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The Efficiency Of Message Codification Level in Print Advertisements: The case of food and drink products or service

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Abstract

It has been our intention through this paper to evaluate the efficiency of chosen encoding messages in print ads for food and drink, so we have conducted the survey with 28 respondents. The respondents have been asked to assess their own emotions to ads from questionnaire by using Self Assessment Manikin scale (SAM). Ads have been divided into conventional and unconventional ads according to the classification based on the levels of codification by Umberto Eco. The comparison of responses to these two types of advertisements through SAM results and conducted by ANOVA, shows significant differences in judgment of pleasure and judgment of arousal between conventional and unconventional group of ads. Post hoc analysis has shown which of the ads contributed to differences between two groups. The results confirm the hypothesis that the print ads for the food and drink products or service which are coded in the conventional manner provokes recipients better than the ads coded with dominance of the tropological or topical content. The reason for that comes from the fact that appealing with the gastronomic icons on recipient cause the affective response of their innate instincts and tendencies .

Key words: Self Assessment Manikin scale, ANOVA, advertisement, tendencies.

Introduction

Between categories of recipient and consumer is the entity that according to its motor and psychophysical constitution represents a complex value composed of a multitude of layered sensors of which, each for itself and in each unit of time, influenced by many stimuli reacts to certain presentations, on which it makes conclusions equivalent to the quality of its emotions and the quality of finished action.

Therefore, a good part of the subject's actions and reactions can be predicted with a large percentage of security. Also, based on the analysis of the subject's responses we can conclude postulates, by which the spe-

aimed, can be effectively designed and broadcasted. The main aim of the research commencing with this paper is to discover more suitable principles for encoding advertising messages in print ads. Visual rhetoric of coded messages projected with the intention of arising recipient's interest can be readily turned from the poetically rhetoric message into the state of murmur if the certain level of advertising code of ads is developed in the "l'art pour l'art" manner. In order to establish adequate education for graphic communication designers on the proper application of visual code in print ads, the inception of the research is the valorization of conventional encoding in food and drink advertising, i.e. the usage of iconic content in print ads with intense emotional messages, which are called "gastronomic icons"

cific content of advertising messages, psychologically

First received: 07.04.2011. Accepted: 29.05.2011. as well (Eco, 1968). Contrary to the conventional code, we assume encoding on the level of tropological content. We feel it arouses emotions which tend to provoke acquired or intellectual impulses and we, therefore, imply that this type often coding is less effective. We name the encoding in this way unconventional. To provide the solid foundation of the thesis that conventional gastronomic icons are exerted in order to appeal effectively to innate human impulses, we carry out the experiment with 28 respondents whose ages range from 25 to 40. The experiment includes visual measuring of emotions while observing print adverts by respondents themselves with SAM method. Hence, the respondents assess their own emotions divided into three groups such as pleasure, arousal and dominance after looking on print ads with food and drink in conventional or unconventional way.

Impulses and appeals

Sensors which constantly receives stimuli, driving a lot of instincts, tendencies and sentiments, and consciously or unconsciously motivate entity, causing in it a certain level of emotions and moods, and open spaces to the expression of needs and the conditions that are immanent, and which it consciously controls and manages ,or is left to them subconsciously.

Instincts in humans are always unconscious, they always indicate some wishes and goals as motifs, the incentives to action, work, etc. (Kropff 1951). The basic fact on which starts the analysis of human behavior is its activity against predetermined goals, then its deliberate activity. The driving forces that lead us to pay attention to certain occurrences and objects are the instincts and tendencies in us. When our attention is drawn to the subject in regarding with an objects or appearance, in accordance with a certain inclination or tendency, we experience the emotions that still drive us to certain procedures. In fact, the overall human behavior is subordinated by inborn or biological instincts, i.e. groups of instincts and tendencies connected in sentiments influenced by our experience.

Instincts that we qualifies as innate are: instinct of fear followed by the emotion of wonder, instinct of thirst, instinct for food, parental instinct, sexual instinct, instinct for a rest and sleep, and others. While for a various groups of instincts, tendencies and sentiments, whose formation is influenced by our experience, we say that they acquired, or intellectual; these instincts are manifested as: gregarious Instincts, instinct for knowledge, instinct to gain with emotion for dominance, fighting instinct, instinct for saving, instinct of patriotism, instincts for maintaining cleanliness and orderliness (Rot 1968).

