

27. Juni 2012, TU Dresden

Netzwerk-Landschaften

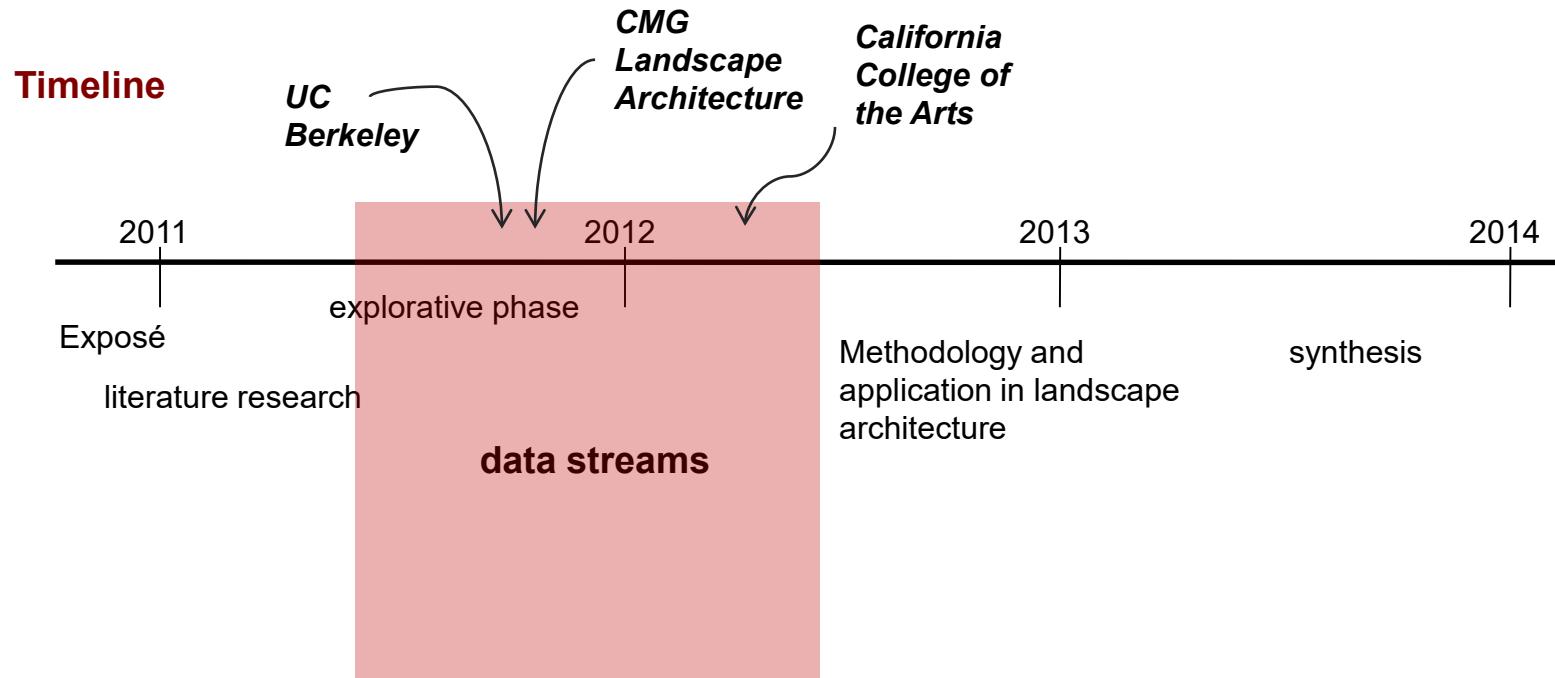
Neue Steuerungsmöglichkeiten für die Landschaftsplanung durch die Nutzung internetbasierter,
internationaler und raumbezogener Datenströme.

Alexander Dunkel

“Network-Landscapes”

Dissertation objectives

- use of virtual, crowd sourced data in planning
- new communication and participation methods through social and locative media

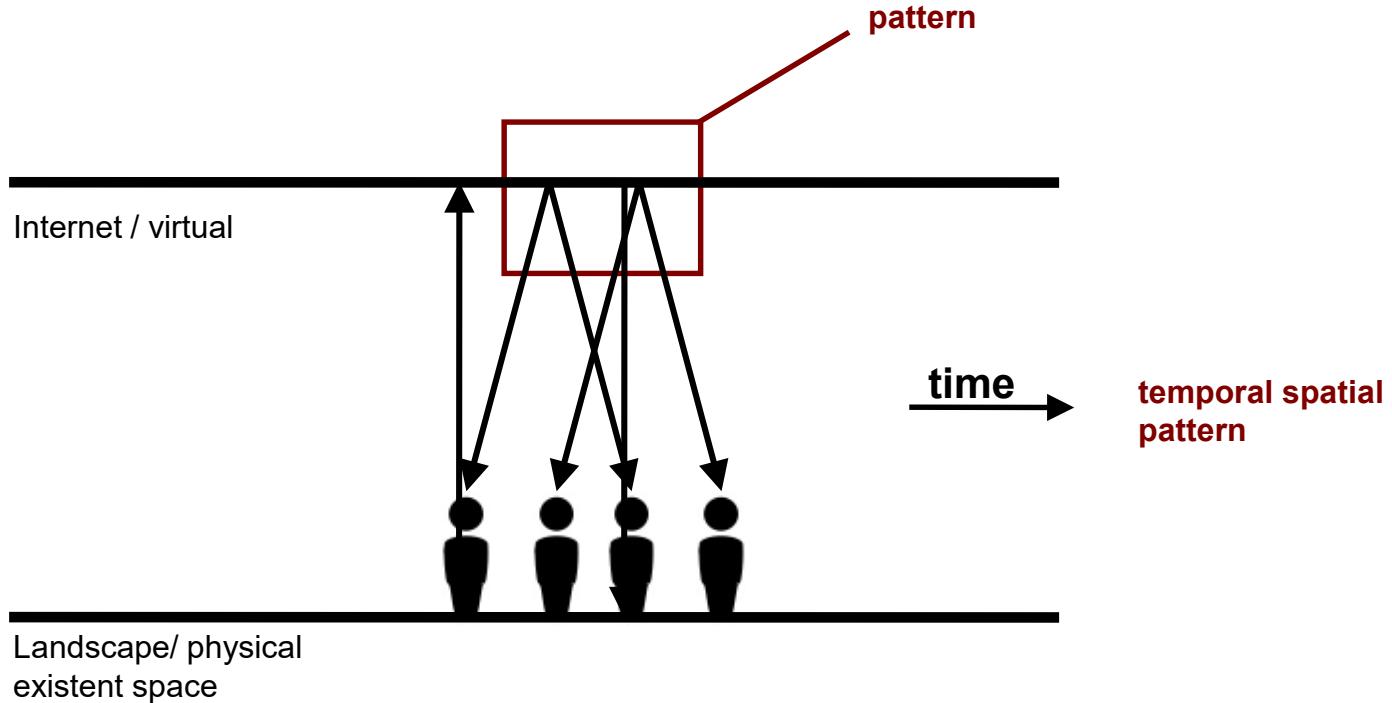


presentation structure

Crowd Sourced Data Streams

- Theoretical background
- RAW Data
- Analysis
- Visualization
- Evaluation
- Issues
- Outlook

