INVESTIGATING THE SPECIFIC PRIMING IMPACTS
OF TELEVISION AND DIGITAL OOH

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Introduction

Working with Ocean, Neuro-Insight used brain imaging to look at the subconscious impact of one medium on another. Specifically, we investigated the ability of premium, full motion media (television and premium Digital Out of Home) to positively prime responses to linked messages encountered in other media (magazines and mobile devices).

The context in which the research was undertaken was a fast-changing media environment in which new media were constantly transforming the media landscape. Within Out of Home (OOH) this effect was apparent in the emergence and growth of full motion digital sites, which Ocean firmly believed to be a game-changing development.

Specifically, they believed that full motion digital OOH (DOOH) could play a role analogous to that played by television, which has been shown to have a strong priming impact on other media. Like TV, DOOH delivers brightness, motion and colour – like TV it delivers an intense experience that Ocean believed could serve to build, not just leverage, brand equity.

Research Objectives

Previous research work carried out for Ocean had demonstrated that premium OOH sites elicited a particularly strong emotional response, and that they could positively prime responses to standard OOH sites. Subsequent work had built on this research to show that, on comparable sites, full motion campaigns elicit stronger and more positive emotional responses than static ones.

We wanted to go further with this research, to understand just how far the impact of DOOH in particular could extend; our hypothesis being that it could reach well beyond the OOH sector.

Specifically, we set out to discover whether prior exposure to DOOH advertising had an effect on responses when people were exposed to advertising from the same campaign in other media i.e. Did DOOH have a priming effect that extended beyond OOH and into the wider media landscape?

Methodology

Ocean chose neuroscience as the methodology for this project, to give objective evidence about effects that people wouldn’t be consciously aware of. Specifically, Neuro-Insight carried out the research using their Steady State Topography (SST) methodology, which tracks electrical responses in the brain in real time as people are exposed to different stimuli. SST delivers a number of metrics; attention, engagement (personal relevance), emotional intensity, approach/withdrawal (polarity of emotional response) and long-term memory encoding. Because in this study we wanted to look at priming impacts, which require the brain to store information and then link to new stimuli back to what’s been stored, memory encoding was the key measure that we focused on in our analysis.
A key feature of the study was that we wanted to focus on the priming impact of DOOH on other media; therefore we measured not brain response to the priming media, but responses to the media being primed.

To make sure the study was robust we set up a control; whilst some people were exposed to DOOH ads, others were exposed to ads from the same campaigns on television. We used two advertising campaigns in the study – Peugeot and Lynx – and split the sample further so that half the people from both the DOOH and TV groups saw each campaign at the priming media stage.

So, prior to brain readings taking place, people were exposed to advertising for one of the two brands, either on a DOOH site or on television. People saw the OOH site by walking past it on the way to the study location from a pre-arranged meeting point, and saw the TV ad in a programme that was on “in the background” in a holding room prior to the research session starting. In neither case was people’s attention explicitly drawn to the medium or the advertising messages.

Respondents then came into the study room and we measured brain response as they were exposed to branded messages for the two featured brands in magazines and on iPads (they looked at both online ads and websites) (Figure 1).

Using this approach we were able to compare:

- Responses to magazine and mobile online ads amongst those who had previously been exposed to DOOH advertising
- Responses to magazine and mobile online ads amongst those who had previously been exposed to TV advertising.

Figure 1: The sample was split four ways, with different cells seeing different priming material in a natural environment. All respondents then came into the study room where they browsed magazines whilst we measured brain response.
In each case we could look at both responses to unlinked advertising, and responses to ads from the same campaign.

The sample was robust, consisting of 192 people, made up of equal numbers of men and women, with an age spread in the range 18-65. People were convened in groups of eight; half the groups were held in London and half in Birmingham.

Results

The results were unequivocal in showing strong priming impacts; but took us by surprise in that we found more than we expected. Firstly, we found that, regardless of creative, mere exposure to the priming medium had an impact. People who saw television first responded more strongly to magazine advertising (even when not linked to the campaign they had seen on TV) than people who’d been exposed to DOOH. And people who’d seen digital DOOH first responded more strongly to advertising on mobile devices, even when not linked to the campaign they had seen on DOOH, than those who’d been exposed to television (Figure 2).

Figure 2: Even when creative content wasn’t matched, there were clear differences between the priming impact of television and DOOH.
This effect was robust and statistically significant and reflects what we call the congruence effect – the impact of environment and “brainstate” on responses. TV is immersive and involves a sedentary state in the home, just like magazine reading. DOOH involves a heightened response to communication seen out of home whilst on the go, just like mobile devices. The brain is very receptive to the power of context, and congruence plays a role in how we respond to things, just as we have seen in this study.

Unsurprisingly, for both priming media, the priming impact was even stronger when people were responding to creative executions from the same campaign that they had seen on TV or DOOH (Figure 3).

A New Perspective

The results of the study have helped us to build an analogy about the way that brand communication can work in the brain, which we describe in terms of a “brand room”. In our heads we carry networks of associations for the things that we encounter in our lives - as we gather new information, we link it in to our existing knowledge and these networks grow. We can think about these networks as “rooms” in our heads. In the case of brands, we create a room for every brand we come across – some of these rooms, for familiar and loved brands, are well-decorated and furnished; rooms for brands that we know less well will be more sparsely appointed. Advertising can help to furnish or re-decorate brand rooms by giving new information or changing perceptions of the brand. However, the brand rooms in our heads are not usually foremost in our consciousness; we don’t go around thinking about brands all the time, and it’s as if the room is often in darkness. In order to harness, along the path to purchase, all the associations that a brand has spent time and money building up, there’s a need to illuminate the room.
To do that we need triggers that act like light switches for the rooms in our heads, and the market success of a commercial isn’t determined just by the impact it has at point of viewing; the strongest impact occurs when it creates or builds associations that can be triggered later to illuminate the brand room. Television and digital OOH are well-placed to build these associations because they can leverage all the factors that contribute to strong memory encoding; employing visuals, movement and colour, and eliciting strong emotional responses.

These associations can then be activated when associated messages are encountered in another medium – that’s what we mean by priming. And, as this study has shown, this effect is particularly strong when that second medium is encountered in a similar environment – it’s easier for the brain to make the connections and light up the brand room.

Learnings

The findings of the study have clear implications for maximising the impact of cross-media campaigns by harnessing the specific priming impact of DOOH. We know from previous work that iconic, large format advertising delivers heightened emotional response and strong memory encoding, and that this impact is heightened by full motion screens. We also knew, going into this study, that these large, iconic sites had a positive priming effect on other OOH advertising. The new work described here takes the learnings further, to show that the priming impact of DOOH extends beyond the OOH world and into wider media universe. There is a congruence between screen experiences out of home, and the combination of large and small screens, accessed on the go, is a particularly powerful one.