When by the iconic sign, the genuine, or transposed representation one, we intend to provoke entity instincts, the act of receiving a message and transposing it, and the act of making a decision, drives a conscious or unconscious process of appealing (Nedeljković 2001)

The strength of impulses aroused in a subject is equal to the power of appeal. The power of appeal depends on the quality and number of carefully chosen principles of appeal directing towards the social-historical structure i.e. the subject's profile. Moreover, the argumentation used in the emotional message has to be logical and absolutely truthful. It does not mean it is not allowed to be poetic for the poetic message itself, or to put it more precisely, rhetoric message has always been and will be the assurance of successful communication.

When we observe logical and absolutely truthful argumentation in commercial messages through the prism of visual rhetoric, which from the very beginning of the research of visual/verbal rhetoric analogy has been observed and examined most in advertising media itself, we notice that since "Visual/Verbal Rhetoric" by Gui Bonsiepe and "Rhetoric of the Image" by Roland Barthes, through analyses and criticism of theories and assumption of the picture as the reflection of reality (Scott, 1994), up till now there have been big digressions in the choice of adequate rhetorical design. What we consider magnificent rhetoric messages nowadays are quite often, in fact, bombastic and meaningless messages in the "l'art pour l'art" manner, with ineffective elaboration and not sufficiently well-modeled codes.

Magnificent rhetoric messages with the prevailing tropological content, along with other levels of visual registers, in an interesting way and quite frequently mingled with a trace of humor, arise effectively to a certain extent most impulses we have already classified as acquired or intellectuals. On the other hand, we infer that gastronomical icons most successfully provoke acquired human impulses because these impulses are tightly connected with primary emotional reactions. This postulate stems from the theory of William Mc-Dougall by which innate impulses are frequently connected with primary emotions*. *Each of the principal instincts conditions, then, some one kind of emotional excitement whose quality is specific or peculiar to it; and the emotional excitement of specific quality that is the affective aspect of the operation of any one of the principal instincts may be called a primary emotion (McDougall, 1926). The desire for food that we experience when hungry, with the impulse to seize it, to carry it to the mouth, to chew it and swallow it, must be regarded as rooted in a true instinct (McDougall 1926). However, when one wants to appeal to the acquired human instincts, then it is not required to take advantage of the primitive passions of the people, but to respond to their wishes, to the desire for health, the desire for companionship, the desire for pleasure, the desire for convenience, the desire for domination, and - of course - the desire to follow a leader.

This theory is reflected in a Theory of Human Motivation by Abraham Maslow. According to it, man possesses at least five basic groups of motifs which have a hierarchical value. Only when has the lowest group of motifs been fulfilled to a high or low degree, high motifs can appear. Physiological motifs (impulses) are primary and the lowest. If they are not fulfilled, the others, high motifs do not emerge at all. If they are, the next category of high motifs appears and Maslow called them self-confidence motifs and etc. (Maslow 1943).

Codes of advertising messages

Semiotic theories of codes are the groundwork for numerous advertising studies. Since codes are systems for knowledge management and the basis of all cultural communications, semiotic theories of codes are regarded as additional key for decipherment hidden messages of ads.

Umberto Eco in his work La Struttura Assente (The Absent Structure) (1968) discusses about double-layered registers within advertising codes in the same way as Barthes and he differentiates verbal and visual register of the message. However, contrary to Barthes, he detects five levels of visual codification.

On the first codification level is iconic content which is similar to the message content Barthes refers to as non-coded photographic description of an object; an iconographic level, based on the convention of symbols whether culturological, historical, cultural or type of genre; tropological level based on visual equivalence to rhetorical figures; topic level with premises and topoi of argumentation; enthymematic level including articulation of real visual argumentations i.e. incomplete syllogism as the opposition to the picture.

Hypothesis / the objective of the paper

The most common visual code for product or service advertising connected with food and drink is certainly by dominant iconic content in conventional or semi-conventional layout of ads. Undoubtedly, the choice of message coding of this type is the most frequently habitual for the conventional layout of the ad has been the most existing throughout the history since the emergence of object poster (sachplakat). However, this basic postulate of ad is at the same time the most essential and straightforward way of visual communication. Therefore, this is the communication we tend to use most easily.