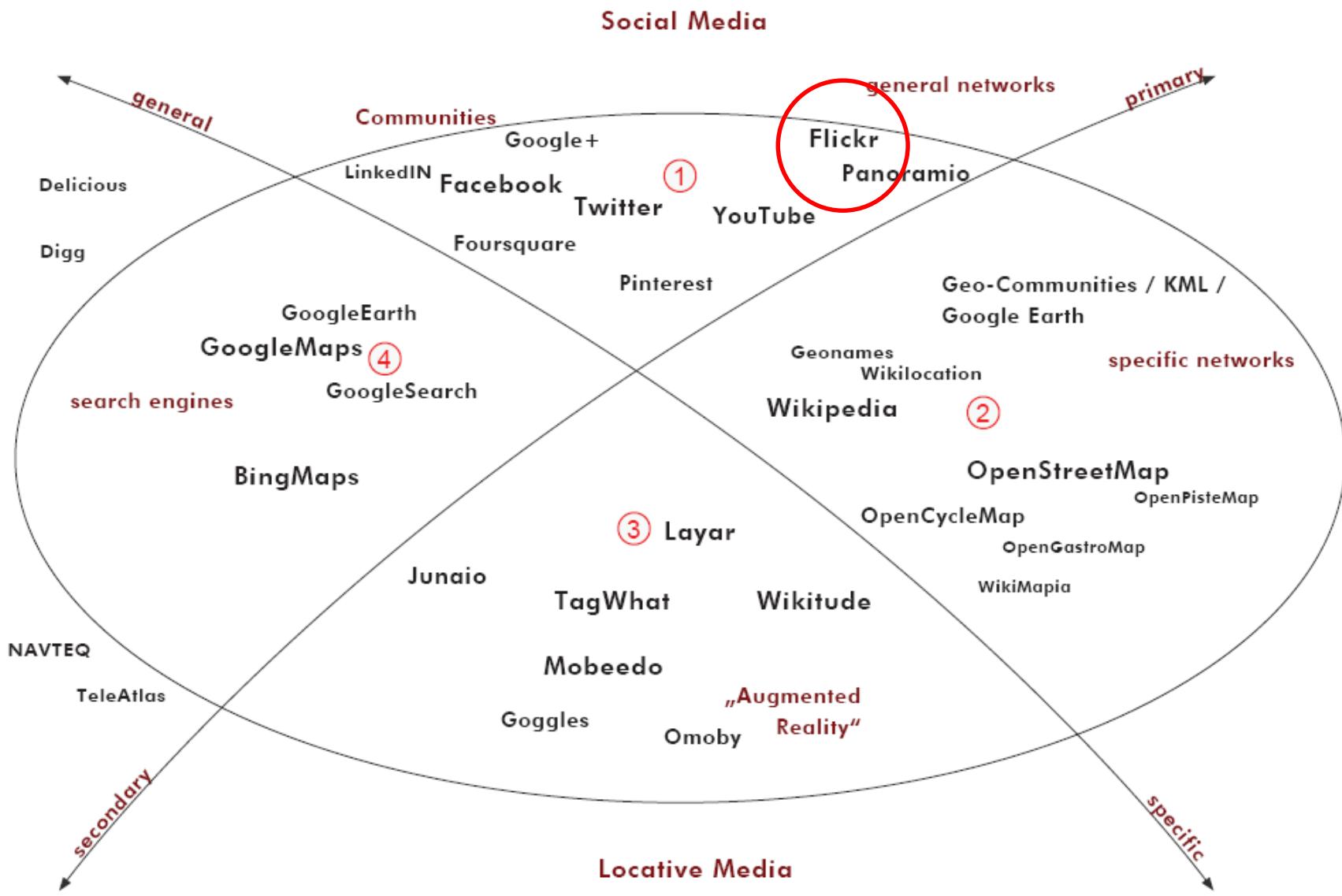
network-landscapes and data streams



data stream:

**continuous and ongoing flow of information with unknown amount
of data and unknown number of participants**

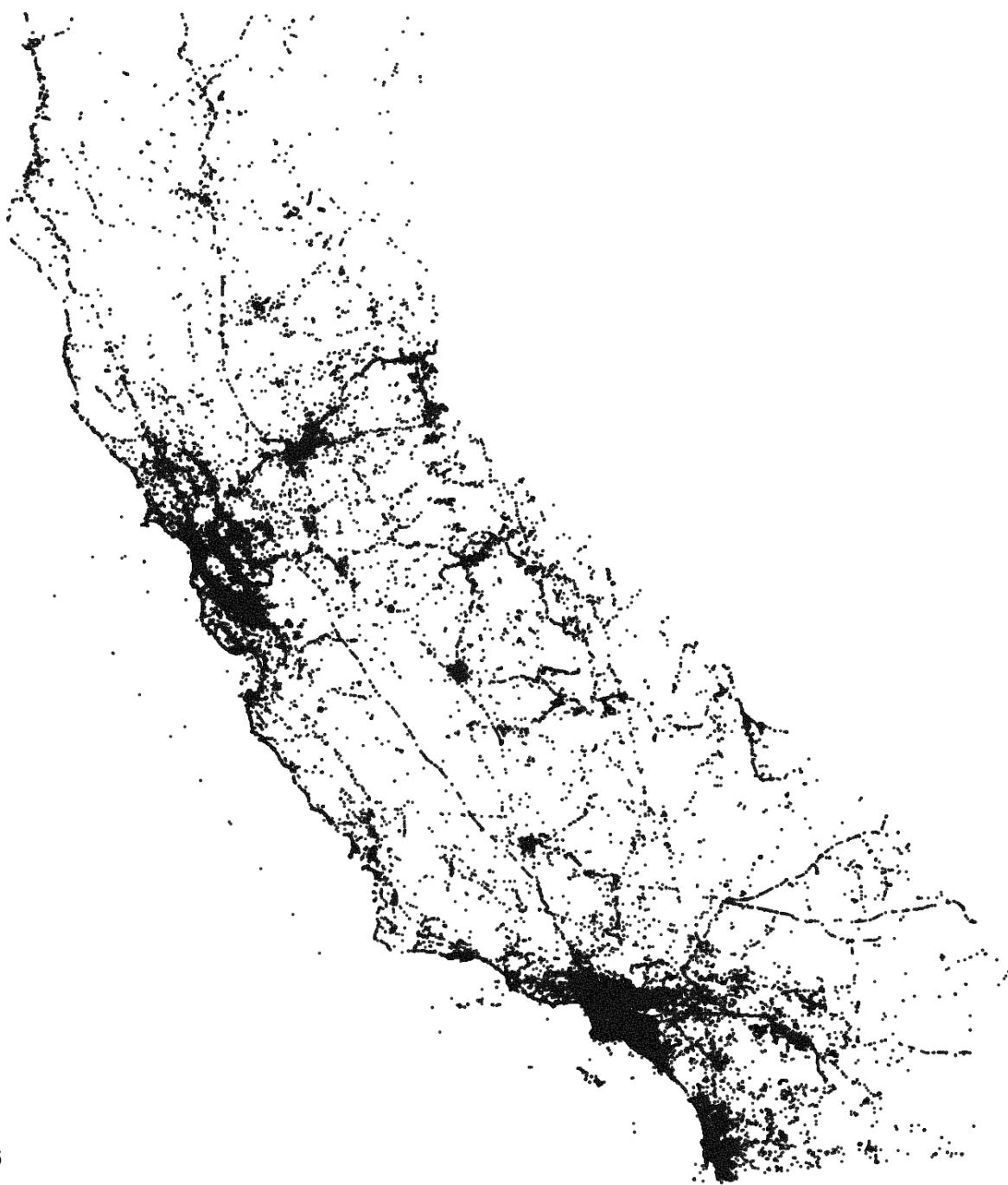
Finding Patterns



Flickr

6 billion photos

3000 new photos/minute



State of California
2011

For each photo:

Geolocation

Date Taken

Tags

Title

URL

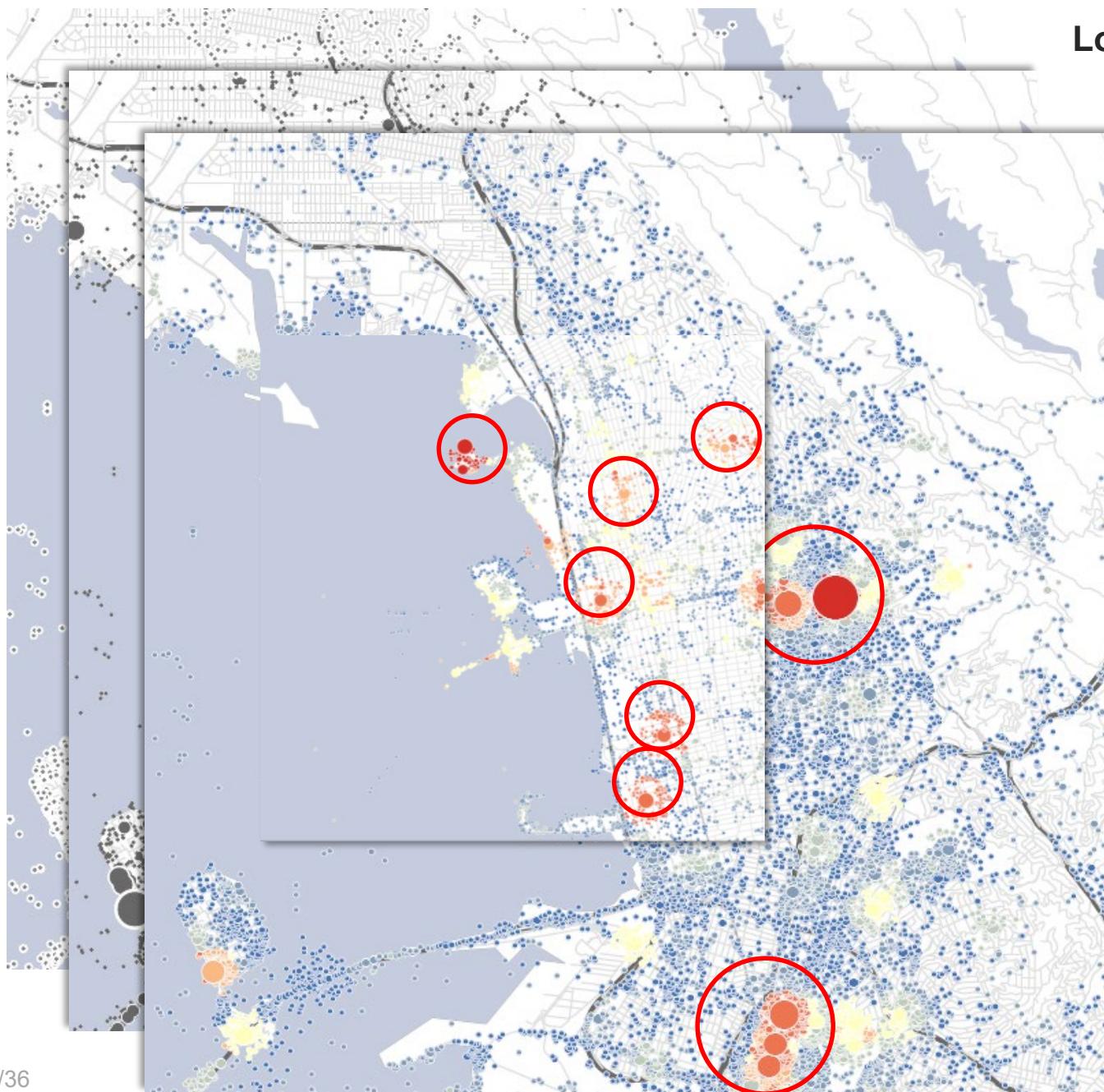
Owner

Views

...



