

Metaphor's Validity in Marketing Research

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ABSTRACT

Using metaphor is widespread in management and marketing because it provides creativity. However, metaphor's validity is seldom investigated. This article offers an analysis of the validity of metaphor using three steps: (1) analysis of the metaphor's source concept, (2) analysis of the metaphor's aptness, and (3) analysis of the process of metaphor generation. These three steps have been applied to investigate the validity of two very well-known metaphors in marketing: product life cycle and brand personality. Results show these two metaphors lack validity when analyzed using the three steps. © 2009 Wiley Periodicals, Inc.

Metaphor is a process of transposing a word meaning to another meaning using either an analogy or an implicit comparison (e.g., burning with desire, tasting the victory). Metaphor is often used in marketing. Concepts such as "brand trust," "brand equity," "brand personality," "price war," or "product life cycle" (PLC) make use of metaphor.

Using metaphor offers several advantages such as helping to understand a message by linking things which seem distant or finding unexpected and meaningful combinations (Cornelissen & Kafouros, 2008; Zaltman, 1995). These advantages explain the success of this process in management sciences (Morgan, 1983, 1997) even if the inherent ambiguity of metaphor may distort our view of reality and thus lead to poor management decision making (Ramsey, 2004). In marketing, metaphor properties have been investigated in the area of persuasive

communication (Bremer & Lee, 1997; Derosia, 2008; Durand, 1987; McQuarrie & Mick, 1992, 1996, 1997; McQuarrie & Phillips, 2005), but little research has focused on metaphor as a research process (Cornelissen, 2003; Kajzer Mitchell & Saren, 2008). Nonetheless, metaphors are a primary means by which new ideas are developed. The well-known example of the planetarian model illustrates the use of metaphor as a research method. In 1904, Nagaoka, a Japanese physics professor at Tokyo University, developed an early, incorrect “planetary model” of the atom (Saturnian Theory). The model was based on an analogy of the stability of Saturn’s rings to explain the dynamic between the nucleus and its electrons. Its predictions were successfully confirmed by Rutherford and other well-known physicists. However, some details of the model were incorrect and Nagaoka himself abandoned it in 1908. This example shows that when metaphor is used for generating theories, it may be both creative and misleading.

Similar examples can be found in the marketing field. For instance, some products, like Coca-Cola, never die. This contradicts the product life cycle theory. According to Popper’s theory, this immortality should question the validity of the research method used for developing product life cycle concepts. Therefore, using a metaphor is not sufficient to warrant its validity.

For this reason, this article focuses on metaphor’s validity. Investigating such validity raises several scientific questions about metaphor’s use as a specific research method (Cornelissen, 2003, 2006). Transferring a theory to another field does not guarantee that it is adapted to this field. Three criteria will be used to investigate metaphor’s validity in the research process.

The first deals especially with the source concept of the metaphor. Conditions underlying the theory that grounds the metaphor and its hypotheses have to be taken into account to investigate the validity of its transfer to another field.

The second criterion deals with a metaphor’s aptness. Although metaphor is considered here as a scientific research method and not as a simple stylistic device, studies dealing with aptness of metaphor as a stylistic device are also of interest.

Finally, the third criterion deals with the research method used in practice to develop the concept and its measurement. Using a metaphorical argument to justify research validity requires following a scientific process according to the metaphor principle. The three steps mentioned above are presented in Figure 1.

ANALYSIS OF THE METAPHOR’S CONCEPTUAL ROOT

The first criterion used to investigate the validity of metaphorical reasoning to generate concepts is to determine if the transferred concept was invalid in its original context. In case of failure, the validity of the new concept, generated by transposition, will fail too. Allport (1967) suggests six criteria by which to evaluate the validity of a theory in its original context: (1) its adequacy with the facts, (2) its generalization, (3) its parsimony, (4) its immediate experimental availability, (5) its logical basis, and (6) its capacity to explain. These criteria provide a structure that can guide the researcher interested in validating a metaphorical reasoning. Checking a metaphor’s validity using these six criteria will be illustrated in relation to brand personality concept. Plummer (2000, p. 79) emphasizes, “To my mind, however, no approach has been more enigmatic or

