Title: Using immersive planning tools to reimagine virtual libraries

Authors: Richard Yanaky ¹², Catherine Guastavino ¹²

Abstract:

Immersive technologies (e.g., Virtual Reality) can both reproduce existing spaces or help bring imagination to life. When considered in relation to the needs of the users, these technologies can facilitate rewarding experiences that encourage repeated usage. However, poorly motivated experiences may result in expensive mistakes. One rewarding experience has been through the creation of immersive sound planning tools to help Professionals of the Built Environment (e.g. urban planners and designers) consider sound in their work (Yanaky et al., 2023).

Using a user-centered design process, we developed a Virtual Reality planning tool, *City Ditty*. A first evaluation indicated that users, regardless of their experience, could complete both a sound-awareness learning phase *and* implement their own soundscape designs in under an hour. Feedback was positive, suggesting value for its use in public consultations and participatory approaches towards creating healthier, inclusive, and sustainable communities.

Could City Ditty be used to help rethink and prototype new forms of virtual libraries? Libraries host a wealth of information and contribute community space. They also act as community hubs for classes, games, storytelling, community events, etc. Yet, digitally reproducing a navigable 3D library space without consideration for the medium will reproduce the inconveniences of existing spaces, while failing to take advantage of the new medium.

Could similar methodologies help engage library users to conceptualize together the future of virtual libraries? How might different users want to utilize immersive virtual libraries? We place this discussion in the context of a hype cycle for emerging technologies to understand potential timelines for change.

Yanaky, R., Tyler, D., & Guastavino, C. (2023). City Ditty: An Immersive Soundscape Sketchpad for Professionals of the Built Environment. *Applied Sciences*, *13*(3), 1611. https://doi.org/10.3390/app13031611

¹ Multimodal Interaction Lab, School of Information Studies, McGill University

² Centre for Interdisciplinary Research in Music Media and Technology