Mapping Experiences and Culture of Opensource Cartography

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We have been adequately cautioned about mapping as a means of projecting power/knowledge, but what about mapping as a productive and liberating instrument, a world enriching agent.

-- James Corner, *The Agency of Mapping*, 1999.

My talk

- Opensource cartography
- Explanations in era of web2.0 production of knowledge
  1. Ritzer's notion of 'prosumer society'
  2. Goodchild's concept of 'volunteered geographic information'
  3. Carr's critical 'ignorance of crowds' argument
- Gaining scholarly understanding of space and memories of place through studying ('doing') opensource mapping
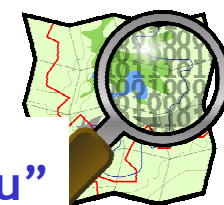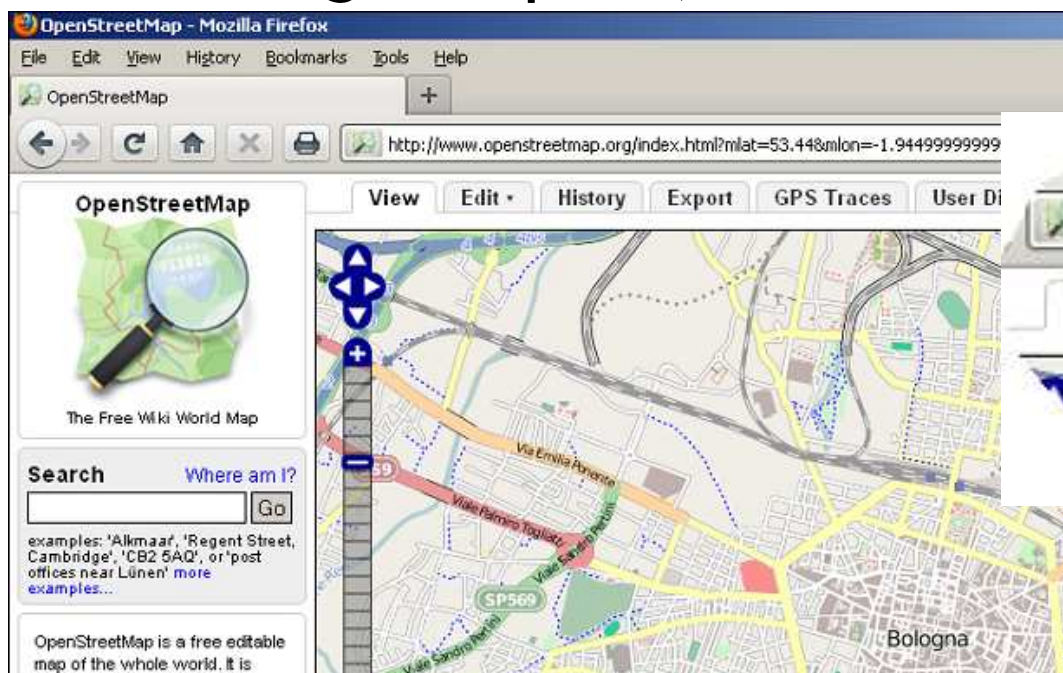
What is opensource cartography?

- Cartography – closed, elite knowledge
- Existing map data expensive, restrictive
  - artificially stifles innovation and wider use
- Building 'free' map from bottom-up, surveying street by street. Can't use existing copyright sources

- Enrolling large numbers of non-professionals
- Embodied experience, local expertise

What is opensource cartography?

