Thematic and Design Paradigms in Minnesota’s Official Highway Maps, 1936-2018

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INTRODUCTION

Since the mid-1930s, highway maps distributed by the State of Minnesota have become more detailed and comprehensive while integrating themes that reflect aspects of the state’s diverse economic activities. This study identifies the themes emphasized in Minnesota highway maps, how they have changed over the past century, and how technological advancements in map production have influenced the cartographic elements employed in their design.

LITERATURE REVIEW

Feminist geography focuses on representation and the inequalities within them, as well as the emotions that come with these representations. Because of the general disconnect between researchers and their subjects, mapping has always exhibited a masculine tone (McLafferty 2005). Feminist theory focuses on inequalities of race, ethnicity, class, sexual orientation, and more in order to create representations of how these marginalized groups experience the world and how power structures in society shape those experiences (D’Ignazio and Klein 2016).

The process of creating state maps has been virtually the same since their inception, save for a transition to digital production when it became relevant. States have taken advantage of the maps as promotional tools for the interests of the state (Akerman and Block 2005). Within these promotions, there are three dominant cultures: the culture of transportation and modernization, the culture of promotion, and the culture of domination (Bockenhauer 1994). All of these cultures can be seen throughout the years in the Minnesota state highway map.

METHODS

CONTENT ANALYSIS

Content analysis is a research technique that utilizes qualitative and quantitative methods to analyze words, phrases, or photographs in a text in a replicable and valid manner (Rose 2001). The goal of this research method is to understand the symbolic qualities of texts or imagery and the way that elements within them symbolize aspects of culture, from the policies of social institutions to the values of individuals.

Numerous aspects of the visual elements on the maps were coded as a part of the manifest analysis phase of the research. Categories used to classify the imagery included themes relating to natural amenities, urban amenities, a mix of each, economic activities, or transportation. Imagery was also assessed for its relative and absolute location (i.e., urban or rural; Mississippi River headwaters, Minneapolis, etc.), seasons represented, land cover, and characteristics of people in photos (age, race, sex, etc.).

RESULTS AND DISCUSSION

MAPS SELECTED FOR ANALYSIS

<table>
<thead>
<tr>
<th>Year of Publication</th>
<th>Predominant Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1936</td>
<td>Natural amenities</td>
</tr>
<tr>
<td>1942</td>
<td>Nationalism during WW2</td>
</tr>
<tr>
<td>1949</td>
<td>Road networks and marketing the Midwest</td>
</tr>
<tr>
<td>1960</td>
<td>Road networks and marketing the Midwest</td>
</tr>
<tr>
<td>1965</td>
<td>Interstate highway system</td>
</tr>
<tr>
<td>1970</td>
<td>Interstate highway system</td>
</tr>
<tr>
<td>1979-1980</td>
<td>Urban amenities</td>
</tr>
<tr>
<td>1989-1990</td>
<td>Urban amenities</td>
</tr>
<tr>
<td>1999-2000</td>
<td>Natural amenities</td>
</tr>
<tr>
<td>2000-2010</td>
<td>Natural amenities</td>
</tr>
<tr>
<td>2011-2018</td>
<td>Natural amenities</td>
</tr>
</tbody>
</table>

The back side of the 1936 edition of Minnesota’s highway map includes a photo of women reclining lakeside, presumably at a rustic Northwoods lakeside cabin – the quintessential post-war amenity for the suburban Blue and white collar worker. Similar photos promote active pursuits for men and passive activities for women.

The Minnesota State Seal, which is included in each edition of the state’s official highway map (1949 edition pictured here), is full of symbolism that commemorates the conquest of the state’s lands by white colonizers.

The back side of the 1936 edition of the Minnesota highway map emphasizes the state’s outdoor amenities.

ENVIRONMENTAL THEMES

Nature’s representation in Minnesota state highway maps has fluctuated over the years, being the focus of the map in one decade and pushed aside in favor of infrastructure the next. This fluctuation represents changing focus of the Minnesota Department of Tourism as well as societal ideals in general changing throughout the decades.

FEMINIST THEMES

Feminist theory focuses on the representation of people and their experiences, emphasizing social power structures associated with each. In the decades involved in this study, the representation of women and people of color has fluctuated while there has been no representation of the LGBTQIA+ community or people with disabilities. Feminist analysis reveals representation reflective of the social problems associated with the decades in which these maps were produced. Inclusive representation may start with those who create the maps, and diverse cartographers may bring in diverse perspectives to the creative cartographic process.

RACIAL THEMES

Photos promoting the state’s natural and scenic amenities in maps between 1936 and 2018 rarely included people of color (92.7% of people in promotional photos included in the maps analyzed were white), but editions published after 1989 more consistently include people of color than previous years. The state seal, which includes an Indigenous man who is passing by a white homesteader on horseback, is included in each edition of the highway map (Figure 3). The historical moment that the state seal captures is revealing, as it commemorates the dispossession of Indigenous lands and the act of colonizing the white frontier.

CONCLUSIONS

Over the past century, the maps have revealed several thematic paradigms in content: a focus on “Up North” tourism during the 1930s, a focus on wilderness-related tourism during the 1960s and into 1970s, when new interstate and highway systems were emphasized, and a shift in emphasis towards the state’s urban cultural amenities from the late 1980s to the present. Recent scholarship in feminist cartography informed a critical latent analysis of the sampled maps highlighted a relatively equitable inclusion of women but revealed problematic representations of Indigenous peoples, people of color, and other classically underrepresented groups. Considering the current print/digital navigation crossroads in society, we suggest that paper highway maps still meet the needs of their users and have the potential to be more inclusive in their design and thematic content.

LIMITATIONS

Our content analysis consisted of ten (computer scanned) maps, rather than the 50+ in the Minnesota Official State Highway Map archive. Our content analysis was performed three times, by three different people to ensure uniformity in responses. However, involving perspectives of a variety of people would likely have brought different patterns and themes to light.

ACKNOWLEDGMENTS

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SOURCES

Akerman, James R. and Daniel Block. 2005. The Shifting Agendas of Midwestern Tourist Regions of MN. Tourist regions of MN, emphasis on modern nationalism, and outdoor recreation. Patriosm during World War, depiction of colonizing traditions, inclusions were also assessed for its relative and absolute location (i.e., urban or rural; Mississippi River headwaters, Minneapolis, etc.), seasons represented, land cover, and characteristics of people in photos (age, race, sex, etc.).

The back side of the 1936-90 Minnesota highway map emphasizes the state’s cultural amenities.

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