

Meaning Chasing Kiddies: Children's Perception of Metaphors Used in Printed Advertisements

Aşina Gülerarslan

Abstract—Today's children, who are born into a more colorful, more creative, more abstract and more accessible communication environment than their ancestors as a result of dizzying advances in technology, have an interesting capacity to perceive and make sense of the world. Millennium children, who live in an environment where all kinds of efforts by marketing communication are more intensive than ever are, from their early childhood on, subject to all kinds of persuasive messages. As regards advertising communication, it outperforms all the other marketing communication efforts in creating little consumer individuals and, as a result of processing of codes and signs, plays a significant part in building a world of seeing, thinking and understanding for children. Children who are raised with metaphorical expressions such as tales and riddles also meet that fast and effective meaning communication in advertisements.

Children's perception of metaphors, which help grasp the "product and its promise" both verbally and visually and facilitate association between them is the subject of this study. Stimulating and activating imagination, metaphors have unique advantages in promoting the product and its promise especially in regard to print advertisements, which have certain limitations. This study deals comparatively with both literal and metaphoric versions of print advertisements belonging to various product groups and attempts to discover to what extent advertisements are liked, recalled, perceived and are persuasive. The sample group of the study, which was conducted in two elementary schools situated in areas that had different socio-economic features, consisted of children aged 12.

Keywords—Children, metaphor, perception, print advertisements, recall.

I. INTRODUCTION

CHILDREN, who had limited influence on decisions about areas of their own consumption until recently, are now actively involved in almost all decisions about consumption and represent an indispensable area of study for marketing people and advertisers all over the world. Children are targeted in advertisements sometimes as direct consumers, sometimes as indirect sources of influence on their parents and sometimes to create positive brand associations [1]. For children, advertisements fulfill functions such as giving information, teaching, providing entertainment and sale. Children from age 1 to age 5 can associate simple content in advertisements with shopping, can understand informative content besides amusement from age 6 on, and from age 8 on they tend to know that advertisers provide information in an advocacy, rhetorical way. By middle to late childhood, there

is usually an understanding of advertising's advocacy, informative, and rhetorical functions [2]. In this context, a 12-year old child is informed about the content of an advertisement.

II. LITERATURE

An advertisement is the whole of signs presenting meanings to consumers in order to fulfill the goal of marketing a product or a service. Signs, images, metaphors, myths and symbols aimed at creating meaning are frequently used in advertisements to support the promise of the advertisement.

The "meaning" that is attempted to be created by using both verbal and non-verbal-visual signs can materialize when target audience deciphers the codes presented to them. Therefore, advertisements benefit from the past experiences and social, moral, and religious background knowledge of the target audience to whom codes are sent. This background knowledge, which the target audience is supposed to possess, turns into signs that advertisers have created to strengthen the promise of the advertisement.

Expressing something unknown via something known is called metaphor or figure of speech in literary usage. Metaphors are defined as "experiencing and understanding something in terms of another thing" [3] and help make sense, recognize and recall the knowledge and experiences obtained from the past by serving as clues [4]. Metaphors consist of verbal or visual codes whereas codes are rather complex association patterns that we learn within the society and culture [5].

A metaphoric sign in an advertisement—be it an object, a word or a picture—is quite a simple thing that has a special meaning for a person or a group of persons. The sign is composed of a signifier, a material object, and the signified, which is its meaning. They are separated from each other only for analytical purposes: In practice, a sign is always a thing + meaning [6]. Signs involved in metaphors refer to ears, eyes, nose (smell), tongue (taste), and skin (touch) [7]. Metaphors serve, for advertisers, as keys to meaning aimed at audiences and facilitate making sense by activating individuals' repertoire of feelings and knowledge. Metaphors are extensively used in almost all verbal and print productions in the advertising industry. Verbal or visual metaphors are motivating, appealing and urge participation.

Another point regarding metaphors concerns learning their meanings. Meanings may not naturally belong to a metaphor. The difference between the metaphoric text/visual and meaning is important.

A.Gülerarslan is with the Selçuk University, Faculty of Communication, Department of Advertising, Konya, 42151. Turkey (Phone: +90-332-223-36 94; fax: +90-332-241-0187; e-mail: asina.asina@gmail.com).

Metaphor in an advertisement assumes the role of the signified and the meaning attached to this sign by the recipient is called making sense/perception. Metaphoric signs alone may strongly indicate certain things to us but what constitutes meaning is always the total of signs [8]. Association of a meaning attempted to be conveyed in advertisements with an image can cause the ultimate inferred meaning from advertisements to be perceived higher in status and prestige [9].

