

Eye|watch: using eye tracking to optimize the ‘attention path’ of magazine advertisements

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Abstract

Magazine advertisements create ‘impact’ when they have enough ‘stopping power’. In the past, stopping power has been defined by the extent to which ads can grab the attention of the reader. Nowadays, also the extent to which the ad can draw the reader’s gaze towards its most relevant elements, is taken more and more into consideration. The latter is reflected in the measurement of what is called the ‘attention path’. Sanoma Magazines Belgium has created a new tool, ‘Eye|watch’, that gives insight into this attention path of print advertisements.

With this tool, Sanoma Magazines Belgium (and its saleshouse Medialogue) completes its research portfolio. Next to the well known and appreciated Stop|watch, measuring the pure impact of advertisements, the new tool offers a better understanding of the cognitive processes used by consumers to decode print messages.

The attention path can be defined as the successive fixations and their durations that readers show when they watch an advertisement. In a traditional questionnaire this would be measured/operationalized by: ‘what part of the ad did you look at first and for how long, what part did you look at secondly, thirdly and so on’. It is immediately clear that to collect this kind of information one needs observation techniques rather than questioning techniques.

Different ‘attention tracking’ technologies are available nowadays. Eye tracking and mouse tracking are the two common major techniques. Weighing pros and cons, we made a choice in favor of eye tracking. Furthermore, in this paper we plead, based on scientific comparative research, for a setup using the standalone advertisement shown on a computer screen.

Of course, measuring impact and attention paths are both conditions ‘sine qua non’. But also consumers’ subjective evaluation of the ad, rating purchase intention, likeability, credibility, etc. is an important element in getting the overall picture, as is an understanding of the deeper psychological impact of the advertisement: e.g., how does one feel about an ad, what are less conscious associations, what are meanings and motivations of consumers’ reactions towards the ad, how does the ad meet or correct the positioning of the advertised product, service or brand.

These more subjective and psychological parts of the global ad-evaluation are also taken care of by the new Medialogue tool. A well balanced set of items is a standard part of the Eye|watch tool. Qualitative research is offered as an optional instrument to those advertisers using the tool.

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Before starting the paper, an overview of its structure is included below:

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But first things first. In order to understand the background of it all, let us start by answering the following question:

1. Why an advertising sales house launches 'Eye|watch'?

Medialogue, the advertising sales house of Sanoma Magazines Belgium, runs 'Stop|watch' since more than 10 years. Stop|watch is a post publication impact barometer of magazine advertisements³. More than 3800 ads have been tested on their ability to leave a trace in the memories of the readers. In 2005 a [book](#), titled 'Stop|watch: everything on the impact of advertisements in magazines', was published (Hermie, Lanckriet, Lansloot, and Peeters 2005), resuming everything we had learned from the analysis of almost 3000 ads tested till then.

On average an advertisement is noticed by 57% of the readers of which 42% can recall the correct brand or product name. This leads to an average net 'effective score' of 26% (meaning that approximately a quarter of the readers correctly remember an average advertisement and this by name). There is however a huge variation in effective scores: from 0% to 90%. Some tricks help to improve the score of an ad, like: using spreads, buying back covers, adding a sample, ... But, these elements do not contribute decisively to the success or failure of an advertisement. And, post analysis by definition only tells us whether an advertisement scores above or below the benchmarks after the ad has been published and thus, after the money has been spent.

³ In Stop|watch 100 readers of the edition of a title that carried the advertisement are recruited on central locations (street recruitment). In the interview room they are first confronted with 'blinded' advertisements in the real context of the full magazine. For each ad they are asked whether they remember having seen this ad (recognition) and whether they can recall the brand that was advertised (attribution). In a second phase they go through the 'non-blinded' magazine again. They are then asked to evaluate the ads on: likeability, originality, information level and whether they are suited for the specific magazine title.

At Medialogue we are very concerned by helping our clients to get the maximum of return from the money they confide us. If we were able to help our clients upfront, by screening advertisements before they are published, or help them find an answer to the question why an advertisement does not score above the average benchmarks in the impact barometer Stop|watch, we think we could contribute to maximize the return on investment of their advertising Euros even more.

That's why in 2007 we decided to look for a trustworthy and acceptable way to measure the attention path and the direct evaluation of advertisements. Trustworthy speaks for itself! Acceptable means that in no way, as an advertising sales house, we feel in the position to judge or criticize creative strategies developed by clients and their agencies. What we wanted was a method to evaluate whether the way the creative concept is translated and composed in a print advertisement succeeds in drawing the reader's attention to the message that has to be communicated and is well understood and positively evaluated by consumers. In other words, if we can detect that crucial elements are not optimally placed in the advertisement to draw the reader's attention, we can suggest adaptations in order to optimize the 'attention path' and thus to improve the 'communication power' of the advertisement. Insights in the evaluation of the ad can help to put more or less emphasis on certain elements in the message.

Medialogue set up a partnership with a specialized agency for executing this test and implementation of the Eye|watch barometer. Rogil is a market research agency, specialized in sensory research and has experience in eye-tracking methods since the early 1980's. Rogil has been executing the fieldwork and analysis of the 3 eye tracking tests and has been co-writing to this article. More detailed information on eye-tracking applications from this agency can be obtained via www.rogil.eu.

2. Measuring the attention path

The 'attention path' is defined as the successive fixations and their durations, that readers show when they watch an advertisement. To collect this kind of information one needs observation techniques, of which several alternatives are available today. Eye tracking and mouse tracking are two such techniques, and discussed in further detail below. Weighing pros and cons, a choice is made in favor of one them.

a. What is eye tracking?

