

# THE UNCONSCIOUS AS THE THIRD DIMENSION IN ADVERTISING

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## Introduction

Advertising is generally seen as a two-dimensional phenomenon, its role is to inform about benefits and create positive emotional responses. However, recent biometric studies have shown that the effects of advertising depend not only on information and emotion, but also – to an equally large extent – on signals that are processed outside of consumers' conscious attention, i.e. peripherally. In the years to come biometric research should develop the way we think about conscious and unconscious aspects of marketing communication. To illustrate how biometric examination may uncover secrets of ads I present a fragment of such analysis of a world famous Son Bravia "The Balls" 2005 TV commercial.



## The first two dimensions – Information and Emotions

Traditionally, advertising has been perceived as operating in two dimensions: INFORMATION and EMOTION. Academic handbooks and manuscripts for practitioners recommend that marketing communication should be double-tracked. First, it should appeal to the consumers' reason. Rational arguments, facts, numbers and research findings are to convince us consumers that it is our brand, has a competitive advantage over others and offers the most benefits. Second, the parallel communication channel addresses our emotions. By presenting emotional values, attractive lifestyles, appealing family models, loyal friends, etc. we are persuaded that the brand is the most likeable (or even loveable) and is going to give us more satisfaction than its competitors.

## The third dimension- UNCONSCIOUS

I have studied the human mind for twenty years now. I believe that theorists and practitioners of advertising communication should incorporate yet another dimension of advertising – the UNCONSCIOUS (Fig.1).

The third dimension is responsible for creating

unconditional desire for the brand. It should trigger a behavioral drive to approach the brand and eventually to grab it from the shelf. The third dimension may be influenced by so called peripheral cues. These are subtle sounds, gestures or images which are "ignored" by our conscious attention and often – conscious recollection. These cues make us want to have things, even if on the conscious level we can't explain it with rational or emotional arguments. We want something because... we just do. The goal of the third dimension is to enhance the desire and to spur consumers into purchase-related behavior.

## How to measure the third dimension?

Many marketing theorists and practitioners have intuitively sensed the existence of the third dimension and its peripheral cues. Unfortunately they have been unable to capture them with traditional research methods. Why? Because the unconscious purchase drivers are likely to be encoded in neurophysiological processes which cannot be described in a paper-and-pencil questionnaire or an interview. Their detection requires advanced apparatus similar to machines used in medicine. I believe that the contemporary consumer research has reached the point to draw not only on marketing and humanities, but also on neuroscience and biology. What I am referring to is the biometric research approach. From this perspective, to assess an ad we need to look not only into respondents'



Fig. 1. Three dimensions of advertising:  
Information, Emotion, Unconscious

conscious declarations but also into their continuous neurophysiological reactions to the ad's audio-video stimulation. The biometric approach to test marketing communication uses technologically advanced methods, which include primarily brainwave analysis (electroencephalography, EEG), body arousal (skin conductance responses, SCR) and facial muscle activity (electromyography, EMG). In turn, to test a product itself neuroimaging methods should be applied (positron emission tomography PET, functional magnetic resonance, fMRI).

### Benefits of the biometric research approach

Thanks to the biometric examinations we may not only measure a liking, recall, or message comprehension of an ad, but also find out which particular moment, word or sound have produced neurophysiological approach or avoidance tendency. We may monitor respondents' continuous



engagement and arousal level in every single moment of the presented ad. We may find out how to display the logo and a packaging in the most effective way, how to animate the demo or how to open and close the spot. This is invaluable information both for advertisers and for advertising agencies. And for scholars who study theoretical frameworks for persuasive advertising.

During the past three years I have biometrically examined over 800 TV ads and 2,500 respondents seeking empirical evidence for the third dimension. Beyond all doubt it has been established that peripheral cues may serve as purchase drivers and do increase the sales potential of TV ads. Contrary to what one may think, such a non-deliberate, impulsive state may not only accompany the purchase drive in the FMCG sector but also influence consumer choices of car brands financial services or domestic appliances. The cues we tested included the way of touching money in ads for financial services, pouring liquid into a mug in beer commercials, biting chocolate bars in sweets ads, applying cream onto the skin in personal-care ads or showing details

in car ads. We have often analyzed stimulations that were purely creative, content-free, unrelated to a strategy, and yet made consumers more likely to choose the advertised product from the shelf. For that purpose I had designed a special test to examine behavioral purchase-related consequences of an ad exposure. The shelf-test had aimed to represent "the first moment of truth" in advertising.

