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## THE EFFECTS OF ADVERTISEMENTS ON OUR CHANGING SOCIETY

### INTRODUCTION

The main aim of commercial advertisers is to persuade receivers. Their goal is to make the advertised products as successful as possible in order to attract more consumers and to grow their profit. These advertisements, let them be printed, verbal or audiovisual have an effect on the members of our society, sometimes even unconsciously. In my paper I attempt to answer the following research questions: How do advertisements effect our society? What kind of changes do they induce? The sales of products are becoming more and more specified nowadays and supposingly, the advertisements have different effect on men and women. I am interested in the veracity of the above mentioned statement, therefore in our research we devided the target groups (namely men and women) and studied them separately. The reseach I would like to present was carried out by Meroving Kft. through eye-tracking technology. We have studied several visual advertisements, among which I am going to present four pictures in the current paper.

### EYE-TRACKING METHOD

The eye-tracking technology which was used to carry out the research is a simple and effective means of evaluating web pages and user interfaces. It makes possible to accurately measure different kinds of gaze patterns. Eyetracking offers a practical alternative to conventional discount usability testing (Krug 2000: 25), which was very popular in the previous decades. In contrary with the qualitative and subjective usability testing which reflected users' conscious thoughts and feelings as well as the observers' impressions, eyetracking is objective based on quantitative research data. Eyetracking can show which parts of an advertisement or a web page are visible and which ones are invisible for users, by analyzing their gaze plots. Eyetracking is capable of following different eye movements, the saccades and fixations. Saccade is the fastest movement of which the human body is capable and centers content within the foveal area. (We primarily take in visual

data from the outside world through the fovea, which provides the greatest visual acuity. We move our head and eyes to focus the fovea on objects of interest that we want to see.) Fixation occurs when this movement stops, permitting the eye to acquire content (*Eyetrack* 2004: 3) During saccadic activity we cannot see at all. We perceive the world visually only through fixations. The brain virtually integrates the visual images that we acquire through successive fixations. The eye-tracker is an instrument that is capable of capturing data about both saccadic activity and fixations on the foveal area. To accomplish this, it uses an infrared light source to illuminate the eyes, a CCD (Charge Coupled Device) sensor to capture a reflection of the user's eyes, and eye-gaze analysis software to process the data (Penzo 2005: 2). Thus, eyetracking can tell us what a user is looking at and for how long. With the help of an eye-tracker researchers can optimize positions for the labels of field in a form, the best placement for a navigation bar, or the most visible location for a logo or an advertisement by evaluating gaze data. Eye-technology lets researchers observe the behaviours of users and provides quantitative, objective data, such as test person's diameter, fixation coordinates, fixation length, saccade angles (Outing-Ruel 2004: 7) that lets them develop a deeper understanding of how users interact with web pages. It provides a set of tools that lets researchers define areas of interest, or boxes of content on a web page such as an ad, then determine a user's attentiveness to them by evaluating the percentage of time the user spends viewing each area of interest relative to time spent viewing other areas of a page during normal page browsing. Usability and marketing studies are just two of the possible applications for eyetracking technology. Researchers can take advantage of this method to discover better interaction paradigms by capturing a screen coordinate of a user's gaze.

## THE RESEARCH

The research was carried out with eight test subject, four men and four women between 15-60 years. The test subjects were selected regardless of their social status and profession. All of them were residents of the capital (because the eye-tracking equipment is a non-carriable one, the test subjects are asked to come to the test venue). The mentioned age group has been chosen because they constitute the potential consumers, the target groups of the examined brands. The test subjects were shown 20 visual advertisements of different brands, and their precise eye movements were recorded through the sessions with the help of an eye-tracking equipment. Each picture was shown for about a minute. The aim of the research

was to find out which parts of the pictures are looked by men and which ones are looked by women, is there any difference between them?

### The test pictures

For the present conference paper I have chosen four pictures that best represent the researched field.

*Picture 1.*



Justification of the choice: on the picture the main role is played by objects (cars) not by human beings, in a natural environment. This picture was chosen to test how objects attract attention, especially objects that might be more attractive to men. My preliminary hypothesis was that both men and women look at the red car first, then at the driver inside it, after that they look at the trademark and finally at the registration number. Men are scrutinizing the car for a longer period, women do the same with the person inside instead. Following this they will pay attention to the left hand side vehicle, later to the text in the bottom left corner. According to my preliminary hypothesis men are only checking the words with capital letters, women will read the smaller characters as well. Lastly, attention will be paid to the background environment, going from left to right.