- **Definition.** Eye tracking is a term used for techniques measuring the movement of the eye in order to determine the point of gaze.
- **Evolution.** Eye tracking evolved quickly with the help of modern technology. Where eye movement was still analyzed by means of direct observation in the 1800s, new techniques automatically generating data were developed from the 1950s.
- **Technique.** Devices measuring a person's gaze can be used when testing the viewing behavior towards visual stimuli. One way to do this is via corneal reflections induced by infrared light. The eye tracking device processes these reflections and determines the person's point of fixation accordingly. It is a non-intrusive and easy to use measuring technique. From a practical point of view, two main categories can be identified: fixed and moveable eye trackers. Fixed eye trackers have a fixed position of both participant and camera. They are suitable for all research in which it is not necessary for the participant to move around, and they can be either standalone (mainly for non-digital stimuli, e.g., a magazine) or incorporated

into a computer screen (for all digitalized stimuli, e.g., a website). Moveable eye trackers are head mounted devices (helmets or glasses), giving participants the freedom to move. The latter may be used for shelf composition research.

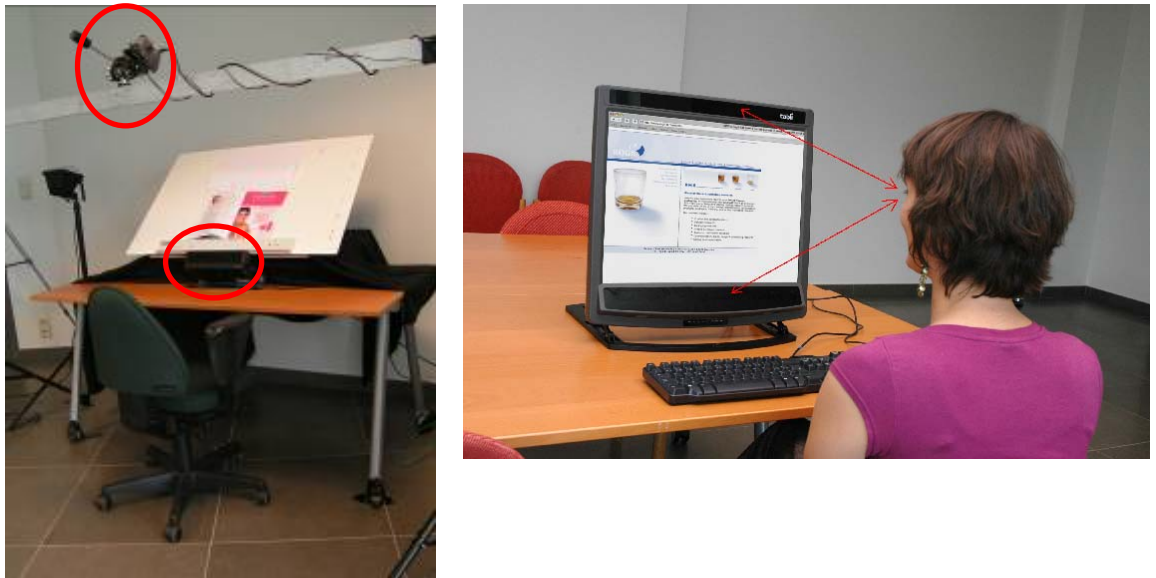


Figure 1. Two types of fixed eye trackers

- **Methodology.** In case of on screen advertisement testing, several advertisements may be included and successively shown to participants. Methodological issues then include, among others, the randomization of the stimuli, free (the participant chooses how long he/she looks at the presented ad) versus predetermined exposure length, and contextual (shown with an adjacent editorial page) versus standalone presentation of the ad.
- **Analysis potential.** An eye tracker determining the point of gaze is able to register both horizontal and vertical eye movements in a two-dimensional space. This way it can objectively determine the elements of a stimulus ‘touched’ by a person’s gaze pattern and the time spent gazing at each element. Concerning eye tracking terminology, there is an important difference between the terms saccades and fixations to be made here. ‘Saccades’ are very quick eye movements, too quick to process in detail what you have seen. These saccades become ‘fixations’ when participants focus for a certain amount of time (i.e., 100 milliseconds or more) on a specific point. A fixation does enable the brain to process the visual information. The main practical questions thus answered by eye tracking research are: how many participants fixated on each element of (for example) the ad, how long is each element (e.g., the logo) fixated on (is it long enough to process the information), and in which order are the elements fixated on (e.g., first key visual, next logo, etc).

b. What is mouse tracking?

- **Definition.** Mouse tracking (or click testing) is a term used for techniques measuring viewing behavior by asking participants to indicate on a computer screen the elements looked with the cursor.

- **Evolution.** As it is computer dependent, this technique is rather new and its development was inspired by the increasing use of the internet.
- **Methodology.** Although all mouse tracking is based on the same simple devices: a computer screen showing the stimuli and a computer mouse, different methods and tasks may be used. A first and important difference concerns clicking or following. Some methods ask the participant simply to follow their own eye movement with the mouse pointer while other methods ask to click on the elements looked at. Secondly, when clicking, the number of clicks to be made can be either free or restricted (e.g., indicate the 5 most attractive elements of the ad). Other methodological issues raised are: randomization of the stimuli, free or fixed exposure length, context or standalone presentation (in line with the eye tracking methodology).
- **Analysis potential.** Information delivered by mouse tracking is: the number of fixations on each element and the order in which the elements are fixated on. Mouse tracking methodologies in which the cursor simply has to follow the participant's gaze, can also report the length of time each element is looked at.

