The Influence of Visual Puns on Advertising Credibility

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Abstract

Advertisements that employ visual puns can easily achieve the goal of persuasiveness. However, the exaggerated and theatrical visual language of advertisements may make it difficult for audiences to believe their claims. Based on previous studies, we formulated 4 hypotheses by using a 2 x 2 mixed experimental design. We manipulated 2 independent variables, advertisement product type (high-involvement-rational versus low-involvement-rational) and skepticism toward the advertising (high-skepticism versus low-skepticism), to validate the hypotheses and test the effect of visual puns on the advertising credibility. This study obtained 4 significant outcomes: (a) The effect of visual puns on the advertising credibility depended on the product type, and visual puns yielded a higher credibility in low-involvement-rational advertisements than in high-involvement-rational advertisements. (b) Differences in degree of skepticism toward an advertisement among the participants affected their beliefs in the claims of an advertisement containing a visual pun, and the participants with low-skepticism were more likely to believe an advertisement compared with high-skepticism. (c) Visual puns in low-involvement-rational advertisements yielded a relatively higher credibility among participants with a high-skepticism. (d) Visual puns in high-involvement-rational advertisements yielded a relatively higher credibility among participants with a low-skepticism.

Keywords: Visual rhetoric, Visual pun, Advertising credibility, Skepticism towards advertising

1. Introduction

Rhetoric, which was previously regarded as a method of expression, is currently being considered as a tool for converting design ideas. Among the numerous rhetoric methods, puns are commonly used in advertisements. A pun is not only a common rhetorical pattern, but also a rhetorical skill that effectively improves message conveyance (Spotts, Weinberger, & Parsons, 1997). A pun is a popular linguistic form. The use of rhetorical puns reflects a certain value, taste, and lifestyle (Laviosa, 2005). Puns are crucial for rhetorical expression and play a crucial communication and creative role in advertising (Mulken, Dijk, & Hoeken, 2005). Applying rhetorical skills to visual images is called visual rhetoric (McQuarrie & Mick, 2003). Chen, Mo, Honomichl, and Sohn (2010) considered that visual information can reinforce our memory and can be used to associate new knowledge systems with old ones. Previous studies have shown that converting linguistic rhetoric into visual rhetoric can render advertisements more persuasive and memorable (McQuarrie & Mick, 2003). The creative application of rhetorical puns in visual images is referred to as a visual pun (Hempelmann & Samson, 2007). People are often impressed by the creative integration and conversion of two forms that are presented together (Abed, 1994). Advertisements containing visual puns are common and are often persuasive, and designers of such advertisements have frequently won awards in international advertising design contests.

Previous studies have shown that advertisements containing visual puns are considered humorous and have a profound impact in delivering a message to audiences (Catanescu & Tom, 2001) and are more memorable (Summerfelta, Lippman, & Jr., 2010). In advertisements containing visual puns, complex images are typically used to connect two unrelated events through some similarity or advertised products and to form new form of visual language in advertising (Phillips, 1997). The semantic meaning of images used in this type of advertisement occasionally goes beyond the life experiences or knowledge systems of consumers. The messages conveyed by such advertisements may be considered amusing, exaggerated, and distorted.

Typically, consumers must exert more mental effort to understand the messages conveyed in advertisements containing complex images (Tanaka, 1994). Maheswaran and Meyers-Levy (1990) indicated that consumers often interpret messages conveyed by an advertisement within the framework of the advertised brand. Therefore, their interpretation of advertisements containing visual puns is influenced by their understanding of the advertised brand. When consumers have no knowledge about the advertised brand, such advertisements fail to convey the intended message. Weinberger and Gulas (1992) indicated that if advertised products or services are not considered humorous, consumers experience cognitive dissonance, and advertising messages would produce a vampire effect. Consequently, consumers tend to ignore such advertisements without processing the information, thus reducing their persuasiveness (Catanescu & Tom, 2001).

Russo, Metcalf, and Stephens (1981) indicated that advertisements exaggerating the performance of a product or service are regarded as deceptive advertisements. Andreasen (1991) considered that deceptive tactics used in the advertising and marketing industry has been normalized by the market. Most countries have implemented advertising regulations requiring that advertisers must produce truthful advertisements (Petty, 1996). However, according to this study, in recent years, numerous advertisers have exploited loopholes in such laws and used creative tactics and exaggerated visual images to convey advertising messages and appeal to consumers. Advertisements containing visual puns are an example of such behaviors. Such advertisements are often exaggerated, amusing, and are typically considered creative by advertisers. However, for consumers, this type of advertisement is unrealistic and inconsistent with their life. Pieters and Wedel (2004) indicated that because advertising authenticity tends to be questionable, consumers are typically defensive when viewing advertisements. Previous studies have also considered that advertising credibility potentially influences advertising persuasiveness (Sallam, 2011; Lafferty, 2007). However, Pieters and Wedel (2004) argued that using similes and metaphors (e.g., puns) in advertisements requires consumers to exert more mental efforts than usual to understand the advertised message, which renders them unable to refute the advertised messages, and therefore enhances the persuasiveness of the advertisement.