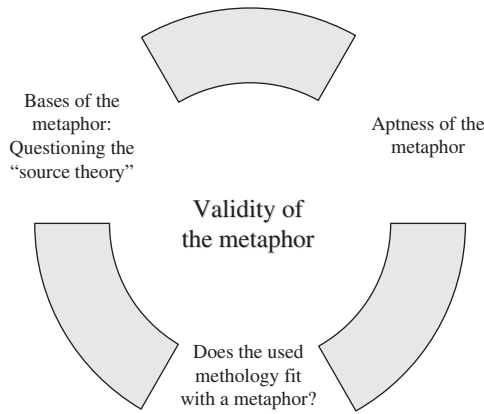


Figure 1. Steps of the metaphor validity analysis.

has been held with such high expectations as that of personality research borrowed from the field of psychology.” Personality is a role played by a person and perceived by other people. By analogy, brand personality is conceived as a brand’s role as perceived by consumers. Underlying this analogy is the choice of the theory of human personality traits rather than other personality theories. Such a choice has to be justified because trait theory has been controversial.

Generalization

Generalizing a theory is a first step toward establishing its validity. To be generalized, a theory should provide the same results when applied in other settings similar to those under which the first study occurred.

Aaker’s (1997) study uses the brand personality metaphor by replicating the trait paradigm according to which behaviors may be described by personality traits. When the theory of trait paradigms was initially developed in psychology (Cattell, 1950; Eysenck, 1970), researchers tried to create a stable structure of individual personal characteristics. They evaluated the way an individual is perceived by others, using a list of adjectives to judge the person. Thus, the basic hypothesis is that adjectives describing personality were developed according to the requirement of human qualifiers. Personality inventories have been created (see, for instance, Cattell’s 16PF or Eysenck’s personality inventory) based on a cleaning of these adjectives and factors analyzing them. More recently, to generalize these results, Costa and McCrae (1992) provide a stable and consensual personality model including five stable traits: agreeableness, conscientiousness, emotional stability, openness, and neuroticism. Brand personality as a metaphor of the big five personality model (Costa & McCrae, 1992) implies that brand is perceived as possessing relatively stable traits, whatever the context may be. However, the relevance of the trait paradigm is questioned in the field of psychology itself.

Parsimony

Parsimony means that to be valid a theory should simplify the reality. Therefore, a theory should not bring more complexity than the phenomenon itself.

Taking this example of human personality, the number of dimensions and items used to evaluate the personality of an individual far exceeds the cognitive capacity of a person. An individual does not evaluate the personality of others using so many criteria. For this reason, personality trait theory does not mesh with an individual's perception. Therefore, parsimony is not enforced for personality theory.

Adequacy with the Facts

Adequacy with the facts means that to be valid a theory needs to be verified in the real world. Therefore, following Popper's refutation principle, every finding that goes against the theory puts it into question. The reliability of human personality scales originating from trait theory has been questioned in psychology. Empirical test–retests do not confirm the NEOPI-R structure. Therefore, adequacy with the facts is not verified.

Logical Basis

To be valid, a theory should be founded upon a logical basis. It should also receive the support of other valid theories. Personality is described not only by personality traits but also by a set of paradigms, such as psychoanalytical, behaviorist, humanistic, biological, and socio-cognitive paradigms (Funder, 2001; Hall & Lindzey, 1970). The choice of the trait paradigm for brand personality has not been justified by Aaker and therefore is invalid. However, using other paradigms would also be relevant. For example, the humanistic paradigm, by underlining the role played by various designs of reality, emphasizes a lack of common qualifiers of personality for comparing different cultures and that sometimes there are shared qualifiers (etics) and others specific to each culture (emics).

Experimental Availability

A theory's result should be replicated by other researchers. Therefore, the theory has to be clearly stated, as should the manner in which its results can be checked empirically.

More precisely, personality traits are obtained with a set of atheoretical behavioral indicators. Indeed, correlation between indicators to identify traits is not enough to build a theory according to which the personality is structured around personality dimensions, since the latter do not have any theoretical support. For instance, in every country, whatever the variation of the translation, the adjectives "calm" and "slackened" will be strongly correlated. The stability of the measurement instrument seems due primarily to the semantic similarity of indicators (Endler, 1982); therefore, these results do not support a theory. This is why Endler claims that the factorialist approach of personality is not really a theory. This weakness is thus transferred to the brand personality metaphor.

