

Signs of Change: role of visual information in consumer perception

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INTRODUCTION

The American Marketing Association emphasizes the role of communication as vital in marketing activities. Research on signage encompasses the ways individuals and businesses use this medium in effective communication (Kellaris and Machleit 2016). For many businesses, the most basic function of an on-premise sign is to communicate its location to customers (Auffrey and Hildebrandt 2017). Taylor et al. (2005) note that communication through signs is fundamental and that “next to the human voice, signage is the most available and ubiquitous form of speech” (xv). Most discussion on the research surrounding the use of signage includes an analysis of signage governance and regulations (Jourdan, Hurd, and Hawkins 2013; Chang and Killion 2015; Connolly 2012). When it comes to sign regulation, aesthetics refers to how signs are visually experienced and appreciated within their environmental context by individual viewers, and will vary based on personal tastes, cultural preferences, socioeconomic background, and education (Hein, Ngalamulume, and Robinson 2010). Researchers have long advocated for effective signage graphics as a way to influence consumer perception (Fontaine and Bradbury 2017). The visual experience of signage includes outcomes on consumer inferences that could be apparently straightforward such as the influence of visual depiction of movement on a sense of belonging in the community (Sundar et al. 2018), to more unintuitive findings such as the role and effect of visual disfluency as it increases sensitivity to missing information (Sundar et. al. 2019).

This issue centers on communication effectiveness at the intersection of consumers’ perception and consumers’ experience. Overall, this special issue explores the visual characteristics of signs as it influences evaluations, purchase

intentions, detection of omission, and compliance. Given the timing of this issue, the COVID-19 pandemic unsurprisingly provided a relevant context in which to study consumers' perception of visual information. The global shutdown began as we published our call for papers and researchers collected data. The emergency of the situation turned well-crafted marketing plans into fight-or-flight responses as the situation evolved day-by-day. Businesses faced unprecedented times (as seems to be the established expression).

When it comes to visual communication, ancient examples such as Ostia, Rome's original port town provides vital clues. Ostia, which was inhabited until Late Antiquity before it was abandoned and eventually buried, was a working town, the connection between Rome and the Mediterranean trade networks, and was organized around the Piazzale dei Corporazioni (Ashby 1912). Shipping and trading companies could set up stalls there, in the *mercatus* (from which the word marketing is derived), and sell the goods arriving on their ships. There was an interest in merchants setting up something distinctive to identify themselves. "The merchants from Musluvium trade here" mosaic was a way to identify the stall, but also likely to signal that they dealt in different and maybe more exotic goods than others (Ashby). Signage and Marketing are inexorably linked and have been throughout history. Importantly, the heart of that link is the processing of visual information by consumers. From antique signs to modern forms around us, the way potential consumers perceive and give meaning to information is a central aspect of all signage communication - the topic to which this special issue is devoted.

The literature in this stream has reached some significant milestones since the days of Musluvium signs. Their contribution to understanding signs, shedding light on consumer behavior and consumer perceptions, is still relevant and meaningful to our understanding of signage and constitutes an important foundation for all research on the topic. Recent attempts to deepen our knowledge of signage have brought us closer to understanding the complex ramifications and implications of such a simple form of communication. For example, philanthropists James and Sharon Weinel endowed two chairs at the University of Cincinnati

(James S. Womack / Gemini Corporation Chair of Signage and Visual Marketing at the Lindner College of Business and Terry Fruth / Gemini Chair of Signage Design and Community Planning at the College of Design, Art, Architecture, and Planning), which have successfully fostered research around the theme or signs and signage. A National Signage Research and Education Conferences (NSREC), held annually from 2010 to 2015, also advanced signage research via interdisciplinary presentations and the publication of proceeding papers that became an archived knowledge base.

The first presentation of signage research at the national American Marketing Association meeting was in 2010, "Marketing Students' Attitudes Towards and Beliefs About Commercial Signage" by James Kellaris. In 2015 the first publication of a signage paper in a major academic marketing journal, "A sign of things to come: Behavioral change through dynamic iconography" by Cian, Krishna, and Elder (2015) occurred. Establishing the Academic Advisory Council for Signage Research and Education (AACSRE) in 2014 was another milestone, as it is the professional organization that launched this journal in 2016 and continues to sponsor. Signage and wayfinding are ubiquitous, and our understanding of a seemingly simple tool of communication consistently provides additional research avenues to improve efficiency and capture impact on elaborate outcomes. For example, in the context of places where people must rely heavily on signs, it is interesting to observe the nature of incremental change (Symonds 2017).