In summary, advertisements containing visual puns use surrealistic images that exaggerate the effects of a product or service. The visual images used in such advertisements are unrealistic and disconnected from life experiences, thereby easily causing consumers to refute the advertisements-yet such images require consumers to exert more mental effort than usual, which enhances the persuasiveness of such advertisements. A contradiction appears to exist between these two statements, which is the motivation for conducting this study. A literature review was conducted to explain this contradiction, and the ability of consumers to question appears to be related to the type of products advertised. The three purposes of this study are listed as follows:

- 1. To explore the influence of the type of products advertised on the credibility of advertisements containing visual puns;
- 2. To explore the influence of the level of skepticism toward advertising on the credibility of advertisements containing visual puns;
- 3. To explore how the type of products advertised and the level of skepticism toward advertising interactively influences the credibility of advertisements containing visual puns.

2. Literature Review

2.1. Application of Visual Rhetoric and Related Studies

The main reason that most advertisements can attract the attention of consumers is that creative visual imagery can remove psychological barriers and lead audiences into the context of the advertisement (Marja, 2009). However, advertisers should reconsider how they use images to appeal to consumers. The concept of rhetoric has been applied in graphic advertising design (Scott, 1999). Numerous advertisers have learned how to apply visual rhetoric (Hempelmann & Samson, 2007). Rhetoric has been applied increasingly more in print advertisements, and the number of advertisements containing visual rhetoric is immeasurable (McQuarrie & Mick, 1999). Initially, researchers defined rhetoric as an activity or behavior in which a suitable language pattern is adopted to improve the language-expression effect in a specific language context. Rhetoric has been considered as a language tool that has evolved from a language style to a visual rhetorical skill. This transformation has occurred because visual rhetoric can increase efficiency and effectiveness of information transmissions, thereby rendering them more persuasive (Bulmer & Buchanan-Oliver, 2006).

McQuarrie and Mick (2003) indicated that although visual rhetoric originated in rhetoric, related studies have been conducted in other fields such as semiotics, psychology, and advertising. Such studies have demonstrated the importance of visual rhetoric. Regarding the application of visual rhetoric in advertising, visual rhetoric often uses unexpected expressions to convey specific, simple, familiar, and novel sales messages to consumers in order to impress them and motivate them to purchase the advertised product or service. McQuarrie and Mick (1999) argued that visual rhetoric is more persuasive than traditional advertising. Phillips and McQuarrie (2004) indicated that advertisements containing visual rhetoric differ from conventional advertisements based on a standardized format, and such advertisements incorporate creative and interesting visual images that appeal to consumers and persuade them that the advertised products or services are as excellent as indicated by the visual images. In addition, Whittock (1990) indicated that visual images are generally more intrinsically meaningful than written words because of specific images selected by artists. Gibson (1971) considered that information was conveyed through language and visual structure, and because visual structure presents more information than language structure does, images alone can convey considerably more information. Kinross (1985) considered that even the simplest layout of information design (e.g., a train timetable) contain a visual-rhetoric component. Buchanan (1985) showed that communication was a common topic among all design research, and the design content following communication contained a visual-rhetoric component.

Numerous previous studies have adopted the concept of rhetoric and explored the relationship between rhetoric and consumers (i.e., audiences) from various perspectives. Morgan and Richert (1999) investigated how the audiences understood concrete and abstract metaphors. McQuarrie and Mick (1996) used various types of rhetoric to test the responses and memories of consumers. McQuarrie and Mick (1999) used rhyme, couplets, metaphors, and puns to explore consumer attitudes toward visual rhetoric. Related studies have found that the application of rhetoric in advertising produces a positive effect. However, McQuarrie and Mick (2003) indicated that advertisements containing visual rhetoric conveyed messages that were often rehashed metaphorical images. Because such images tend to be ambiguous and complex, audiences typically misunderstand the intended message. In other words, the application of visual rhetoric in advertising does not guarantee successful message conveyance. Nevertheless, advertisers continue to apply visual rhetoric frequently in advertising because it enables dramatic effects; consequently, audiences lower their psychological barriers when interpreting advertising messages and thus seldom refute the advertised message. Previous research showed that if advertising messages contains no implication, it would not draw the attention of consumers to the advertised products (Zakia, 1986). In addition, producing a dramatic effect is a method for attracting consumers' attention, and applying visual rhetoric to print advertisements is a creative method that allows advertising text to be presented more dramatically.

2.2. Application of Visual Puns in Print Advertisement

Visual puns are a type of visual expression in which the concept of word play is applied to an image (Hempelmann & Samson, 2007). An image presenting visual puns typically has a double meaning, as if two events were connected; in other words, multiple meanings can lead an audience to the same conclusion (Koestler, 1964). Visual puns are playful, amusing, and open to interpretation. Visual puns are humorous and creative expressions that convey persuasive messages (Mulken et al., 2005). Visual puns have been used in both modern and classical periods. In the classical period, some artists used visual puns to express multiple meanings in their works (Mitchell, 2004). For example, the neoclassical illustrator Charles A. Gilbert (1873–1929) composed a drawing entitled "All is vanity," in which a woman is seated before a mirror reflecting her cosmetics and herself; collectively, the mirror, cosmetics, and the woman form the image of a skull. The drawing implies that the woman's beauty is ultimately futile (Fig. 1). To date, visual puns are frequently used in print advertisements. For example, the print advertisement for Orbit chewing gum (Fig. 2) uses an overlap between teeth, plaque, and chewing gum and a heading "say cheese" to convey that Orbit chewing gum can help clean teeth.



