

‘LOCATING THE GEOSOCIAL TOWN’

Spazi digitali e nuove rappresentazioni urbane attraverso l’utilizzo di
VGI, OPEN GEODATA & (SPATIAL) BIG DATA

❑ **Domanda:**

se e in che modo l'utilizzo della Crowdsourced Geographic Information possa determinare un arricchimento delle informazioni in ambito urbano

→ **landscapes of Cyberspace**

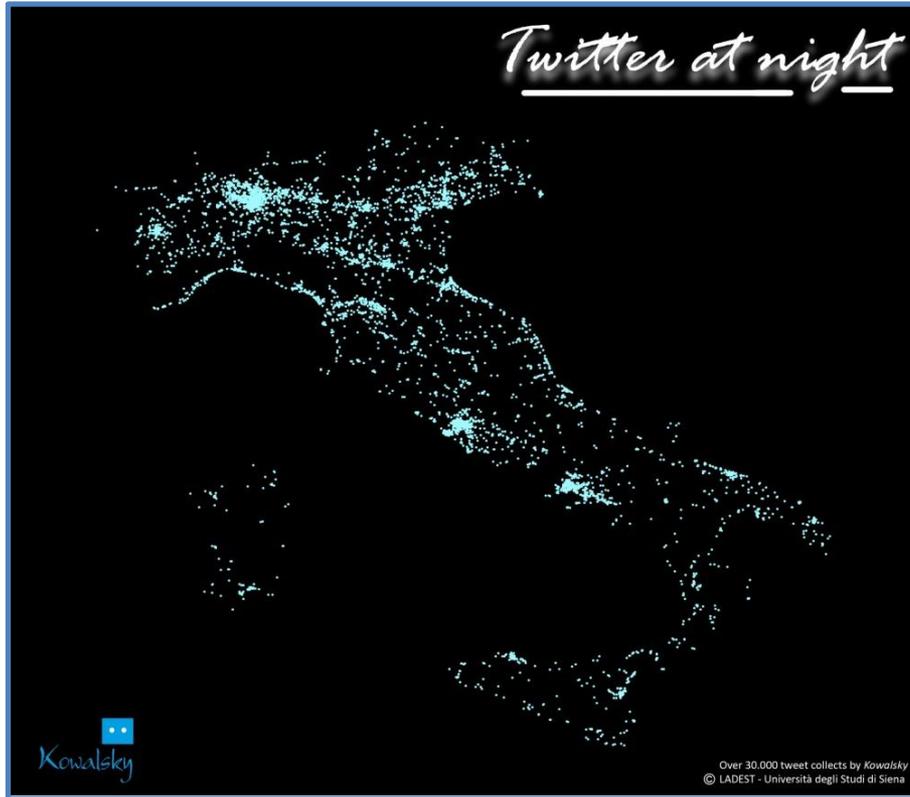
→ **Internet come Trama della nostra quotidianità (M. Castells)**

❑ **Caso studio:**

Comune di Firenze

❑ **Metodologia:**

- ✓ Open Geodata presenti sul portale “opendata.comune.fi.it”;
 - sezioni di censimento Istat;
- ✓ i contributi geo-tagcati dagli utenti in 1 anno → VGI
(Wikipedia, Twitter, Flickr, Instagram --- Openstreetmap)
- ✓ Hot-spot analysis
- ✓ Distance decay



Data based geography

*30.000 Tweets collects by Kowasky
1 night*

The Earth from space - NASA



r= 0.75

Brightest areas of ITALY are the most urbanized

- **Location → Where?** →
- **Locale → Shape of space** →
- **Sense of Place → Emotional** →
AGNEW J. (1987)

-
- **World Wide Web (1991)**
TIM BERNERS LEE:

'The Web is more a social creation than a technical one.'
It was designed for a social effect to help people work together

-
- **WEB 1.0 -> WEB 2.0 (2004)**
TIM O'REALLY

personal website ----->blogging
Britannica Online ----->Wikipedia
Ofoto ----->Flickr
Content management systems ----->wikis
directories (taxonomy) -----> tagging ("folksonomy")

OPEN GEODATA

WIKIPEDIA (geowiki)

