Visualizing Environmental Racism to Raise Public Awareness

Maryam Mahdavian, University of Calgary, maryam.mahdavian@ucalgary.ca

Abstract: This research project highlights the vital role of visualization in disseminating research findings on environmental racism as an interdisciplinary issue that brings together diverse fields such as environmental studies, critical race studies, and public health. Since increasing access to research on environmental racism is essential for raising public awareness, this project translates articles on this topic into cartoons, proposing this form of visual art as an effective medium for communicating research findings to a wider audience.

Knowledge visualization has become increasingly important in the academic realm. It not only helps the audience understand research findings and concepts but also fosters new interpretations. Furthermore, knowledge visualization increases accessibility and engagement, playing a crucial role in the success of knowledge dissemination. In this regard, integrating arts into research is a strategy for enhancing knowledge translation and dissemination of findings. Morris and Paris (2022) argue that art-based knowledge translation can be effective because it promotes accessibility, fosters dialogue, and stimulates sensory and emotional responses (Morris and Paris). They state that when research topics are complex, experiential, and not easily expressed in words, art can translate and communicate research findings even beyond academic circles by using various forms of representation and symbolism.

Using art to enhance research accessibility and public engagement in research findings is particularly important when the research revolves around critical social and environmental issues. Because these topics directly impact everyday lives and addressing them requires collective action. Arts-based translation of research provides opportunities for reflection and ongoing dialogue between researchers and audiences as well as evoking emotional responses (Morris & Paris, 2022), which all are vital for change.

One powerful visualization method, yet underrepresented in the translation and dissemination of critical research, is cartoons. Visually representing research findings through cartoons and comics can play a crucial role in enhancing understanding and engagement with research outcomes, as well as improving the potential for research to promote social change and influence public policy (Bartlett, 2012; Priego, 2016).

This project uses cartoons to illustrate the important issue of environmental racism, which refers to the disproportionate exposure of equity-deserving groups—such as low-income, Black, Indigenous, and other People of Color communities—to environmental hazards as well as their unequal access to environmental benefits (Henderson & Wells, 2020). Considering various articles on environmental racism and injustice, this project translates their main concepts, messages, and findings into cartoons. Examples of topics discussed in these articles and translated so far include the effects of colonialism on natural resources and the impoverishment of local communities (Munyai, 2020); the disproportionate exposure of immigrant women to health risks during the pandemic (Small et al, 2024)); and disparities in water access and quality due to socioeconomic status, race, and ethnicity (Switzer & Teodoro, 2017).

This project ultimately aims to display these cartoons in exhibitions, as a space for public pedagogy and dialogue on critical issues (Clover, 2021). This strengthens the collaboration between universities and art galleries.

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