Figure 1: All is vanity painting (Charles A. Gillbert, 1892)



Figure 2: A print ad for Orbit chewing gum (Advertisement obtained from ADVERTOLOG)

Lippman, Sucharski, and Bennington (2001) indicated that in advertising images containing visual puns, events are typically associated with products according to their context; in other words, some advertising messages are encoded as a type of riddle that consumers had to solve (Mulken et al., 2005), a phenomenon that was called punning riddle (Valitutti, Strapparay, & Stock, 2008). Punning riddles require consumers to decode the riddles according to visual images, product types, and points of interest; accordingly, communication and persuasion occur when the advertised messages are understood (Tanaka, 1994). Moreover, researchers considered puns as incongruent rhetoric (Yus, 2003). A pun means a textual message that has more than two meanings; a pun conveys incongruent messages to message receivers (Valitutti et al., 2008). In other words, puns contain implications; a pun surprisingly connects two distinct ideas on the basis of their hidden similarities to produce a humorous effect. However, visual puns in print advertisements are a type of soft-selling. A visual pun does not directly convey its meaning and is a type of complex rhetoric. Compared with conventional or direct expressions, visual puns are more open to interpretation (Phillips, 2000). Consequently, visual puns may fail to convey the encoded meaning.

When consumers view an advertisement, they first view the visual images and then read the advertisement title (Belch et al., 2008). According to dual loop theory (Rossiter & Percy, 1980), visual content influences consumer attitudes toward products through visual imagery; therefore, visual images are an undoubtedly crucial element of advertisements. Laviosa (2005) considered that visual puns resemble verbal puns and are a type of visual statements; visual puns adopt visual structure to be persuasive.

Attardo, Hempelmann, and Maio (2002) indicated that visual puns are a type of expression where metaphor and analogy are used to combine the similarities of various events into a logical structure. However, the complex imagery of visual puns is induced by associating the similarities between a depicted event and an advertised product; therefore, although the derived visual language might be considered humorous, advertising images are often exaggerated and disconnected from real life. When viewing such advertisements, consumers typically question the effectiveness of advertised services or products (Hoek, 1997). In addition, print advertisements are information carriers that convey product information to consumers. If advertising messages were incredulous or overly dramatic, consumers typically have a negative attitude toward both the advertisement and the credibility of advertisers (Prendergas, Liu, & Poon, 2009). Moreover, such advertisements are considered less persuasive. Advertisements containing visual puns have similar problems in persuading consumers.

2.3. Relationship between Advertising Skepticism and Advertising Credibility

Researchers defined skepticism towards advertising as the degree to which consumers distrust advertising content (Obermiller & Spangenberg, 1998). Numerous researchers have considered that understanding the influence of advertising skepticism facilitates developing new advertising and marketing strategies for consumer markets (Obermiller & Spangenberg, 2000). Mackenzie and Luts (1989) indicated that the implication of advertising skepticism was equivalent to that of credibility in advertising. Advertising skepticism potentially influences advertising credibility. From the perspective of advertised products, Cleland et al. (2002) considered that for most television programs and advertisements, the effectiveness of advertised products was unproven and consumers often doubted the advertisements. Cleland et al. (2002) collected 300 advertising samples and found that in 40% of them, at least one advertisement made false claims, and up to 55% of them were not supported with evidence. The results explain why consumers have a defensive attitude toward receiving advertising messages. However, the degree to which consumers doubted advertising content varies. Consumers who are more doubtful typically question advertising messages and are more able to refute advertising messages; conversely, consumers with fewer doubts tend to accept the advertised message and are less able to refute the message (Hardesty, Carlson, & Bearden, 2002).

Previous research showed that consumers who are more doubtful about various events relied on advertisements to a lower degree (Obermiller, Spangenberg, & MacLachlan, 2005). Prendergast et al. (2009) found that advertisements for certain products involving improving people's appearance or enhancing personal charm (e.g., weight-loss services, hair restoration, and cosmetics) easily elicit questions from consumers. In addition, Rhodes and Wood (1992) indicated that the degree to which consumers doubted advertisements is correlated to their self-esteem. Consumers with high self-esteem are less likely to conform to advertisements (Hovland & Janis, 1959) and more likely to doubt advertisements (Prendergast et al., 2009). Such consumers are not easy to persuade through advertising (Rhodes & Wood, 1992). Prendergast et al. (2009) argued that self-esteem is positively correlated with advertising skepticism, primarily because people with high self-esteem have strong beliefs regarding their existential value, and they are not easy to persuade through advertisements; by contrast, they tend to refute advertisements (Boush, Friestad, & Rose, 1994).

Most advertisements are not truthful to some degree (Obermiller & Spangenberg, 2000). Therefore, consumers are typically skeptical about advertising messages and tend not to be persuaded them (Obermiller et al., 2005). Friestad and Wright (1994) indicated that persuasive strategies elicit persuasive behaviors. Thus, advertising skepticism is crucial for preventing consumers from being persuaded by advertisements. Obermiller and Spangenberg (1998) considered advertising skepticism to be a consumer characteristic that influences the consumer responses to advertising messages. Calfee and Ford (1988) indicated that consumers typically do not believe advertisements they are skeptical of. Thus, consumers do not believe advertisements unless, for some special reason, they believe the advertiser to be trustworthy. Advertising skepticism is a crucial factor influencing the persuasiveness of an advertisement; but consumers possess varying degrees of advertising skepticism (Obermiller & Spangenberg, 1998). Obermiller et al. (2005) found that people with high advertising skepticism are less trusting of brands and advertisements, and they hold a negative attitude toward advertisements. This type of consumer focuses more on nonadvertising messages. Therefore, advertising skepticism subconsciously muffles the effectiveness of advertisements. Accordingly, on the basis of relevant literature, this study employed advertising skepticism as variables to examine its effect on the credibility of advertisements containing visual puns.