OSM

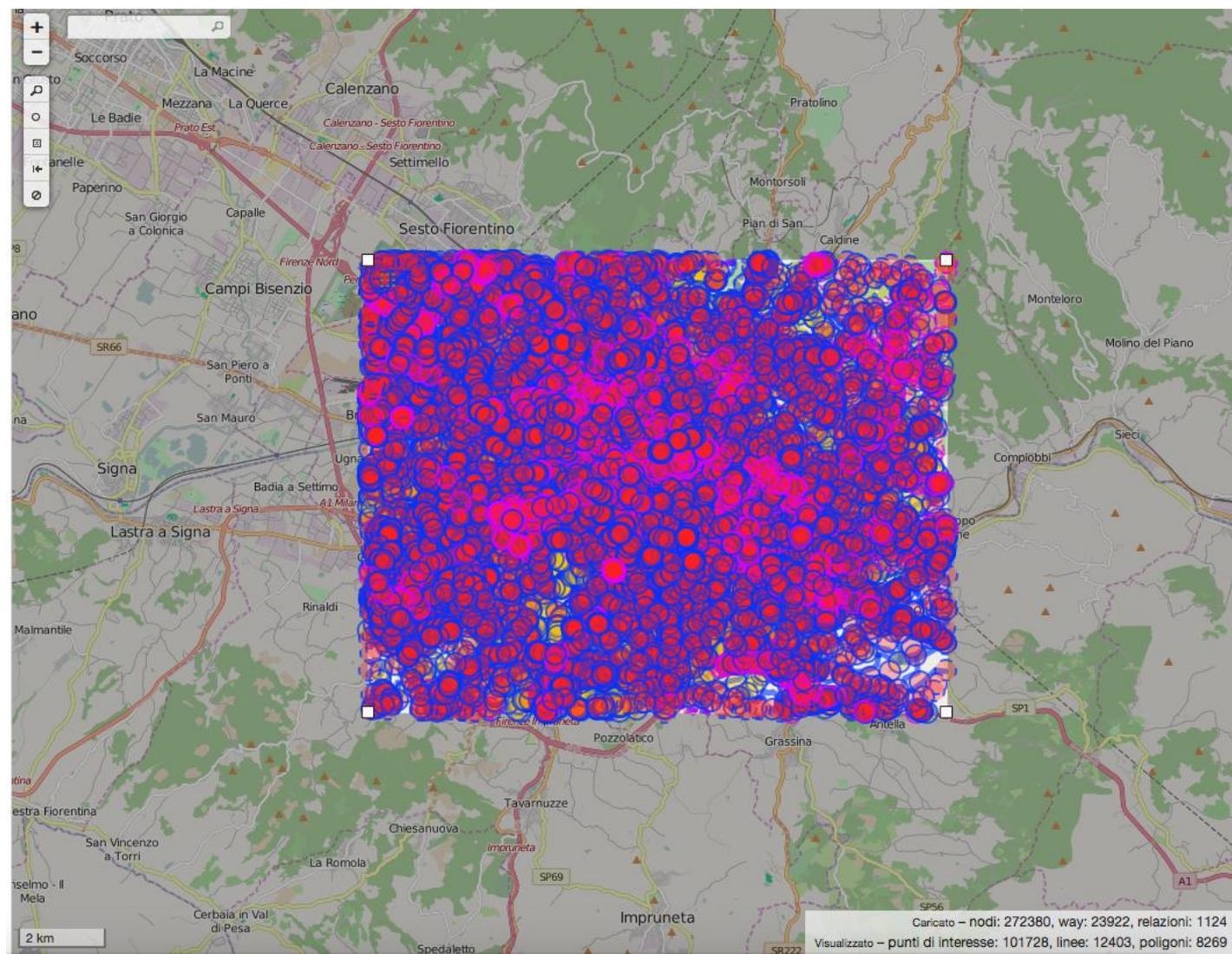
Coordinate

FIRENZE (IT):72933 visite negli ultimi 3 mesi

The screenshot shows the Wikipedia page for Firenze (IT). The browser address bar displays <https://it.wikipedia.org/wiki/Firenze>. The page features a map of the city of Florence and its surrounding area, outlined in red. The map is populated with numerous red location pins, indicating specific points of interest. The page layout includes a top navigation bar with search and user options, a left sidebar with community and navigation links, and a main content area with a map and introductory text. The map is titled 'Mappe di OpenStreetMap (CC-BY-SA), Wikipedia (CC-BY-SA), WIKI OSM (ODbL)'. The sidebar contains links such as 'Pagina principale', 'Ultime modifiche', 'Una voce a caso', 'Vetrina', 'Aiuto', 'Comunità', 'Portale Comunità', 'Bar', 'Il Wikipediano', 'Fai una donazione', 'Contatti', 'Strumenti', 'Puntano qui', 'Modifiche correlate', 'Carica su Commons', 'Pagine speciali', 'Link permanente', 'Informazioni sulla pagina', 'Elemento Wikidata', 'Cita questa voce', 'Stampa/esporta', and 'Crea un libro'. The main content area includes a search bar, a navigation menu, and a list of sections: '1.1 Territorio', '1.2 Clima', and '2 Storia'. The page also displays the Wikipedia logo and the text 'WIKIPEDIA L'enciclopedia libera'.

```
1  /*
2  This is a simple map call.
3  It returns all data in the bounding box.
4  */
5  [out:xml];
6  (
7    node({bbox});
8  <;
9  );
10 out meta;
```

VETTORI
101.728 POI
12.403 Linee
8.209 Poligoni





Catasto 0.72%

Cultura 0.72%

Ambiente 12%

datigis.comune.fi.it

Turismo 3.60%

Attività Economiche 2.5%

Uso Suolo 1%

Strade 0.3%

Urbanistica 20%

Sezioni cens. 1.44%

IL PALINSESTO DEL LUOGO 2.0



USER GENERATED DATA 2.0

SOCIAL GEODATA → LANDSCAPES OF CYBERSPACE? DIGIPLACE?



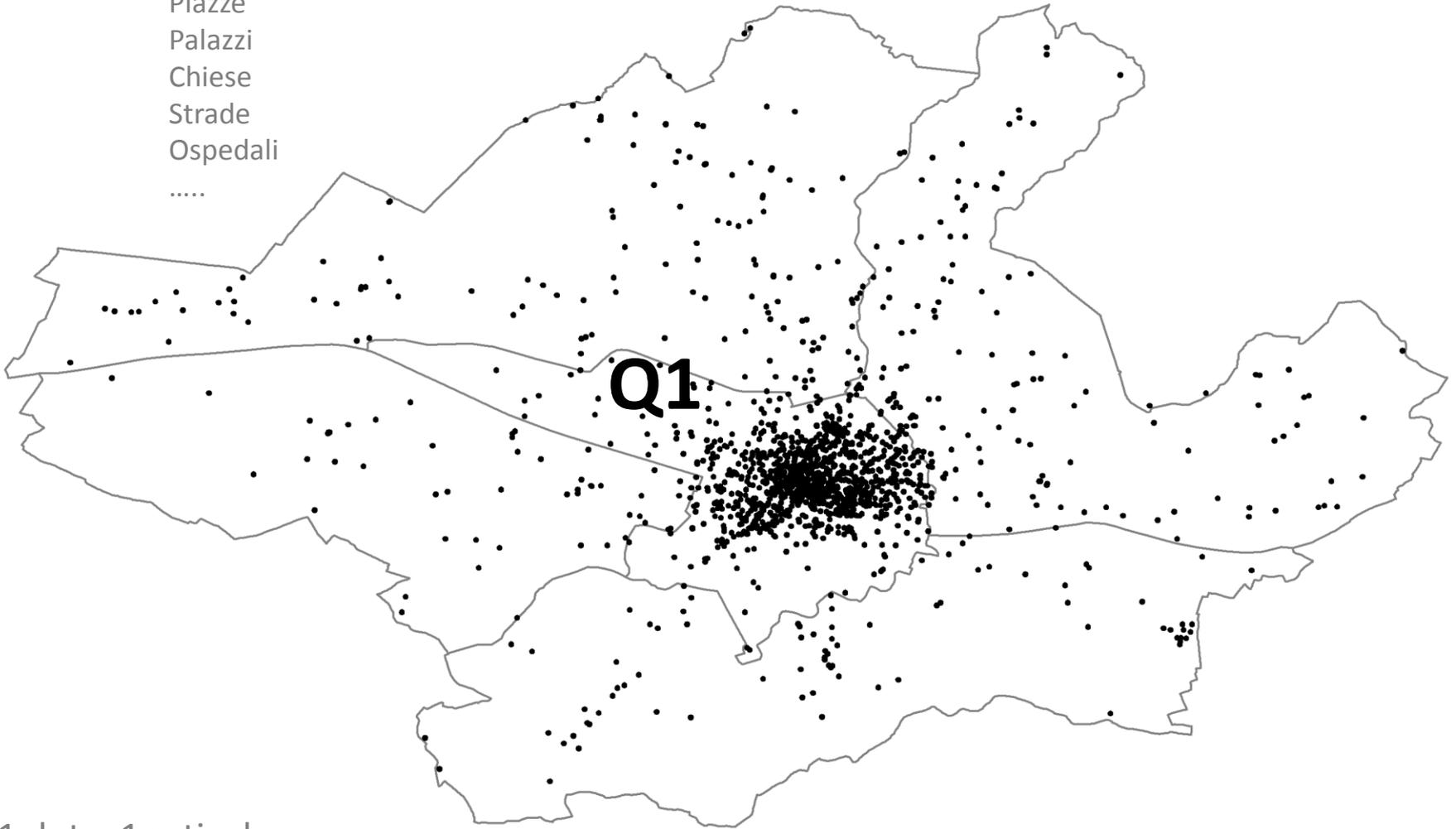


Location

1.500 GEOWIKI

https://antoromano.cartodb.com/me?utm_source=Footer_Link&utm_medium=referral&utm_campaign=Embed_v1&utm_content=antoromano