Capacity to Explain

To be valid, a theory should have some explanatory power. More specifically, it should emphasize significant causes and effects. In marketing, Kassarian (1971)

questioned the forecasting ability of trait theories. At the present time, marketing researchers tend to consider personality more a moderating variable than the main factor of consumer behavior (Kassarjian & Sheffet, 1991).

The criterion used to validate a theory shows that the notion of trait theory borrowed for the brand personality metaphor is questioned. This statement is supported by Endler (1982, p. 157), who notes that “In general, most of personality theories are weak as theories.”

METAPHOR APTNESS

Linguistics research is concerned with the question of metaphorical aptness. The concept of “aptness” is defined as the poetic aspect of the metaphor, its creativity, its similarity, or its intelligence. Aptness, as developed by Tourangeau and Sternberg (1981, 1982), is used as a validity criterion to investigate metaphor’s validity.

According to Tourangeau and Sternberg (1981), a metaphor can be evaluated using two types of similarities: similarity within a domain and similarity between domains. Indeed, a metaphor assumes the transfer of a specific concept (a word in linguistics) belonging to one domain to another domain (a between-domains approach). Tourangeau and Sternberg (1981) conclude that metaphorical accuracy is positively related to the distance between domains and negatively to the distance within domains. In other words, the more distant from one another the fields are and the closer the terms, the apter the metaphor. This result is illustrated in Figure 2.

Similarity within Domain

Similarity within domains refers to the distance between the terms used, namely the “tenor” (the original concept) and the “vehicle” (the concept to which it is transposed). Using the product life cycle metaphor, the distance within domains represents the perceived variation between human life cycle (the tenor) and product sales curve (the vehicle). However, only some characteristics of human life cycle are transferred to brand life cycle. Most important of these are the life cycle stages. Conceptually, the full cycle proceeds through several stages, which

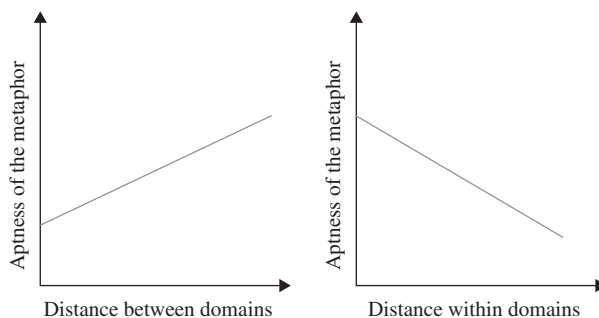


Figure 2. Metaphor aptness and similarities.

can be described in biological terms—conception, gestation, etc. (Wasson, 1974). However, product life cycle stages are very much influenced by competition, marketing effort, and environmental factors (Tellis & Crawford, 1981) that are not of the same nature as in biology.

For the brand personality metaphor, “within distance” refers to the evaluation of the perceived variation between the personality of the individual and the brand image. In fact, some characteristics of the human personality are only transferred to brand image. It can be noted that, like any metaphor, only certain facets of the personality are transferred to the brand. In other words, brand personality and brand image are not assimilable. This difference is emphasized in the definition of the brand personality concept as “The set of human characteristics associated with a brand” (Aaker, 1997, p. 347), which underlines the differences between characteristics of brand personality as opposed to the more global concept of brand image.

The characteristics of the human personality will be specified before examining their transferability. Human personality is defined as the relatively permanent general tendencies characterizing an individual’s behavior over a long period. This definition stresses the relative temporal stability of these characteristics as well as the fact that they appear in the behavior of each individual. Similarly, transferring the concept of personality to brand thus amounts to talking about the way brands “behave” with a set of stable characteristics. The assumption that the “behavior” of the brand, as it is perceived by consumers, can be compared to the set of messages it communicates—voluntarily or not—seems realistic. Batra, Lehmann, and Singh (1993) emphasize, for instance, the importance of communication in the creation of a strong brand personality. The within-distance question thus boils down to studying the stability of the messages communicated by a brand.

However, the statement that brand image is as stable as human personality can be discussed. Coherence within the various messages voluntarily and involuntarily emitted by brand is not assured, as opposed to what generally occurs for a normal individual. For example, when McDonald’s leads a policy of communication aimed at joining local agriculture even while being the standard bearer of American food, and thus symbolizing the genetically modified organisms in France, the stability of the transmitted messages can be questioned.