- OpenStreetMap (OSM) grown into the leading crowd-sourced, web2.0 mapping service
- It's a wiki – everyone can edit everything
- licensing is 'open', fosters creative re-use

OpenStreetMap – "free, editable map … it is made by people like you"

Explaining Opensource Cartography

- Era Web2.0 knowledge production
  - Web1.0 was download + read;
  - Web2.0 is write + share
  - Web2.0 is participatory, people add value to sites and services as they use them
  - Social media – taps into basic human desires
- Much hyped (web1.0-to-2.0 split is artificial), but real world power as a concept
- It is clearly a time of change and innovation, but what does this mean for knowledge about places and memories? Issues: quality, coverage, reliability, authority, longer-term sustainability,

Explaining Opensource Cartography

- George Ritzer "… the producers of much that exists on Web2.0 are simultaneously the consumers of what is produced and there is a fluid relationship between production / consumption and producers / consumers. In terms of the latter, this is the emergence of the 'prosumer'" (p. 8)
- Evidence of prosumption: extending self-service; unfinished products; rise of the amateur (e.g. citizen journalist, unfiltered news)
- Ritzer clear you can identify an emerging _new_ mode of capitalism – 'prosumer economy'

Explaining Opensource Cartography

- Prosumption distinct from production oriented capitalism, consumer capitalism in West
- But, its additional not a simple replacement
- Beneficial: "In Marxian terms, the worker produces a great deal of surplus value, the consumer who 'works' produces nothing but surplus value…." (p. 20)
- Culture of generosity versus exploitative dialectics
- Yet Ritzer asks is their also genuine sense of empowerment and enjoyment in being a prosumer
- "On Facebook, empowerment lies in the fact that one can choose exactly how one wants to present oneself and can alter that presentation at will" (p. 26)

Explaining Opensource Cartography

- Ritzer, "Thus, a complex set of factors is involved in becoming a prosumer including choice, coercion, enjoyment, false consciousness, manipulation and so on." (p. 27)

- Characteristics of prosumer societies: open-ended, heterogeneous, no linear trajectories or simply laws, contingent on local factors

- Fraught with problems, but not a conspiracy

- Yet built upon existing structures power-knowledge in many instances

Explaining Opensource Cartography

- Goodchild explains 'neogeography' using VGI framework

- Established 'citizen science', people provide observations and measurements for free that are of real value in advancing science

- Esp. useful as geographically distributed
  - amateur meteorological observations
  - amateur ornithologists for bird counts
  - amateur astronomers making real discoveries

- But minority participation – requires fair degree of skills, expertise and *motivation*

- Growth of VGI > lowering the barriers to entry

Explaining Opensource Cartography

- Motivation: "Why is it that citizens who have no obvious incentive are nevertheless willing to spend large amounts of time creating the content of VGI sites?" (p. 219)
  - community minded, altruistic ethos
  - vanity and self-promotion (but often VGI output is anonymous); peer recognition
  - personal satisfaction, intellectual challenge
  - powerful lure of local – place matters in peoples lives
- Can we trust VGI?
- Is VGI is democratic authorship?

Explaining Opensource Cartography

- Carr 'contrarian' economist, realist
- Critical of economic value of web2.0, the *kinds* of information and *quality* that these models can actually create
- "peer production is best viewed as a means for refining the old rather than inventing the new; that it's an optimization model more than an invention model" (p. 2)
- Need tight editorial control to assure quality
- Web2.0 can't be democratic or egalitarian, otherwise it tends to produce rubbish, 'ignorance of crowds'

Explaining Opensource Cartography

- "The Internet is changing the economics of creative work - or, to put it more broadly, the economics of culture - and it's doing it in a way that may *well restrict rather than expand* our choices. Wikipedia might be a pale shadow of the Britannica, but because it's created by amateurs rather than professionals, it's free. And free trumps quality all the time. So what happens to those poor saps who write encyclopedias for a living? They wither and die. Implicit in the ecstatic visions of Web 2.0 is the *hegemony of the amateur*. I for one can't imagine anything more frightening." (*The Amorality of Web2.0*, www.roughtype.com/archives/2005/10/the_amorality_o .php)

Studying Opensource Cartography

- Web2.0 mapping projects, like OSM, offer some new potential avenues for academic studies
- They expose how the *processes* of knowledge creation really happens
- Shifts focus onto mapping *practice*, not map products
- Revealing authorship, partiality of representations and contested ownership of places
- These are rich areas for social science research - open up links to emerging themes across geography and STS, in terms of material culture, embodied performance, memories and surveillance, temporal rhythms and mobilities, ...

What do people do with maps? And why?