- Hotel
- Ville
- Piazze
- Palazzi
- Chiese
- Strade
- Ospedali
-

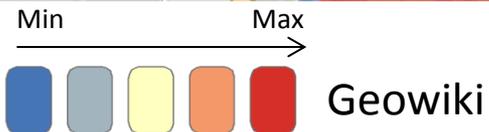
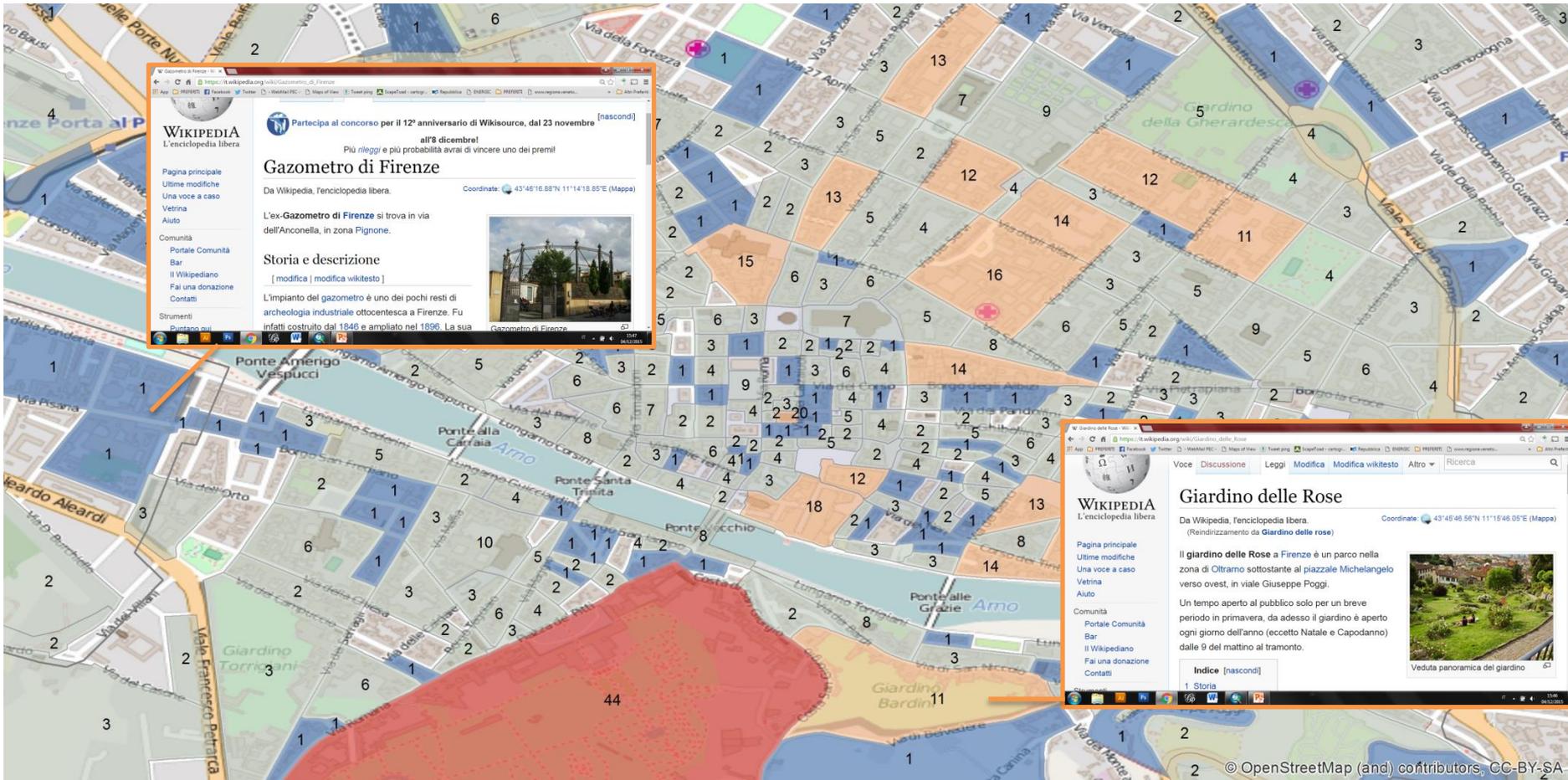


1 dot = 1 articolo



- Location
- Sense of Place

OPEN GEODATA + USC GEODATA



Sezioni Censimento Firenze

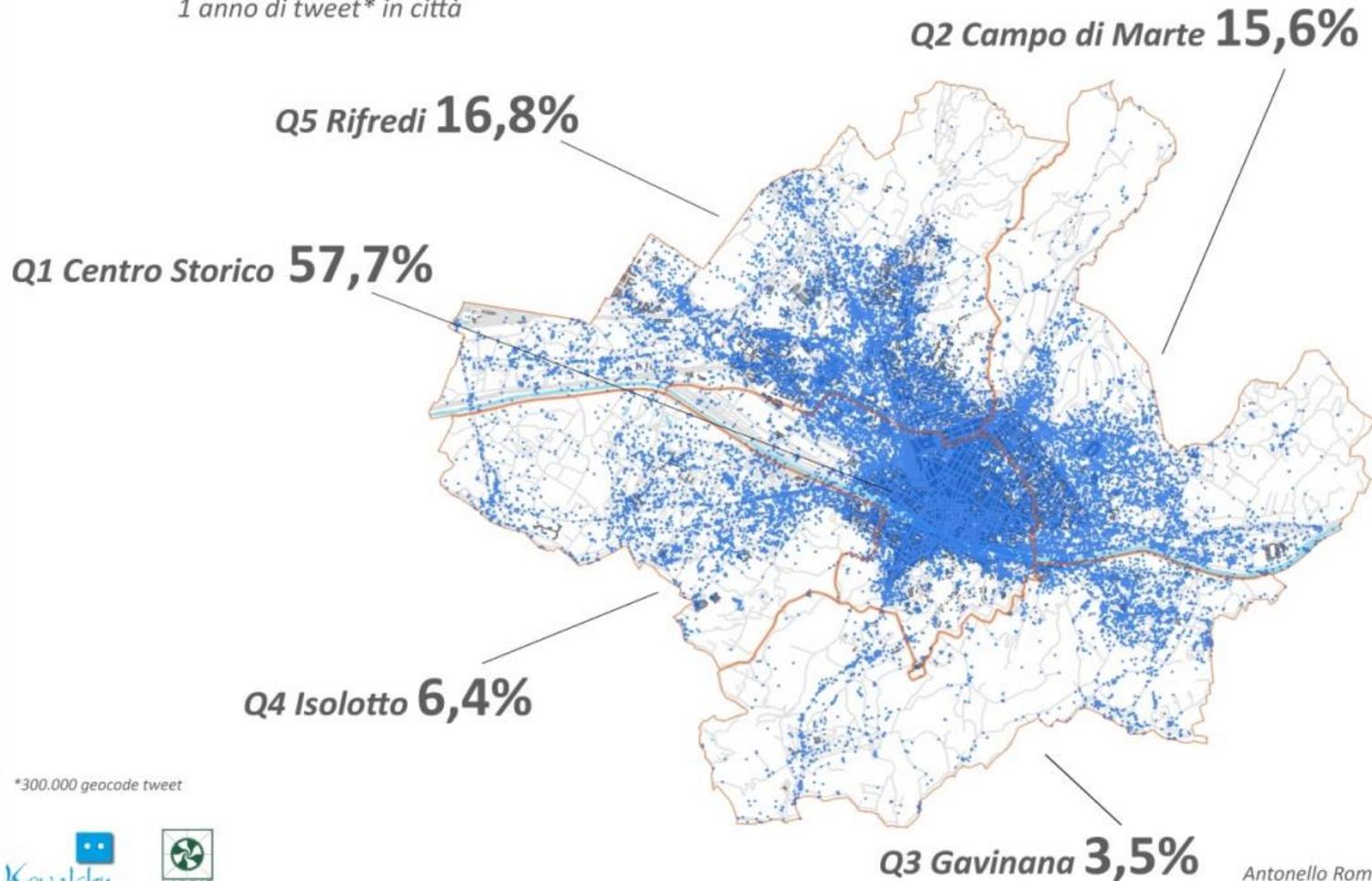
© OpenStreetMap (and) contributors, CC-BY-SA



