）, studies on emojis involved in marketing, behavioral science, linguistics, psychology, medicine, and education, among which marketing attract great

attention on it. Bai & Dai (2019) noted that the use of emojis in marketing activities would have an impact on consumers, including optimizing the consumer experience, improving purchase intention, and changing perceptions of brands. Therefore, this paper aims to study emojis from the cognitive perspective and explore how emojis, the multimodal symbols in advertisements, help the audience to get the advertiser's communicative intentions and obtain optimal relevance.

2. Theoretical Framework
2.1 Relevance Theory
Relevance theory was proposed by Dan Sperber and Deirdre Wilson in 1986 and originated from Paul Grice's cooperative principle. It aims to explain verbal behaviors from the cognitive perspective and emphasizes the mind process of communicators during communication. Typical communication is ostensive-inferential: it is clear to both sender and addressee that the sender wants the addressee to be aware that she directs a message to him and that he is to infer relevant information from this message. Ostensive-inferential communication involves expressing informative intention (the intention to inform an audience of something) and communicative intention (the intention to inform the audience of one's informative intention) (Sperber&Wilson,2004:7). Cognitive principle of relevance and the communicative principle of relevance are the two basic principles of relevance theory. The cognitive principle of relevance means that human cognition tends to be geared toward the maximization of relevance. That is to say, humans pay more attention to the most relevant inputs and maximize the relevance, aiming to achieve the greatest effect with the least processing effort. And the communicative principle proposed that every ostensive stimulus conveys a presumption of its optimal relevance. An ostensive stimulus, then, creates an optimal relevant presumption. The notion of optimal relevance presumption reveals that an ostensive stimulus is relevant enough to be worth the audience's processing effort; the most relevant one should be compatible with the communicator's abilities and preferences. The audience of an act of ostensive communication is entitled to expect in terms of effort and effect.

Based on the two principles of relevance, Sperber and Wilson work out a cognitive comprehension procedure of utterance: a. Follow a path of least effort in computing cognitive effects: Test interpretive hypotheses in order of accessibility. b. Stop when your expectations of relevance are satisfied (Wilson and Sperber 2004:163). The overall comprehension process can be broken down into several subtasks, like constructing explicatures, implicated premises, and implied conclusions. But the subtasks of inferring the speaker's intended meaning are not performed one by one. The hearer's goal is to find an overall interpretation that confirms the presumption of optimal relevance. For this, he must enrich the decoded sentence meaning at the explicit level, and complement it at the implicit level, so that it yields enough cognitive effects (that is, enough contextual implications, strengthening, or revisions of existing assumptions) to satisfy his expectations of relevance. The comprehension procedures of hearers take place in parallel rather than in sequence. Imprecated premises can be put come up during the process, and hearers would propose a more concrete presumption for discourse relevance. Often, the hearer starts with a clear expectation about the type of implicature required and enriches the encoded sentence meaning by the process of backward inference to warrant the expected implicature（Wilson, 2019:17）.

2.2 Multimodal Discourse Analysis
In 2001, van Leeuwen and Jewitt first proposed the concept of "multimodality" in the *Handbook of Visual Analysis*. According to Van Leeuwen, " Multimodality means the combination of different semiotic modes in communicative artifact or event". And Baldry and Thibault (2006) defined multimodality refers to the diverse ways in which various semiotic resource systems are integrated and contextualized to construct the meaning of a multimodal text. Hence, multimodality offers us a way to further the semiotic complexity and richness of certain representations. Zhu Yongsheng (2007) explores the rationale of multimodality and defines it as the simultaneous occurrence of two or more modalities or two or more varieties of semiotics under one modality. Multimodal discourses refer to the discourse where language and other semiotic resources coexist to construct meaning, and multimodality discourse analysis aims at the study of two or more semiotic resources consisting of language, sound, music, image, etc. (Shen,2017:4). For instance, when you are watching TV, you will listen to what the actors are saying and observe their expression, eye, and gesture at the same time which will also help the speakers to construct meaning he/she wants to convey.