Location Identification



Flickr RAW Data

Spatial Join

First Level Clustering

Gettis-Ord GI
Star statistic

Second Level Clustering

Location Labeling

Tags:

ocean
california
blue
sunset
red
sea
sky
bird
colors
sunglasses
silhouette
grey
bay
bravo
hills
albany
sanfranciscobay hdr
trilogy
gonewiththewind
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interestingness27
i500
explorefrontpage
photomatrix
bonzag
p1f1
explore20



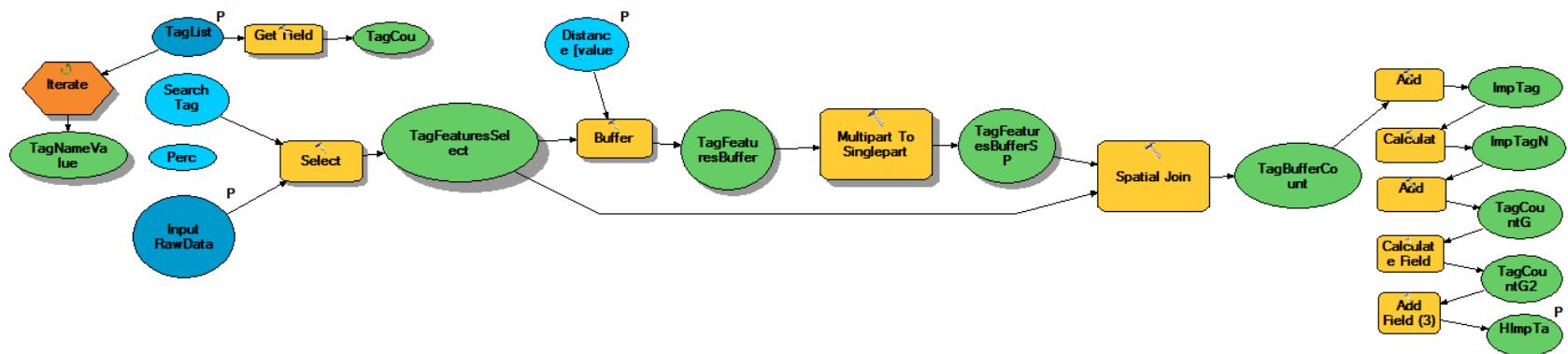
„Bird in Bay”, © Sean Duan, 2006.

What is being tagged?

Location
Subject(s)
Time
Emotions
Associations

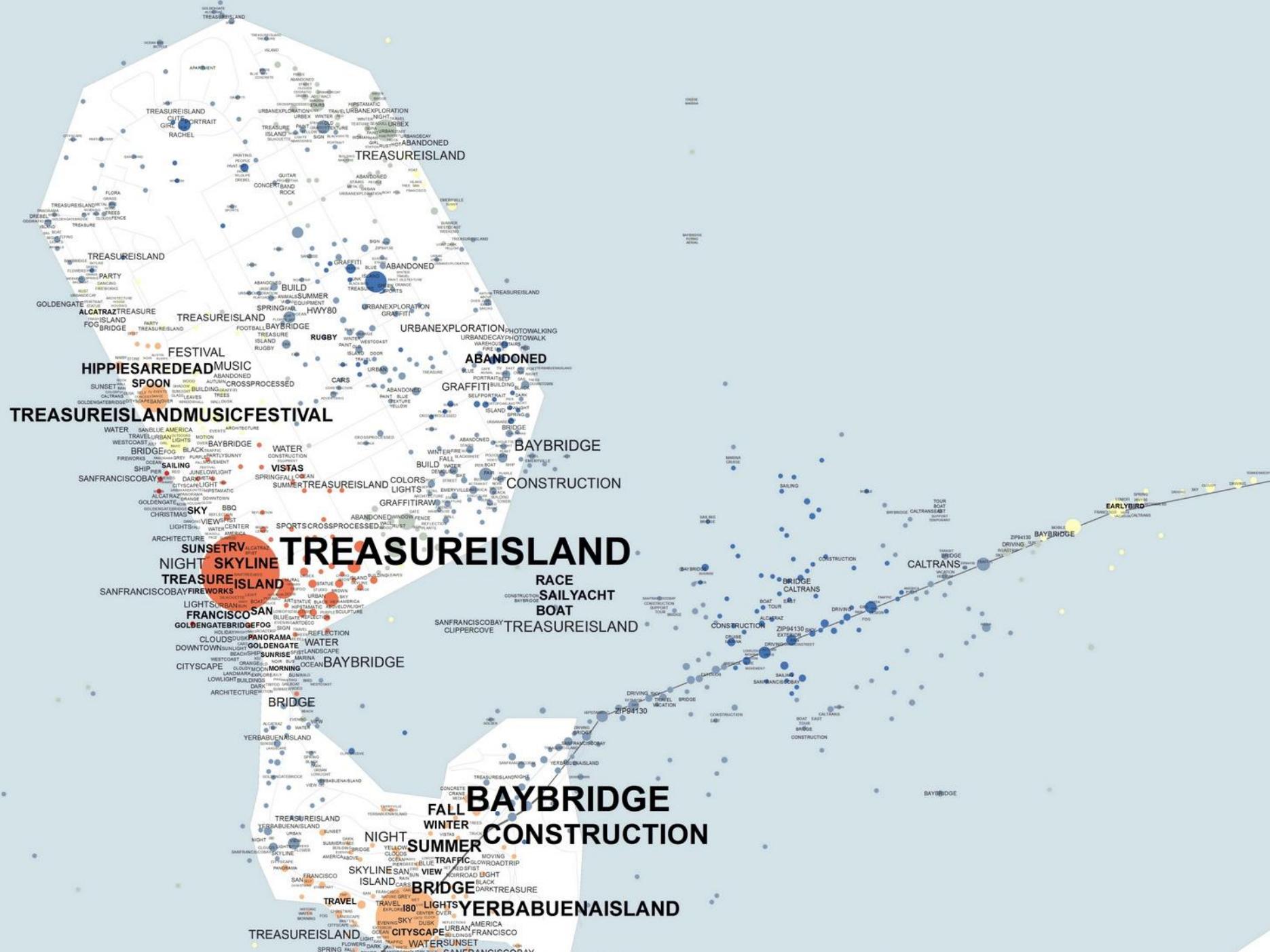
...