### Unconscious in advertising is not about subliminal advertising

The unconscious dimension in advertising – precisely monitored in biometrics studies – has nothing to do with so-called subliminal advertising, although many people may be tempted to lump the two together. The unconscious I am referring to is not associated with millisecond exposures (forbidden by law and by the rules of common decency), but with redirecting attention from some elements to others. We may not remember rational product information or not even find the ad really emotionally appealing or exciting, but if it contains peripheral cues, we are very likely to choose the advertised brand (good examples here are household cleaning commercials, which – though disregarded by many people – contain excellent purchase drivers). Subliminal advertising restricts the consumer's personal freedom (at least theoretically as no one has ever proven that such ads are effective). Consumers cannot see the stimulus that has an effect on them and therefore are unable to protect themselves. However, when exposed to peripheral cues, consumers can see and hear everything. They just do not pay attention to the fact that some elements of an ad, such as a gentle touch of the coffee cup handle, may affect them and facilitate decisions on which coffee brand to choose.

### Ethics in biometric research

We should be all aware that the biometric research and the knowledge stemming from it may be abused. My personal goal has been to integrate international research industry, scholars, advertisers and advertising associations to create The Code of Ethical Conduct in Biometric Research. The Code shall set and then monitor standards of conducting the biometric research and of utilizing its results. I seek all persons who on one hand are eager to explore new territories in advertising by applying the biometric technologies and on the other who wish to aid in protecting ethical values during this pioneer quest to the unknown land of consumers' unconscious. I hope the AAA Newsletter will help us connect.

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# The case: Sony Bravia "The Balls" 2005 TV ad

Most of us surely remember the unique commercial Sony Bravia from 2005. Juan Cabral and the Fallon London Agency were responsible for its production and Nicolai Fuglsig directed it. The commercial consumed a pretty large budget – three days on the film set, ten giant launchers, 250 thousand colorful rubber balls, which were launched into the Filbert and Leavenworth Streets in San Francisco, and all that was recorded by 23 cameras. Yet, it was worth it – sales reportedly increased, the ad became famous all around the world and its authors received prestigious awards, e.g. the Cannes Golden Lion in June 2006. What is the secret of its huge success?

To answer this and some other questions, in collaboration with the research agency Laboratory & Co I conducted a biometric test, which went beyond consumers' verbal declarations and analyzed their neurophysiological reactions to the Sony ad. For this purpose, 45 respondents (50% women, 50% men, who met the criteria of the target group for the tested product category) watched the commercial, while we registered, 500 times per second, their electrical brain activity (EEG) and galvanic skin reactions (SCR). The first measurement informed us about the intensity of engagement (defined as approach-avoidance tendency), the second one about the level of arousal, energization of human body. Here is what we discovered (Fig. 2).



The opening scene – distant frame of an urban landscape of San Francisco and the sound of a classical guitar – immediately arouse intensive positive reactions. It means that the ad is likely to stand out and to distinguish itself in the advertising clutter. A moment later, scenes of jumping balls to the accompaniment of somewhat melancholic music make the neurophysiological reactions less intense (but still positive). This positivity lasts until one certain moment connected with a real explosion of engagement. What scene is it? It is a counterpoint in the 17th second - the moment when a frog jumps out from a rain pipe. The neurophysiological trace goes up suddenly! Some claim that "the frog scene" was recorded by accident. Even if so, the authors still had a gut feeling and during the final editing they decided to keep it. This detail turned out to be the first peripheral cue. It released intense positive reactions, which lasted until the very end, i.e. throughout the presentation of the product

