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Effective ads: new technology answers old questions

By **Linda Couwenberg**

Marketing experts commonly refer to ads as either “emotional” or “rational” in their appeal to consumers. This dichotomy of “thinking versus feeling” is most evident when it comes to discussions around what makes an ad effective. Some studies suggest that an ad that pulls on the heart strings will pack the most punch; others suggest a blend of logic and emotion. However, new research reveals which areas of the brain are stimulated by different ad appeals – and the brain activity associated with the most effective advertising.

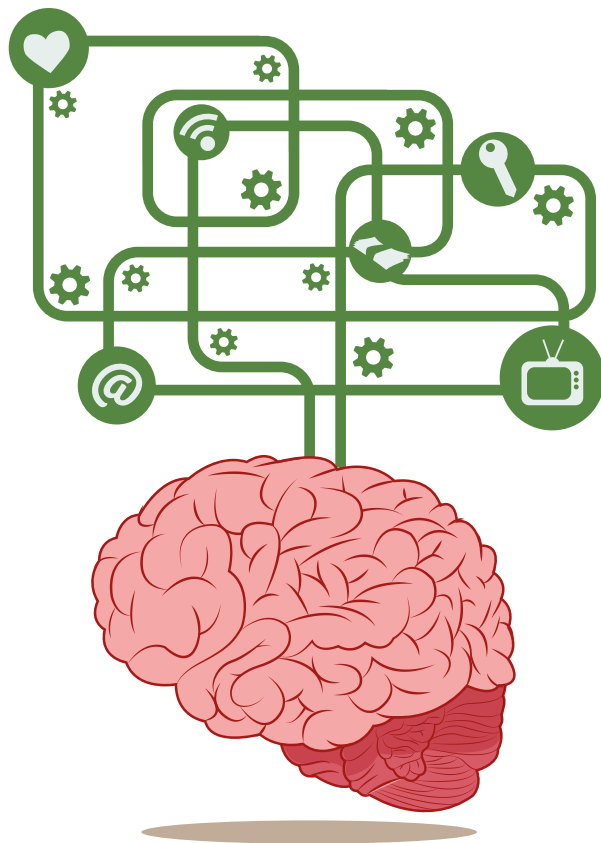
The reality is that, until now, how our brains respond to advertising stimuli has largely remained a mystery. Most of what we know about consumers' internal responses to different ad appeals stems from consumer feedback – a notoriously unreliable research source. Consumers simply cannot always tell us accurately why an ad resonates with them. Their brains, however, can.

In a recent study, we used brain imaging technology to examine brain responses to the most commonly used executional elements in television advertising: functional and experiential appeals. It is these elements that are believed to stimulate either rational or emotional responses in consumers, respectively.

Our findings challenge the simplistic view that these two executional elements stimulate either emotion or reason. A more accurate depiction, according to our findings, is that they activate either higher or lower level cognitive function. As for the most effective ads, our research suggests that these are the ads that activate not one but both levels of cognitive function. And the greater the activation, the more effective the ad.

Neuromarketing research methods hold the promise of providing an unfettered view into the consumer mind. Using functional magnetic resonance imaging (fMRI) technology, scientists can monitor brain activity second by second as subjects are exposed to advertising stimuli, showing which areas of the brain are responding. This data can then be used to elaborate on what we know from conventional research.

Brain imaging technologies, in other words, step in to provide answers where conventional research methodologies have failed to. Raw sales data, for instance, helps demonstrate what works in advertising, but it cannot explain *why*. For this we depend on consumer perception surveys, which ▶



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Effective ads: new technology answers old questions *(continued)*

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work on the erroneous assumption that people are capable of accurately identifying their innermost thoughts and feelings and predict their subsequent choices.

Yet research has shown time and time again just how little we know about our own minds. The mere act of reporting one's response to an ad, for instance, has the power to change it. Circumstances skew our perceptions. Test subjects may unwittingly tell testers what they want to hear. The time lapse between our exposure to an ad and the formulation of our response is time spent on biased reflection. Consumers may also simply not know at all, with much internal brain activity occurring on a subconscious level. It is into this gap that neuroscience enters, presenting us with the opportunity to circumnavigate the "noise" of other methodologies.

What brain scans tell us

Our main goal in this project was to expand our knowledge of the internal brain processes that are evoked by two types of ad appeal: functional and experiential and, specifically, whether

they were rational or emotional in nature. Ad appeals directly predict an ad's effectiveness, so the prospect of accurately measuring them held immense potential value both scientific and commercial.

Ads with functional appeal typically present factual information about a product's attributes or benefits to persuade a consumer on the basis of logic to like and buy that product. Ads with experiential appeal use desirable symbols to create an experience in association with the product: an emotive experience or an imaginative journey, for instance. Some ads mix both appeals.

Both approaches aim to persuade, and we know they do so through stimulation of different areas of the brain. Traditionally, scientists have suggested that experiential ads arouse emotion in association with a product, while functional ads stimulate the consumers' reasoning abilities: they engage in decision-making based on logic, such as whether or not the product offers value for money, practicality, and so on.

