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Impression Evolution During Ad Exposure: Typicality Effects From 100 Ms Onwards

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Although print ads display all information simultaneously, people are unable to process this all at once. This research investigates how people rapidly try to identify what ads are for over the course of a single ad exposure, and how this influences subsequent attention, impression formation, and memory. Three studies show that typical ads--which can be rapidly identified accurately--are liked even after 100ms, and retain this high liking. We find that evaluations for atypical ads, however, improve or deteriorate within a single exposure depending on the specific identification process engendered, and that memory effects critically depend on exposure duration.

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EXTENDED ABSTRACT

In advertising theory and practice, atypicality is considered to be an effective creative strategy to break through the clutter, and to boost ad evaluations and memory for the ad and brand (Heckler and Childers 1992; Smith and Yang 2004). However, research on this issue is limited (Smith and Yang 2004). Moreover, most advertising research used long and forced ad exposures of up to thirty seconds or longer to investigate advertising processing and effectiveness (reviewed by Meyers-Levy and Malaviya 1999), whereas attention to ads is much shorter in practice, typically a few seconds or less (Pieters and Wedel 2004). It remains unclear whether the positive effects of atypicality carry over to these much shorter durations. In fact, considering people's basic need for certainty (Loewenstein 1994), there is reason to believe that the effects of atypicality may be different at shorter exposures.

The present research focuses on information processing within the first exposure to the ad, from 100 ms onwards. Motivated to identify the stimuli they are exposed to, people attempt to identify the ads that they encounter, i.e., what they are for. In three experiments, we show that, depending on the typicality of the ad, this identification process can take different forms over the course of a single exposure, which in turn influences how evaluations develop over time (experiment 1 and 2), the attention devoted to the ad (experiment 3), and subsequent memory (experiment 2).

Typical ads display objects and scenes that are expected for the advertised category (Mervis and Rosch 1981), such as a car in a car ad. The product category of these ads is rapidly identified and with certainty in 100 ms or even less ("Ha, it's a car ad"; Pieters and Wedel 2009), and this identification certainty contributes to an immediately positive ad evaluation (Loken and Ward 1990). Additional information that becomes available after the first glance confirms the immediate identification, leaving the ad evaluation at relatively high levels of positivity, until boredom eventually befalls these ads. We distinguish two types of atypical ads, hereafter referred to as "atypical" and "typical-other" ads. Atypical ads display objects and scenes that do not immediately bring up a product category, leading to identification uncertainty ("What is that ad for?"). This negatively affects the initial ad evaluation. When exposure to the ad continues, additional information and cognitive integration contribute to ad comprehension reducing identification uncertainty ("Aha, it's a car ad"). This increased certainty is appreciated, leading to a positive updating of the evaluation. Finally, typical-other ads display objects and scenes that are typical for another category, such as a lady misting her face in a car ad. These ads are initially identified with certainty ("Ha, it's a fragrance ad"), which is liked. However, new information that becomes available during exposure disconfirms the initial identification, which needs to be revised ("Oh no, it is a car ad"). This need to revise one's initial identification may lead to confusion and requires more cognitive effort, which is disliked and leads to a downward adjustment of the initially positive evaluation.

Thus, typicality determines the identification process—identification confirmation (typical), identification disconfirmation (typical-other) or uncertainty reduction (atypical)—which has predictable effects on how ad evaluations are updated within a single exposure. In addition, it influences attention and memory, and we predict different effects depending on whether recall or recognition

performance is assessed. Typical ads do not retain attention well, since they are immediately identified and additional processing does not provide much "new" information. However, because a connection between the ad and the advertised category is immediately established upon exposure, and the ad category serves as a useful retrieval cue (Goodman 1980), they are recalled well, even after brief exposures. Recall performance of atypical ads, in contrast, is relatively poor after brief exposures, but strongly improves when additional processing leads to ad comprehension (Bransford and Johnson 1982). Because atypical ads cannot be immediately identified, they retain attention longer, such that memory should be good. In case of typical-other ads, rapidly identified inconsistencies between the initial identification and newly processed information motivate people to prolong attention to the ad. However, recall performance remains relatively poor for these ads despite additional time attending, because of source-confusion (Roediger and McDermott 2000). Recognition performance, in contrast, is poor after very brief exposures for all three ad types, but strongly improves with additional time attending (Loftus and Bell 1975), except for typical ads, that remain relatively difficult to discriminate from other ads. Due to their typicality, these ads appear familiar regardless of whether they were presented or not, increasing false recognition (Silva, Groeger, and Bradshaw 2006).