• Study embodied practices of mapping, researching 'doing'

(Photographs by Stephen Gill)
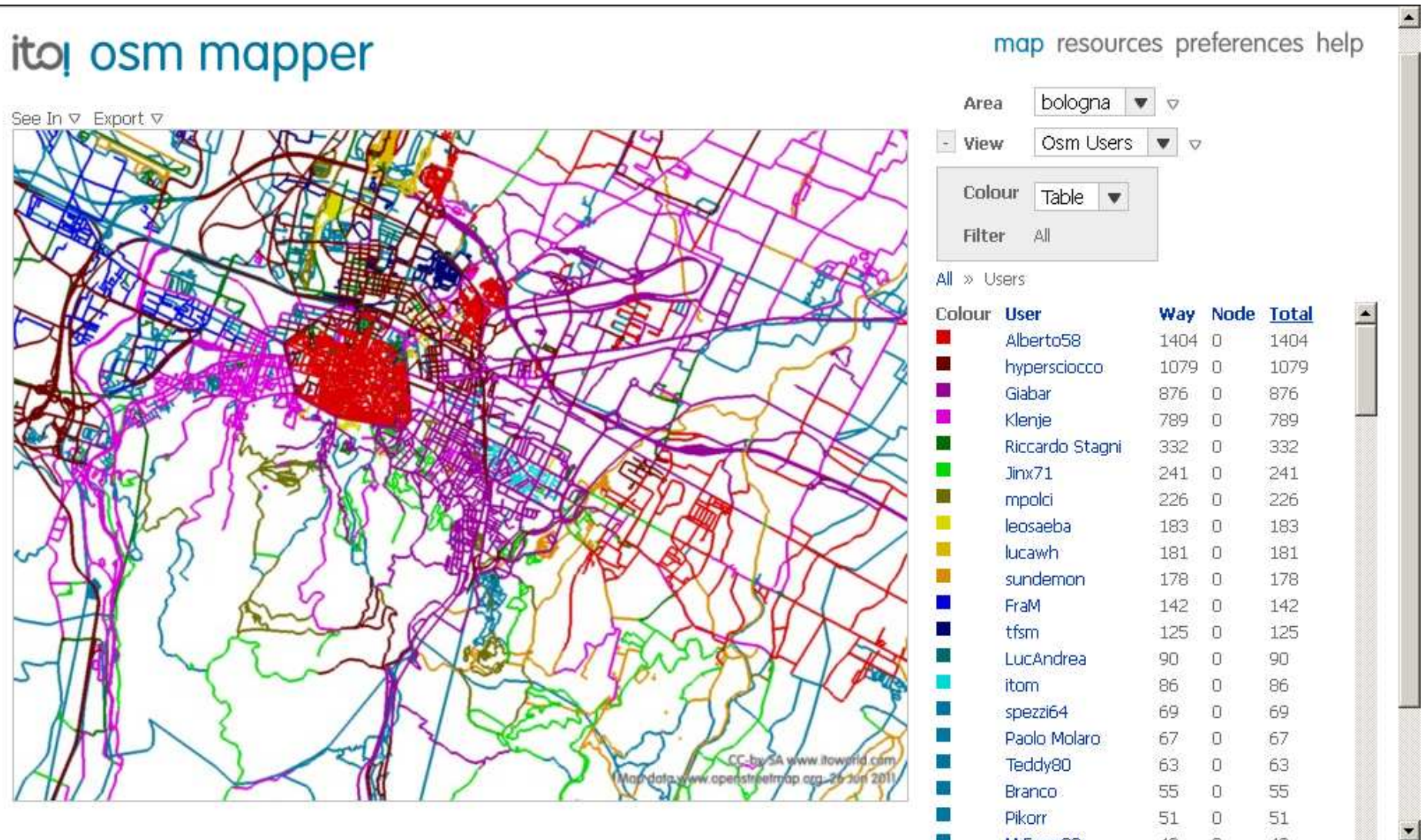
Emergence of ontologies of place