The present issue aims at further uncovering the puzzle that signage represents. This special issue considers the crucial theme of consumer visual information processing from multiple angles and disciplinary perspectives: (1) considering fundamental properties of signs regarding their features, content, complexity, and fluency (McNeish 2020; Wu et al. 2020; Knuth, Behe, and Huddleston 2020; Isaac 2020) (2) integrating the importance of the source of aspects of the message (Isaac) and (3) considering the broader context of signage use and its implications for information processing and heuristic processing (Kellaris, Machleit, and Gaffney 2020; Isaac). The focus on consumer perception is a fruitful avenue to contribute to the

signage literature as a whole. For instance, using the conceptual model of signage as a marketing communication proposed by Kellaris and Machleit (2016) as a framework, the papers presented here explore and contribute to our understanding of antecedents such as the characteristics of signs themselves; situational process of evaluation under mortality salience, and the potential role of cognitive load on a variety of outcomes such as compliance, likeliness to buy, or improved decisions (Kellaris, Machleit, and Gaffney; Knuth, Behe, and Huddleston; and Wu et al.).

The COVID-19 pandemic provided a timely event in which to study consumers' perception of visual information. The history of hazard warnings and signage is documented from as early as 1686 (Platt 2014). Our knowledge of the use and effectiveness of hazard signage typically rests on established systems with clear norms and codes (*see* Espiner 1999; Charlton 2006). The specific context of the pandemic, as leveraged by several of the contributors, extends the theoretical contribution to meaningful and concrete implications. Kellaris, Machleit, and Gaffney (2020) present a series of messages tied to safety measures required by social distancing. McNeish (2020) gathered evidence from business signs during Toronto's lockdown. Both articles contribute to our understanding of delivering immediate and information-based signs and to the literature from a different angle to hazard signage. While dealing with a situation that is inherently improvisational (contrary to most of the research on hazard signage), both in the characteristics of the message and its communication form, the fundamental elements of framing and efficiency remain.

Signage effectiveness ties into some fundamental questions of visual processing. Knuth, Behe, and Huddleston (2020) consider the amount of information presented on signs and provide insight on the delicate balance between a sign's attractiveness and its complexity. As the amount of information on a sign increases, so does its complexity; however, a certain threshold must be reached for the sign to contain enough information to be helpful. The authors observe this impact directly by recording the perceptual process and sign complexity level using eye tracking data. They develop prescriptive guidelines by observing the impact of sign complexity on consumers' likeliness to buy. Isaac's (2020) article contributes to the dialectic between sign complexity and clarity. A business' sign may contain information that comes from third-party sources in the form of an accolade or honor. Communicating about the source of the accolade increases complexity, so it is important to understand if such information is beneficial to the consumer. Isaac's research shows that attribution of an accolade claim increases the perceived credibility of the organization and provides evidence that source attribution in accolade claims has a positive impact on evaluations. This holds true in the context of physical signage when consumers are likely to be engaged in heuristic processing.

Wu et al.'s (2020) findings also tie into the role of complexity. They do not vary the amount of information on a sign, but instead alter the ease or difficulty that information can be perceived by changing the lettering and contrast of

the message and the background. In the context of research on the effects of perceptual information, this article shows that the impact of this perceptual fluency depends on the amount of time consumers have to process information (*see* Sundar et al. 2018). Taken together, the results of these papers provide interesting perspectives on the constitutive elements of signs: amount of information, lettering, background contrast. They also represent a range of signage communication outcomes, such as purchase and compliance intentions, as well as downstream reactions to new information.

Exploring further some of these fundamental questions of visual processing and sign effectiveness, Kellaris, Machleit, and Gaffney (2020) did not vary the amount of information or the difficulty to process it, but consider other essential characteristics of the message, such as framing a request as a demand or using rhyming language. They considered the way those interact with other elements on the sign or affect consumers outside of the sign itself (mortality cues). The interaction between the characteristics of the message and the state of anxiety of consumers leads to varying levels of compliance. Generally the papers in this issue provide a better understanding of the appropriate content and messaging that should be included in a sign by considering a sign's features as well as how they interact with the consumer's immediate situation and how broader contexts influence their evaluation. Each helps uncover a bit more of the fundamental mechanisms at play in sign communication and consumers' perception. The pandemic changed consumers' state of mind as they receive this information. It rapidly, radically, and universally changed out environments. In that context, Kellaris, Machleit, and Gaffney consider how mortality salience was heightened by the pandemic, impacted consumers' affect towards signs and ultimately their compliance with the message. They provide valuable insight into how messages should be communicated in emergency situations.

When modern technologies are unavailable to deliver adaptive and timely information and circumstances limit preparation time, retailers sometimes must rely on simple handwritten signs on doors and windows. McNeish (2020) observes that retailers will use a variety

of fast response techniques to immediately shape and guide consumer behavior in the face of changing conditions. They provide observations on how rapid response signs vary around the availability of time, business capabilities, and business size. Differences in sign type, size, and the front used connects to the importance of the sign features investigated by Knuth, Behe, and Huddleston (2020) and Wu et al. (2020). McNeish provides a fascinating account as they bear witness to Toronto shutting down and businesses having to communicate with potential consumers from a distance. From the sudden stop of business activity to new rules being communicated as they were being developed, signs were a necessary emergency communication channel. Consumers' response, however, is conditioned by more than the nature of the signs and the information they deliver.

We are pleased to offer this special issue on effective signage communication. We hope readers will find theoretical advances, empirical findings that can be used to inform evidence-based decisions, and a multitude of interesting ideas for future research.

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