c. Making a choice: eye tracking versus mouse tracking

- **Registration.** Eye tracking is direct (it registers each gaze and this at the exact moment the participant watches the element) and non-biased (not influenced by any social desirability viewing, and the exact purpose of the measurement – mapping the viewing behavior - is unclear to the participant). Mouse tracking stands for a less direct and possibly biased eye movement measurement. It asks for 'active' tracking by the participant, who will not register each gaze, also because the fixations are numerous and fixation times may be very short. Participants may decide not to move the cursor towards a woman's breast although their eyes have spotted them. Finally because of the instructions given to successfully complete the mouse tracking test, the purpose of the study is more clear to the participant.
- **Conscious versus unconscious eye movements.** Mouse tracking solely registers eye movements the participant himself is aware of. However, studies (Merikle and Joordens 1997) have shown that much more information is processed. Unconsciously made eye movements are also processed by the brain but cannot be registered through mouse tracking. Eye tracking is the solution here. Research also indicates that this unconsciously processed information influences further attitudes and behavior (Howard-Spink 2005). Some illustrations: Janiszewski (1990, 1993) showed how the allocation of subconscious resources to brand names during the processing of ads can influence their evaluation. He concludes that mere exposure to a brand name or product package can encourage a consumer to have a more favorable attitude toward the brand, even when the consumer cannot recollect the initial exposure. A study by Shapiro, Macinnis, and Heckler (1997) extends this research on incidental ad exposure by examining whether incidental exposure to an ad (i.e., the ad receives minimal attentional resources while other more relevant information is being processed) increases the likelihood that a product depicted in the ad will be included in a consideration set. Inclusion-effects were found despite participants' lack of explicit memory for the ads. (e.g., the attitude towards the brand).

- **Sample size.** As mouse tracking research can be conducted using any computer connected to the internet, attention tracking studies on large samples or very specific samples recruited from access panels can be quickly and cost-efficiently executed. Eye tracking research, however easy and quick in use, can only be performed with equipped devices (see Figure 1) and is thus less appropriate for widespread use.
- **Stimuli.** Both eye and mouse tracking render data for all digitalized stimuli. However, appropriate eye tracking devices can additionally analyze viewing behavior concerning physical stimuli, and large or scattered stimuli requiring the participant to move around (e.g. a real magazine or an in-store shelf).

Our choice

Mouse tracking certainly has the potential advantage of reaching quickly and cost-efficiently large or specific samples. Although perceived as less ‘pure’ compared to eye tracking, this advantage surely makes it an attractive alternative. Nevertheless we chose to continue our research using eye tracking. As we are offering a multi-client tracking service, the standard setup uses a representative sample of the population from 18 to 65 years of age. We were thus less attracted by the sampling flexibility of the mouse tracking method. The main reason however is that eye tracking offers the opportunity to report very precisely on the time each element is looked at. We think that this additional information is very relevant to judge whether the fixation is long enough to really capture the message.

3. Measuring consumers’ attitudes towards an advertisement

Eye tracking generates objective eye movement data. It describes the dispersion of attention in an ad, but it cannot directly uncover the consumers’ attitude towards the ad nor the impact of the advertisement. To complete the ‘attention path’ information, an evaluation of the ad is needed. The combination of these two methodologies enables well informed decision making. **Different methods** can be used to evaluate advertisements with regard to overall liking, understanding, (emotional) impact, etc.:

a. Item scales

Item scales quantify a participant’s reaction to an exposed ad by an explicit scale-based evaluation of different aspects of the advertisement. In general, the affective reaction (e.g., I find this ad attractive), informative nature (e.g., I find that this ad tells something new) and clarity of the ad (e.g., I find this ad clear and easy to understand) are evaluated on a, for example six-point scale.

b. In depth interviews

In a personal interview the researcher tries to uncover underlying attitudes and feelings towards the advertisement. In the conversation different techniques such as projection, association or story completion can be used to unveil hidden attitudes, beliefs and feelings. It reveals profound insights that cannot be generated by a quantitative questionnaire. Well executed, it generates a clear framework for further interpretation of the ad’s evaluation.

c. Physiological measuring techniques

These neuro-marketing techniques all measure the body's reaction and thus emotional reaction to an exposed advertisement. Most are complicated to interpret and expensive and thus rarely used. Examples of such techniques are:

- Electro Dermal, Respiratory & Cardiovascular Response. They concern devices measuring the skin electric conductivity, respiration or heart rate as people are exposed to ads and indicate their arousal and according emotional response to the advertisement.
- An emerging technique is measurement of Brain Activity. Brain wave recording devices identify active brain regions as people are exposed to ads. Based on prior research, activity in 'known centers' such as reward centre, self reference centre, liking centre etc. can be analyzed. However, the definition of these 'known centers' is still in full development.
- Another rising technique is Facial Coding (Stegeman 2007). It analyses in detail the participant's facial micro-expressions to a print advertisement by video recordings. Each produced expression is then translated to an according emotion which can be related to either acceptance or dismissal of the advertisement.

Our choice

In Eye|watch we include the evaluation of 12 aspects of the advertisement (2 additional client specific aspects may be added) in the standard setup. The advantage of item scales is that they are very easy to implement and are cost efficient. They measure the consumer's reaction in a standardized and straightforward way. This allows us to establish benchmarks once the database contains a sufficient number of tests. In order to understand the deeper meaning and motivation of consumers' reactions, the client can choose to add an in depth interview (on a subsample) to the standard Eye|watch measurement. Some techniques like facial coding look very promising to observe the spontaneous emotional reactions of respondents towards the ads. Unfortunately this kind of techniques is not yet mature enough today to include in the standard Eye|watch setup. But, things are evolving fast ...