Stability of brand image over the course of time is also questionable. Indeed, whereas the behavior of an individual generally stems from his or her own choices, the messages conveyed by brands are usually made by various managers trying to leave their personal mark. Thus, brands “are regularly repositioned” by marketing practitioners. A recent work by Aaker, Benet-Martinez, and Garolera (2004) shows that these fluctuations modify consumers’ brand perception. According to these authors, brand personality is not as stable as human personality, and as a consequence there is an irremediable deterioration of perceived sincerity resulting from transgression in the communication policy.

Finally, the distance between human personality and brand image seems more significant than it appears at first glance. Indeed, the brand’s human characteristics, as described by Aaker (1997), do not have the same stable characteristics as the individual. Thus the within distance arises and the accuracy of the metaphor of brand personality is all the more restricted.

Similarity Between Domains

A metaphor assumes the transfer of a concept (or of a word in linguistics) specific to one field to another field. For instance, most relationship marketing concepts come from interpersonal relationship literature: trust, commitment, loyalty. These concepts have also traditionally characterized human couples (Stanley & Markman, 1992). Therefore, similarity between domains represents the distance between the two fields (here, relationships between human couples and marketing relationships). Aaker (1997) makes use of relational marketing theories in order to ground her work on brand personality. According to Aaker, individuals talk about brands as about a person to whom they are linked. Thus, brand anthropomorphization is the basis of the metaphor of brand personality. In other words, Aaker assumes that brand is considered as an individual and that the distance between the individual and the brand is weak. Thus, this argument goes against the accuracy of the brand personality metaphor (the weaker the distance between domains, the less apt the metaphor).

The product life cycle concept comes from biology. As biological evolution has a finite life cycle, similarly, products and ideas of any kind have a finite life cycle. Here the similarity between domains representing the distance between fields (in this case biology and marketing) seems to be weak. This illustrates the danger of utilizing large differences in distance between fields. To bring fields closer, Midgley (1981), for example, calls for an infusion of knowledge from consumer theorists and judges the PLC theory as an embryonic theory.

DOES THE METHOD CORRESPOND TO A METAPHOR?

At the methodological level, the metaphor is a process that must be used carefully in order to ensure the validity of the procedure. Indeed, Cornelissen (2003) denounces distorted metaphors that invalidate reasoning in the field of marketing. In this last step it makes sense to consider the methodology used to develop a metaphor and to analyze the methodology used for brand personality.

Cornelissen (2003) proposes a process that is adapted to the development of a metaphor in marketing. For the author, a metaphor must respect two principles, namely, the assumption of comparison and the criterion of isomorphism. In other words, the two compared fields must be comparable and the structure of the original concept (the tenor) must be preserved when transferred to the other field.

The Assumption of Comparison

The assumption of comparison must be respected in order to validate the metaphor. According to Cornelissen (2003, p. 212) "there are complementary significant theoretical connections which must be forged between the two fields." Thus, it is advisable to theoretically compare the two objects of the two various fields before proving the relevance of a metaphor. For this comparison, the between-distance criterion used in the preceding section provides a first evaluation. The author also suggests analyzing the coherence between fields. Thus, the metaphor of corporate

culture can be questioned because it implicitly compares individuals' characteristics with that of a set of individuals (the organization).

For brand personality, the unit of analysis is quite similar from one field to another, since the brand, just like the individual, can be regarded as a single entity. However, Azoulay and Kapferer (2003) have shown that the transfer of some human personality traits to brand is not valid. Indeed, the terms used for an individual will not necessarily have the same meaning for a brand.

Product life cycle theory also fails to meet the assumption of comparison because product characteristics differ from those of a living organism (Tellis & Crawford, 1981). Moreover, Rink and Swan (1979) point out the difficulty in comparing several PLCs because of the differing levels of aggregation used (product class/living organism or brand/living organism). They show that various levels of comparison have been chosen in past research. The first assumption of comparison, "product class/living organism," may be considered valid because consumer needs change with time, resulting in decreasing interest for a product class. The second comparison, "brand/living organism," appears to be controversial since a brand might have an exceptionally long life span because it serves as an umbrella for different product lines, each of them being periodically renewed.