3. Research Design

3.1. Research Hypotheses and Experimental Framework

Cotte, Coulter, and Moore (2005) showed that the credibility of an advertisement indirectly influences the affective responses of consumers. In addition, the degree to which advertisements for various products and services are trusted varies among consumers (Prendergast et al., 2009). Vaughn (1980) indicated that products that induce high-involvement-rationality (e.g., household appliances, insurance services, and vehicles) generally cost more, and advertisements for these products underscored their functions. Consumers typically exercise prudence when evaluating advertisements for such products. By contrast, products that induce low-involvementrationality (e.g., daily necessities, food, and drugs) cost less. Consumers typically evaluate such advertisements on the basis of habit or convenience.

Advertising skepticism influences consumer responses to advertising messages (Obermiller & Spangerberg, 2000). Obermiller et al. (2005) indicated that consumers who are generally skeptical tend to rely less on advertisements when deciding whether to purchase a product or service. In addition, consumers with high advertising skepticism are not only more skeptical about advertisements, but they are more able to refute advertising messages and are less likely to trust advertisements. The opposite is true for consumers with low advertising skepticism (Obermiller et al., 2005). Based on the findings of previous studies, this study proposed the following research hypotheses, which also provided an experimental framework for this study (Fig. 3):

- H1: Advertised product types are correlated with the credibility of advertisements containing visual puns.
- **H2**: Advertising skepticism is correlated with the credibility of advertisements containing visual puns.
- H3: For people with high advertising skepticism, advertisements for product types that induce lowinvolvement-rationality are more credible than advertisements for product types that induce high-involvementrationality.
- H4: For people with low advertising skepticism, advertisements for product types that induce highinvolvement-rationality are more credible than advertisements for product types that induce low-involvementrationality.

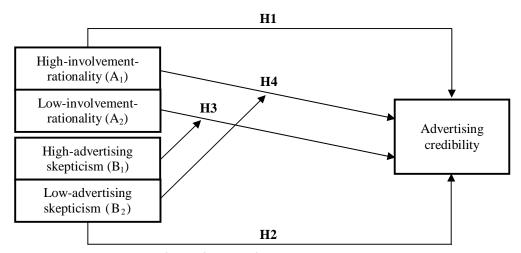


Figure 3: Experimental Framework

3.2. Experimental Variables

In this study, the first independent variable was product type. This study adopted the Foote, Cone, and Belding Grid (FCB Grid) (Vaughn, 1980; Vaughn, 1986) as the basis for selecting products that induce high-involvementrationality or low-involvement-rationality. The second independent variable was advertising skepticism, which was measured according to the advertising skepticism scale developed by Obermiller and Spangenberg (1998). A 7-point Likert scale was used to assess the degree of advertising's trustworthiness, which was evaluated using an advertising skepticism questionnaire comprising nine questions (see Obermiller & Spangenberg, 1998). This questionnaire has been adopted by many researchers (Thakor & Goneau-Lessard, 2009), and was adopted for the present study because of its high validity and reliability.

Advertising skepticism was measured as a categorical variable (high versus low); accordingly, the research participants were categorized based on whether they had high or low advertising skepticism.

The dependent variable for this study was advertising credibility. On the basis of the study by Sutherland and Middleton (1983), a questionnaire was developed; opposite adjectives with a 7-point semantic differential rating scale. The questionnaire was designed to measure two dimensions: whether advertising content was authoritative, which was measured in terms of reliable–unreliable, informative–uninformative, intelligent–unintelligent, valuable–worthless, and expert–amateur, and the characteristic of advertising text, which was assessed in terms of honest–dishonest, friendly–unfriendly, pleasant–unpleasant, and nice–awful.

3.3. Experimental Design and Stimuli

In this study, a 2 × 2 mixed experimental design was adopted, and the two independent variables, advertised product type (high-involvement-rationality versus low-involvement-rationality) and the level of advertising skepticism (high-skepticism versus low-skepticism) were manipulated. Using the Rossiter–Percy FCB Grid (Rossiter, Percy, & Donovan, 1991), we selected 8 advertisements containing visual puns for automobiles, ovens, personal computers, dryer, stereo system, microwave, dishwasher, and vacuum cleaner from the ADVERTOLOG (http://www.advertolog.com) website to represent products that induce high-involvement-rationality products. Similarly, 8 advertisements containing visual puns for detergent, toothpaste, laundry detergent, eye drops, gastrointestinal drug, shampoo, plant waterer, and low-calorie beer were selected to represent products that induce low-involvement-rationality (see Appendix).

Actual advertisements that have appeared in print media were used in this study to ensure that the participants would express their real attitude. To ensure that the participants were equally familiar with the advertised brands, advertisements for foreign brands that the participants were unfamiliar with were selected for this study in order to control experimental errors resulting from familiarity with the advertised brands.