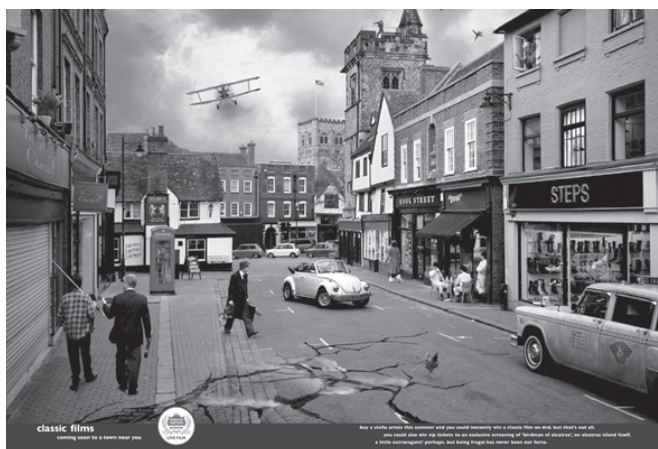
Justification of the choice: the second picture does not represent any human beings either, but the picture itself is more feminine, with its colours and its objects. Therefore it is supposed to attract females' attention most. It also contains a caption like the first one, but in the opposite side (in the upper right corner).

Picture 2.



According to my preliminary hypothesis the picture itself will be scrutinized by women and looked through quickly by men. Women's attention will first be captured by the curtain which is situated in the middle of the picture. Then they will look at the patterned wall and read the caption. After that women will look at the little table and chairs in the bottom right corner, putting greater emphasis on the teddy bear. Later on they will glance at the pillows and then at the window on the left side. Men will only take a quick look at the picture, especially at the pillows and table and chairs with the teddy bear. Supposingly men won't read the caption.

Picture 3.



Justification of the choice: the third picture is the most complex and hectic one. Full of excellent colours, feelings, people, animal, plants, buildings, objects and also visible trademarks and captions. It is full of movement.

My preliminary hypothesis is that this will be the most viewed picture both by women and men. Women will mainly be focusing on people, while men on buildings and vehicles. Men will first look at the white car in the middle of the picture, then at the helicopter above, followed by the buildings in the background. After that they will glimpse at the people on the left hand side, then at the sitting people on the right side of the picture. Afterwards they will glance at the buildings on the right side and the red telephone box on the left side, then the pothole on the road, followed by the cock. Later they will focus on the diving people in the background and the three parking cars. On the contrary, women will be focusing first of all on the walking people on the left side, on the man, who is crossing the road, then they will glance at the cock with the pothole, and the sitting people on the right side. They will also scrutinize the shopwindows and the building on the right side. After they will pay attention on the diving people in the background. They won't take into consideration the cars, the helicopter and the telephone box, the trademarks and labels and any other objects on the picture.

*Picture 4.*



Justification of choice: on the fourth picture only human beings can be seen, advertising a certain brand. Two men and a woman are visible targeting our test subjects. When choosing this picture we were interested in whether a tendency between genders interest can be observed. In fact we were interested in whether men will mainly look at the woman, and female test subjects will look at the men. Therefore my preliminary hypothesis is that men will scrutinize the woman, first of all her face, then her body. Afterwards they will only glimpse at the two men, and they won't take into consideration the trademark label in the bottom right corner, mainly because of its bad position. Contrary to this, women will scrutinize the two men, first their faces, then the lying one's bust. Afterwards they will look at the woman, but only at her face. Finally they will glimpse at the trademark in the bottom right corner.

### Results of the research. What men were looking at

In the following chapter I attempt to present the results of the research concentrating on men's interest, what they were looking at, what did they check. The pictures represent the results of the eye-tracking method, marking the points what only men have checked, not showing women's interests. All four pictures are illustrating a more focused result of the research. There are pictures representing both genders' gaze plots, and showing an average of what test subjects had watched, but in the following I have chosen gender specific pictures representing only male test subjects' gaze plots.