The Isomorphism Principle

The isomorphism principle is the specificity of the design of the metaphor as a research method. This means that the use of the metaphor supposes the stability of the transposed structure. More precisely, Cornelissen (2003, p. 212) asserts us that "In spite of the similarity that it implies, the metaphor underlines implications based on analogies of structure perceived between the two subjects of the two different fields. These isomorphisms are then the object of a first evaluation of the suitable character of the metaphor in question." This criterion of isomorphism is thus a necessary condition, which, when combined with the principle of comparison, allows one to prove the relevance of metaphorical process. For instance, Cornelissen (2003) shows that the metaphor of corporate identity, though it fits the assumption of comparison, does not meet the condition of isomorphism, because the dimensions of human identity and corporate identity are not the same.

A similar conclusion is drawn for human personality, since only three of the dimensions of the big five model, developed in psychology, are preserved (Aaker, 1997). Thus the isomorphism principle is not respected in brand personality metaphor, even though the comparison between man and brand seems justified by the anthropomorphic approach of relationship marketing.

The isomorphism principle is also violated in brand personality research, because the structure of the measuring instrument is not preserved as are its items. The structure of the inventory is not the same for individuals and for brands: The five main dimensions of the inventory of brand personality (sincerity, excitement, competence, sophistication, and ruggedness) do not correspond to those of the big five model of human personality (openness, conscientiousness, extraversion, agreeableness, and neuroticism). Until now, none of the listed works have shown any kind of stability in the inventory structure compared to human personality (Aaker, Benet-Martinez, & Garolera, 2001; Bauer, Mäder, & Keller, 2000; Caprara, Barbanarelli, & Guido, 2001; D'Astous &

Lévèsque, 2003; Supphellen & Grønhaug, 2003; Venable, Rose, & Gilbert, 2003). Consequently, the isomorphism principle is not respected. In other words, the brand personality metaphor is not valid since characteristics that are supposed to be similar are not. Even if the authors explain the lack of similarity between human personality and brand personality in terms of specificities of each brand (Austin, Sigauw, & Mattila, 2003), this argument does not justify the validity of the metaphor. Another investigation of the isomorphism principle of brand personality at the item level shows that the logic of the metaphor does not follow Churchill's (1979) recommendations concerning building of a brand personality measurement scale.

A downward procedure, starting from item generation, is usually recommended. For brand personality, this logic is reversed, since Aaker (1997) tries to validate brand personality by replicating preexisting items in another field. Consequently, the metaphor of brand personality is not conducted at the conceptual level, but only at an instrumental level. This process basically assumes a total assimilation between brand and individual at the measurement level, without considering isomorphism at the structure level of the scale.

The isomorphism principle is violated in product life cycle studies. Only a few studies have empirically validated the PLC and found evidence of the classical bell-shaped curve (Rink, 1976). On the contrary, Tellis and Crawford (1981), reviewing published results, found nonconclusive results concerning the existence of the classical bell curve.

CONCLUSIONS

Although frequently used, metaphor's validity suffers from a lack of theoretical framework. In order to improve it, this article offers an analysis in three steps:

1. Analysis of the concept source and of the implied implicit assumptions.
2. Analysis of the aptness of the metaphor, focusing on the between distance between the considered fields and the within distance between the concepts used.
3. Analysis of the process of metaphor generation.

According to these three steps, brand personality and product life cycle concepts lack validity, in spite of their success in scientific and professional fields.

Considering the difficulties encountered, some authors have chosen another assessment of brand personality, such as global measures suggested by Hem and Iversen (2002) or one-dimensional measurement by Müller and Chandon (2003). Aaker, Fournier, and Brasel's latest work (2004) also fits with this tendency since they no longer use a brand personality inventory, but only selected items that seem relevant to the considered brands.

As far as PLC is concerned, this concept is now used as a description of the sales curve, without considering the similarity of this curve with the inverted U form of the human life cycle.

Brand personality and PLC have been used in this article to make the reader aware of the risks generated by the use of metaphor. In marketing, several concepts

are based on metaphors. For example, relationship marketing relies on an analogy between personal relationships and the relationships between consumers and firms. All concepts belonging to or used in the field of brand relationship, such as brand trust, brand commitment, brand loyalty, should be investigated with regard to the validity of their metaphors.

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