Tag Clustering/ Model Builder

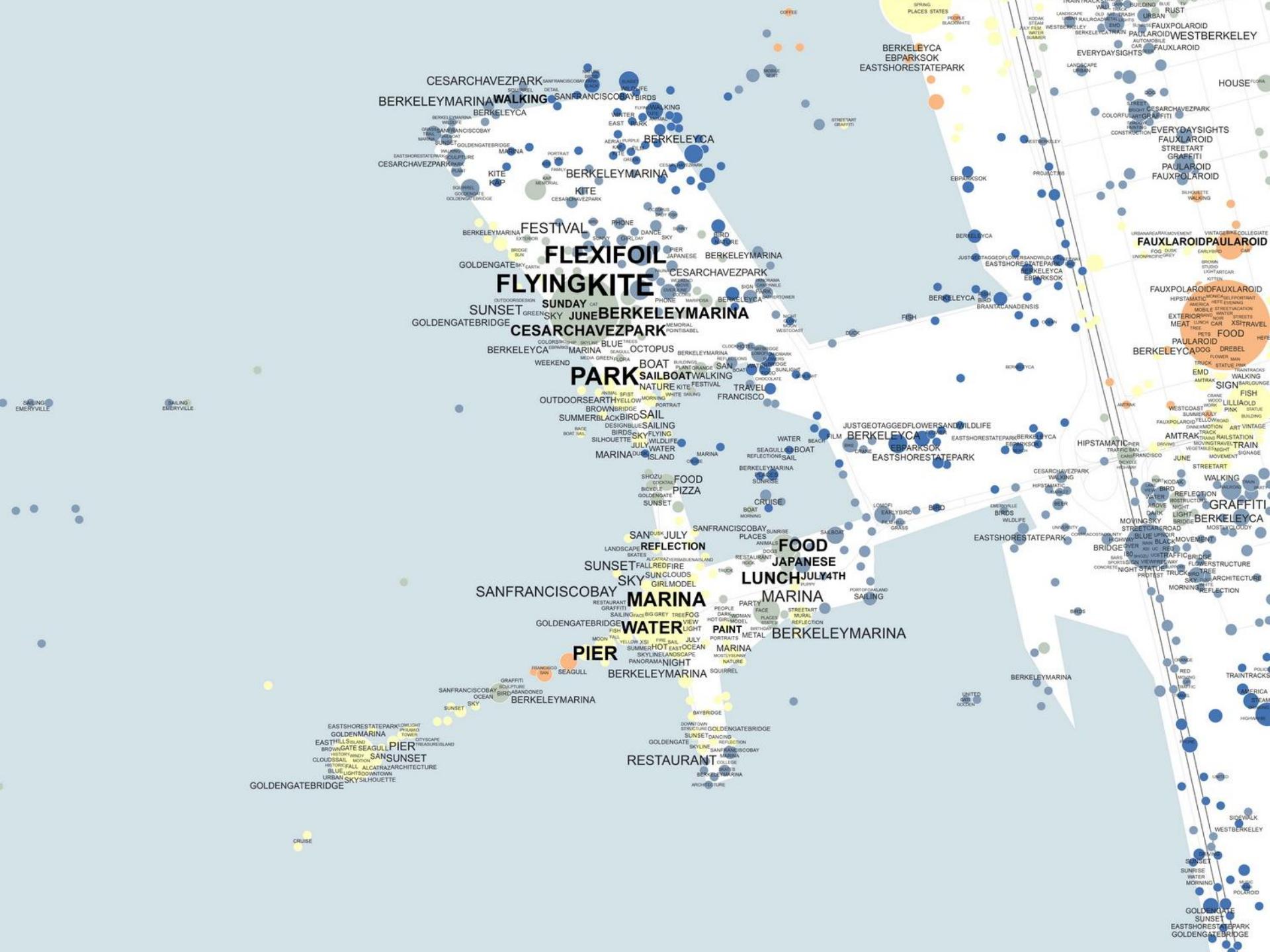


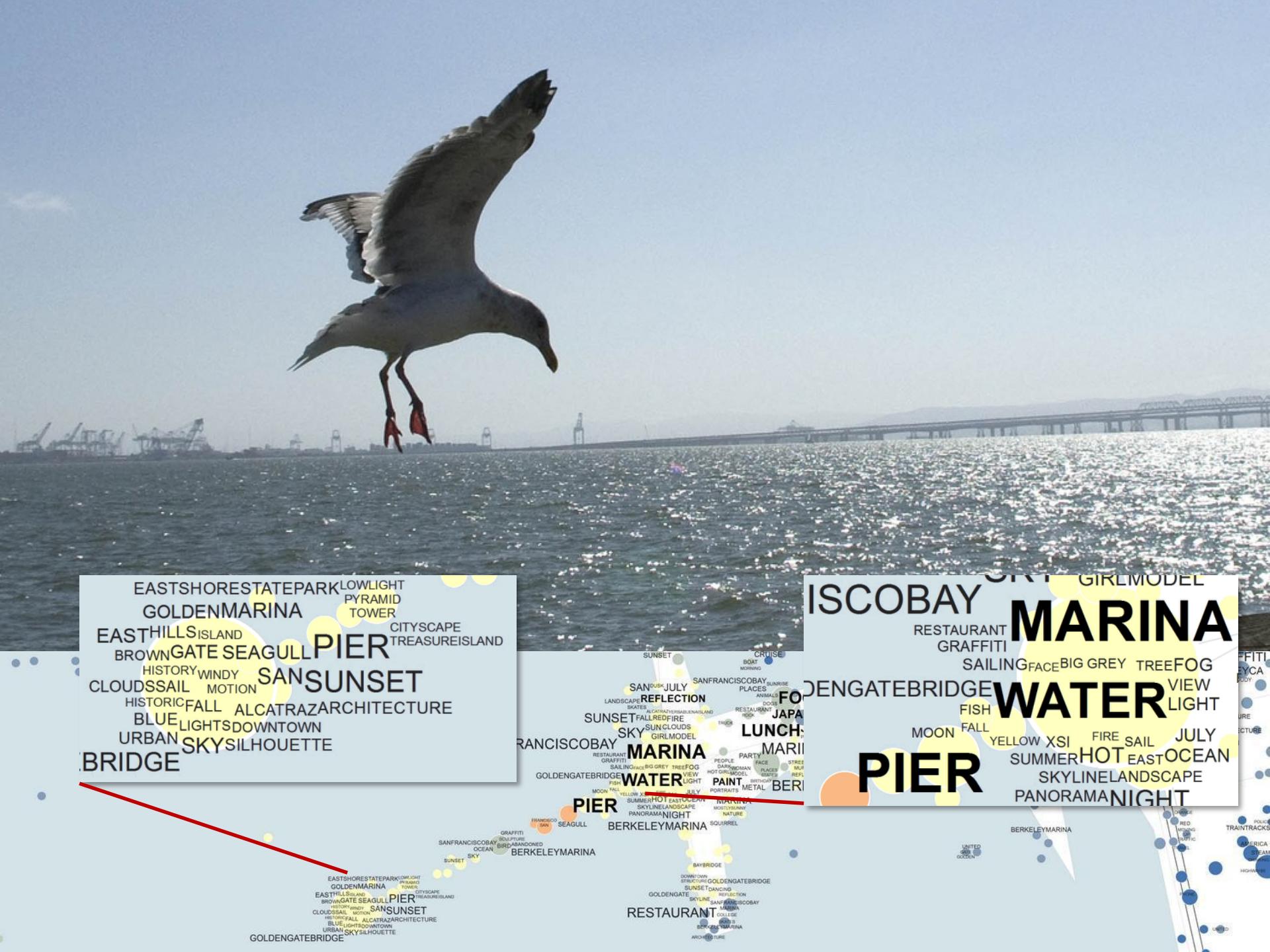


**Spatiotemporal Tag Cloud as
a statistically weighted