300.000 TWEET IN UN ANNO

Tweeting in Firenze

1 anno di tweet* in città



*300.000 geocode tweet



Q3 Gavinana 3,5%

Antonello Romano
@Antorom

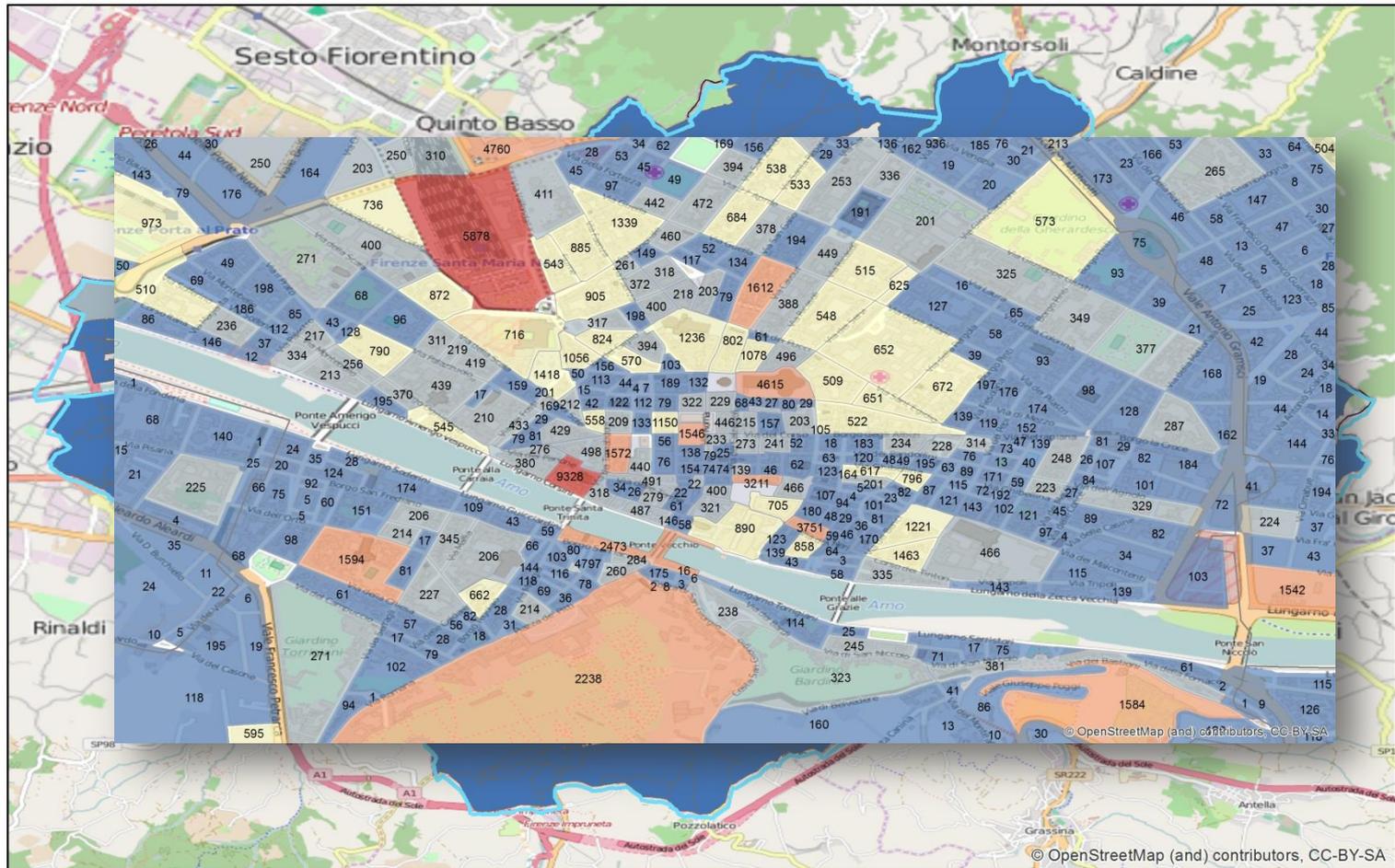
TWITTER



Location

300.000 TWEET IN UN ANNO

Tweet
Numerosità



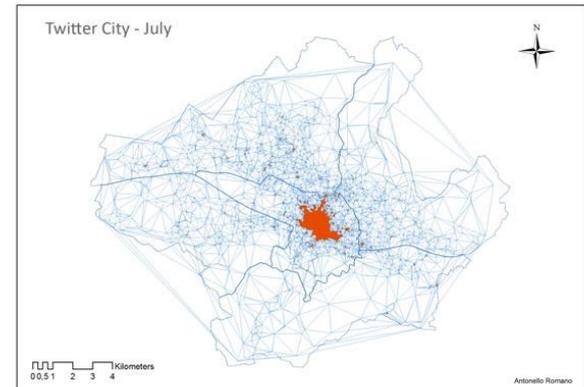
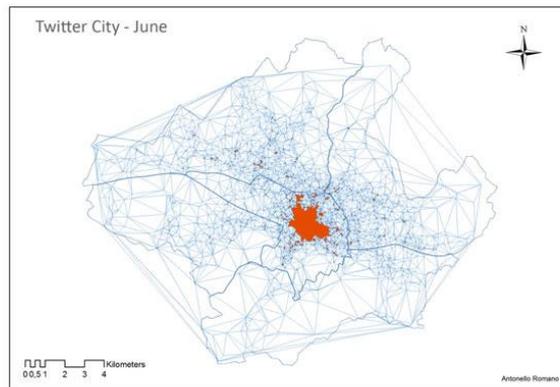
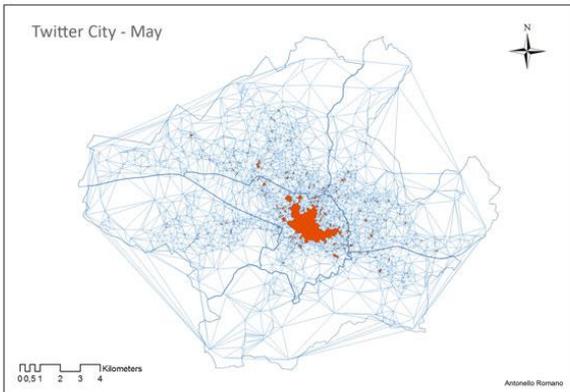
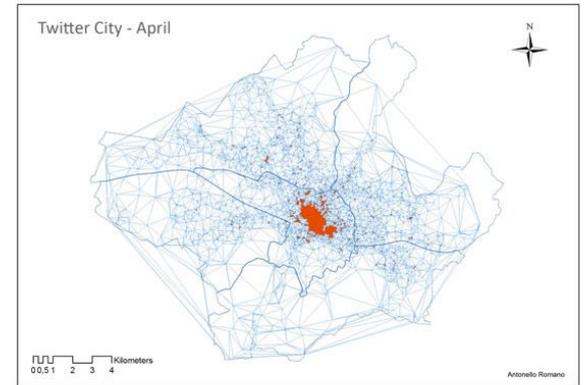
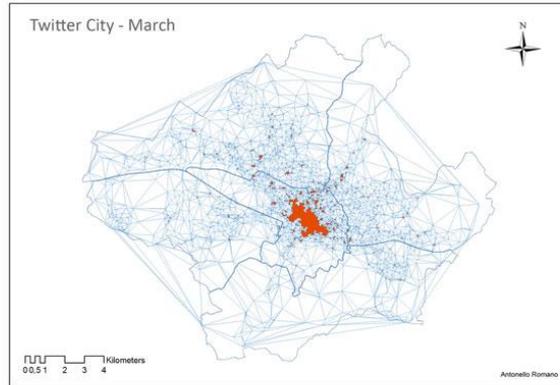
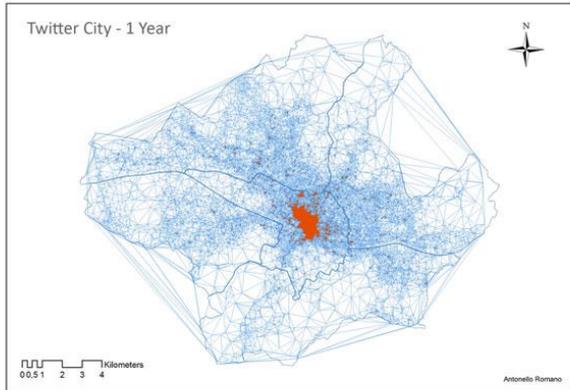
1:92.000



TWITTER



- Location
- Local?



