Exploring Vernacular Signage Along America's Legacy Roadscapes: A Field Report of Ongoing Research

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INTRODUCTION AND OVERVIEW

In 2004, John Jakle, a professor of geography and landscape architecture at the University of Illinois at Urbana-Champaign and Keith Sculle, the head of research and education for the Illinois Historic Preservation Agency published Signs in America's Auto Age: Signatures of Landscape and Place (Jackle & Sculle, 2004). As the authors note, signs "orient, inform, persuade, and regulate" (xvii), and as such, "give meaning to our natural and human-built environment, to landscape and place" (xvii). For those interested in how the design, placement, and context of on-premise signs both affect the visual communication effectiveness of the signs (Auffrey & Hildebrandt, 2017), and the signs' impact on creating a sense of place (Rahman & Mehta, 2020), the book offers an expansive examination of "how we take meaning" from signs and assign meaning to their locations (xx). As such, this work is foundational in its depiction of how signs contribute "meaning to our surroundings—the ways we 'read' landscape" (xvii). Yet even more, for contemporary signage researchers, Jakle and Sculle's work provides a useful historical perspective for understanding how on-premise signs have evolved in response to changing social and environmental contexts as they are used to orient, inform, and persuade. Indeed, it is the basis of our ongoing work that this historical perspective provides important lessons for understanding and informing the design, placement, and regulation of contemporary on-premise signage.

Abstract /

The context in which a sign is displayed and viewed, reflecting the surrounding natural, built and socio-cultural environments in which it is placed, is essen-tial for how well a sign is able to perform its intended visual communication function to orient, inform, persuade, and/or regulate. To this end, signage research must give appropriate attention to contex-tual factors, especially along highways where natural, built, and socio-cultural environments may continually change. This field report describes efforts to document and assess vernacular signage found along America's legacy highways. Vernacular signs include a range of contextually designed and placed displays, usually connect to unique local businesses. The focus here is on how vernacular signs respond to contextual factors and often control their own contexts, and as such provide insight to the design, placement, and regulation of contemporary signs of all types.

Keywords /

vernacular signage; contextual factors; legacy highways

PREVIOUS RESEARCH

It was in this context that signage researchers from the University of Cincinnati with backgrounds in community development and urban and regional planning, and architecture and design set out in 2012, to document the design, placement, and context of on-premise signs along some of America's most venerable legacy roadscapes: US 50 from Ocean City, MD to Sacramento, CA; US 61 from New Orleans to the Minnesota Canadian border; and historic US Route 66, from Chicago to the Santa Monica pier. Other trips were made to places recovering from natural disasters to observe signage replacement (post-tornado recovery in Joplin, MO and Greenfield, KS), and those experiencing expanded use of signs associated with very different types of rapid economic expansion (Williston, ND and Branson, MO). Over the past nine years, the researchers have driven more than 12,000 miles and collected over 20,000 photos, taught three graduate seminars focused on signage research using visual attention and eye-tracking technology, presented and published numerous academic papers, and curated a university gallery exhibit. Currently a book manuscript based on this work is under preparation.

FUTURE RESEARCH

This field report describes on-going efforts to explore the use and impact of America's on-premise signage from a contextual perspective rooted in historical sociocultural understandings. This research has focused on "vernacular signage" along "legacy highways." Vernacular signage has been defined in various ways by numerous researchers and is often associated with vernacular architecture (VAF, 2021) and even vernacular landscapes (Jackson, 1986). This work has adapted a definition by designer Angela Voulangas who considers vernacular signage to be "local, site-specific, handmade or hand-crafted messages" (Voulangas, 2010). For our purposes the definition has been expanded to go beyond "one offs" to include a broad range of contextually designed and placed displays intended to reflect unique local establishments or organizations. For signage research, what is important is how the study of vernacular signs provides insights to the de-sign, placement, and regulation of contemporary signs. This insight is particularly important for understanding how past, present, and future signs orient, inform, persuade, and regulate.

The positioning of this research along America's legacy "roadscapes" is considered equally important to its focus on vernacular signs. The term "legacy" as used here refers to those older two-lane US highways, many built in the 1920s, 30s, and 40s, and that are not part of the Interstate highway system. Interstate highways are highly regulated spaces that have been designed and located to facilitate the rapid movement of large numbers of vehicles and volumes of cargo between and within major metropolitan areas. Given the different role Inter-



Figure 1/

Donut Shop, along US 61, Natchez, MS, 2013.



Figure 2/

Bo-Mac's along US 50, Shoals, IN, 2012.

state highways, research related to the design, placement, and regulation of signs along Interstate highways raises somewhat different questions whose answers may have limited implications for signage in different contexts. Conversely, the many existing segments of the "United States Numbered Highway System"—often called US Routes or US Highways—continue to provide links between major cities. Sometimes these highways are re-routed and rebuilt as multi-lane freeways, but frequently they continue to serve as main streets through the business and government centers of the many small and medium-size cities, towns and villages that dot the American landscape (Weingroff 2019). The term "roadscape"



Figure 3/

Yard Dog and Maya off US 290, Austin, TX, 2013



Figure 4/

Ocean Gallery off US 50, Ocean City, MD, 2013.

reflects the combination of roadways and landscapes and is intentionally used here in a specific way: encompassing all the visible features that are part of the natural and built environments of an area along a roadway including animate and inanimate objects. Like landscapes, roadscapes are often experientially interpreted in terms of both their functional and aesthetic appeal based on sign viewers socio-cultural conditioning (Jackson, 1984).

