Chatty, Happy, and Smelly Maps

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ABSTRACT

Mapping apps are the greatest game-changer for encouraging people to explore the city. You take your phone out and you know immediately where to go. However, the app also assumes there are only a handful of directions to the destination. It has the power to make those handful of directions the definitive direction to that destination.

A few years ago, my research started to focus on understanding how people psychologically experience the city. I used computer science tools to replicate social science experiments at scale, at web scale [4, 5]. I became captivated by the beauty and genius of traditional social science experiments done by Jane Jacobs, Stanley Milgram, Kevin Lynch[1, 2, 3]. The result of that research has been the creation of new maps, maps where one does not only find the shortest path but also the most enjoyable path [6, 9].

We did so by building a new city map weighted for human emotions. On this cartography, one is not only able to see and connect from point A to point B the shortest segments, but one is also able to see the happy path, the beautiful path, the quiet path. In tests, participants found the happy, the beautiful, the quiet paths far more enjoyable than the shortest one, and that just by adding a few minutes to travel time. Participants also recalled how some paths smelled and sounded. So *what if we had a mapping tool that would return the most enjoyable routes based not only on aesthetics but also based on smell and sound?* That is the research question this talk will start to address [7, 8].

Categories and Subject Descriptors

H.4 [**Information Systems Applications**]: Miscellaneous

Keywords

Social Media, Web Science, Urban Informatics

Short Bio

Daniele Quercia is a computer scientist, has been named one of Fortune magazine's 2014 Data All-Stars, and spoke about "happy maps" at TED. He is interested in the relationship between online and offline worlds, and his work has been focusing in the areas of data mining, computational social science, and urban informatics. He was Research Scientist at Yahoo Labs, a Horizon senior researcher at The Computer Laboratory of the University of Cambridge, and Postdoctoral Associate at the Massachusetts Institute of Technology. He received his PhD from UC London. His thesis was sponsored by Microsoft Research Cambridge and was nominated for BCS Best British PhD dissertation in Computer Science.

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