



A COMPARATIVE STUDY ON THE DIFFERENCE BETWEEN PARTICIPANTS AND OBSERVERS IN AMBIENT MEDIA DESIGN

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Abstract

The original definition of ambient media is an untraditional media that communicate design and service outdoors with special emphasis on the relationship between design and surrounding environment. Applying the ambient media design method to the context of space and packaging design could deliver information more efficiently and vividly, and inspire consumers' attention and interest.

The object of this study is the kind of ambient design that call for participation of part of the users. This study aims to discuss the differences between the participants and the observers and how to apply the design method to achieve the best design expression effect. Firstly, we study how the ambient media delivers information with the surrounding environmental elements through literature review on the ambient design method especially the part that acquire the participation of some users. Then based on the collected design cases, we discuss the characters of that kind. The research method used in this paper is mainly paired sample T test, 4 design samples are collected, then we choose 360 participants and words/phrases describing emotion and experience to be used to test the image of the user of different roles (the participant and the observer). Finally we analyze whether there is difference between the two kinds of persons, what is the difference and what causes the difference, last but not least, whether the difference will affect the users, especially the participants.

Key words: ambient media design, design image, participation

Introduction

The original definition of ambient media is an untraditional media that communicate design and service outdoors with emphasis on the relationship between design and surrounding environment. Applying the ambient media design method to the context of space and product design could deliver information more efficiently and vividly, and inspire consumers' attention and interest.

Outline

The term "ambient media" was first used in the British advertisement design industry in 1999 to define new type advertising media. The initial meaning of ambient media is "nontraditional media of publicizing products or service outside the home environment". In the practice of ambient design, the following several elements must be considered:

- (1). Advertisement benefits: often in public places, whether outdoor or indoor places.
- (2). Field characteristics: the place must have certain significant characteristics which are correlated with advertising theme, creative concept and technique of expression.
- (3). Characteristics of users: the audiences targeted by the ambient design usually appear in the specific field, thus, the users' behavior must be considered in this field as well, such as boring wait-

ing at the bus stop, taking the same lift embarrassingly, directional movement of escalator, fixed defecation action in the public toilet, etc.

- (4). Expressional method of information: generally, the simple, interesting, visualized and slightly interactive methods are used to express information. The information of advertising theme exists more passively in this field in the form of background, rather than actively being sent to audience. The audience must contact the information actively by sense organs to produce effects.

The object of the study is the part of users that participate in the ambient design surroundings, aims to discuss the experience differences between the observers and experiencers.

Research Method

This chapter extensively collected the existing ambient media related to advertising and merchandise cases, selected those required users to participate, analyzed their application methods of interaction for concept development, excluded the highly similar and unrelated cases, and finally found four cases as required test samples for interactive concept of the ambient media. Thereunder, we analyzed and summarized each sample's expressive method showing the relationship between "communication message" and "environment" as follows:

Table 1. "Communication message" And "Environment"

No.	1	2	3	4
Name	Plastic Surgery Hospital Advertising	Public Service Advertising	Watch Advertising	Hip Hop Music
Sample				
Message	After the plastic surgery, the nose will be more stand-out.	The random graffiti will be brought to justice.	Experience the feeling of wearing this watch	The guy sitting on the seat and waiting for the bus with background picture together to constitute the image of African American music singer.
Relationship with Ambient Media	Hold the cup and drink the water, the side look of the nose is perfect.	The picture drawing hands being handcuffed at bus seatback to warn the citizen.	When Passengers use the bus pull ring, it looks just like wearing the watch.	Cleverly take advantage of seat height and background image.

For the next, we use those samples to carry out consumer use tests. We selected 360 participants to participate the testing (aged from 20 to 63 years old and the education degree of university or above) to act as observers and experiencers respectively. They were consisted of undergraduate students, university teachers, housewives and company staff. The questionnaire included observation and perception to each design. Then we proposed the hypothesis that there is significant difference of advertising accep-

tance for such advertisement between members of observation group and experience group.

In the test, the interviewee was asked to score from 0 to 5 regarding above four advertisements. For example, as the observers, if this design was well recognized and fully accepted, the score was 5 points, otherwise it was 0. As the experiencers, the interviewees need to imagine whether they were willing to use the product, or in this scenario when

they were in the public environment. If they were completely reluctant, the score was 0 points, conversely it is 5. If in intermediate opinion for both situations, they can give scores from 1 to 4 depend-

ing on the specific degree of perception. We distributed total 360 copies of the questionnaire of and 321 copies were valid after screening. The statistical results of questionnaire are as follows:

Table 2. Paired samples' Statistical Data

		Mean	N	Standard deviation	Standard error of the mean
Pair 1	Observation Group	3.73	321	1.541	.086
	Experience Group	2.94	321	1.723	.096
Pair 2	Observation Group	3.10	321	1.837	.103
	Experience Group	2.29	321	1.927	.108
Pair 3	Observation Group	4.22	321	1.203	.067
	Experience Group	4.04	321	1.330	.074
Pair 4	Observation Group	4.00	321	1.364	.076
	Experience Group	3.47	321	1.651	.092

Based on results in Table 2, the differences of advertising acceptance between the observation group and the experience group in four advertisements were different. In general, when the observer played the role of the experiencer, the degree of acceptance for such advertising creative was averagely lower than being the observer. In Pair 1, the means of the experience group and the observation group were 3.73 and 2.94 (2.94 < 3.73); In Pair 2, they were 3.10 and

2.29 (2.29 < 3.10); In Pair 3, they were 4.22 and 4.04 (4.04 < 4.22); In Pair 4, they were 4.00 and 3.47 (3.47 < 4.00) respectively.

Paired samples t-tests were applied to the corresponding questionnaire results of four advertisements. The computed results were as follows.

Table 3. Paired samples' correlation

		N	Correlation	Significance
Pair 1	Observation Group & Experience Group	321	.556	.000
Pair 2	Observation Group & Experience Group	321	.612	.000
Pair 3	Observation Group & Experience Group	321	.732	.000
Pair 4	Observation Group & Experience Group	321	.627	.000

Table 3 indicated the relevance of scores data between the observation group and the experience group. In Pair 1, the data showed that the correlation coefficient was 0.056 and the significant level was 0, we can infer that there is a correlation between them and this relevance was significant ($0 < 0.05$); In Pair 2, based on information that the correlation coefficient was 0.612 and the significant level was 0, we can infer that there is a correlation between them and

this relevance was significant ($0 < 0.05$). In Pair 3, based on information that the correlation coefficient was 0.732 and the significant level was 0, we can infer that there is a correlation between them and this relevance was significant ($0 < 0.05$); In Pair 4, based on information that the correlation coefficient was 0.627 and the significant level was 0, we can infer that there is a correlation between them and this relevance was significant ($0 < 0.05$).

Table 4. Paired samples t-tests

	Paired Difference					T	DF	Sig (Two-tailed)
	Mean	Standard deviation	Standard error of the mean	95% confidence interval of the difference				
				Lower Limit	Upper Limit			
Pair 1 Observation Group Experience Group	.788	1.547	.086	.618	.958	9.129	320	.000

Pair 2 Observation Group Experience Group	.810	1.660	.093	.628	.992	8.744	320	.000
Pair 3 Observation Group Experience Group	.181	.935	.052	.078	.283	3.464	320	.001
Pair 4 Observation Group Experience Group	.536	1.327	.074	.390	.682	7.232	320	.000

From Table 4, the results in Pair 1 — T statistic value was 9.129, the 95% confidence interval of the difference was (0.618, 0.958) as well as 0 was the level of significance and is smaller than 0.05 — showed the difference of acceptance of advertisement 1 was significant between observers and experiencers in the same group; The results in Pair 2 — T statistic value was 8.744, the 95% confidence interval of the difference was (0.628, 0.992) as well as 0 was the level of significance and is smaller than 0.05 — showed the difference of acceptance of advertisement 2 was significant between observers and experiencers in the same group; The results in Pair 3 — T statistic value was 3.464, the 95% confidence interval of the difference was (0.078, 0.283) as well as 0.001 was the level of significance and is smaller than 0.05 — showed the difference of acceptance of advertisement 3 was significant between observers and experiencers in the same group; The results in Pair 4 — T statistic value was 7.232, the 95% confidence interval of the difference was (0.390, 0.628) as well as 0 was the level

of significance and is smaller than 0.05 — showed the difference of acceptance of advertisement 4 was significant between observers and experiencers in the same group.

Conclusions

From the above analysis, we found that in the design of ambient media, when users played different roles as experiencer and participant, the differences of acceptance of the design were significant. In such advertising creativity, when the observer played the role of the experiencer, the degree of acceptance of such advertising creativity was lower than being the observer. To explore the reason, the researcher randomly interviewed some of the subjects (some people who gave scores with great differences when they played as experiencer and observer respectively) and they believed the acceptance differences were due to the environment. That is, such advertisements were placed or used in the public environment, and it might contain the humor part but also embarrassing component. In such environment

and the expression way, some people with more introverted personality were reluctant to be experiencers to accept such design.

In addition, for some designs, participants were often unconsciously involved in the design scheme. They

didn't feel embarrassed because of the unconscious participating, and observers could also understand the meaning of design concept. In such design, the differences of acceptance between experiencers and observers were often close, of which reasons for this kind of design can be further explored in further researches.

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