map of what is influencing people's perception**







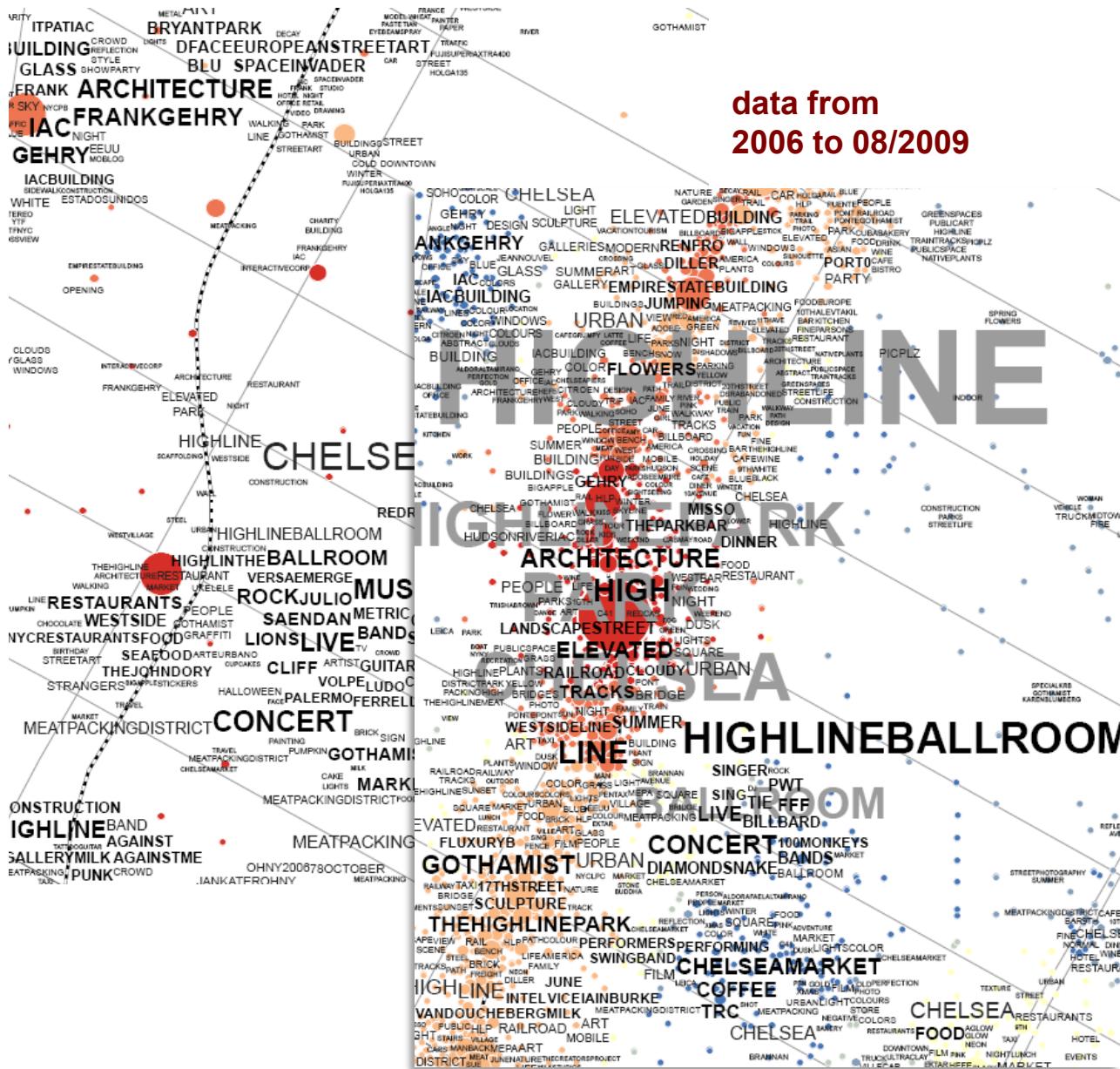




Highline Park Project, open to public 06/08/2009

Social impact?