In our study, we first exposed a large group of online consumers to eleven variations of a TV commercial

promoting a brand of pain-relieving muscle and joint gel. Each ad used different executional elements. Some ads used functional elements, showing specific features and explaining the benefits of the gel's use. Others used experiential elements, associating the product with positive emotions, sensations or experiences.

After watching an ad online, the consumer had the opportunity to click-through to the product's website. This click-through data was then aggregated and examined across the eleven ad variations.

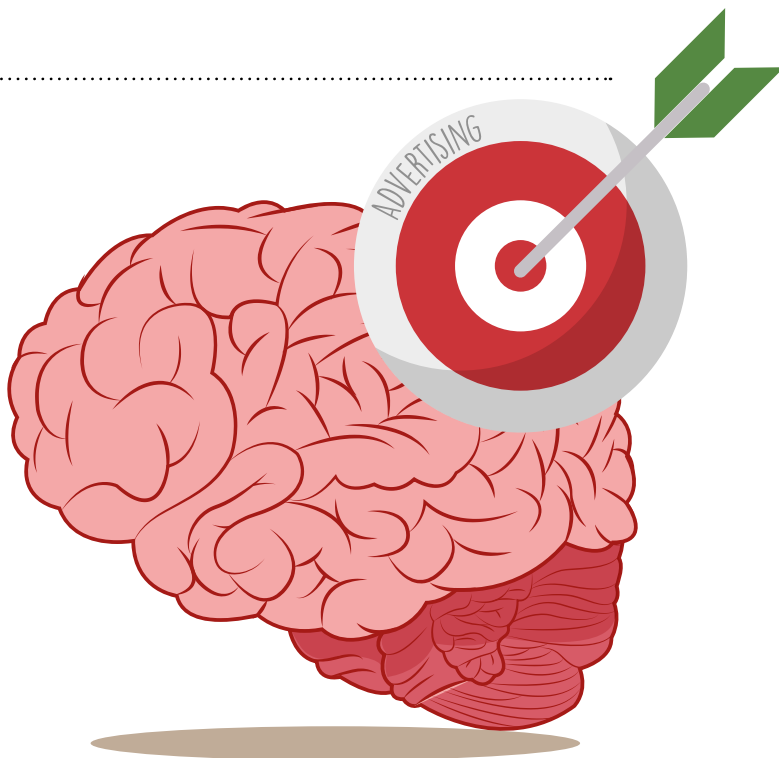
Our findings were that the most effective ads in terms of click-through rates, indicative of intention to buy, were those that contained a combination of both the functional and experiential elements. Our next question was why? What had occurred in the brains of consumers in response to these ad appeals?

To answer this question, we used fMRI to monitor the brain activity in a group of subjects as they watched the different ad versions. The data from these fMRI scans could then be used to understand which mental processes reflected the highest level of persuasion achieved and in response to which precise elements.

More than thinking or feeling

Our data showed that the elements of the ads that highlighted the product's advantages triggered activity in the brain associated with rapidly detecting, recognising and identifying objects: "what am I looking at and how can I use it?" This is a lower level of

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cognitive processing in response to visual input that occurs regularly in our daily lives.

Elements of the ads that appealed to the imagination or had an original way of delivering the message led to activity in the area of the brain associated with more complex cognitive processes, including sustained attention, working memory and creative thinking.

Activity in either of these regions of the brain triggered an inclination in viewers to click-through to the website. However the highest spike in click-through rate occurred when both areas of the brain were activated at the same time.

What can we conclude from this? Firstly, that our responses to ad appeals cannot be divided into those of either emotion or reason, as tradi-

tionally assumed, but rather as either lower or higher in their level cognitive processing. Functional elements, it would seem, stimulate lower-level cognitive processes, while experiential elements stimulate higher-level cognitive processes.

In other words, functional information does not stimulate any deliberative reasoning processes and, on the contrary, higher-level cognitive processes are triggered by experiential appeals. We might speculate then that originality could be an important element for maintaining interest and attention in viewers and enhancing memorability.

Our study demonstrates the extent to which fMRI technology can provide new insights into how ad appeals are processed by the consumer mind, and why a particular commercial is effec-

tive. This has considerable marketing value for practitioners. Precise knowledge of which brain processes are correlated with a higher click-through rate in viewers could help marketers craft more effective ads.

So what are the implications for our future research? I am interested to know how these same mechanisms work in relation to other product categories. What elements of an ad and which brain processes are connected with the most click-throughs when it comes to ads promoting hedonistic lifestyle products such as package holidays, for example? Does this combination of the two elements also work best for the promotion of more expensive products, such as cars? We still have many important questions to investigate and, with this technology, we hope to definitively answer them. ■

This article draws its inspiration from the paper *Neural responses to functional and experiential ad appeals: Explaining ad effectiveness*, written by Linda E. Couwenberg, Maarten A.S. Boksem, Roeland C. Dietvorst, Loek Worm, Willem J.M.I. Verbeke and Ale Smidts, and published in the *International Journal of Research in Marketing*, available online 26 October 2016. DOI: <http://doi.org/10.1016/j.ijresmar.2016.10.005>

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