Present studies on multimodal discourse mainly on the theoretical framework of systemic functional theory. Kress and Van Leeuwen extended the application scope of the three meta-functions of language and established a fundamental framework for visual analysis (Dai,2013:21). Zhang (2009) sets up a framework for multimodal discourse analysis on the basis of systemic functional linguistics and discusses the complementary and non-complementary relationship among modalities. And with reference to systemic functional theory, Chen & Qian (2011) construct an analytical framework for multimodal pragmatics analysis. Forceville (1996,2005,2009) proposed that relevance theory is not confined to verbal communication but is applicable to non-verbal, multimodal discourse analysis, and later in 2014, Forceville further explained the feasibility of relevance theory to analyze the visual and multimodal discourse.

Therefore, this paper aims to explore how advertisers use modal resources to build a relationship with the audience and help the audience to get the advertiser's communicative intentions and obtain optimal relevance.

3. Pragmatic Analysis of Emojis in Advertisement

In this paper, the corpus analyzed comes from the marketing advertisements for the May 5th Shopping Festival of Alibaba arm Juhuasuan platform in 2022. Juhuasuan is committed to building the best marketing platform for merchants and aims to provide consumers with high-quality and cost-effective products and services. With the advent of the shopping festive, Juhuasuan launches a video with the title "Top 100 brands say "hello" online", which mainly shows the dynamic posters of six brands. The dynamic emoji cartoon images like "mysterious man" in Bananain, "666" in Yoyomei, and "barista" in Sumidagawa are highly recognizable and quickly caught the eye of young people. Studying the marketing poster aims to reveal how advertisers use emojis to build connections with consumers and how they can be understood and accepted by consumers.

3.1 Implicit and Explicit Information

In ostensive-inferential communication, some of the speaker's utterances are explicitly communicated, while some are implicitly communicated. Therefore, when the advertisers consider the emotive power of the utterances they use. They will first make decisions about how to communicate directly to make the hears understood. Advertising communication can be regarded as overt if the whole advertisement is made manifest that is expected to communicate, while they can also convey information in an implicit way with the aid of visual, multimodal elements, urging the consumers to have cognitive inferring.

In order to understand and explain information on the advertising posters, we need to decode the poster information carried by multimodal resources. We first need to recognize the elements in the picture that have been depicted. In Figure 3, there is a mysterious cartoon emoji character whose face is half covered, wearing pajamas and raising his hand. This interesting but familiar emoji will easily catch the sight of those who see the marketing poster. In this way, the advertiser successfully reaches his goal of attracting people's attention. Because the brand Bananain mainly serves products like bras, briefs, sleepwear, loungewear, pajamas, etc., the mysterious man in the poster who wears the pajamas can easily make customers understand that he is the image representative of the pajamas brand. We need to infer the implicatures if we want to know what the emoji character wants to convey. Strong implications (implicatures for whose derivation the sender takes responsibility) include emoji election and text information typically. Combined with the text and emoji information above the cartoon character and brand information, we may try to infer that it aims to inform us that we should not pay much attention to the appearance of beauty but should attach much importance to the inner quality.

Figure 1：Brand of Bananain

Of course, when decoding the modality information, the envisaged addressee needs to be able to recruit a lot of knowledge about the world from his cognitive environment (Forceville, 2014:11). For example, the consumers should know the brand of Bananai and what kind of product it sells. It is also important for the envisaged addressee to be able to recruit a lot of knowledge about the world from his cognitive environment (Forceville, 2005).

3.2 Contextual Construction

To attract the attention of the audience, arouse interest, produce conviction, and promote potential buyers to take action, marketing advertisement tries to affect the target audience's cognitive environments, which play a great role in how well the advertisement will perceive, comprehend and respond to (Wang,2009:18). Therefore, it is a key for the advertiser to design the marketing advertisement to promote consumers change in cognition and psychology, enhance their willingness to buy products. When seeing the advertisement, the audience would choose a present a context from a series of potential contexts based on the text, image, emojis, colors, and other modality resources. If the advertisers have an extra expectation of how to achieve relevance for the utterances, they can guide the audience to the proper context by presenting an eye-catching advertising poster. Then I would like to show the following example (figure 2) to confirm that emojis, together with other modality resources, help consumers construct cognitive context, which contributes to building a relationship between the advertiser and consumers.