On the other hand, due to global expansion of supply and demand within marketing war for commercial market, advertisers overload media with all means of advertising especially with ads every day. Therefore, with the intention to make their campaigns more striking and gripping in the overburdened media, advertisers often avoid conventional type of ads. In addition to this, another reason why advertisers stay away from the conventional type is tough competition on the commercial market so products are more or less similar to each other. Consequently, there has been a gradual development of special advertising techniques primarily in visual rhetoric, which are daily improved by both advertisers and practitioners. A modern advertiser has plenty of alternatives regarding the choice of advertising topic and visual content and the most often alternative of iconic content is tropological level.

Observing through the eyes of consumers, advertising messages in print ads can be divided by the mode of coding into the ones encoded with conventional visual content and the ones encoded with unconventional visual content. Messages or ads, nevertheless, cannot be entirely divided in this way but when it comes to the code of visual content which dominates the advert composition it may be diverged towards these poles. Ads called conventional from now on has the composition of iconic content, that is, photographic account of goods or services in the most inappropriate manner with the high level of iconic content. The most common examples of the ads are iconic depictions of soft drinks with drops of condensed water on the package or metonymic representation of food and drinks. Ads regarded as unconventional are mainly diametrically opposite towards the choice of topics or the way of representation, so iconic representation does not dominate the composition but tropological level of visual register based primarily on hyperbole, metaphor or litotes.

With the intention of making adverts remarkable, exceptional, more intellectual and above all more effective, advertisers of food and drink trying to provoke certain human impulses connected with primary emotions, quite often slide into visual rhetoric, which we feel is not effective for such a type of product because its content and topic arouse emotions which recipients often do not link with his primordial impulses. As a consequence, they provoke in the receptor instead of basic emotions the emotions arousing intellectual and acquired impulses because during the process of interpretation and deliberation of the message subject arouses himself impulses such as instinct for knowledge, or instinct to gain with the emotion for dominance whereby subject receptor departs from the basic appeal for consuming fresh and delicious food or soft drink.

We assume the ads for food or drink without the dominant representation of iconic content are less effective for advertising such groups of products because with the need to come out of the framework of the conventional using more amusing and richer tropological content they move away from basic direction of the appeal. Ads have to be focused on our aspirations and previously determined goals, thus appeals have to be directed at emotions, impulses and sentiments by which receptor can be provoked most quickly to respond, and

at best at the very moment. If we prompt the process of deliberation of the ad content and topic, at the same time we take the risk to prompt cognitive dissonance, which alienates every subject receptor from the desire of consuming in this case. If it happens, then these ads we can rightly regard as of "l'art pour l'art" or tacky which direct subject to consume the ad instead of the product or service.

Self-report measures of emotion

The easiest way to measure emotion is to ask people how they feel or felt at a previous point of time. But, emotions are multi-dimensional, including the different dimension of pleasantness, excitement. Over some emotion person has no control. This dimension is also included in the research, such as dominance, in other words it measures the level of control over some emotion.

Table 1: View of factor analysis for 18 pairs of emotions

The Self Assessment Manikin (SAM), developed by Lang (1980), is a visual self-report instrument that relies on Mehrabian and Rassel's PAD-dimensions (1974). This PAD scale refers to 3-dimensional structures: Pleasure, Arousal and Dominance. Pleasure is covering emotions from pleasant to unpleasant, arousal is the scale from sleepy to frenetic excitement and dominance is showing control over some emotion. This PAD Scale is a widely used instrument for assessing the 3-dimensional structure of objects, events, and situations. Its origin is the set of 18 bipolar adjective pairs each of which are rated along a 9-point scale. Factor analysis of the resulting 18 ratings generate the scores on the dimensions of pleasure, arousal and dominance (Bradley and Lang, 1994.). These scores are shown in Table 1.