Twitter City - Florence

Antonello Romano



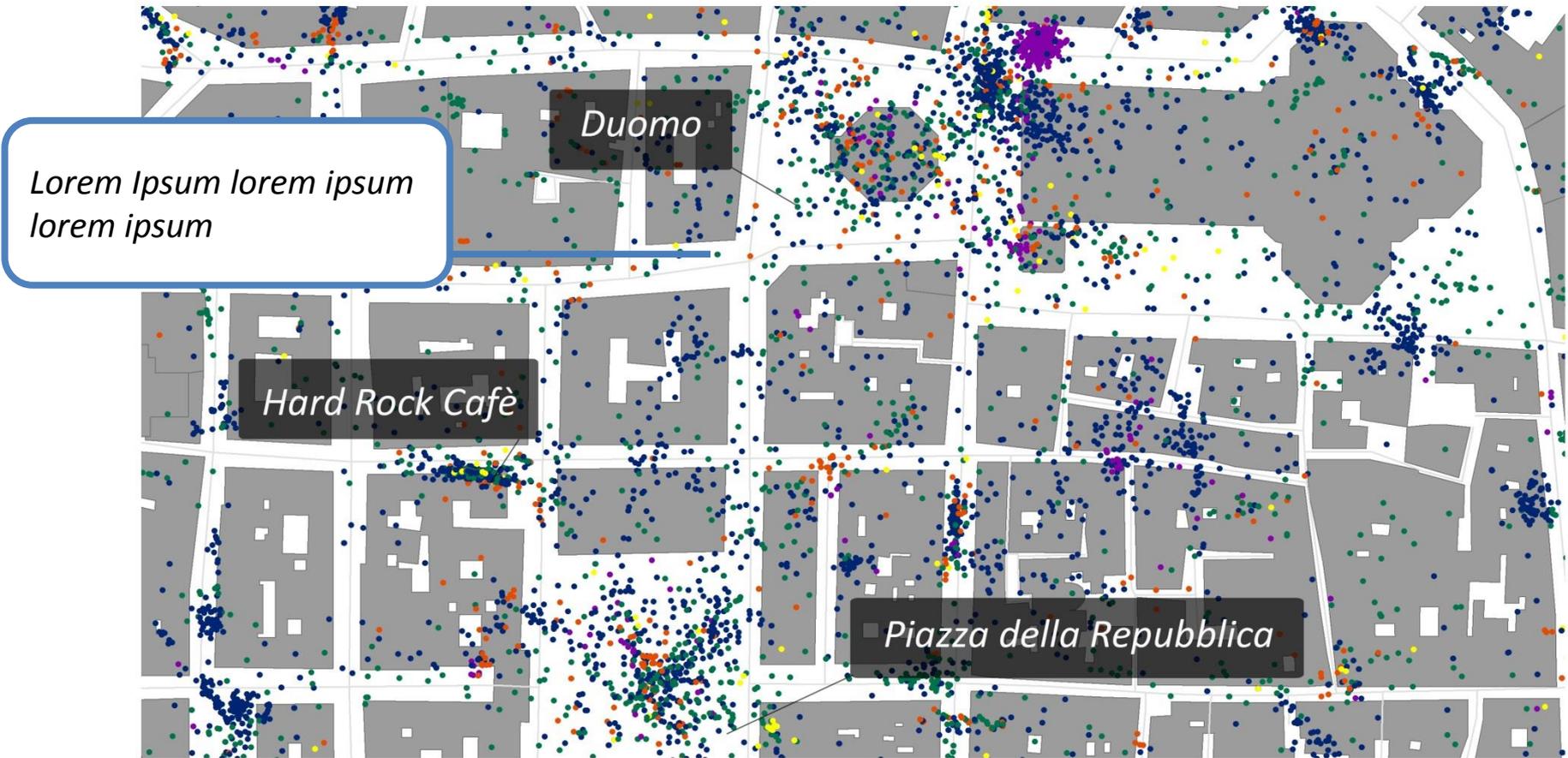
- Location
- Sense of Place
(text, folksonomy)

Tweeting in Firenze

1 anno di tweet in città

Lingua Tweet

● Italiano ● Francese ● Inglese ● Spagnolo ● Russo



Lorem Ipsum lorem ipsum
lorem ipsum

Duomo

Hard Rock Café

Piazza della Repubblica

300.000 geocode tweet

The World according to Flickr

Mapping 7.5 Millions Photo



FLICKR



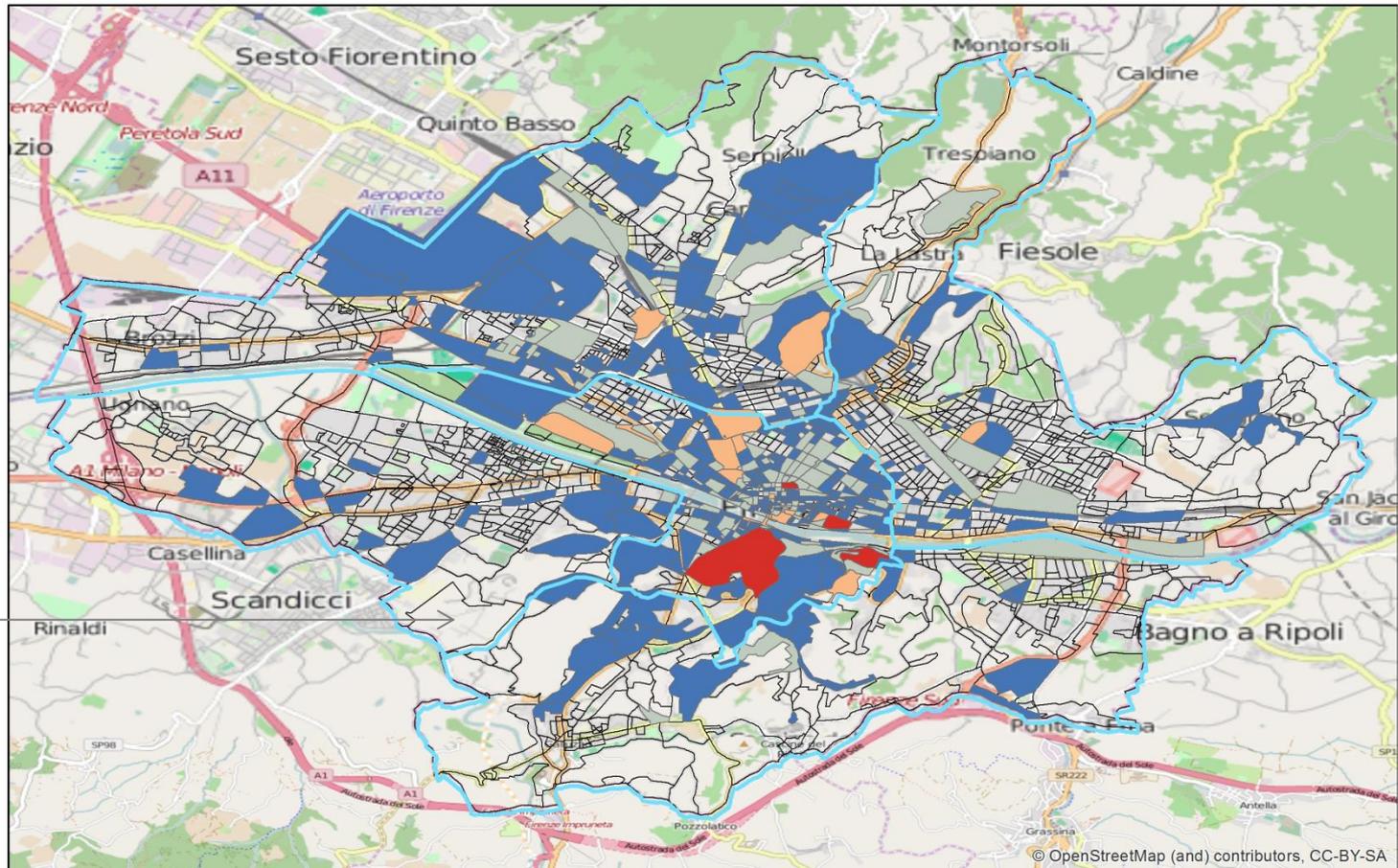
- Location
- Sense of Place
(tags, Folksonomy)