Figure 2 Brand of Chow Tai Sang

This poster is a marketing image of the jewelry brand Chow Tai Sang. The character of the brand in the picture is an emoji "bride", wearing a wedding dress and exquisite makeup. This positive character image conveys a positive emotional attitude, such as happiness and love. When consumers, especially women, see this marketing poster, the cartoon image of the bride come into sight first. They would easily put themselves in that scene full of beauty, love, and happiness and show the eagerness of being a happy bride wearing exquisite jewelry, which helps to create a positive cognitive contextual effect potentially. Above the cartoon character，there are three lines about the brand introduction, which combine emojis and text. "Hello, I am Chow Tai Sang [star-stuck]". Usually, the emoji express that someone or something is amazing, fascinating, impressive, or exciting. On the one hand, it shows the kindness or eagerness of the brand " Chow Tai Sang" to the customers. On the other hand, it may also represent the mood of customers when they see the brand poster, some exquisite jewelries appearing in mind. And by adding emoji after the text, a friendly emotional attitude is shown to the customers, and it conveys implicit information that it hopes to build a conversation with the customers. Besides, the emojis⭐ [star], 💘[heart with arrow]，💎 and [gem stone] are the emblem of eternity, which further strengthen the attitudinal meaning of the text. The context within which a mass audience accesses a message, that is, is to a considerable extent anticipated by its maker（Forceville, 2014：13）. With the help of emojis in the advertisement, the consumers naturally create a presumption of context which is in agreement with the visual information. Based on the given context, the consumers will decrease some efforts to process advertising information.

3.3 Presumption of Relevance

Ostensive-inferential communication involves the use of an ostensive stimulus designed to attract an audience's attention and focus it on the communicator's meaning. Relevance theory claims that using an ostensive stimulus may create precise and predictable expectations of relevance not raised by other stimuli (Sperber & Wilson,2004:8). An ostensive stimulus used in the advertisement must be attractive enough to the audience to make the advertising communication successful. The audience has to realize that the stimulus produced by the advertiser is intentional, which is directed to the audience and is a conscious modification of the environment to draw the audience's attention. The advertising posters of the products usually contain several modality information, including image and text, music, and sound effect to attract the attention of the audience. The poster maker tries to be optimally relevant to her envisaged audience (Forceville, 2014:9). Take Figure 3, for example:

Figure 3: Brand of Three Squirrels

Emoji has always appeared in real-time internet communication. When it suddenly appears in the advertising poster, it can be easily recognized and gives customers a sense of freshness and familiarity feeling, so it will make people who see this poster linger on it for a longer time. Through the emoji character, the advertiser successfully achieves his intention that attracts the consumers' attention and conveys ostensive communication. In this picture, the emoji character raises one hand, which is consistent with people's gesture when greeting in daily life, and hold on to a pinecone on the other hand. This gesture conforms with the theme of the advertisement "Top 100 Brands Greeting Online"; on the other hand, people can easily recognize the informative intention

conveyed by the cartoon character. In addition, the text modalities are complementary to the emoji modalities. The symbol image of three squirrels and smiley emoji is added to the text, further introducing the brand image to consumers and helping to construct a conversation with the consumers. Through this poster, its advertisers or maker attract the audience's attention through communication, convey information or attitudes, and thus affect this audience with no unnecessary effort (Forceville, 2014). Advertising posters, as mass-communicative pictures, whose genre their envisaged addressees usually recognize unproblematically use emojis to attract consumers' attention successfully. And the pictorial message comes with the presumption of relevance. All signal: "Hey, look at me; I'm worth your attention

4. Conclusion

Multimodal resources have become important tools for meaning construction and information exchange. And multimodal resources used in marketing advertisements have represented the general trend. Emojis, as the emerging internet language symbol, are used in marketing, like brand management, advertising, and product design. Based on the relevance theory and with emoji advertising posters of 2022 Juhuasuan 55 marketing activity as the corpus analysis, the paper discussed how advertisers use emoji to build connections with consumers and how consumers understand the information and communicative intention conveyed by emojis and obtain the optimal relevance interpretation. It concludes that emojis, as vivid visual symbols, serve as the tool of ostensive communication and convey the message with the presumption of relevance; the emojis help consumers construct new cognitive context; emojis will be complementary with other modalities, which increase the ostension of information and save cognitive effort, and promote the audience find the optimal relevance path. However, the current study is limited by the small number of analyzed emoji advertisement corpus and visual modal analyzed. Further study could analyze more advertisements corpus about emojis. Researchers might also choose to investigate emojis and other multimodal features in other contexts like internet-based instant communication. In addition, further study could combine the qualitative approach with the quantitive approach when analyzing the multimodal corpus.

Conflicts of Interest: The authors declare no conflict of interest.
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