Connecting Two Oakland Neighborhoods: Surveillance and Self-Representation

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Abstract

A Hole in Space (Oakland Redux), by Maya Gurantz and Ellen Sebastian Chang, connected sidewalks in two Oakland neighborhoods with a life-size webcam connection for a week. Passerby-participants' interactions with each other and reactions to the installation reveal differing concerns about surveillance and authority in these socieoeconomically disparate neighborhoods. As a networked technological intervention aimed at fostering connection, this public internet-of-things piece surfaces the importance of accounting for indirect and direct stakeholder values and the need to enable self-representation in interconnected systems.



Figure 1: In San Antonio, a man sees a Rockridge bookstore.

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Introduction

For a week in January, A Hole in Space (Oakland Redux) set up a nightly Skype-like connection between sidewalks in the San Antonio and Rockridge neighborhoods [8]. On approximately 3m by 1m screens in the windows of the Youth Employment Partnership (YEP) in San Antonio and Cole Hardware in Rockridge, passerby became participants seeing, hearing, and being seen and heard by those on another street. Though both in Oakland and about 8km apart, there is a great socioeconomic distance between these neighborhoods. An example of the rapid gentrification creating tensions in the Bay Area of California, the median household income of mostly white Rockridge is about three times that of mostly black and Latino San Antonio [2].

Upon encountering the installation, sometimes participants watched, waved, and chatted with people on the other side. A Rockridge delivery man waiting for his shift to end recognized the San Antonio view of International Boulevard and remarked that he grew up over there [2]. Leaving YEP, young people would gather around the screen to try and catch the attention of Rockridge passerby [11]. After a group of young people finished chatting with a Rockridge man, a young boy who who had been leaning on a lamp post nearby came into the center of view and danced with no one on the other side [7]. However, for the most part, people glanced at it and kept walking.

Though the project sought to connect two communities, it highlighted their differences and sheds light on complications around "smart" connected technologies in the urban environment. By examining stakeholder perspectives, this paper seeks to elicit design considerations for urban IoT.

Stakeholders

Artists Ellen Sebastian Chang and Maya Gurantz both have a history in the Bay Area. Sebastian Chang has worked on numerous plays in the Bay Area [1], co-owns a restaurant in West Oakland [3], and lives in Oakland [7]. Gurantz is currently an LA-based visual artist who used to run the Bay Area performance group Temescal Labs [6, 7]. Both were inspired by the 1980 Hole in Space [5], which connected Los Angeles and New York. Though press coverage by The Atlantic's CityLab, local art review Eat Drink Films, and local newspaper East Bay Express framed the piece around bridging divides and connecting rich and poor neighborhoods, the intent of the piece is not consistently represented. Sebastian Chang said to Eat Drink Films, "My greatest fantasy of this piece is that two people that normally wouldn't talk to each other would enjoy the interaction so much that they'd say, 'Are you walking by here tomorrow night? 'Cause I am, and I'll wait for you. Let's talk." However, in an interview with me, Gurantz said that she had no specific goals for what would come out of the piece, that she wanted to install it and see what would happen. When I mentioned how she described it to Eat Drink Films as, "The river is flowing and you put a rock in it," she confirmed that she liked what she had said there [11, 7].

In Rockridge, some residents complained about the noise of the installation. One man threatened to shut down the project if they did not reduce the volume [2].

San Antonio residents' concerns about police surveillance were not unanticipated. "As low-income black people, we feel surveilled and scrutinized all the time," said artist Sebastian Chang. "...Everybody in East Oakland, the first thing out of their mouths was, 'Are the police looking at this?' " [2]. A member of the San Antonio host

organization was concerned that police would subpoena the video footage. In response to hearing the basic premise of the project, one teenager said, "So you're spying... If you're watching someone, you categorize them. It's stereotyping." [11]. One young woman told Sebastian Chang she was upset that the screens would show the sex trafficking on International Boulevard [2].

As for myself, I am interested in questioning common narratives and implicit values around IoT such as efficiency, convenience, and connectedness. Having grown up in a village amidst the delight and difficulties of tight community, projects that address neighborhood identity and inter-neighborhood relationships resonate with me.

Discussion

Residents' concerns reveal strikingly different attitudes about surveillance and authority. In the act of surveillance, police exert their power to watch and potentially convict residents of crimes. Though some might view surveillance as protection against crime-committing others, San Antonio residents seemed to consider it negative for themselves as well. By contrast, the Rockridge resident who threatened to shut the project down if the volume was not reduced considered himself in a position of power to stop the project.