4. A methodological scientific study behind Eye|watch

This study examines whether the specific eye tracking methodology used, that is the ad shown on paper or on the PC, in combination with editorial content or not, influences the processing and the evaluation of the advertisement. If we cannot find general and significant differences between the eye tracking settings for the different ads, and this with regard to the amount and pattern of attention given to different elements of the ads and their evaluation, we can safely conclude that the most 'convenient' setting can be used for the Eye|watch barometer.

a. Method

- **Participants.** A total of 131 persons (n = 52 for each of both PC settings as described below; n = 27 for the Real setting) participated in this study. The test was administered in a mobile test unit after the person was recruited from the street (PC settings), or in a specialized lab located at the market research company itself (Real setting). A 50/50 distribution with regard to gender and age (18-40 and 41-65 yrs) was strived for, and all participants were at least occasional readers of magazines. It took about 20 to 30 min. to complete the test. In

return for their cooperation people received cakes worth €2 (PC settings), or a voucher worth €15 (Real setting).

- **Task and design.** A participant was exposed to a set of five advertisements and asked to evaluate them after having completed the set. This exposure was done in one of three settings:

- 1) Editorial PC: a complete dummy magazine was digitalized and looked at on a computer screen, showing a page containing editorial content next to the page containing the ad;
- 2) Standalone PC: standalone ads were shown on a computer screen;
- 3) Editorial Real: a real, physical dummy magazine was gazed at with editorial content next to the ad.

As such we have three groups of participants, with the ads shown being a within-subjects factor and the setting a between-subjects factor. In both PC settings the sequence of the ads was randomized to avoid possible position effects. In case of the real, physical magazine the sequence was kept fixed out of practical considerations.

From a technical point of view, the ads in the Editorial PC and Standalone PC settings are tested on a special computer screen with integrated infrared eye movement cameras. On the 21 inch screen large stimuli, such as two magazine pages, are still very clear and legible. The advertisements in the Editorial Real setting are presented to the readers in a physical magazine form. While reading the magazine, a standalone infra red camera registers the eye movement and a video camera captures the images the readers sees.

- **Operationalization.** In total five ads were presented to the participant, related to the following brands: L'Oréal, Essensis, Coca Cola, Carrefour and After.

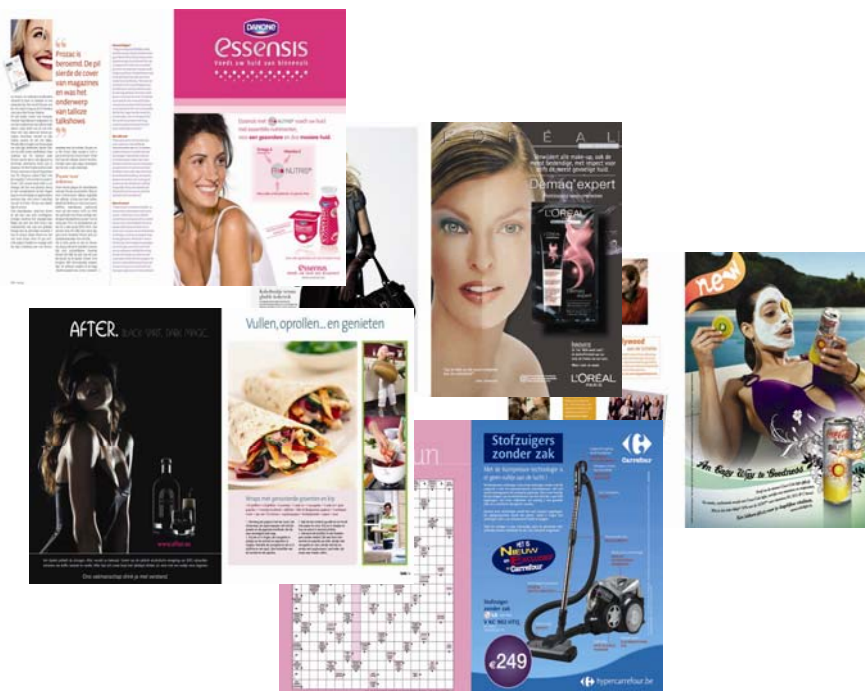


Figure 2. Advertisements included in the methodological study

In terms of measurement two major parts may be defined: (1) indices related to the processing of the ad, and (2) items providing direct insights into how the ad is evaluated. With regard to the **ad's processing** the ads are divided into sections (e.g., headline, logo, key visual), to subsequently compute reading patterns, percentages of respondents looking at specific sections, the distribution of total attention across the different sections, and average observation times for specific sections. Each of these is defined as follows:

- 1) Reading pattern: is defined in terms of the average time to first fixation for the specific sections, in the sense that the flow starts in the section with the lowest average time to first fixation, subsequently moves to the section with the second lowest average time to first fixation and finally ends in the section with the highest average time to first fixation.

Average time to first fixation for a section is the time that passes between the participant first seeing the ad on the screen or in the paper magazine and the first, of perhaps several fixations in this region, and this averaged for all respondents looking at this specific region.

- 2) The percentage of respondents looking at a specific section: is calculated as the number of respondents fixating at least once in this section divided by the total number of respondents in the sample.
- 3) The percentage of total attention given to a section: is measured as the number of fixations in this section divided by the total number of fixations in the total ad (i.e., also containing parts of the ad that are covered by none of the sections).
- 4) The average observation time for a specific section: is defined as the duration of one or more fixations in this section by a participant, averaged for all respondents looking at this specific region. In case a participant has several fixations in a same section, whether or not interrupted by fixations in other sections, all these durations are being summed.