Advertisers tend to convey more meaning by saying fewer things. At this point, both verbal and visual metaphors come to assistance in advertisements intended for all media. Metaphors offer significant advantages especially in terms of print advertisements. The fact that the area where messages of advertisements will be presented is limited urges advertisers to use these areas effectively. The use of both verbal and visual metaphors not only enables the conveyance of an advertisement's promise in a creative manner but also increases its effectiveness. Advertisements congaing metaphors are more vivid than simple and literal versions of advertisements [10].

Metaphors are useful in actively creating, forming and experiencing emotions and ideas [11]. In this context, metaphors that are frequently used in conversations during daily life are not only linguistic figures of speech but at the same time are helpful in understanding the outer world and language cognitively [10]. Everything we do and think in everyday language is full of metaphors [3]. In this context, from very early ages on, children develop a familiarity with metaphors through conversations within the family.

In children's world, tales, stories and jokes also represent the metaphoric world and from very early on they improve their ability to think in metaphors. These texts, which enable children to use their imagination, turn out to be a creative form of logical inferences. In many texts, words are understood in the way the author has encoded them unlike other advertisements and stories of this sort. In contrast, like the heroes and events in tales, advertisements themselves also create meaning, go beyond the limits of the text and are born out of the interaction between the text and its reader [12]. In other words, texts do not only speak but at the same time function as meaning. Since metaphors reveal processes about understanding, which cannot be expressed through literal meanings of words, they elicit ideas that cannot be stated in this language, direct attention, reveal emotions and increase perception [13].

Children's relationships with metaphors have been handled in the context of Gestalt orientation, and it has been revealed that both verbal and pictorial metaphors can be perceived as early as age 4-7 [14], [15]. A large portion of human communication is nonverbal and although ideas are typically expressed verbally, they appear in nonverbal images, too. At this point, metaphors constitute a verbal field of expression for children.

In studies conducted by Forceville [16] Sperber and Wilson [17] to determine whether children like advertisements with metaphors or not, it was argued that perception of

advertisements could increase their likeability and that children who believe in advertisements also grow a liking for advertisements. On the other hand, children cannot distinguish among familiarity, likeability and the goal of advertising and "to like" and "to know" appear as part of the same global reaction [10]. The likeability of advertisements is handled in the context of perception of advertisements in the relevant literature and likeability is associated with the perception of factors such as "creativity", "meaningfulness", "amusement", "empathy", "emotionality", "complexity", "creating negative feelings" [18], and 'ingenuity'; 'meaningfulness'; 'energy'; 'rubs the wrong way'; and 'warmth' [19].

The way metaphors, which help grasp "the product and its promise" both verbally and visually and facilitate making associations, are perceived by children constitutes the subject matter of this study. This study deals comparatively with both literal and metaphoric versions of print advertisements belonging to various product groups and evaluates to what extent advertisements are liked, recalled, understood (perceived) and are persuasive.

III. APPLICATION

This experimental study aims to compare levels of likeability, perception, persuasiveness and recall of metaphoric advertisements and print advertisements that are prepared in a literal sense by children. The experiment was conducted in a randomly selected public school and in a private school in Konya, which is the 8th largest city in Turkey in terms of population. Public schools in Turkey, as in many other foreign countries, are preferred largely by middle and lower class families whereas private schools are preferred by families with higher socio-economic level. According to the data for the year 2011 by TÜİK (Turkish Institute of Statistics), 10,979,301 children attended primary education institutions in Turkey. Only 286,972 of these children attended private schools whereas more than 10 million children received education in public schools [20].

Students attending 4 classes in the 8th grade in the selected primary education institutions were included in the study and before the experiment was conducted, the form teachers were informed of the experiment. One of the two classes, each of which consisted of 20 students and were selected randomly, was assigned as the control group while the other was chosen as the experimental group. 80 students from the schools participated in the study (40 in the control group and 40 in the experimental group).

At the first stage of the study, children were shown; reflected on a screen via an overhead projector, print advertisements of products marketed in Turkey, namely toothpaste (Signal), Color Pencil (Faber), Sneakers (Adidas), and crisps (Doritos), which they had not seen before. The product group was selected from among products that could appeal to both girls and boys. Taking into account the possibility that children could remember advertisements that they had seen before and respond by keeping them in memory, fictional advertisements were used and both the metaphoric and literal versions of the advertisements were prepared and

colored in very simple sketches. No metaphoric components were used in the first four advertisements belonging to four products/brands and literal versions giving the promise of the product directly in the “product is hero” format were prepared. The 4 metaphoric versions of the advertisements belonging to the same products presented the promise of the product and were designed to be visual and metaphoric. Sometimes a linguistic explanation is needed for the picture to mean something in advertisements containing metaphors [16] and print advertisements can provide verbal and visual clues to grasp the metaphor. Therefore, assistance was lent to these metaphors through words in the metaphoric advertisements. Both the products selected and the written messages used represent objects that children of this age group are used to and are within their field of experience. For example, the messages contain words such as “pearl”, “feather”, “rainbow” and “blaze”, which children hear about or see in their daily lives.