The issues of stereotyping and visibility of sex trafficking raised by San Antonio residents suggest concerns about how individuals and the community will be perceived by Rockridge. Maybe sex trafficking would move down the street out of view, or maybe not. This young woman does not want her neighborhood to be represented to outsiders in this way, but she can't stop it. Walking by in view of the camera, San Antonio residents experienced potential stereotyping by Rockridge viewers. Residents were

exposed to persistent watching by outsiders which they could not control, a possible invasion of privacy in a public space with issues similar to those discussed around A Room with a View [4]. These concerns arose with the design even though Sebastian Chang identifies with personally feeling surveilled [12].

Press coverage framed the piece around fostering connection between two neighborhoods [11, 2, 3]. In this regard the project had mixed results. However, it is not clear that simply fostering connection was really the intent. Artist Gurantz said that at some point she and Sebastian Chang realized they were using particular language about the project in order to appeal to grant-giving organizations [7]. The framing of bridging divides between rich and poor neighborhoods may have been part of this, piggybacking on narratives about using technology to overcome inequality and support social connectivity. This framing has hints of technological determinism that run contrary to their focus on discovery and mutual acknowledgment [7].

The technological structure imposed certain restrictions. The piece was only active from 5:30pm - 11:00pm, when it was dark enough to see the screens. Social interactions are different at night, involving more fear of crime and less willingness to chat. Adaptations such as a sun shade or a brighter projector might have allowed for daytime screening. Also, continuing the connection throughout the night might have caught interesting interactions.

Design Considerations

Even if a designer strongly identifies with a particular issue, stakeholders should be consulted directly through a variety of methods [4]. In this case the artists anticipated concerns about surveillance but were surprised by the

strength of those concerns. As more sensors are embedded in the built urban environment for "smart" cities, concerns about surveillance may continue to rise.

Especially in public IoT, sensor choice is not neutral, and considerations of self-representation are essential. As explored in a public deployment of air quality sensors, sensors carry political implications [10]. The choice of video camera "sensors" in this project carried implications of police surveillance for San Antonio residents. Using only video and audio did not allow participants to influence what was shown or provide any commentary. Public IoT should not default to sensor measurements, but instead try to enable participants' self-representation. For example, Koeman's inter-neighborhood surveys and chalk data visualizations showed participants' chosen responses as a means of representation [9].

Finally, it is important to be aware and reflexive about the language used to describe and situate work. These artists became more careful about how their descriptions of their work to particular audiences could make their project seem to be part of another narrative that was not their own.

Conclusion

As the internet of things becomes increasingly embedded in public space, involving a much broader range of participation and indirect stakeholders, design considerations around stakeholder values become more complex and important. In particular, concerns about surveillance may continue to rise. Further, it should be recognized that video, audio, and other sensors carry their own political implications and provide limited representations, and ways in which participants can represent themselves should be considered.

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References

- Biography: Ellen Sebastian Chang. http://www.kitka.org/calendar/ellen-sebastianchang-bio.html.
- [2] Bliss, L. Two Oakland neighborhoods connect through a 'hole in space'. *Atlantic CityLab* (2015).
- [3] Burke, S. Artists create two-way video portal for Oaklanders to meet their neighbors. *East Bay Express* (2015).
- [4] Friedman, B., Kahn, P. H., and Borning, A. *Value Sensitive Design and Information Systems*. M.E. Sharpe, Inc, 2006.
- [5] Galloway, K., and Rabinowitz, S. A hole in space. Los Angeles and New York, 1980.
- [6] Gurantz, M. About. http://mayagurantz.com/about/.
- [7] Gurantz, M., and Howell, N. Interview with Maya Gurantz. Personal Communication, June 2015.
- [8] Gurantz, M., and Sebastian Chang, E. A hole in space (Oakland redux). Oakland, CA, 2015.
- [9] Koeman, L., Kalnikaitė, V., and Rogers, Y. "Everyone is talking about it!": A distributed approach to urban voting technology and visualization. *CHI'15* (2015).
- [10] Kuznetsov, S., Davis, G. N., Cheung, J. C., and Paulos, E. Ceci n'est pas une pipe bombe: Authoring urban landscapes with air quality sensors, 2011.
- [11] Orenstein, N. Site and sight: A hole in space (Oakland redux) opens a window between two neighborhoods. *Eat Drink Films* (2015).
- [12] Sebastian Chang, E., and Howell, N. Interview with Ellen Sebastian Chang. Personal Communication,

June 2015.