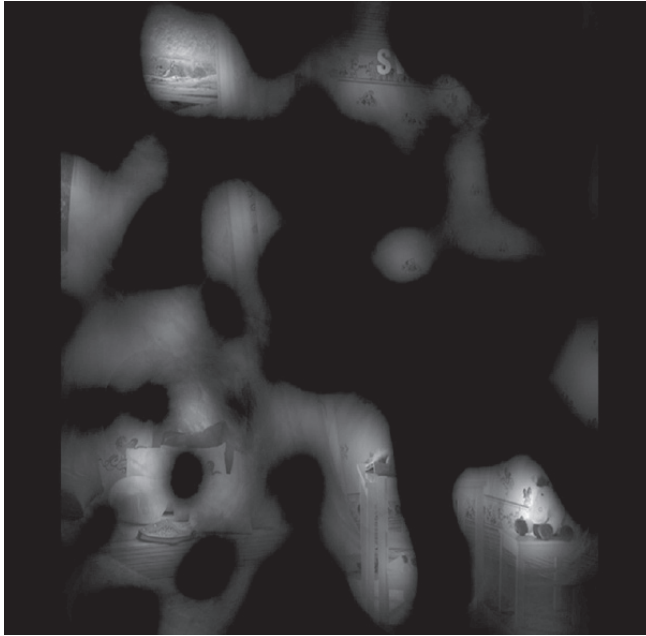
*Picture 5.*





From the results of the eye-tracking research turns out that men were checking the red car's driver, its trademark and its registration number. They have also watched the white car and the label in the bottom left corner. Opposite to my preliminary hypothesis, they did not check the background environment, they were only interested in the objects. My supposition concerning that men will only read the characters in capital letters and won't check the smaller ones has been verified.

*Picture 6.*



As for my preliminary hypothesis I have considered this test picture as a female one, referring to the fact that it will mainly be viewed by female test subjects and men will only take a quick look at it, watching the pillows, and the table with the chairs and the teddy bear, not paying attention to the caption. Men have indeed watched the pillows, the table, the chair with the teddy bear. Moreover they have not read the caption. This part of my hypothesis has been proven. But among these they have also checked some parts of the wall, the curtain, and the window. Meaning that I was wrong in thinking this test picture will only attract women's attention, seemingly it was equally interesting for men as well.

Picture 7.



Concerning the liveliest test picture my hypothesis regarding that men will mainly focus on buildings and vehicles and won't be interested in people has been refuted. They have checked the walking people on the left side, the man crossing the road, the people sitting in front of the shop, the cock, and even the diving people in the background. Beside these they spent time watching the white car in the middle of the picture, the other car in the bottom right corner, the pothole on the road, the helicopter, also some of the right side buildings, and the trademark in the bottom left corner. Opposed to my preliminary supposition, they were not interested in the red telephone box, and in the parking cars. I can say that they were equally interested in human beings and in objects as well. But they were more attracted by motion than by stabil objects.

Picture 8.



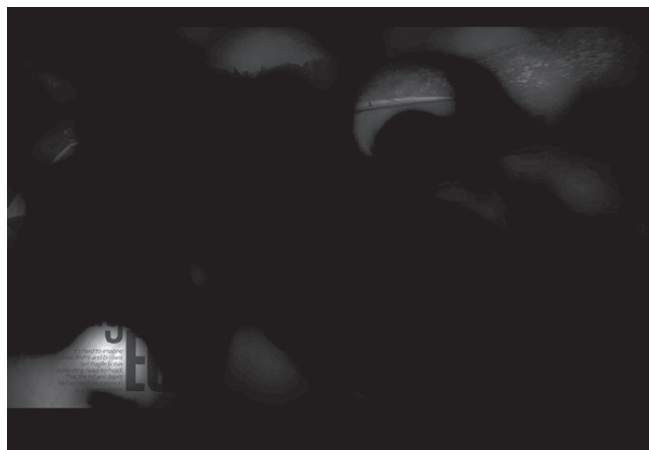


Concerning the fourth test picture my preliminary hypothesis has partly be proven. Men have indeed watched the female character, first of all her face and mainly her upper body. In fact men were not interested in the male participants of the picture. Opposed to my supposition they have checked the trademark logo in the bottom right corner.