With respect to signage research, it is understood that the signs along a particular roadscape, like language and literature, take on meaning based on the physical and socio-cultural character in which they are experienced (Sinha 2015). In the case of highway signs, it is the physical and socio-cultural character of the surrounding roadscape that affect how the message, design, and placement of signs are able to orient, inform, persuade, and regulate.



Figure 5/

Visual Clutter Context, along US Route 66, Joplin, MO, 2014.



Figure 6/

Flavors Drive Thru, along US 50, Aurora, IN, 2012.



Figure 7/

Days Inn and Mobil, along I-40, Arizona, 2018. Based on extensive highway signage research and travel over the past eight years, there is clear evidence that the roadscapes along legacy US highways generally offer greater variety of both physical and socio-cultural context and vernacular signage than do the roadscapes along the Interstate highway system, or state highways or local roads.

RESEARCH METHODS

This ongoing collection of images of vernacular signs along America's legacy highways is both a continuation and expansion of a long-term signage research agenda and seeks to build on the success of previous highway signage research. Indeed, a significant part of this current research is to design an enhanced research methodology so as to more broadly assess the communication effectiveness of on-premise road signs so the resultant understandings might better inform sign design, placement, and regulation. The researchers' previous work had focused on understanding how signs garner visual attention by means of analyzing photos of "in situ" on-premise road signs using both static image analysis (3M, 2017) and dynamic eye-tracking technologies (Tobii, 2019). Fundamental to this research was an effort to understand how the visibility, conspicuity and legibility of road signs are impacted by real-world contextual features of surrounding landscapes (i.e. natural and built environment features) in fulfilling the basic functions of signs to orient, inform, persuade, and regulate (Bullough, 2017; Jackle & Sculle, 2004).

As an expansion of that prior research design, new and existing methodologies can and should be adapted to facilitate a more advanced assessment of the other known and yet to be identified unknown factors influencing how signs orient, inform, persuade, and regulate. Visual attention analysis software has been useful for assessing



Figure 8 /
Example of Visual Attention
Software Analysis, 2016

how sign design and placement capture viewer attention within a single perspective or viewshed as captured by a camera in a discreet moment in time (3M, 2017). When used appropriately, and the results interpreted within the limitations of the visual field captured in an analyzed image, such software can be a useful, easy to use, and inexpensive signage research tool (Auffrey & Hildebrandt, 2017). However, its major limitation is that it may miss important contextual elements that are visible to real-world sign viewers but have been excluded from the analyzed images. This may be especially problematic for highway signage research given how the valid sign images must necessarily be collected from a moving vehicle in a highway travel lane. Partially in response to the limitation of visual analysis software, recent wayfinding research has used more advanced eye-tracking technology to dynamically assess how subjects' visual attention is captured by directional signage as they move through signage environments (Tang, 2018). Other research has adapted eyetracking technology for assessing pedestrians experience of on-premise signs in shopping districts (Knuth, Behe & Huddleston, 2020). Current research at the University of Cincinnati is focused on adapting the eye-tracking technology for highway sign research (Hildebrandt & Auffrey, 2020).

Other research methods for highway sign research may include tools such as visual preference surveys (VPS) for obtaining viewer feedback on signage design alternatives based on photos with full context (Nelessen, 2021). VPS have been used in urban and regional planning research to assess impacts of zoning changes and preferences for development alternatives, and conceptually the methods have promise for signage research as well (Ewing, 2019). Specifically, VPS methods may allow more rigorous assessment of how signs with different designs and contextual placements orient, inform, persuade, and regulate different groups of viewers. Further, VPS methods might be adapted to identify if and when vernacular signage, either separate from or in combination with vernacular architecture, provides an advantage for certain types of visual communication messages.

Finally, any discussion of the development of advanced research methods for the assessment of on-premise highway signs must address the need for a signage image source with consistent, valid and reliable data. In this regard, it is hoped that an outcome of the current highway signage research, and perhaps more realistically an aspirational component of a future research process will be the creation of just such a permanent, searchable digital archive of still and video images of on-premise signage. Such an archive would be made available to researchers throughout the world via the internet, and made searchable by date, type, technology, location, context, purpose, size, and other yet undetermined characteristics. Technical issues of format, perspective, and quality will need to be standardized and classified. Given its open-source nature, care will be needed for the determination and maintenance of accurate authorship and other sourcing information. Of course, appropriate digital security will be required to avoid loss or corruption of images (Gosal & Ziv, 2020).

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