A direct **evaluation of the ad** is based on a set of eleven bi-polar items, measured on a six-point scale. The items are listed in Table 1.

General	Specific	
overall liking	relevant	clear/easy to understand
	gives new information	invites to buy the product
	pleasant	makes the brand attractive
	credible	interesting
	original/distinguishing	typical for the brand

Table 1. Evaluation of the advertisement using general and specific items

The lower the score the more positive the evaluation, except for the overall liking item (e.g., a five scored on the pleasant item indicates the participant does not find the ad pleasant; this same score on the overall liking item indicates the ad is very much liked).

- **Procedure.** First, participants are asked for socio-demographic information (i.e., gender, age, reading behavior) as part of the recruitment phase. Second, they are guided to the EMR cabin, where the researcher operates the eye tracking computer and makes sure the participant is positioned well. Furthermore, he informs the participant that a magazine (Editorial Real and Editorial PC conditions) or images from a magazine (Standalone PC condition) will be shown, and asks him to look at the magazine or images as he would do in an ordinary setting (e.g., at the hairdresser). The participant is also told that he himself decides how long each image is looked at and this by pressing the spacebar (in both PC conditions) or by turning the page (in the Editorial Real condition). Afterwards, the participants are asked to evaluate the five ads on several items using CAPI technology. As a reminder, a printed version of each of the ads is successively put in front of the respondent. Finally, the latter is debriefed and rendered thanks for his cooperation.

b. Results

As different ads may consist out of different components (e.g., presence of a hyperlink or not, presence of a sub-brand or not), we focus in the description of the results on those parts common between most ads and of substantial importance (e.g., importance of hyperlink compared to logo): logo, headline, key visual, product and text.

- **Reading pattern.** The sequence determined for the main sections based on the time to first fixation is comparable for Editorial PC and Standalone PC for certain ads, and for Standalone PC and Editorial Real for other ads. The sequences for both Editorial settings (i.e., PC and Real) never seem to resemble each other. Might the latter imply that an ad is differently processed for the magazine being read on the PC or in hand? In that case it might be wiser to avoid showing ads in a magazine context on screen, assuming the Editorial Real setting is representative for real life processing. Further, it may be noted that in case a key visual is included in the ad it is the first point of fixation for the three methodologies, for all ads, except one.
- **Percentage of respondents looking at a certain section.** For the product, headline and text sections the eye tracking methodology used seems to be related to whether or not the participants concentrate on these specific sections. A larger share of participants is looking at the product/headline/text in case of the Standalone PC compared to the Editorial PC setting, and in addition for the text section, the Editorial Real setting leads to a higher percentage of participants fixating compared to the Editorial PC setting. This may hint at the editorial drawing attention away from the ad, and that keeping the magazine in hand, compared to reading it on PC, leads to more engagement on the part of the reader (less superficial), causing more attention for the ad and the text it contains. It might also just be that the text is less readable on PC (compared to the Real setting). However, as the statistical analyses (Pearson Chi-Square and subsequent pairwise comparisons) do not show this pattern across all the advertisements we do not want to generalize these findings.
- **Distribution of total attention across the different sections.** Although for several combinations of 'section' and 'advertisement' the percentage of total attention given to the section differs between the eye tracking

methodologies used, no consistent pattern is found across the different advertisements when focusing on each of the sections.

a = Editorial PC b = Standalone PC c = Editorial Real	Advertisement				
	Ad 1	Ad 2	Ad 3	Ad 4	Ad 5
Section					
Key visual	n.s.	* (a,b) (c,b)	* (a,b) (a,c) (b,c)		* (c,a) (c,b)
Product	n.s.	n.s.	n.s.	* (c,a) (c,b)	n.s.
Headline	n.s.	n.s.	n.s.	* (a,c) (b,c)	* (a,c) (b,c)
Text	n.s.	n.s.	* (b,a)	n.s.	n.s.
Logo		* (a,c) (b,c)	n.s.	n.s.	* (a,c) (b,c)
*: significant at the .05 level n.s.: non-significant Gray area: this specific section is not present in the ad How to read this table? An example: (a,b) for the combination 'key visual' and 'Ad 2': in case of Ad 2 the percentage of total attention given to the key visual is larger for the Editorial PC (a) setting compared to the Standalone PC (b) setting					

Table 2. Illustration of the absence of a consistent pattern across the ads

- **Average observation time for a certain section.** Analyzing the average observation time for the different sections of the ad and the ad in total shows an increase for the Standalone PC setting compared to the two Editorial settings (both PC and Real). This might not be that strange as the ad is the only stimulus presented to the participant in the Standalone PC setting (no further magazine content), and as such more thoroughly looked at. As the computation of the average observation time for a certain section is based on those participants fixating on this section only, the base is too small to justify further statistical testing.
- **Evaluation of the ad.** The eye tracking methodology used does not (systematically) influence the evaluation of the ad as a multivariate analysis of variance shows significant differences between the three methodologies for one ad only (and this for three of the eleven items).

c. Practical issues

Whereas measurement issues play an important role and need to be understood, factors such as easiness to perform the testing, budget and presence of benchmarks also deserve attention. When focusing on the *Editorial Real methodology* for example, this setting resembles a real life contact with the magazine the most. The fact that it is more **cumbersome** (participants need to go to a specialized lab located at the market research company itself, instead of completing the test in a mobile unit, after being recruited from the street), and is using more complex and expensive **technology** (compared to the two PC methodologies) make it a less attractive alternative though. In addition, it asks for the creation of a **dummy magazine** (in case of pre-testing of the ad) which implies extra human and financial **resources**; and because of the magazine format the **time** needed

for the participant **to complete** the eye tracking exercise will be longer. These latter issues also apply to the *Editorial* version of the *PC setting*.