3.4. Administration of the Pretest Questionnaire

The questionnaire used in this study was designed to measure two dimensions: advertising skepticism and advertising credibility. For advertising skepticism, the advertising skepticism scale developed by Obermiller and Spangenberg (1998) was employed to determine the nine questionnaire items related to advertising skepticism, which were measured using a 7-point Likert scale. Regarding advertising credibility, according to Sutherland and Middleton (1983), a 7-point semantic differential rating scale was employed and rate nine pairs of bipolar adjectives that were adopted for the questionnaire. The questionnaire items were adopted from previous studies that have demonstrated adequate construct validity.

Before the experiment was conducted, print advertisements for a television (high-involvement-rationality) and shampoo product (low-involvement-rationality) were selected for a pretest involving 30 university students. Regarding internal consistency reliability, the participants with high (low) advertising skepticism had a Cronbach's α of 0.862 (0.887), and that for advertising credibility was 0.892. Thus, all three dimensions achieved high reliability (a value of 0.70 was considered as a high-reliability value). Therefore, the questionnaire was not modified for the final experiment.

3.5. Participants and Experiment

In this study, students from four universities in Taiwan were recruited as participants. Through purposive sampling, undergraduate and graduate students were recruited from the Departments of Applied Foreign Languages (n = 63, 26.3%), Business Management (n = 54, 22.5%), Industrial Design (n = 57, 23.7%), and Visual Communication Design (n = 66, 27.5%). Tested completed in eight sessions, where participants were tested collectively. A total of 240 valid responses (107 men, 133 women) were collected. The age of the participants ranged from 20 to 24 years (M = 22.5 years).

At the beginning of the experiment, each of 16 print advertisements containing visual puns was printed on 20.5×26.5 cm posters. The experiment had four experimental conditions (A to D). Each experimental condition included advertised product type that induced high-involvement-rationality and the advertised product type that induced low-involvement-rationality. The four experimental conditions were as follows: Condition A—automobile, oven, detergent, and toothpaste; Condition B—personal computer, dryer, laundry detergent, and eye drops; Condition C—stereo, microwave, gastrointestinal drugs, and shampoo; and Condition D—dishwasher, vacuum cleaner, plant waterer, and low-calorie beer. The entire experiment lasted approximately 35 minute

(including time spent explaining the experiment and time for the participants to complete the questionnaire). During the experiment, participants were not allowed to discuss the advertisements with other people.

3.6. Reliability Analysis of Advertising Skepticism Samples

This experiment had four conditions. Each experimental condition was tested on 60 participants. A total of 240 valid questionnaires were collected. After questionnaires were returned, an a posteriori strategy was adopted to cluster the responses (Meyers-Levy & Malaviya, 1999). After the advertising skepticism scores were summed, the participants were categorized into high or low advertising skepticism according to the median score (33.5) (Obermiller & Spangenberg, 2000). Among the 240 responses, 126 (52.5%) were categorized as having high advertising skepticism and 114 (47.5%) were categorized as having low advertising skepticism. Table 1 shows the distribution of participants.

In this study, the data collected were analyzed using SPSS. The participants with high (low) advertising skepticism obtained a Cronbach's α for internal consistency reliability was 0.902 (0.889). Because the Cronbach's α values were higher than 0.70, the questionnaire was considered to be highly reliable. Subsequently, a Student's two-independent-sample t test revealed a significant difference in advertising skepticism between the two groups (t = 29.86, df = 238, p < .001). The difference between the two groups was suitable for serving as the second independent variable to examine the effect of advertising credibility. In addition, the Cronbach's α of the items measuring advertising credibility was 0.899, indicating high reliability.

		Experimental Conditions				
		Condition A	Condition B	Condition C	Condition D	Total
Advertising	High-Skepticism	37	28	27	34	126
Skepticism	Low-Skepticism	23	32	33	26	114
	Total	60	60	60	60	240

Table 1: Distribution of Participants by Advertising Skepticism Score

4. Results

4.1. Descriptive Statistics

According to the mean values of the dependent variable obtained by manipulating two independent variables, the advertisements for product types that induce low-involvement-rationality were more credible than those for product types that induce high-involvement-rationality ($M_{\text{low-involvement-rationality}} = 4.20 \text{ versus } M_{\text{high-involvement-rationality}}$ = 3.78). Regarding the advertising skepticism items, the advertisements presented to the participants with low advertising skepticism were more credible than those presented to the participants with high advertising skepticism ($M_{\text{low-Skepticism}} = 4.32 \text{ versus } M_{\text{high-Skepticism}} = 3.70; \text{ Table 2}$).

Table 2: Summary of the Mean and Standard Deviation

ariables Source			Advertising Credibility	
		n	M	Std.
Product Types	High-involvement- rationality	240*	3.78	1.40
1	Low-involvement- rationality	240	4.20	1.35
	Total	480	3.99	1.39
Advertising	High-Skepticism	126	3.70	1.35
Skepticism	Low-Skepticism	114	4.32	1.37
	Total	240	3.99	1.38

Note: For each experimental condition, advertisements for two product types were used and each test involved 60 participants. For the two types of advertised products in four experimental conditions, 240 pieces of data were obtained separately.

In this study, paired- and independent-sample t tests were performed to examine the influences of the advertised product type and level of advertising skepticism on advertising credibility. The results showed that the advertised product type exerted a significant influence on advertising credibility (t = -2.34, df = 238, p < .05), as did the level of advertising skepticism (t = -3.51, df = 238, p < .01), although the degree of influence differed between these two variables.