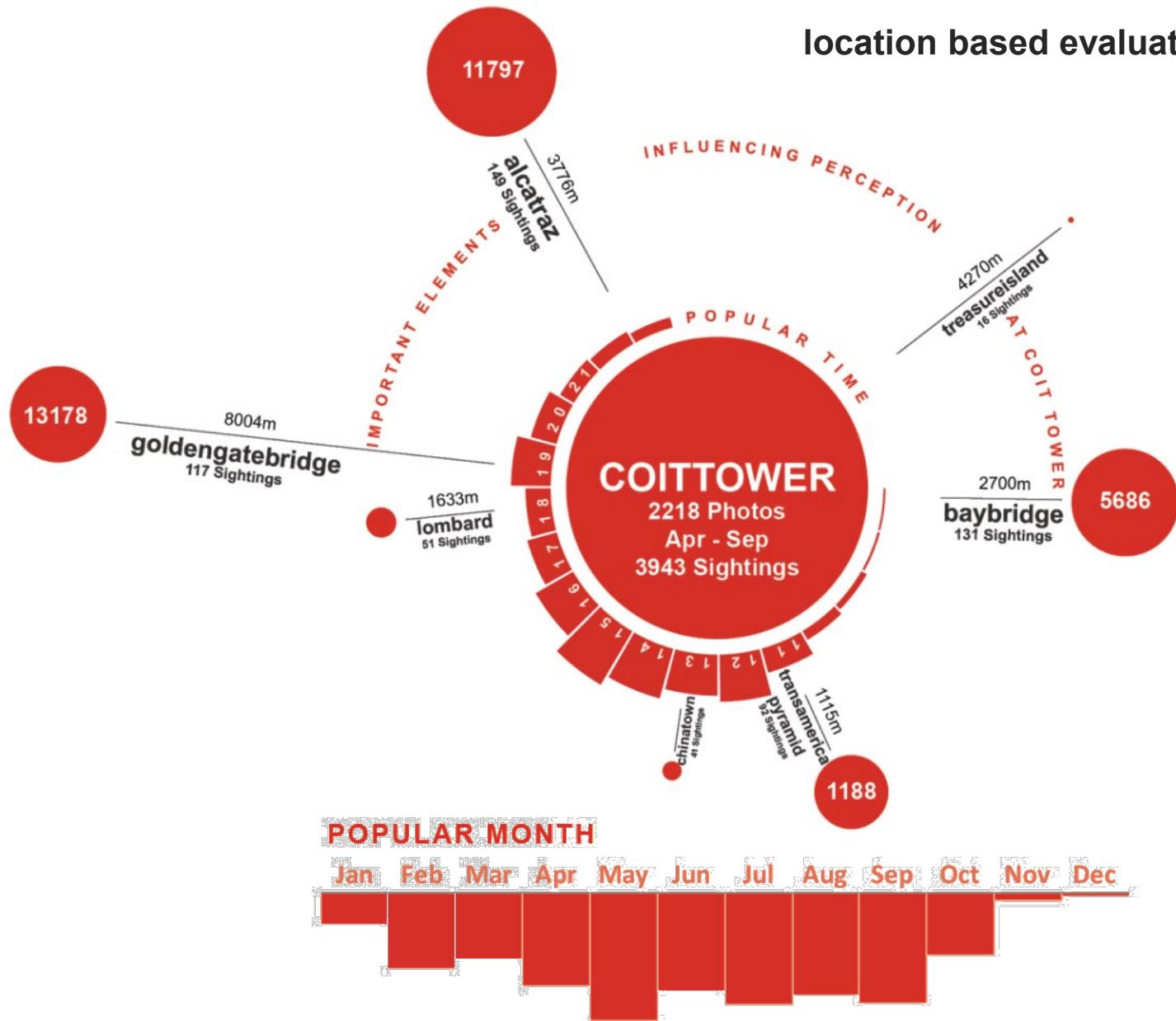
data from
2006 to 08/2009



data from
08/2009 to 2011

maps.alexanderdunkel.com

location based evaluation



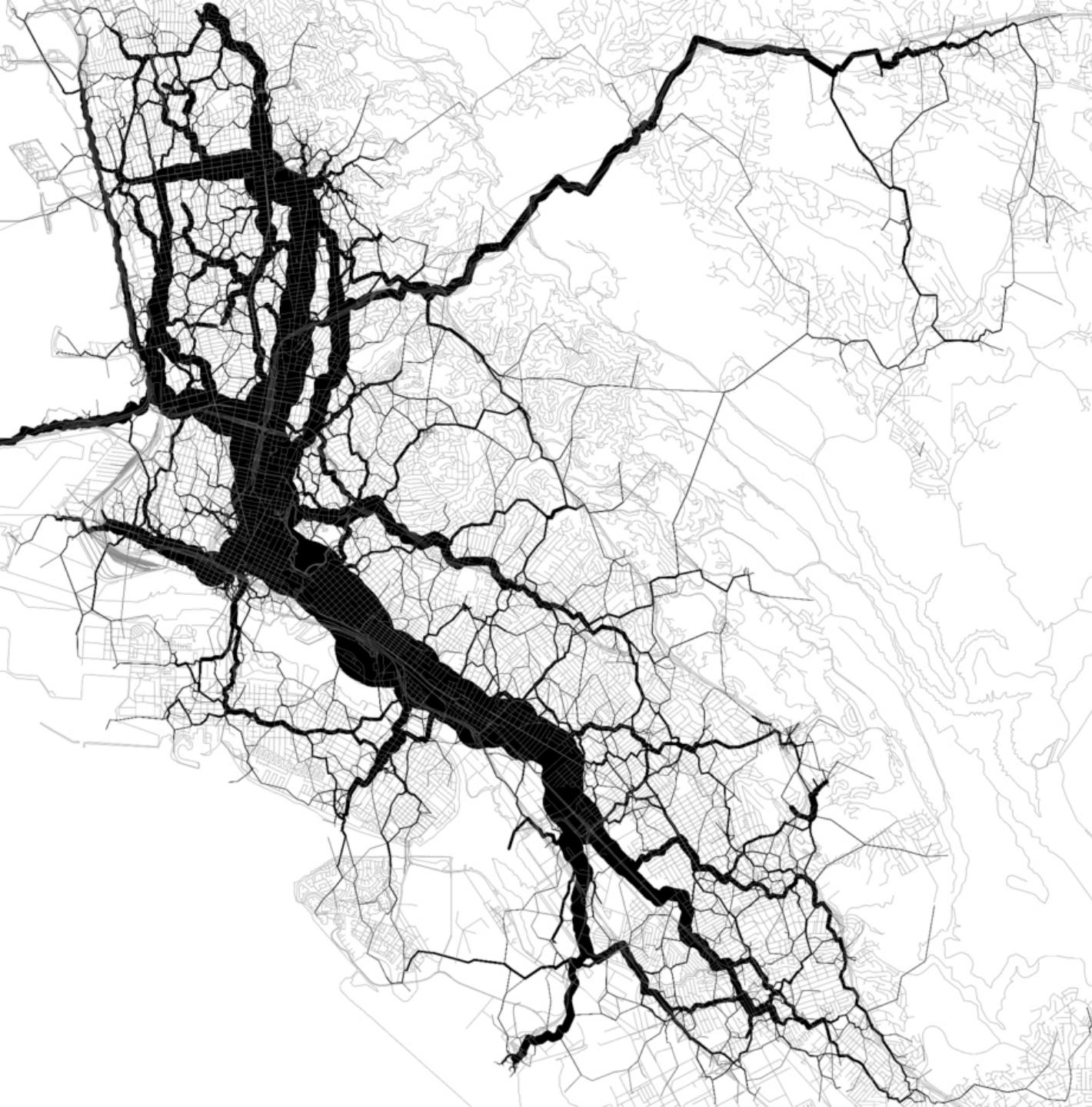
issues

Who?