With regard to the editorial content it also needs to be noted that the **type of editorial** (e.g., crossword, article completed with attractive visuals) might influence whether and how the ad is being processed. Keeping this in mind, what editorial content is to be added in case of *ad pre-testing* (as the final content in which the ad will be embedded is not yet fixed)? For *ad post-testing*, the editorial content is known and the Editorial version (with the real magazine digitalized) might be suited more. But then the processing and evaluation conclusions for the ad hold only with respect to that particular magazine (i.e., the same ad tested in another magazine may give different conclusions). We think it is very important to keep the *research objective* in mind: is it optimization of the ad itself or how the ad is experienced by a person at the moment he or she is reading a magazine (and this experience might differ from magazine to magazine depending on the editorial with which the ad is paired).

Finally, the existence of **benchmarks** (for output measures related to the processing and the evaluation of an ad) might drive one in the direction of one or other methodology. In our case benchmarks are available for the Standalone PC setting and that adds an extra argument to use this methodology for the Eye|watch service we offer.

d. Conclusion

The Results part does not show robust findings with regard to the influence of the eye tracking methodology used on how an advertisement is being processed. And we found absolutely no influence of the methodology on the evaluation of the advertisement. In addition, the Standalone PC setting offers a number of practical advantages, both in terms of implementation of the methodology as in terms of interpretation of the results (i.e., it is the purest, not influenced by any editorial surrounding, method to test how ads are being looked at or, in other words, to register the 'attention path'). We therefore feel we can safely conclude that the Standalone PC setting can be used as standard for Eye|watch.

e. Ideas for further research

In this study we have tested different ads in the original context they were published in. This gave us no possibility to analyze how different types of editorial opposite pages (e.g., text pages without visual elements, text pages with important visual elements) would interact with the ad or how different ads (e.g., a lot of text, no text) would interact with a certain type of editorial opposite. We neither had the possibility to examine what the influence would be of having the ad at the right hand side or the left hand side of the editorial setting.

This kind of analysis would be indispensable if someone would want to develop a standardized 'editorial' setting for pre-testing advertisements in order to be able to interpret the interactions between the ads and the editorial pages. On the other hand, this kind of analysis is very interesting in its own right to better understand the influence of the context on the processing of ads. Of course, a large number of types of ads and types of editorial in a large number of combinations would be needed to fully understand the interactions. But even if this would be possible, it is not sure how this could be operationally used.

5. Eye|watch in practice

a. What is the research setup?

Six times per year a wave of Eye|watch will be organized. Per wave a maximum of 7 ads can be tested. A sample of 100 persons, representative for the population of 18 to 65 years (northern or southern part of the country) will be recruited on location (street recruitment). The interview takes place in a mobile test unit (fully equipped bus) and consists of the Eye Movement Registration (5 minutes) and a face-to-face interview to evaluate each advertisement (15 minutes). The research is run by Rogil, the specialist in Attention Tracking Research in Belgium. For more details consult www.medialogue.be or www.rogil.eu.

b. How about reporting?

The standard output consists of a PowerPoint report including the analysis of the hotspots and reading pattern (Figure 3), the overall liking of the ad (Figure 4), the evaluation of the ad on 14 items (including two client specific items if available; Figures 5 and 6)⁴ and some key findings (Figure 7).

Hotspots

TOTAL AD: average fixing time = 6.04 s



Reading Pattern

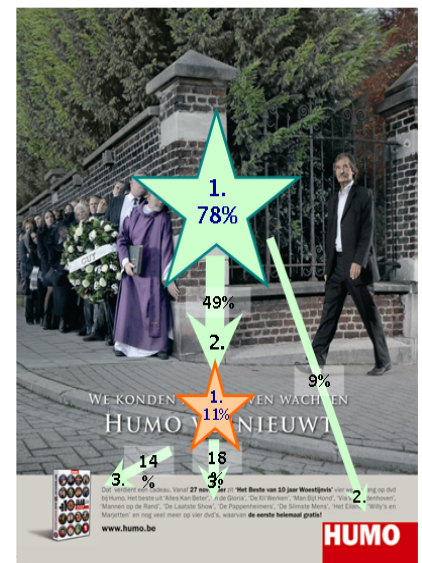


Figure 3. *Hotspots*: the more an area is colored red, the more and/or the longer participants have looked at this spot; percentage of participants fixating on a particular section, compared to benchmark percentages for the sections logo, headline, key visual, product and product information; and average fixing time for participants fixating on this particular section, with previous research indicating one can read on average 4-5 words per second – *Reading pattern*: indication of primary, secondary and tertiary attention

⁴ Overall liking and evaluation of the ad are measured using slider bars, resulting in continuous measurement instruments.