Below, you will find the literal and metaphoric versions of the advertisements (Figs. 1 & 4). The symbols used in the advertisements were first shown to 10 undergraduate students attending the Art Teaching Department at Necmettin Erbakan University in order to see whether the metaphors were chosen correctly or not.



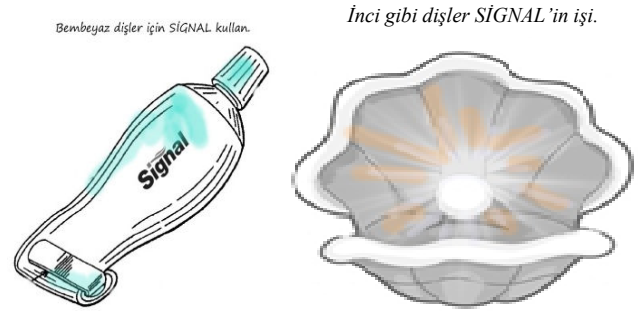
(The lightest sneakers by Adidas) (Sneakers as light as a feather)
Fig. 1 Literal and Metaphoric Versions of Sneakers



(A hot Doritos came out) (Try Doritos, the blazing crisp!)
Fig. 2 Literal and Metaphoric Versions of Crisps



(Wonderful Colors from Faber) (Seize Rainbows with Faber)
Fig. 3 Literal and Metaphoric Versions of Color Pencil



(Use Signal for snow-white teeth) (Pearly white teeth with Signal)
Fig. 4 Literal and Metaphoric Version of Toothpaste

During the experiment, the 4 literal advertisements were shown to the control group whereas the metaphoric versions of the same advertisements were shown to the experimental group. The children were made to sit singly and the questionnaire forms were handed out after the advertisements were shown so that the children would not manipulate one another and they would complete the questionnaire forms on their own.

The subjects were informed by the form teachers that the questionnaire form was not an examination and could not be evaluated as right or wrong and that their names would not be used. The number of questions were kept within a certain limit taking into account the children’s age and concentration capacity so that they would not be bored and the questions were so formulated as to be very simple and direct.

The single page question form measured whether or not the children understood the advertisements they saw with the 5-item likert scale consisting of the phrases “For me, understanding the advertisements was.....” “Very Easy, Easy, Difficult, Very Difficult, and I am Undecided” (q.1). Whether they liked the advertisements they saw or not was measured with the statements “I Liked Very Much, I liked, I Did Not Like, I Did Not Like At All, and I am Undecided” (q.2).

In another question, to what extent the advertisements were understood, liked, and believed was evaluated on the basis of the following criteria: Interesting / Boring; Meaningful / Meaningless; Pleasurable & Amusing / Unpleasant & Not

Amusing; Persuasive / Not Persuasive; Comprehensible / Complicated; Based on Imagination / Ordinary) (q.6)

The children's recall levels were measured via free recall data obtained from 2 open ended questions (q.3; q.5). These questions were encoded in terms of "product recall", the correct expression of the product represented in the advertisement (for ex.; crisps, sneakers), and the correct expression of "recalling brand name" (for ex.; Adidas, Doritos). The scores for recalling brands and products were listed as (Not at all=1 5 = All).

On the other hand, the subjects' levels of recalling the words and visuals in the advertisements and associating them with one another were formulated using open ended questions again (q.4). Correct matching verbally and visually was encoded with (3), Mismatching of the Expression and the visual with (2), only Verbal Expression or only Visual Remembering with (1) and Absence of any Correct Expression with (0).

The question (q.7) which was designed to understand the children's perceptions of advertisements, measure their motivation about whether or not they want the product in the advertisements they watched and obtain information about how much they liked the product and to what extent the advertisement attracted their attention, asked the children whether they wanted the products they saw or not. "I wanted very much" was encoded with (5) whereas "I did not want at all" was encoded with (0). While the data from the study were being evaluated both metaphorically and literally, they were handled in terms of the differences between girl and boy subjects and the relationships between private schools and public schools.