Unhappy-Happy	0.914	0.063	0.148
Annoyed-Pleased	0.883	0.068	0.158
Unsatisfied-Satisfied	0.868	0.144	0.114
Melancholic-Contented	0.729	0.095	0.056
Despairing-Hopeful	0.858	0.063	0.078
Bored-Relaxed	0.580	0.372	0.234
Relaxed-Stimulated	-0.211	0.774	0.052
Calm-Excited	-0.181	0.793	0.056
Sluggish-Frenzied	0.268	0.771	0.005
Dull-Jittery	-0.211	0.793	0.121
Sleepy-Wide awake	-0.046	0.810	0.047
Unarousad-Aroused	0.051	0.827	0.127
Controlled-Controlling	0.262	0.192	-0.673
Influenced-Influential	0.292	0.089	-0.618
Cared for-In control	-0.090	0.198	-0.626
Awed-Important	0.199	-0.040	-0.301
Submissive-Dominant	0.195	0.306	-0.695
Guided-Autonomus	0.161	-0.100	-0.479
Amount of variance accounted for	24.6	23.12	12.18

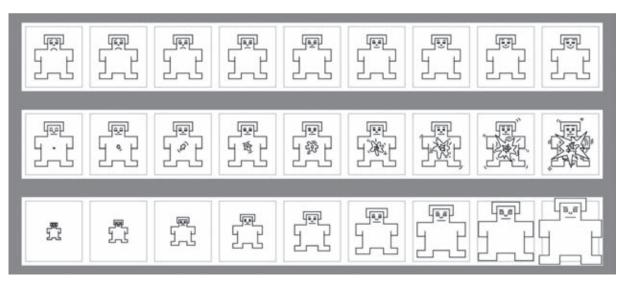


Figure 1. The Self-Assessment Manikin (SAM) used to rate the affective dimensions of pleasure (top panel), arousal (middle panel), and dominance (bottom panel)



Figure 2. Advertisements encoded with conventional visual content — Ad#1 Chockolate chase cake, Ad#2 Soft drink, Ad#3 Beer, Ad#4 Coffee.

Table 1 clearly distinguishes the three dominant emotions whose analysis gives the best display of emotion for a particular situation. The reduction of feelings through factor analysis is performed to give an acceptable number of emotions that can be easily expressed. In this way the testing of subjects is faster and analyzing the results is easier to perform. Examination of pleasure, arousal and dominance give the most comprehensive picture of the emotional state of a person at a time.

Another advantage of this model test is the ability to run tests without the use of modern technology. The scales can be printed on paper and fill out in pencil, allowing public survey in different conditions.

The reliance on a verbal rating system makes it difficult to utilize this methodology in non-English speaking cultures and with populations which are not linguistically sophisticated (e.g. children, aphasics, etc.), so picture-oriented instrument is suitable for such cases.

Method

The questionnaire has been designed in the way that respondents view ads and after each add they fill in SAM visual scale for measuring emotion. Ads and SAM scales have been found in a pdf document one after another. Each ad is followed by one page that contained scales for measuring emotion. Each of the three scales (pleasure, arousal, dominance) has 9 fields, and the respondents have chosen the field which represents their personal emotional experience best while observing advertisement.

Before each participant begins to fill in SAM scale, they have been explained what the scale indicates. In addition, they have been told to assess their own emotional experience, through the three scales that are in the questionnaire. The evaluation has been done in a way that participants fill in one of the existing 9 fields in scales of "pleasure" "arousal" and "domination. " Participants in the poll have not known any other details



Figure 3. Advertisements encoded with unconventional visual content; Ad#5 Meat, Ad#6 Sushi restaurant, Ad#7

Coffee 2, Ad#8 Soft drink 2

about the survey. Ads have been divided into conventional and unconventional ads by basic classification explained above. The order of shown ads has not suggested categorization. The respondents have not been familiar with the categorization nor has their attention been drawn to the valorization and revalorization of any results. Respondents have viewed each ad for a period of 6 seconds. After that time they have exceeded to the next page, which has contained the SAM scale for grading emotions. Participants in the survey have had 15 seconds to assess advertisement they have just seen, after which they have exceeded to the next ad and the next SAM scale. This procedure has been repeated for all 8 commercials that are the part of the survey.