Likeability

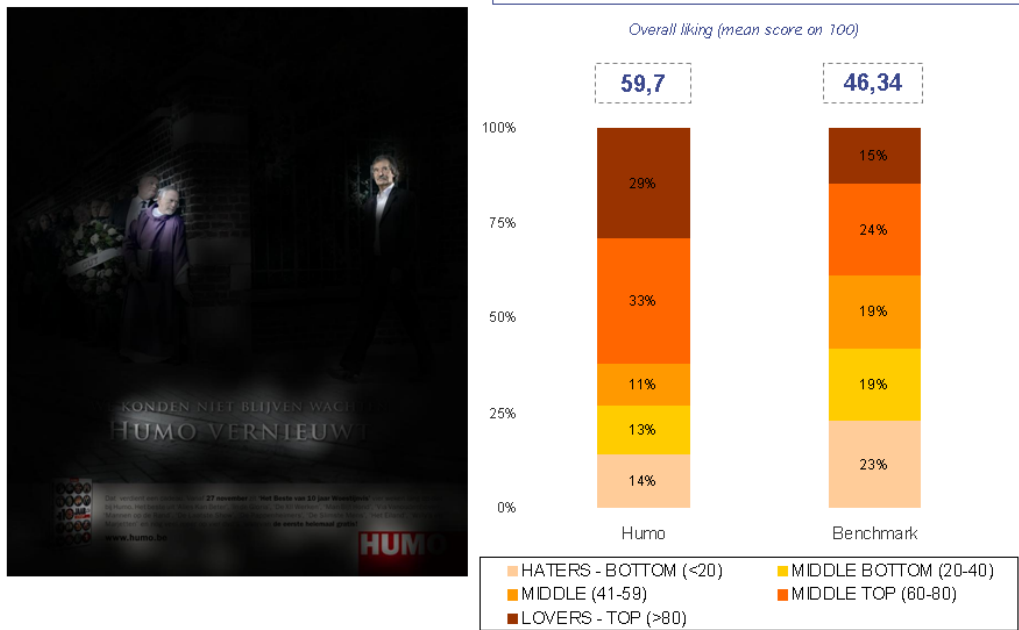


Figure 4. *Inversed hotspots*: showing parts of the ad seen by the participants - *Overall likeability*: mean score on 100; and percentage of participants scoring between 0-20, 20-40, ... on 100; for both ad and benchmark

Evaluation of the ad

(Mean score on 100)

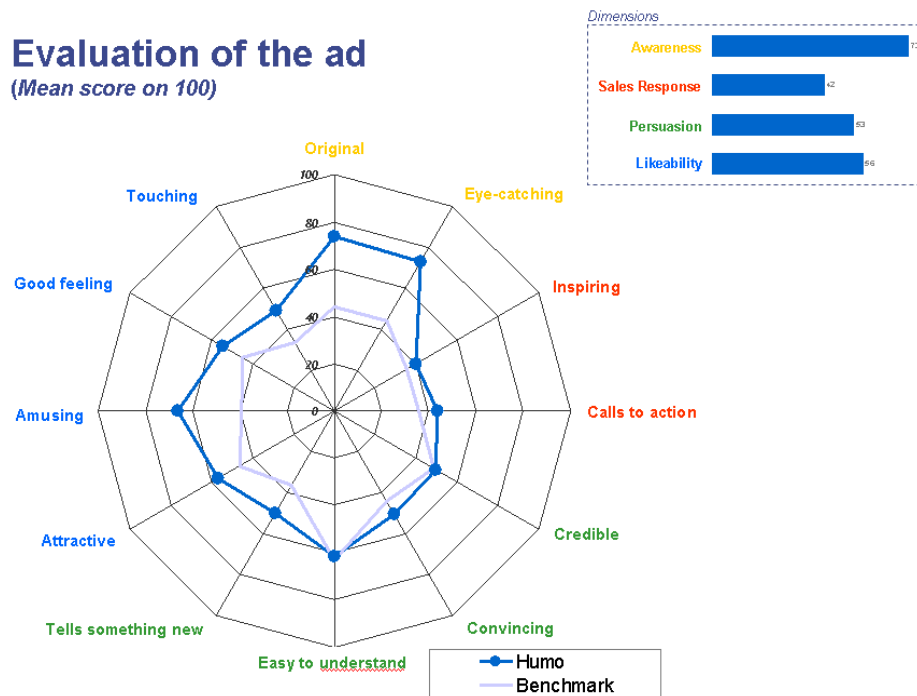
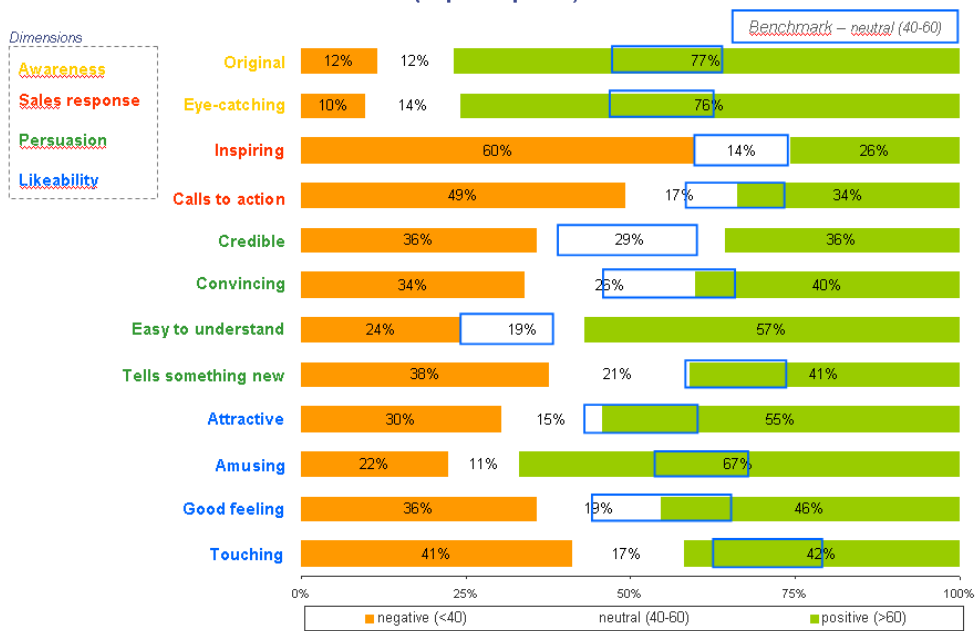