Flickr

Numerosità Foto



122.271 Flickr foto



No data

1:92.000

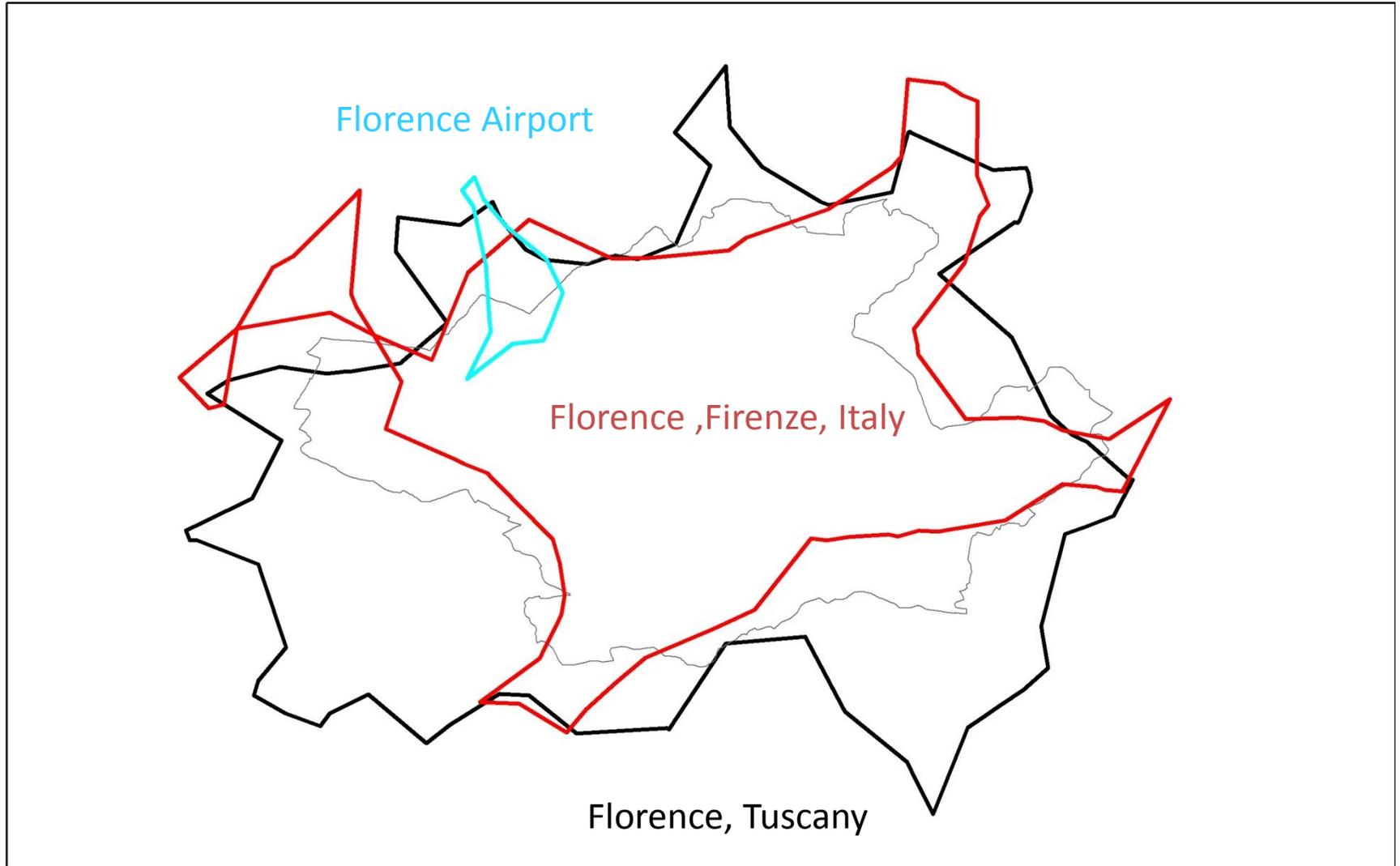


FLICKR



«ShapeTiles»

- Location
- Local?
- Sense of Place?



1:150.000

0,75, 1,5 3 4,5 6
Kilometers

INSTAGRAM



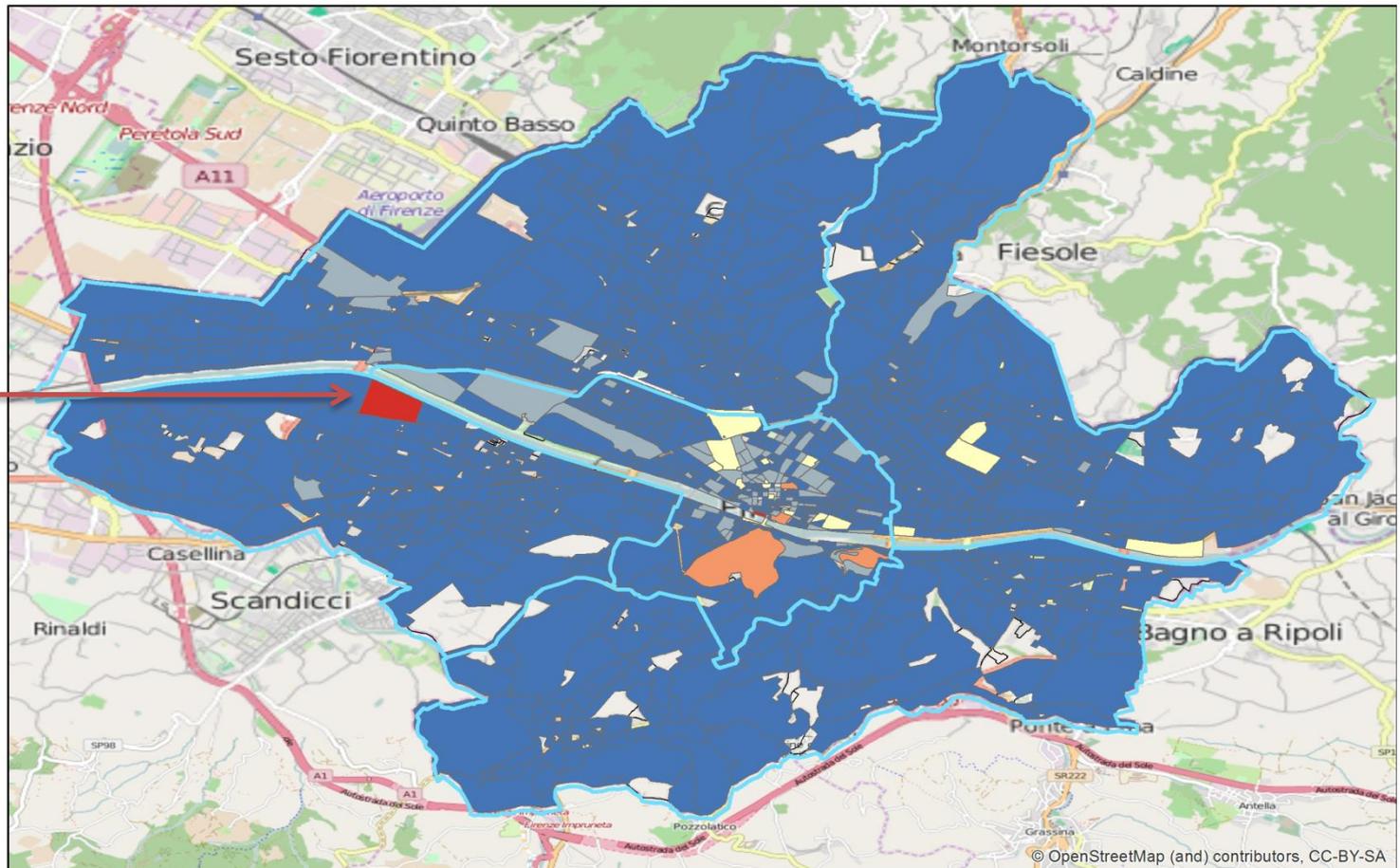
- Location
- Sense of Place
(tags, Folksonomy)

