

The Pursuit of Urban Happiness

Daniele Quercia
Yahoo Labs, Barcelona
dquercia@acm.org

ABSTRACT

Cities are attracting considerable research interest. The agenda behind smart cities is popular among computer scientists and engineers: new monitoring technologies promise to allocate urban resources (e.g., electricity, clean water, car traffic) more efficiently and, as such, make our cities ‘smarter’. This talk offers a rare counterpoint to that dominant efficiency-driven narrative. It is about recent research on the relationship between happiness and cities [1]: which urban elements make people happy?

To help answer that question, I built a web game with collaborators at the University of Cambridge in which users are shown ten pairs of urban scenes of London and, for each pair, a user needs to choose which one they consider to be most beautiful, quiet, and happy. Based on user votes, we are able to rank all urban scenes according to these three attributes. We recently analyzed the scenes with ratings using image processing tools [2]. We discovered that the amount of greenery in any given scene is associated with all the three attributes and that cars and fortress-like buildings are associated with sadness (we equated sadness to our measurement for the low end of our ‘spectrum’ of happiness). In contrast, public gardens and Victorian and red brick houses are associated with happiness.

Our results (including those about distinctive and memorable areas [3]) all point in the same direction: urban elements that hinder social interactions are undesirable, while elements that increase interactions are the ones that should be integrated by urban planners to retrofit our cities for happiness.

Now, as a computer scientist, you might wonder: can these findings be used to build better online tools? The answer is a definite ‘Yes’! Existing mapping technologies, for example, return shortest directions. To complement them, we are designing new tools that return directions that are not only short but also tend to make urban walkers happy [4]. Another application comes from the mobile world. In mobile settings, geo-referenced content becomes increasingly important, and content about a neighborhood inherently depends on the way the neighborhood is perceived by people: whether it is, for instance, distinctive and beautiful or not. We are designing an application that identifies memorable city pictures by predicting which neighborhoods tend to be beautiful and which tend to make people happy [5].

Categories and Subject Descriptors

H.4 [Information Systems Applications]: Miscellaneous

Keywords

Social Media, Web Science, Urban Informatics

1. REFERENCES

- [1] C. Montgomery. *Happy City: Transforming Our Lives Through Urban Design*. Farrar, Straus and Giroux, 2013.
- [2] D. Quercia, N. Ohare, and H. Cramer. Aesthetic Capital: What Makes London Look Beautiful, Quiet, and Happy? *Proceedings of ACM CSCW*, 2013.
- [3] D. Quercia, J. P. Pesce, V. Almeida, and J. Crowcroft. Psychological Maps 2.0: A web engagement enterprise starting in London. In *Proceedings of ACM WWW*, 2013.
- [4] D. Quercia, R. Schifanella, and L. M. Aiello. The shortest path to happiness: Recommending beautiful, quiet, and happy routes in the city. *To Appear*, 2014.
- [5] V. Zambaldi, J. P. Pesce, D. Quercia, and V. Almeida. Lightweight Contextual Ranking of City Pictures: Urban Sociology to the Rescue. *To Appear*, 2014.