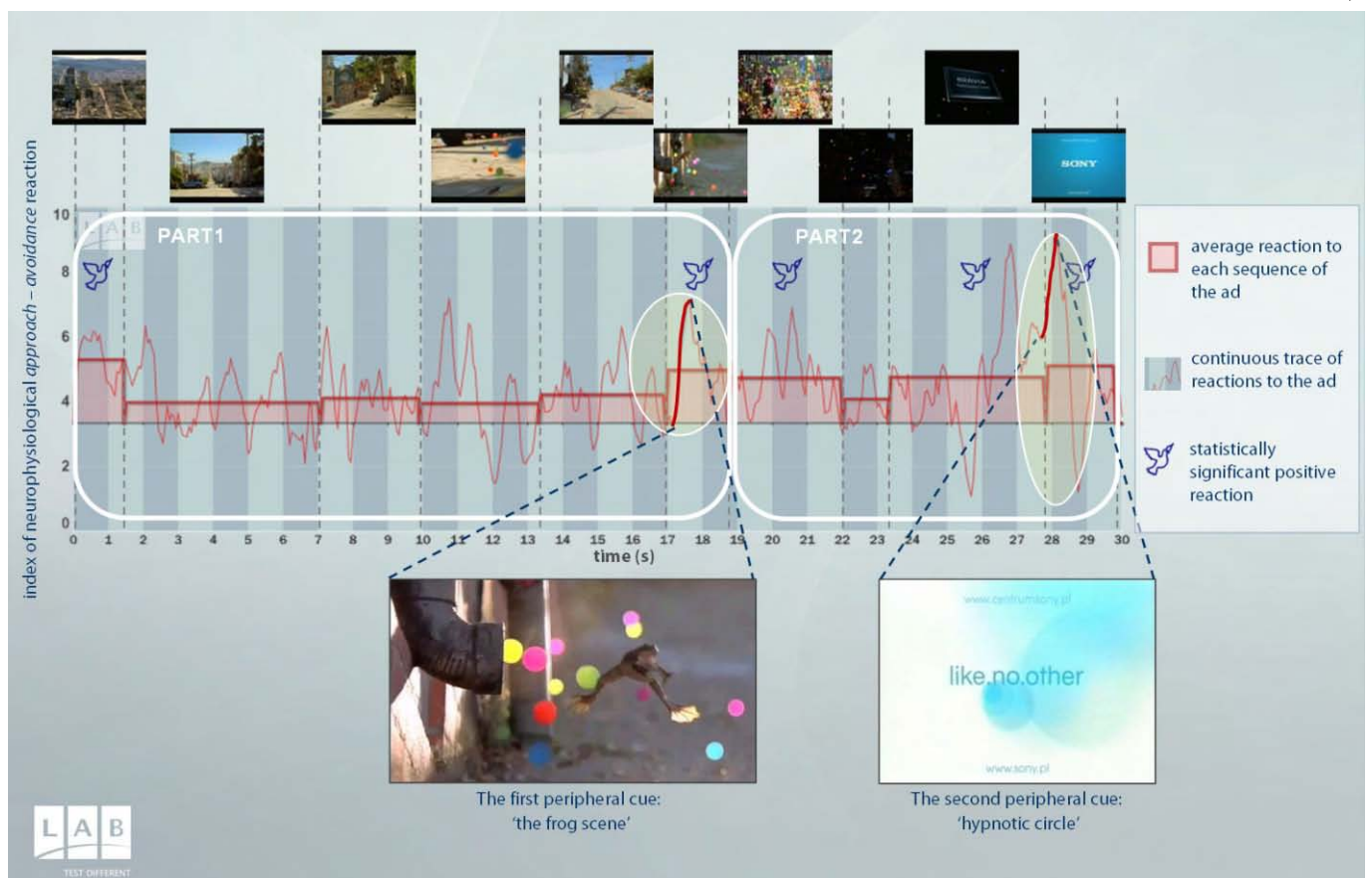


Fig. 2. EEG trace of continuous engagement reactions to Sony Bravia "The Balls" TV ad

benefit („color“), during the appearance of the product itself („Sony Bravia“), and during the final scene, where the headline („like no other“) and the brand (Sony) have been presented.

Our biometric analysis has gone far beyond conscious description of consciously experienced feelings. Could anyone predict that "the frog scene" may play such a crucial role? Would anyone say before that a frog enhanced the perception of a high-tech product? Another study we conducted later on showed that if we discarded "the frog scene", the positivity toward the benefit and product would significantly decrease. It means that the frog is more than just a funny moment (however, respondents claimed differently in post-experimental interviews). The frog turned out instrumental in priming positive, approach reactions to the ad crucial strategic messages. Moreover, the second part of the ad (which is more informational than emotional) generated more neurophysiological engagement reactions than the first one (which portrays beautiful San Francisco, jumping balls and soothing music). However, on the conscious level respondents declared that the jumping balls appealed more to them than information on the brand and product. It means that both parts of the Sony ad are equally important and crucial: the first one to our conscious mind, the second one to our unconscious mind. Finally would any one presume beforehand that indisputably the "hypnotic circle" – an animation in the 28th second, which precedes the exposition of the logo, caused the most intense reactions to the whole ad. And this is the second peripheral cue in this ad.



More results from the study, including assessment of its famous song performed by Jose Gonzalez, are available at: [www.testdifferent.com](http://www.testdifferent.com).

## ABOUT THE AUTHOR

**Rafal Ohme** (PhD) is a professor of psychology, expert in persuasion and unconscious processes. He held the *Fulbright Scholarship* at *Kellogg School of Management* where he learned advertising.

From 1996 on he visited Department of Psychology at *Stanford University*, and researched unconscious processing and emotions. He was a guest speaker at seminars and workshops across *North America and Europe*

In 1997 he founded *Human Mind and Brain Applied Research Center* which adopts cutting-edge scientific discoveries, and creates innovative marketing research instruments. In 2003 he founded *LAB* which is a research company that integrates bio and conventional approaches. In 2009 he organized the *NEUROCONNECTIONS* conference – a global annual meeting to integrate bio and conventional researchers [www.neuroconnections.eu](http://www.neuroconnections.eu)

He wrote *New Mind of Consumer* (in press), *Unconscious Affect* (2007), *Subliminal Facial Information* (2003), and trilogy *Automaticity* (2001, 2003, 2003).



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