4.2. Influences of the Independent Variables on the Dependent Variable

According to a two-way analysis of variance (ANOVA), the F value for the interaction effect of the two independent variables on the dependent variable (A \times B) was significant at p < .001 (Table 3). The results indicated the existence of an interaction effect between the two independent variables on advertising credibility. In other words, the effect of advertised product type or advertising skepticism on advertising credibility depended on the other independent variable. In this study, the simple main effects of the two independent variables were examined to understand the influences of the two independent variables on the dependent variable and the causal relationship between the two independent variables (Table 4). If the simple main effects were significant, posterior comparisons were undertaken to examine the causal relationships between the two independent variables and the dependent variable.

Table 3: The Effects of Product Type and Advertising-Skepticism Level on Advertising Credibility

Variables Source	SS	df	MS	F	Sig.
Product Types (A)	5.90	1	5.90	4.51	.035*
Advertising Skepticism (B)	21.87	1	21.87	16.72	.000**
$A \times B$	123.54	1	123.54	94.46	.000**
Error terms	308.67	236	1.31		

*p<.05 **p<.001

Table 4: The Simple Main Effects of the Two Independent Variables

Variables Source	SS	df	MS	F	Sig.	Post-hoc
Product Types (A)						
in B1 (High-skepticism)	96.58	1	96.58	90.76	$.000^{**}$	A2>A1
in B2 (Low-skepticism)	35.91	1	35.91	22.76	.001*	A1 > A2
Advertising Skepticism (B)						
in A1 (High-involvement-rationality)	124.06	1	124.06	132.71	$.000^{**}$	B2>B1
in A2 (Low-involvement-rationality)	20.83	1	20.83	12.39	$.001^{*}$	B1 > B2

*p<.01 **p<.001

According to the results about the simple main effects of the two independent variables, the advertised product type appearing in the print advertisements significantly influenced the advertising credibility for the participants with high advertising skepticism (F = 96.58, p < .001) and those with low advertising skepticism (F = 35.91, p < .01). For the participants with high advertising skepticism, the advertisements of products that induce low-involvement-rationality were more credible than those of products that induce high-involvement-rationality (A2 > A1). For the participants with low advertising skepticism, the advertisements of products that induce high-involvement-rationality were more credible than those of products that induce low-involvement-rationality (A1 > A2). In addition, the level of advertising skepticism significantly influenced the credibility of advertisements for products that induce high-involvement-rationality (F = 124.06, P < .001) and those for products that induce low-involvement-rationality (F = 124.06, P < .001) and those for products that induce low-involvement-rationality were more credible to the participants with low advertising skepticism than they were to the participants with high advertising skepticism than they were to the participants with high advertising skepticism than they were to the participants with low advertising skepticism (B1 > B2). The internal factors of the two independent variables had opposite effects on advertising credibility.

5. Discussion

5.1. Influence of Product Type on Credibility

In this study, advertised product type was employed as an independent variable to explore whether the type of product being advertised influences the credibility of advertisements containing visual puns. The experimental results show that the type of advertised product significantly influences how credible an advertisement is perceived to be. In addition, advertisements for products that induce low-involvement-rationality were more credible than those for products that induce high-involvement-rationality.

Therefore, H1 was supported. This study considered that visual rhetoric was related to how messages were framed (Scott, 1994). If an originator could identify an appropriate rhetorical method, then message persuasiveness could be effectively enhanced (McQuarrie & Mick, 1996). Previous studies have indicated that incorporating visual rhetoric into advertisements is a creative meaning-making process that can influence product identification and consumer behavior (Campelo, Aitken, & Gnoth, 2011). However, such studies have focused on the persuasiveness of advertisements containing visual puns and appear to have excluded the effect of the type of advertised product. Therefore, the results of previous studies should be further explored.

According to the consumer purchasing decision making model (FCB Grid) (Vaughn, 1980; Vaughn, 1986), when consumers consider whether to purchase a product, their motivation and decision to purchase is influenced by the type of product (Rossiter et al., 1991). Among the advertised product types used in this study, the products that induce high-involvement-rationality were mostly expensive products with high functionality. Consequently, the advertisers had to provide sufficient information to assist the consumers in making rational decisions. In addition, for such products, consumers would be highly involved in risk assessment activities such as seeking more information on the price, function, and effectiveness of using the advertised products. Conversely, the products with low-involvement-rationality were mainly inexpensive products that were either convenient to purchase or typically purchased by consumers. The role of advertisements for such products is to assist consumers in comparing products but not to influence them regarding whether to make a purchase.

This study considered that although the advertisements containing visual rhetoric were persuasive, the application of visual puns in advertisements for products that induce high- involvement-rationality resulted in some product information being excluded and sealed off. Therefore, consumers could not obtain complete product information from the advertisements and thus tended to doubt and refute the advertisements. However, because products with low- involvement-rationality had low unit prices and were easy to purchase, consumers only used product information to compare products. For this type of product, consumers typically do not consider the accuracy of the advertising messages, and thus, advertisements containing visual puns were effective.