Results

A one-way within subjects ANOVA has been conducted to compare the effect of print advertisement type on the judgment of three factors: pleasure, arousal and dominance. There was a significant effect of print advertisement type on the judgment of pleasure, Wilks' Lambda = 0.694, F (1,27) = 11,91, p = .002. The paired samples t-tests have been used to make post hoc comparisons between conditions. A paired samples t-test has indicated that there is a significant difference in the scores for Ad1 (M=7.14 SD=1.51) and Ad2 (M=6.04, SD=2.03) conditions; t=2.55, p=.017, scores for Ad#1 (M=7.14 SD=1.51) and Ad#5 (M=5.75, SD=2.55) conditions; t=2.759, p = .010, scores for Ad#1 (M=7.14) SD=1.51) and Ad#6 (M=5.07, SD=2.463) conditions; t=3.740, p = .001, scores for Ad#1 (M=7.14 SD=1.51) and Ad#7 (M=5.21, SD=2.780) conditions; t=3.660, p = .001, scores for Ad#1 (M=7.14 SD=1.51) and Ad#8 (M=5.68, SD=2.525) conditions; t=3.061, p=.005, scores for Ad#3 (M=6.89, SD=2.233) and Ad#4 (M=5.75, SD=2.119) conditions; t=4.570, p = .007,scores for Z3 (M=6.89, SD=2.233) and Ad#6 (M=5.07, SD=2.463) conditions; t=2.900, p = .000, scores for Ad#3 (M=6.89, SD=2.233) and Ad#7 (M=5.21, SD=2.780) conditions; t=3.401, p = .002, scores for Ad#3 (M=6.89, SD=2.233) and Ad#8 (M=5.68, SD=2.525) conditions; t=2.217, p = .035. These results suggest that type of print advertisement has the greatest effect on judgment of pleasure in case of ads 1 and 3 in the group of conventional ads.

A one-way within subjects ANOVA has shown that there is a significant effect of print advertisement type on the judgment of arousal, Wilks' Lambda = 0.804, F (1,27) = 6,565, p = .016. The paired samples t-tests have been used to make post hoc comparisons between conditions. A paired samples t-test has indicated that there is a significant difference in the scores for Ad#1 (M=6.04, SD=2.081) and Ad#6 (M=4.14, SD=2.305) conditions; t=3.140, p = .004, scores for Ad#2 (M=5.54, SD=2.365) and Ad#6 (M=4.14, SD=2.305) conditions;

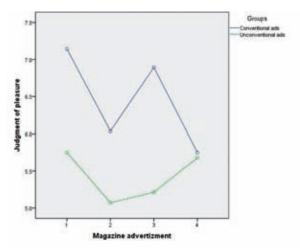


Figure 4. Estimated marginal means of pleasure dimension.

t=2.400, p=.024, scores for Ad#3 (M=6.21, SD=2.616) and Ad#6 (M=4.14, SD=2.305) conditions; t=4.271, p=.000, scores for Ad#3 (M=6.21, SD=2.616) and Ad#7 (M=4.75, SD=2.771) conditions; t=3.061, p=.005, scores for Ad#3 (M=6.21, SD=2.616) and Ad#4 (M=5.14, SD=2.121) conditions; t=2.161, p=.040, These results suggest that type of print advertisement has the greatest effect on judgment of arousal in case of ad 6.

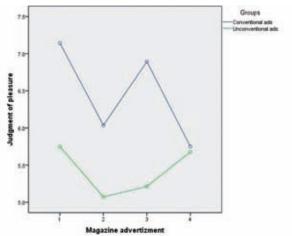


Figure 5. Estimated marginal means of arousal dimension

A one-way within subjects (or repeated measures) ANOVA indicated that there was no significant difference in the scores for dominance. Due to insufficient effect of dominance scale, this scale is often neglected to evaluate SAM results. Taking into account that most of the respondents have not comprehended the meaning of the scale, the results of the scale will not be included in this case.

The exclusion of dominance scale was adopted in research conducted by Russel (1980) and later by Olney, Holbrook and Batra (1991).