Figure 5. Evaluation of the ad based on 12 standard items and 2 client specific items if available: mean score on 100; for both ad and benchmark – Evaluation of the ad following the 4 dimensions ‘awareness’, ‘sales response’, ‘persuasion’ and ‘likeability’ (being linked to the standard items): score on 100; for both ad and benchmark

Evaluation of the ad (% participants)



8

Figure 6. Evaluation of the ad based on 12 standard items and 2 client specific items if available: percentage of participants scoring between 0-40, 40-60, 60-100 on 100; for both ad and benchmark

Key findings



- The **key visual** is focused on by almost all participants (90%), with an emphasis on the face of Guy Mortier, the pastor and the mourning aureole. And this for a rather long time period (about 3 sec).
- The **headline** communicating the renewal of the title is read by ¾ of the people. The reading time of 1.76 sec makes it possible to read it completely*.
- The **addition of the DVD to Humo** is noticed by about half of the participants (with 41% looking at the DVD; 47% at the explanation to the right of the DVD).
- The **Humo logo** at the lower right corner (although contrasting with the other colors in the ad) obtains a rather low percentage of viewers (34%). This is also far below the benchmark (60%).
- The **Humo ad** shows a clear top-down **reading pattern**, starting with the key visual (78%), continuing to the headline, and finally to the DVD or the DVD explanation.
- The **Humo ad** is really **liked** with an average score of 60 on 100. 30% of the participants are lovers of the ad, whereas 15% are haters.
- **Eyetrack** shows the ad is perceived as being really **original and eye-catching** (scores of 74 and 73 on 100).
- "The ad **tells something new**" obtains a rather moderate score (50 on 100), surely if one keeps in mind that the objective was "communicating the renewal of the title".
- The **amusement** aspect is also appreciated by the participants (66 on 100).

* In general, people are able to read 4-5 words in 1 second

3

Figure 7. Some *key findings* based on the hotspots, the reading pattern, the overall likeability of the ad, and the ad's evaluation using the 12 standard items and the 2 client specific items if available.

6. How about implementing Eye|watch conclusions to the advertisement?

In 2006 and 2007 Rogil tested 3 consecutive Danone Actimel advertisements using eye tracking technology. Below one can find the effect of adaptations made to the layout of an advertisement using eye tracking insights: the more prominent product and the simplified text draw more attention (product: 87% of the participants fixating on the product for on average 0.43 seconds in 2006 versus 95% of the participants for on average 0.54 seconds in 2007; text: 74% and 42% in 2006 versus 85% in 2007). However, the unchanged position of the headline at the bottom still hinders its visibility (42% in 2006 and 25% in 2007). In a following test, further simplifications of the ad led to additional attention for the text and headline sections. A more recent example will be added once available through the Eye|watch barometer.

Actimel ad 2006

- Key visual is not clear enough, too dark and too large (only the face is seen).
- Integrate brand in key visual.
- 2 headlines: include only second slogan (main message) and place it at the top.
- 2 text blocks. Not a lot of added value.
- Too much text, which is not all read.
- Abundant amount of text doesn't allow a logical reading pattern.
- Bullet points are more effective than paragraphs.
- KISS-principle → Keep It Short and Simple



Actimel ad 2007

- Using the product as the key visual works very good. It is simple, clear and well visible. It also emphasises the brand.
- The increased structure and simplification of the ad allows a more efficient reading pattern.
- The main message of the ad, is still positioned at the bottom of the page and attracts too little attention.
- In the text part, mainly the simple visual draws the attention. The text block, although reduced to one, is still too elaborate and is not read thoroughly by the viewers.

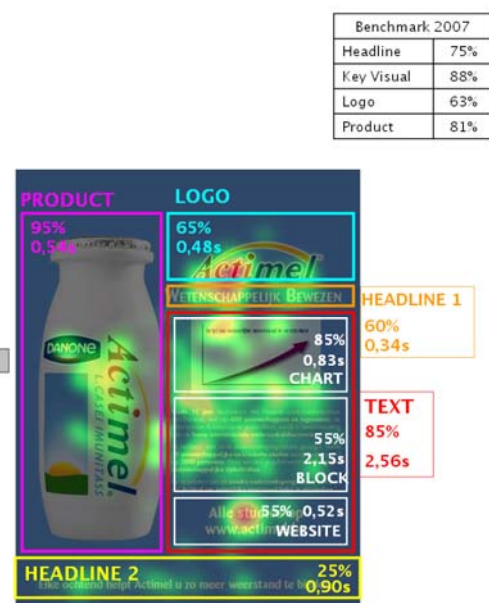


Figure 8. Effect of adaptations made to the layout of an advertisement using eye tracking insights

7. Overall conclusion

Eye|watch is a very promising new tool to help improve the effectiveness of magazine advertisements. From the tests we have run before launching the service we have learned that we can be confident about the Standalone PC methodology. In setting up the service we have raised the sample size to 100, although 30 to 50 observations is generally accepted as a sufficient number of registrations. The higher sample size will allow us to compare the results of large segments (men versus women, young versus old) or to isolate broad communication target groups. For finer target groups (e.g., women with babies) the client can decide to do a sample boost. The partnership between Rogil and Medialogue allows us to offer the basic service and the extra options at sharp prices.

Although the first objective is of course to improve individual ads, the database of cases that will result from this service should allow us to draw general lessons in a couple of years. We can thus already look forward to the next paper or maybe even a book: 'Eye|watch, everything about improving the attention path of magazine advertisements'.

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