IV. FINDINGS AND COMMENTS

The recall levels of the advertisements in the study were evaluated with a 5-item score scale (1=None, 5=Remembers all) in 3 different questions. First, the data indicating the 5-item recall scores belonging to the three questions were entered separately and then the arithmetic mean of the recall scores belonging to the 3 questions was put under the heading of "Recall Index" via the "Compute Variable" command and thus a single index/score was obtained.

The question (Interesting / Boring; Meaningful / Meaningful; Pleasurable & Amusing / Unpleasant & Not Amusing; Persuasive / Not Persuasive; Comprehensible / Complicated; Based on Imagination / Ordinary) which measured the likeability level of the advertisements was evaluated using a 2-item score scale (1=Negative, 2=Positive).

First, the data indicating the 2-item recall scores belonging to the same question were entered separately, then the arithmetic mean of the scores belonging to the 6 choices was put under the heading of "Likeability Index" via the "Compute Variable" command and thus a single index/score was obtained.

Table I likeability and recall indexes of the experimental and control groups at the private school and their levels of perceiving, wanting, and liking. According to Mann-Whitney U test it was concluded that there is no significant between

two study groups in manner of perceiving ($U=182.5$, $p>0.05$) liking ($U=151.0$, $p>0.005$), wanting ($U=179.0$, $p>0.005$) indexes.

TABLE I
PRIVATE SCHOOL

	Group	N	Mean Rank	Sum of Ranks
Recall Index	Experimental Group	20	21.53	430.50
	Control Group	20	19.48	389.50
	Total	40		
Likeability Index	Experimental Group	20	21.80	436.00
	Control Group	20	19.20	384.00
	Total	40		
q.1(perceiving)	Experimental Group	20	19.63	392.50
	Control Group	20	21.38	427.50
	Total	40		
q.2(liking)	Experimental Group	20	22.95	459.00
	Control Group	20	18.05	361.00
	Total	40		
q.7(wanting)	Experimental Group	20	21.55	431.00
	Control Group	20	19.45	389.00
	Total	40		

Although there are no major differences in the private school between the responses of the (experimental) children to whom metaphoric advertisements were shown and the (control) children to whom literal advertisements were shown, it can be said that the children in the experimental group recalled the advertisements a little more than the others. A similar result is that metaphoric advertisements were liked more than the others. Metaphoric advertisements were perceived at a level similar to literal advertisements.

Regarding how much the products shown in the advertisements were wanted, it was found that the products in the metaphoric advertisements were wanted more than the products in the literal advertisements. The fact that there was not much difference between the experimental and control groups is in fact a significant finding. Obviously, it is as easy for a 12-year old child to decipher the codes of a metaphoric message of a product as it is for a literal one.

Table II contains analyses about the state school. Although no significant differences were found, the level of recall at the state school was slightly higher for literal advertisements than metaphoric ones. Regarding the perception level of the advertisements, it was found that literal advertisements were more easily perceived than metaphoric advertisements. The most significant difference concerned the likeability of the advertisements. The children liked literal advertisements more than metaphoric ones. According to Mann-Whitney U test it was concluded that there is no significant between two study groups in manner of perceiving ($U=180.0$, $p>0.05$) liking ($U=164.0$, $p>0.005$), wanting ($U=183.0$, $p>0.005$) indexes.

TABLE II
STATE SCHOOL

	Group	N	Mean Rank	Sum of Ranks
Recall Index	Experimental Group	20	19.15	383.00
	Control Group	20	21.85	437.00
	Total	40		
Likeability Index	Experimental Group	20	19.63	392.50
	Control Group	20	21.38	427.50
	Total	40		
q.1(perceiving)	Experimental Group	20	19.50	390.00
	Control Group	20	21.50	430.00
	Total	40		
q.2(liking)	Experimental Group	20	18.70	374.00
	Control Group	20	22.30	446.00
	Total	40		
q.7(wanting)	Experimental Group	20	19.65	393.00
	Control Group	20	21.35	427.00
	Total	40		

When private schools are compared with state schools, it can be said that the children in the private school were more inclined to metaphoric advertisements. The children attending the private school remembered the metaphoric advertisements (21.53/19.15) more than the children in the state school. The situation is just the vice versa in the case of literal advertisements. The children who attended the state school recalled the advertisements where the product was the hero and the promise of the advertisement was given directly more than the children who attended the private school (21.85/19.48). As regards the advertisement likeability index, the children in the private school liked the metaphoric advertisements more than the students attending the state school (21.80/19.63). There is no significant difference between the experimental group in the private school and the experimental group in the state school in terms of perceiving the advertisement. Regarding the second question, which dealt with the likeability level of the advertisements, it was found that the mean score of the children in the private school liking metaphoric advertisements was higher than that of the children in the state school (22.95/18.70).