5.2. Influence of Advertising Skepticism on Credibility

In this study, advertising skepticism was operationalized as the second independent variable to explore whether skepticism toward advertisements influenced the credibility of advertisements containing visual puns. The experimental results showed that advertising skepticism significantly influenced the credibility of print advertisements containing visual puns. In addition, people with low advertising skepticism were more trusting of advertisements compared with people with high advertising skepticism. Therefore, H2 was supported. Although previous studies have shown that advertising skepticism influences message conveyance, such studies have focused on exploring consumers' attitudes toward advertisements (Obermiller et al., 2005) or analyzing the responses of consumers to new products (Morel & Pruyn, 2003) and advertising appeals (Tien & Phau, 2010). Few studies have focused on advertising persuasiveness. In this study, advertisements containing visual puns were used as stimuli to explore the influence of advertising skepticism on advertising credibility. The experimental results showed that advertising skepticism significantly influences advertising credibility.

Because consumer markets and media technologies are subject to rapid change, naive consumers have become self-aware and highly critical individuals. Consumer skepticism toward information is the main reason that current advertising and marketing strategies must change (Obermiller & Spangenberg, 1998). According to Calfee and Ringold (1994), 70% of consumers in the United States were moderately skeptical about advertisements, although they believed that the advertisements provided them with valuable information. Tian and Pasadeos (2012) considered that the increasing levels of skepticism resulted from consumers' resistance to being persuaded by advertisements. Skepticism typically arises when consumers are faced with persuasive information or seemingly believable advertisements (Koslow, 2000).

However, consumers differ in their level of skepticism toward advertisements because their perceptions differ (Obermiller et al., 2005). Compared with narrative advertisements, advertisements containing visual rhetoric are highly persuasive (Hempelmann & Samson, 2007). Koslow (2000) indicated that consumers are defensive toward persuasive information. Accordingly, the present study considered that highly skeptical consumers were defensive toward advertisements containing visual puns, and were thus skeptical about the visual claims presented in the advertisements. Mangelburg and Bristol (1998) indicated that high skepticism was a psychological attitude and direct consumer response to advertising messages.

Tian and Pasadeos (2012) argued that advertising skepticism to be a strong method for resisting advertising persuasiveness. Obermiller and Spangenberg (1998) considered that even for creatively designed advertisements, consumers questioned the truthfulness of the advertisements.

The present study considered that for advertisements containing visual puns, multiple images (symbols) were presented simultaneously; therefore, visual rhetoric is highly persuasive (McQuarrie & Mick, 2003). However, the composite images of the advertisements produced an overly dramatic effect, and thus consumers with high skepticism attempted to identify the weaknesses of the advertised messages and unreasonable aspects of the visual image. Accordingly, consumers tend to refute advertising messages; in other words, they doubt the truthfulness of the advertisements. This type of behavior is similar to a debate. When facing persuasive advertisements, people with high advertising skepticism typically attempt to locate the weaknesses of the advertisements to prevent themselves from being persuaded. By contrast, advertisements containing visual puns are highly effective in persuading consumers with low advertising skepticism. According to the experimental results, this study considered that when facing changes in consumer markets and media technologies, advertisers must reconsider whether the strategy of using creative visual images in advertisements to persuade consumers should be adopted.

5.3. Interaction Effect of Product Type and Advertising Skepticism on Credibility

In this study, two independent variables were adopted. The experimental results demonstrate an interaction effect of the two independent variables on advertising credibility. In other words, people with high advertising skepticism find advertisements containing visual puns for products that induce low-involvement-rationality highly credible, whereas people with low advertising skepticism find advertisements containing visual puns for products that induce high-involvement-rationality highly credible. Therefore, H3 and H4 were supported. Researchers considered that advertising skepticism was characterized by cynicism effects; in other words, consumers were tired of and had a negative attitude and distrust toward other people's motives and integrity (Mohr, Eroglu, & Ellen, 1998; Obermiller & Spangenberg, 1998). Morel and Pruyn (2003) considered that cynicism resembled high advertising skepticism; in other words, the truthfulness of an event was questioned and new products were frequently doubted. However, Koslow (2000) indicated that consumers were skeptical of advertisements to protect themselves from being persuaded by an advertiser's deceitful claims. Particularly, for expensive products, advertising skepticism assisted consumers in resisting advertising messages. Products that induce highinvolvement-rationality typically had higher unit prices and were characterized by their functionality. Such product advertisements typically guide consumers to become highly involved in the advertisements (Rossiter et al., 1991). When consumers are unsatisfied with an advertised message, they do not hold a positive attitude toward that advertisement (Janssens & Pelsmacker, 2005).

From the perspective of advertising design, the application of visual puns in advertisements resembles the use of a key. Advertisers who use puns combine images and "lock" some product information into the advertisement, and then let consumers locate the key to unlock the information. Although this method is creative, it does not present the characteristics of products that induce high-involvement-rationality. In addition, high advertising skepticism is characterized by cynicism effects. Therefore, advertisements containing visual puns for products that induce high-involvement-rationality are not trusted by people with high advertising skepticism. The role of advertisements for products that induce low-involvement-rationality is to assist consumers with comparing various products but not to influence consumer decisions to purchase a product (Vaughn, 1986). Thus, advertisements for products that induce low-involvement-rationality are easily trusted by people with high adverting skepticism.