Instagram

Numerosità Foto



1 Milione di Foto (1 anno)

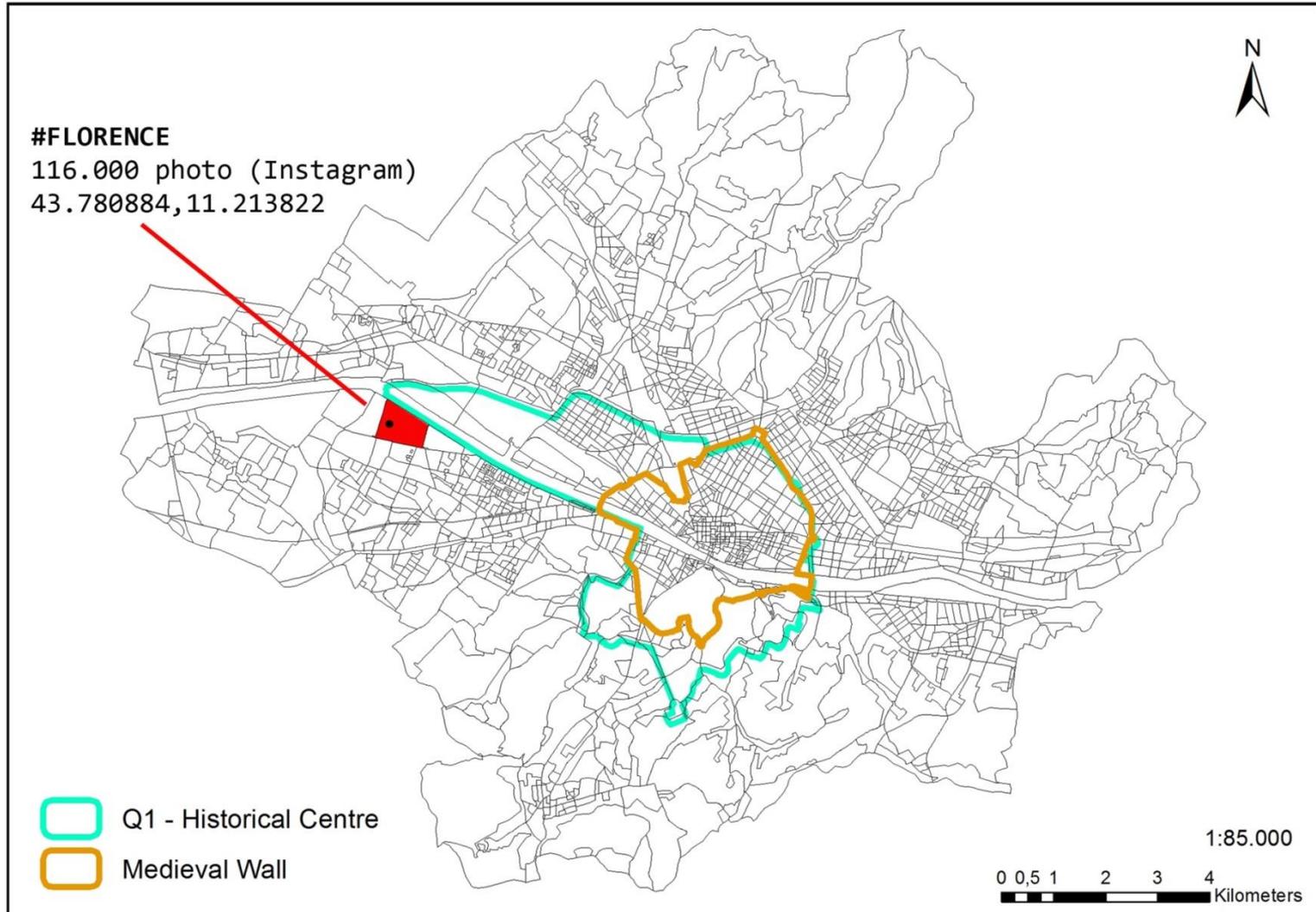


1:92.000

0 0,5 1 2 3 4 Kilometers

DATA VALIDATION

The quality of Geographic Information is measured as the difference between the data and the world they represent and becomes poorer as the data and corresponding reality diverge (Maué and Schade, 2008).