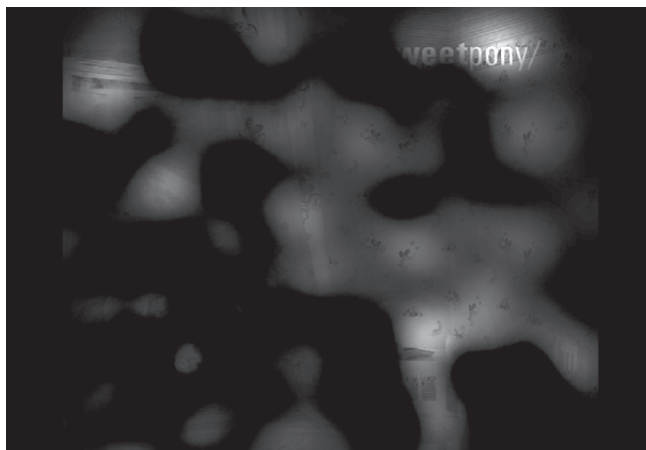
### **Results of the research. What women were looking at**

For presenting the results of what female test subjects were looking at I am showing the test pictures representing their gaze plots. These test pictures only show what women were interested in. Male gaze plots have been extracted from these pictures. The stronger a gaze plot on the test picture is, the more test subjects have watched that part of the picture.

*Picture 9.*



To my big surprise it turned out that concerning the first test picture, objects (in this case cars) do not attract women's attention at all. However, I was right in assuming that they are willing to read the caption, and not only the capital letters but also the smaller ones. Women have also checked parts of the red car, especially the person sitting into it. Opposed to my preliminary hypothesis they were neither interested in the trademark nor in the registration number of the car. Moreover they did not even check the white car and the surrounding natural environment. The test picture that I have called a „male like” one, really turned out to be more attractive to men.

*Picture 10.*

The second test picture that researchers have analysed focusing on women, was a more „feminine” one with its colours and represented venue. As I have supposed women have scrutinized the picture carefully, paying attention to the colourful curtain, the patterned wall, staring at the little table with the chairs and the teddy bear on one of them, then reading the caption. They were not very interested in the curtain, only blinked at some parts of it, and did not take the pillows into consideration either. Although, they have checked the window with the white curtain. In fact it turned out that women are more willing to look at a picture with brighter colours, representing feminine topics, rather than watching pictures full of male like objects.

*Picture 11.*

The liveliest test picture was popular among women as well. Interestingly, my preliminary hypothesis was completely false, because women were not interested in human beings but in buildings and objects and labels. They only glimpsed at the walking people on the left side, but they did not check the man crossing the road, the sitting people on the right side, the cock, or any other human beings. Although, they glanced at one of the diving people. What they were very much interested in, is the buildings, the red telephone box, the parking car, the helicopter, the pothole, the shopwindow, and also the trademark sign in the bottom left corner. They have carefully checked all the buildings and vehicles that I have considered male like but were not interested in the supposingly female topics, like people, faces, animals.

*Picture 12.*



The results of the fourth test picture are close to my preliminary hypothesis. Women have indeed scrutinized the male faces, first of all, the one opposing the viewer. They have also checked the lying man's face and his bust, but they were not interested in the female character at all. Interestingly to me, female test subjects did not check the trademark logo in the bottom right corner.

## CONCLUSION

Analysing the research results I came to the conclusion that there is a significant difference between the interest of men and women. Therefore it is advisable for commercial advertisers to run preliminary researches (even eye-tracking researches) before launching a new product advertisement. Although it is quite

unpredictable what a certain viewer will check but there seem to be some common trends. We can state that when there are female and male participants on a picture viewers tend to be more interested in the opposite gender, men will mainly check female characters while female the male ones, focusing first of all on their faces then on other parts of their body. After analysing a small sample it turned out that there are certain topics which do not interest women (like cars) but men tend to be interested in female like topics, brighter, lively colours. I draw this conclusion after analysing the results of a small sample (four test pictures), I do not state that the results could be applied for a wider sample as well, or constitute a universal truth. For revealing those data a research on a bigger sample should be carried out. My preliminary hypothesis that men are more interested in buildings and vehicles while women are interested in human beings has not been proven. In fact when a picture represents both human beings and objects, men tend to be very interested in human beings, while women tend to focus on objects. Both genders like reading colourful captions written in capital letters (it is false that men are lazy to read texts, but they prefer shorter ones), however the good positioning of the text is very important.

In light of the research results we can conclude that careful and appropriate advertisement is needed to reach the target groups and the desired effect. Advertisements do have an effect on the society and on commercial advertisers' work. In the 21st century commercial advertisements should be more gender specified than before, taking into consideration gender specific needs.

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