From the perspective of advertising humor, in the elaboration likelihood model (Cacioppo & Petty, 1984), message humor has been regarded as a peripheral cue (Zhang, 1996) and low-involvement messages for consumers (Zhang & Zinkhan, 2006). Phillips and McQurrie (2002) indicated that advertisements containing puns were humorous forms of communication.

Consumers feel pleasure when viewing advertisements containing puns and processing related information. Consequently, consumers have a positive attitude toward products advertised in such a manner (Mulken et al., 2005). In the present study, we inferred that people with low advertising skepticism were typically unable to resist messages; therefore, consumers with low advertising skepticism found the creative use of visual puns humorous, and thus this approach was effective in providing a peripheral cue for such consumers, thereby inducing a positive attitude toward the messages. The experimental results also showed that for people with low advertising skepticism, visual puns in advertisements for products that induce high-involvement-rationality were highly persuasive (Hempelmann & Samson, 2007); although the mean difference between the two product types was small, it was significant.

According to the experimental results, this study considered that the use of visual puns was a novel advertising method. In other words, designers creatively integrated and transformed two forms and then presented them together as one (Abed, 1994). This method involves applying visual skills (Object A + Object B = Product benefit) to present the appeal of products that induce high-involvement-rationality. In addition, the visual humor presented through the advertising images differed from other types of advertisements. Although advertisements containing visual puns were dramatic, the advertisements were creative and interesting for people with low advertising skepticism, and these people probably changed their positive attitude to the credibility of products that induce high-involvement-rationality. We further inferred that products that induce low-involvement-rationality were characterized by low unit prices and convenience. According to Rossiter et al. (1991), because products that induce low-involvement-rationality are common and easy to purchase, consumers typically are not prudent when processing related advertising messages. Therefore, although people with low advertising skepticism typically do not refute such messages, advertisements containing puns for products that induce low-involvement-rationality do not easily elicit a humorous response from such people.

6. Conclusion

The application of visual rhetoric in advertising texts can attract the attention of consumers and stimulate their curiosity about messages. However, advertisements where visual rhetoric was applied were sometimes excessively dramatic; consequently, consumers tend to be distrustful toward such advertisements. Advertisers should first consider how to adequately apply rhetorical methods when advertising products. Information availability assists people in forming judgments about various events. The conventional advertising persuasion model (i.e., "you talk and I act") has changed into a consumer behavioral pattern (i.e., "you talk and I consider"). Consumers no longer passively receive messages, but actively filter and select them. Therefore, advertisers must reconsider the structure of consumer segments and then produce appropriate advertisements. Accordingly, an advertisement can target the main consumers segment and be focused on persuading that group of consumers. In addition, advertising skepticism appears to act as self-protection mechanism that guides consumer judgments about advertising messages. This process may promote the marketing value of truthfulness. Therefore, a skeptical attitude is favorable for consumers and assists marketers in developing positive values. Skepticism is conducive to human civilization and social progress. Through education and training, people can be encouraged to hold a positive skeptical attitude toward various events.

The function of an advertisement is to persuade people, and creative ideas are a tool for persuading consumers. Advertisers may use an advertisement to persuade or connect with consumers; however, consumer awareness has risen. Currently, consumers are no longer a passive audience that simply receives messages; rather, they actively search for, make judgments about, and select useful and reliable information. Therefore, an advertisement must be creatively designed according to consumer characteristics and products. Although overly exaggerated or dramatic advertisements may attract the attention of consumers, consumers tend to be skeptical about these advertisements. Regarding the use of visual puns, the combination of Object A and Object B in this study in presenting advertised product characteristics was considered to be creative from the perspective of visual design, but it was considered to be excessively manipulative from the perspective of consumers. Consequently, consumers distrusted advertisements containing visual puns for products that induce high-involvement-rationality. Therefore, we recommend that advertisers exercise prudence when evaluating how to advertise such products. In addition, advertisers should not underestimate the ability of consumers to question and criticize products. Developments related to the Internet have increased consumer awareness, and advertisers should consider this issue.

Several limitations were encountered while conducting this study. First, the participants were students. Although the sample size was relatively large, the sample does not represent all consumer segments. Therefore, the findings obtained from this study cannot be generalized to the entire population. In future studies, research participants should be sampled from various age levels to be representative of the population and to provide strong support for their arguments. Second, the stimuli used in this study were 16 print advertisements containing visual puns. These advertisements did not cover all product types, and therefore the findings of this study cannot be generalized to all product types. We recommend that future studies should first allow participants to select their preferred products and then classify them to determine the experimental stimuli; subsequently, the aforementioned experimental procedure should be implemented to obtain valid results. In subsequent studies, the framing of advertisement messages and consumer self-esteem should be included as variables, and the effects of informational and emotional appeals on advertising credibility should be compared to establish a factor model for advertising credibility.

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Appendix: Experimental Stimuli (Advertisements obtained from ADVERTOLOG)

High-involvement-rationality products					
	- arcen	AS COMMENT	THE REAL PROPERTY OF THE PARTY		
No.1: automobile	No.2: oven	No.3: personal computer	No.4: dryer		
Principle of the control of the cont		MANNA			
No.5: microwave	No.6: stereo	No.7: dishwasher	No.8: vacuum cleaner		
	Low-involvement-	rationality products			
	©Last				
No.9: detergent	No.10: toothpaste	No.11: laundry detergent	No.12: eye drops		
No.9: detergent	- Charles	No.11: laundry detergent	No.12: eye drops		