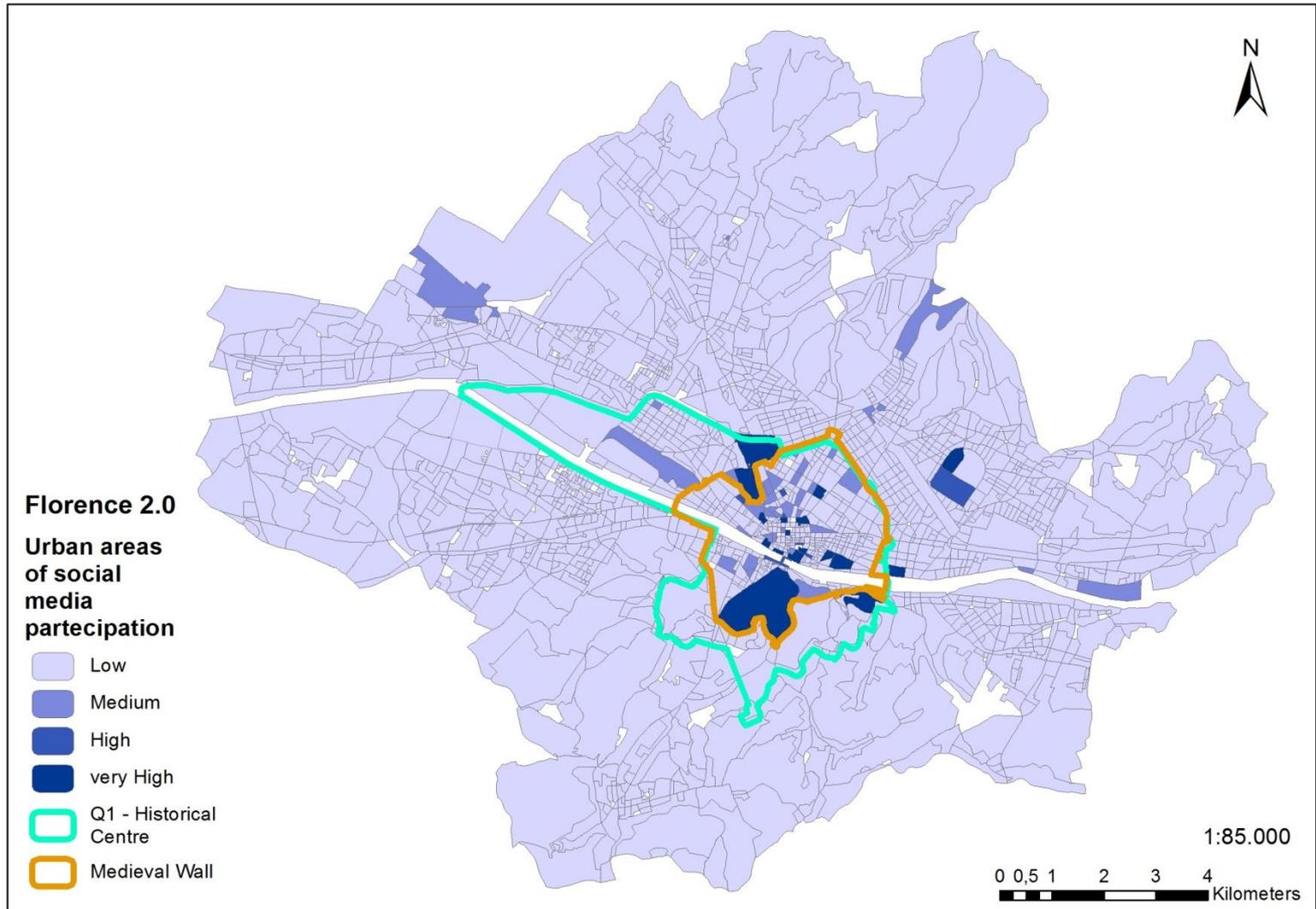


THE GEOSOCIAL TOWN

USER GENERATED DATA COMMONS?

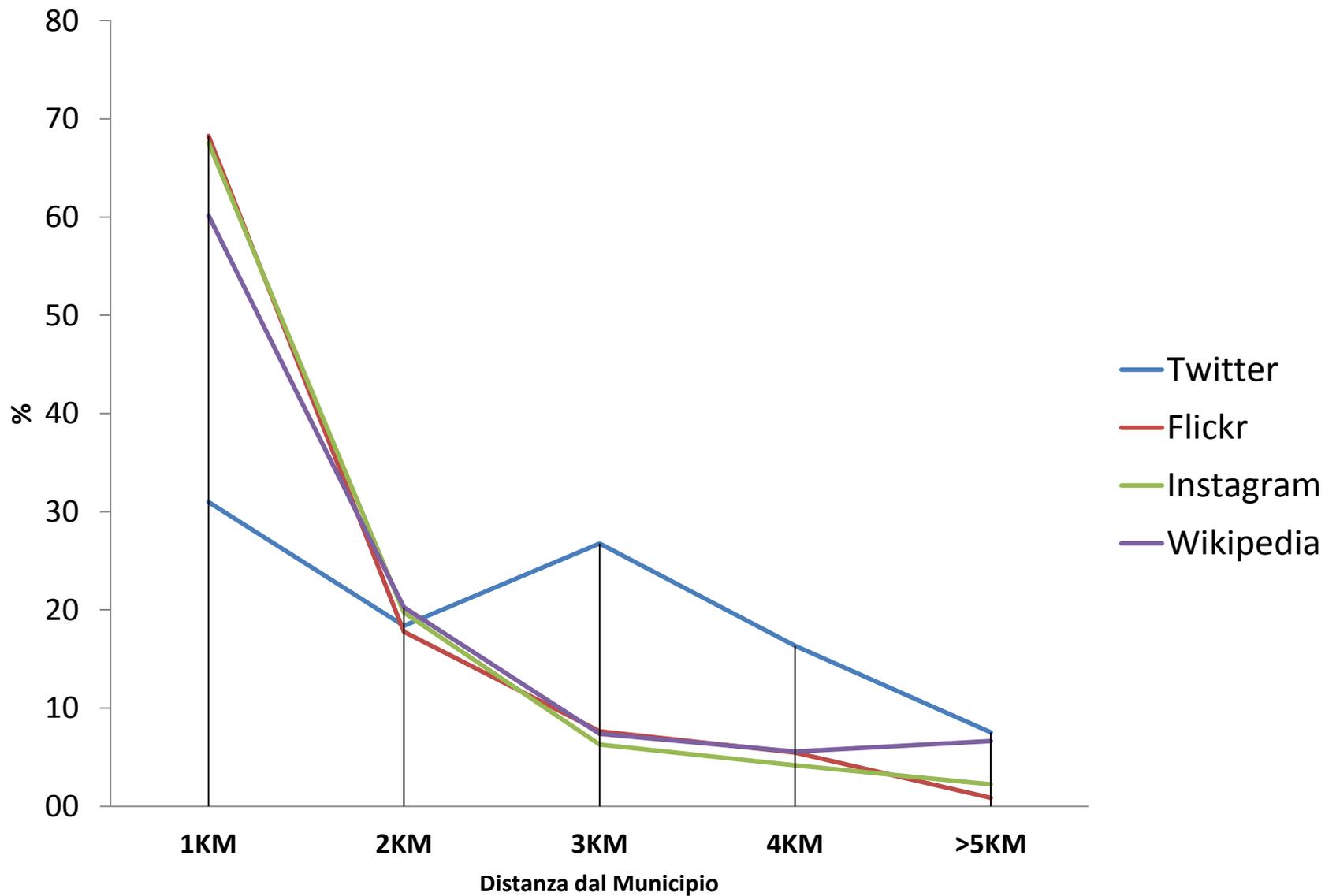
Tweet + Instagram + Flickr + Wikipedia

67.000 GeoSocial data per km²



DISTANCE DECAY

70% in centro storico



- ✓ *The internet is characterised by complex spatialities which are challenging to understand and study, but that doesn't give us an excuse to fall back on unhelpful metaphors which ignore the internet's very real, very material, and very grounded geographies. (M.Graham).*
- ✓ **The experiment has tried to highlight multiple layers of digital geographic information strongly linked to the urban physical spaces that can contribute to the interpretation of the urban environment and its dynamics, and in an innovative way, the definition of urban centralities defined by social participation.**



Getty Images

DIGIPLACE

digital data and physical places (Zook, Graham, 2007)

CONCLUSIONI

- ❑ Presupposto: Open Geodata → Dataset più scaricati > Necessitano più apertura/usabilità (Global OpenData INDEX)
-
- ❑ LIMITI 'TECNICI' GEOPORTALE → **SHAPEFILE; ELABORARE XML/KML.**
 - ❑ LIMITI 'TECNICI' SOCIAL MEDIA → **API (Application Program Interface)**
-
- ❑ **La componente location/sense of place è presente negli UGC → Spatial Big Data**
 - ❑ **Volume, Varietà, Velocità**
 - ❑ **E' necessario validare e filtrare i dati**
 - ❑ **Veradicità**
 - ❑ **Livello 'UGC' può contribuire (arricchire) ad una nuova rappresentazione urbana**
 - ❑ **DATA DRIVEN SCIENCE**
 - ❑ **E' fondamentale interrogarsi sui vantaggi e sulle potenzialità dei dati social circa il buon governo del territorio.**