Flickr Data

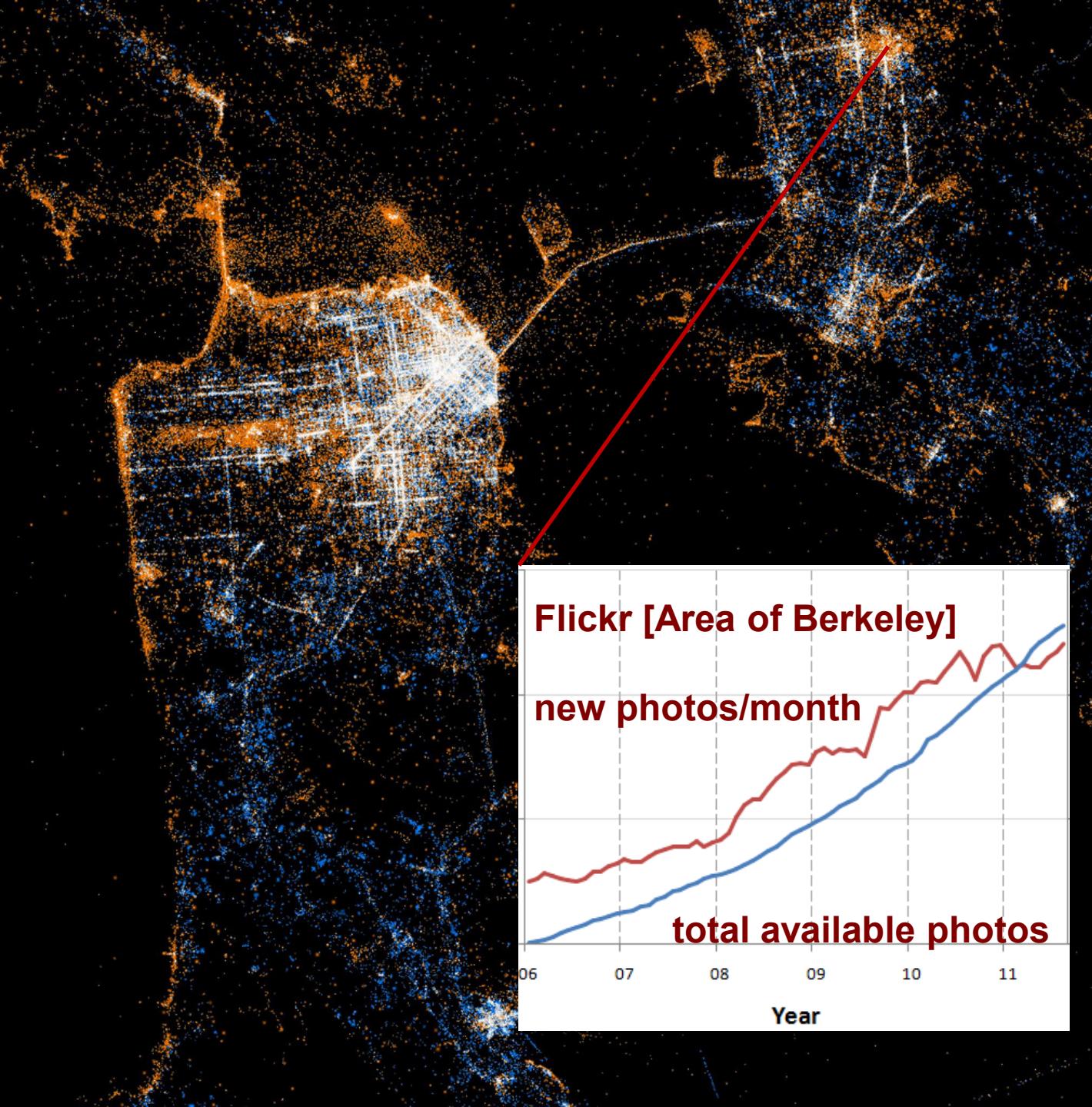
Tourists

Locals

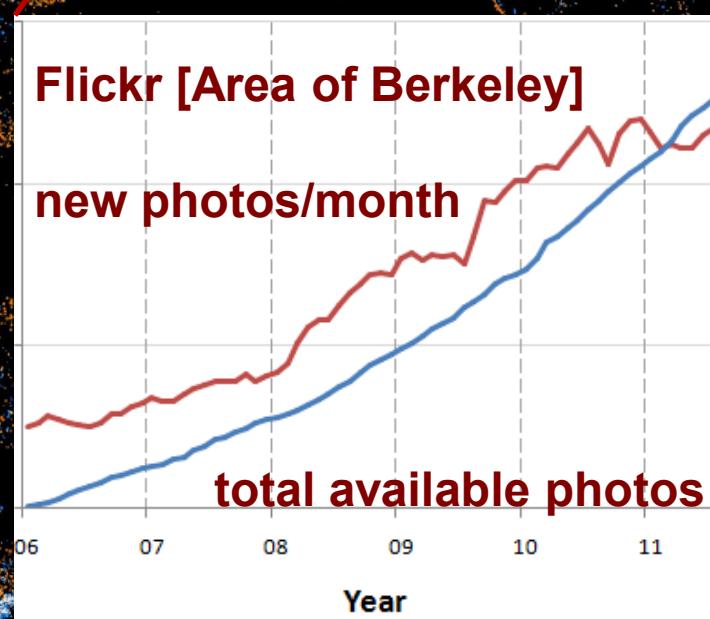


Shortest Path Routing through Twitter Tweets, East Bay

21167 trips routed through
1000 geotags. Data from the
Twitter streaming API.



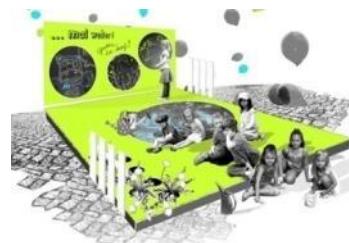
Flickr
Twitter
both



Where does it go?

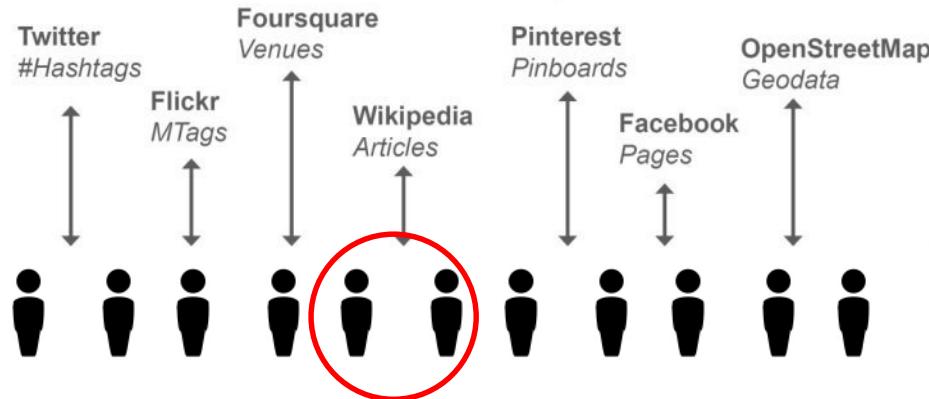


Landscape Architecture



your data stream

Filter



Thank You.

Photo credits:

“a 7-lb. striped bass “ © Dennis&Grace , 2009; “bike love (his 'n' hers)” © third uncle, 2007. “California's Baker Beach - Golden Gate (Large Panorama)” Darvin Atkeson © , 2009. “SF Fire Hydrant Vote for Equality” © Tony Fischer, 2010. „Frauenkirche, Dresden“, © rengawfalo, 2011. „+ 4_shades_of_red :: hdr“, © David Richter, 2009. „Dresden reflection“, © Hans Vaupel, 2008. „The Park Through the Sky”, © Trey Ratcliff, 2009. “In the shadow of the High Line, pt. 1” © Marcin Wichary, 2007. “Gull on the pier #1” © thamiter, 2009. “San Francisco Skyline” and Ship on a Bay © Thomas Hawk, 2008. “Bay Bridge under construction” © Ivan S. Abrams, 2011. “Fireworks* San Francisco's 2009 New Years Eve Celebration from Treasure Island” © xray95, 2010. “SF Skyline from Treasure Island” © Rob Kroenert, 2009.



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