The results argue for the hypothesis. However, t-test results call our attention to the comprehension of the recipient's reaction to the conventional content. Accordingly, the advertisements with the dominant conventional content in the foreground, while in the background and periphery of the ad there is the topic developed on topic and tropological level (Ad#1,Ad#3, Figure 4), get the best scores with both factors. Then, by comparing these results to those of ads Ad#2 and Ad#4 (Figure 4,5) without further rhetoric elaboration which is with ads Ad#4 clearly obvious (Figure 2), we can undoubtedly deduce that gastronomic icons have enabled affective responses to innate impulses according to the appeal. Since the recipient's impulses are provoked by the ad, his pleasure and excitement grow according to the ad, that is, its rhetoric elaboration. Another argument to this observation is the results of the responses to ads with unconventional content (Figure 4, 5). In ads Ad #5 and Ad #8, there is iconic content, however, not dominant but dominant tropological and topic content. In ad Ad#5 iconic level has been overpowered by visual metaphor of tropoi and hyperbole as well, whereas in ad Ad#8 there is a small gradation in argumentation communicating by double metonymy. Therefore, we can conclude that the presence of iconic representation of a product has boosted to a certain degree the results of the factors of pleasure and arousal comparing to those of ads without it and consequently, by complex codification, it has reached the result of the ad encoded by just simple gastronomic icon Ad#4.

Conclusion

On the basis of results of the survey, we are able to draw the conclusion that the hypothesis of the research is correct. In ads appealing to innate human impulses, there are better and more positive responses with ads whose content of gastronomic icon of the product is in the foreground. According to this, if we are looking for effectiveness through the ads, eliciting affective response should be the main role for advertising images. So, advertisers which have consistently used visual stimuli that are rhetorically composed to be processed automatically, with function to affect the emotions directly, in this case had enough reasons to do in that way. "Yet advertising images are-in every case-complex cultural artifacts. It is inappropriate to use a photograph as an unconditioned stimulus... Research on affective response must continue but in a manner more fitting for the level of sophistication at which advertising images signify-and are read".(Scott 1994) There was no question if advertisers should use visual rhetoric, but how they should use it in this specific advertising theme. Advertising messages for food and drink should stand for iconic conventional style which doesn't mean they aren't rhetorical in that way. The gastronomic icons are already rhetorically coded and they could be aimed with humor, and psychologically directed to target audience and they ethno-cultural or affiliation profile.

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References

- McDougall, W. (1926) An Introduction to Social Psychology (Revised Edition). Boston: John W. Luce & Co.
- Nedeljković, M. (2001) Marketinški priručnik, Serbia, Novi Sad, Dnevnik novine i časopisi.
- Rot, N. (1968) Socijalna psihologija, Serbia, Beograd, Rad.
- Scott, L.M. (1994) Images in Advertising: The Need for a Theory of Visual Rhetoric, The Journal of Consumer Research, Vol. 21, No. 2 (Sep., 1994), pp. 252-273
- Barthes, R.(1981), Retorika slike, (Original Title: "Rhetoric of the Image", 1977.) Zbornik radova iz teorije vizuelnih umetnosti, ed. Miščević, N. i Zinatić, M. Biblioteka Dometi, velika edicija, separate časopisa, str. 71–82.
- Eco, U. (1973) Kultura komunikacija informacija, (Original Title: "La Struttura Assente",1968), Serbia, Beograd, Nolit.
- Bonsiepe, G. (1965) Visual/Verbal Rhetoric, Ulm: Journal of the Ulm School of Design, 14/15/16, pp 23–40.
- 8. Maslow, A. H. (1943) A theory of human motivation, Psychological Review, Vol 50(4), Jul 1943, pp 370–396.
- Poels, K. Dewitte, S. (2006) How to capture the heart? Reviewing 20 years of emotion measurement in advertising, Leuven, Catholic University of Leuven — department of marketing and organisation studies.
- 10. Bradley, M.M. and Lang, P.J. (1994) Measuring emotion: The self-assessment manikin and the semantic differential, Journal of Behavior Therapy and Experimental Psychiatry Volume 25, Issue 1, pp 49-59
- 11. Kropff, H.F.J. (1951) Neue Psychologie in der neuen Werbung. Methodische Grundlagen für die praktische Anwendung. Stuttgart, Poeschel.
- Olney, T. Holbrook, M. Batra, R. (1991) Consumer Responses to Advertising: The Effects of Ad Content, Emotions, and Attitude toward the Ad on Viewing Time, The Journal of Consumer Research, Vol. 17, No. 4 (Mar., 1991), pp. 440-453
- Russel, J. A. (1980) A Circumplex Model of Affect, Journal of Personality and Social Psychology, Vol. 39, No. 6, 1161-1178
- 14. Mehrabian, A., & Russell, J.A. (1974). An approach to environmental psychology. Cambridge, MA: M.I.T. Press.