TABLE III
GENDER X STATE SCHOOL

	Gender	N	Mean Rank	Sum of Ranks
Recall Index	Boy	14	24.11	337.50
	Girl	26	18.56	482.50
	Total	40		

The findings also indicate that boys and girls differed in recalling brand names and in their tendency to elaborate. Table III and Table IV show gender differences. The tables show the mean total free recall level of both literal and metaphoric advertisements.

TABLE IV
GENDER X PRIVATE SCHOOL

	Gender	N	Mean Rank	Sum of Ranks
Recall Index	Boy	23	21.04	484.00
	Girl	17	19.76	336.00
	Total	40		

The recall levels of metaphoric advertisements on the basis of gender are shown in Table V.

TABLE V
GENDER X METAPHORIC ADVERTISEMENTS

	Gender	N	Mean Rank	Sum of Ranks
Recall Index	Boy	19	22,26	423,00
	Girl	21	18,90	397,00
	Total	40		
Likeability Index	Boy	19	22,55	428,50
	Girl	21	18,64	391,50
	Total	40		
q.7(wanting)	Boy	19	20,89	397,00
	Girl	21	20,14	423,00
	Total	40		

As can be understood from the table, the recall level of metaphoric advertisements is higher in boys than in girls. Moreover, metaphoric advertisements are liked more by boys than girls. There is not a significant difference between the boy and girl subjects regarding their want for the products.

TABLE VI
GENDER X LITERAL ADVERTISEMENTS

	Gender	N	Mean Rank	Sum of Ranks
Recall Index	Boy	18	22,69	408,50
	Girl	22	18,70	411,50
	Total	40		
Likeability Index	Boy	18	20,31	365,50
	Girl	22	20,66	454,50
	Total	40		
q.7(wanting)	Boy	18	22,83	411,00
	Girl	22	18,59	409,00
	Total	40		

Table VI, on the other hand, evaluates literal advertisements in terms of gender. According to this, the recall level of literal advertisements is higher in boys. While mean scores of likeability are almost the same, level of wanting is higher in boys than in girls.

TABLE VII
METAPHORIC X LITERAL ADVERTISEMENTS

	Ad	N	Mean Rank	Sum of Ranks
Recall Index	Metaphoric	40	40,17	1607,00
	Literal	40	40,83	1633,00
	Total	80		
Likeability Index	Metaphoric	40	40,78	1631,00
	Literal	40	40,23	1609,00
	Total	80		
q.1(perceiving)	Metaphoric	40	38,64	1545,50
	Literal	40	42,36	1694,50
	Total	80		
q.2(liking)	Metaphoric	40	41,15	1646,00
	Literal	40	39,85	1594,00
	Total	80		
q.7(wanting)	Metaphoric	40	40,95	1638,00
	Literal	40	40,05	1602,00
	Total	80		

Table VII shows all the evaluations about the experimental and the control groups. According to this, there is no difference between the levels of recall, likeability and wanting the products in the metaphoric advertisements and literal advertisements. As far as perception is concerned, literal advertisements seem to have been better perceived. However,

metaphoric advertisements were liked more.

V. CONCLUSION

Within the limitations of the study, the metaphoric advertisements' level likeability is slightly higher than that of the literal advertisements. It can be said that although children may not understand it, they find the visual content in the advertisements interesting. The study showed that metaphoric meanings could be decoded by children. However, as far as the type of school is concerned, it can be said that children in the private school are more inclined to decipher the codes of metaphoric advertisements than the children in the state school. Metaphors are recalled, liked, and wanted more by this group. The fact that private school curricula in Turkey contain more creative applications (drama courses, extra class hours for culture and art etc.) than state schools can account for this inclination. On the other hand, factors such as the socio-economic status of the child and the environment where the child lives may be linked to this result. These differences can be taken into consideration extensively in other studies.

As far as gender differences are concerned, it is observed that metaphoric advertisements are recalled and liked more by boys. Differences between boys and girls in deciphering the codes of advertisements and differences between metaphoric and literal advertisements in children's long-term memories can be subjects of study for other researches. It is believed that not only the visuals but also verbal explanations supporting visuals in metaphoric advertisements may have enabled the children to understand metaphoric advertisements. It can be argued that metaphors can assist in recall on condition that metaphoric expressions accompany visuals.

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