We tested and found support for our predictions about the dynamic identification, evaluation and memory processes within a single exposure in experiments 1 and 2, where we systematically varied the exposure duration of ads between-conditions from 100 ms (which is less than a single eye fixation) up to 10 seconds (cf. Donders 1868). Finally, support for the prediction that atypical and typical-other ads retain attention longer than typical ads was provided in experiment 3, where participants freely viewed a large set of ads. These findings are the first to provide insights into the rapid advertising processes from 100 ms onwards. They reveal that the effects of typicality critically depend on the exposure duration, and require revision of the idea of atypicality as a universal creative strategy to improve advertising effectiveness. Although we observe the benefits of atypical ads, we also find that their effectiveness crucially depends on their ability to retain the consumer's attention. Typical ads, in contrast, do not require such sustained attention in order to develop positive ad evaluations and memory traces for the ad and brand. Moreover, we argue for careful consideration of the type of typicality, since typical-other ads failed on almost all accounts in the present research. We believe that the proposed theory and methodology are applicable to other situations where initial feelings may be rapidly updated, and point to repeated ad exposures as a relevant area of future research.

REFERENCES

- Bransford, John D. and Marcia K. Johnson (1972), "Contextual Prerequisites for Understanding: Some Investigations of Comprehension and Recall," *Journal of Verbal Learning and Verbal Behavior*, 11, 717-726.
- Donders, F.C. (1868), "On the Speed of Mental Processes," *Acta Psychologica: Attention and Performance*, 30, 412-431.
- Goodman, Gail S. (1980), "Picture Memory: How the Action Schema Affects Retention," *Cognitive Psychology*, 12, 473-495.

- Heckler, Susan E. and Terry L. Childers (1992), "The Role of Expectancy and Relevancy in Memory for Verbal and Visual Information: What is Incongruity?" *Journal of Consumer Research*, 18 (March), 475-92.
- Loewenstein, George (1994), "The Psychology of Curiosity: A Review and Reinterpretation," *Psychological Bulletin*, 116 (1), 75-98.
- Loftus, Geoffrey R. and Susan M. Bell (1975), "Two Types of Information in Picture Memory," *Journal of Experimental Psychology: Human Learning and Memory*, 104 (2), 103-113.
- Loken, Barbara and James Ward (1990), "Alternative Approaches to Understanding the Determinants of Typicality," *Journal of Consumer Research*, 17, 111-26.
- Mervis, Carolyn B. and Eleanor Rosch (1981), "Categorization of Natural Objects," *Annual Review of Psychology*, 32, 89-115.
- Meyers-Levy, Joan and Prashant Malaviya (1999), "Consumers' Processing of Persuasive Advertisements: An Integrative Framework of Persuasion Theories," *Journal of Marketing*, 63 (Special Issue), 45-60.
- Pieters, Rik and Michel Wedel (2004), "Attention Capture and Transfer in Advertising: Brand, Pictorial, and Text-Size Effects," *Journal of Marketing*, 68, 36-50.
- _____ (2009), "Gist in a Glance: Determinants of Immediate Advertising Identification," Unpublished manuscript, Tilburg University.
- Roediger, Henry L. and Kathleen B. McDermott (2000), "Distortions of Memory," in Endel Tulving and Fergus I.M. Craik (eds.), *The Oxford Handbook of Memory*, Oxford, UK: Oxford University Press, 149-62.
- Silva, Mariana M., John A. Groeger, and Mark F. Bradshaw, "Attention-Memory Interactions in Scene Perception," *Spatial Vision*, 19 (1), 9-19.
- Smith, Robert E. and Xiaojing Yang (2004), "Toward a General Theory of Creativity in Advertising: Examining the Role of Divergence," *Marketing Theory*, 4 (1/2), 31-58.