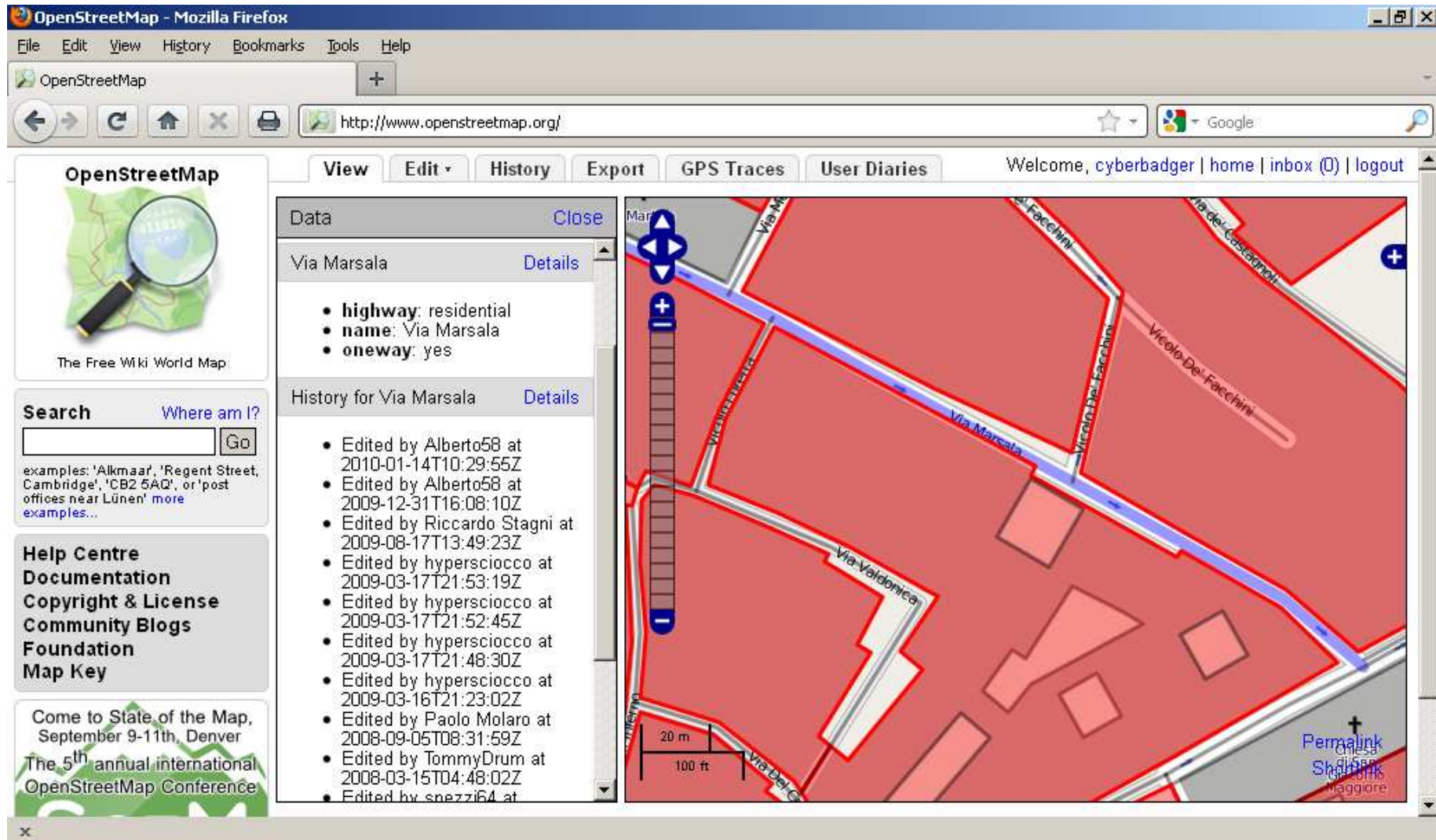January 2011 – 343 messages on Italian OSM list

Emergence of ontologies of place

- OSM novel application; reinventing and fresh rethinking, new 'rules' for mapping being made
- Typically these kinds of practices are closed, undocumented and hard to observe
- Explaining what gets mapped and not mapped is at core of critical understanding of representation of place
- Ontological politics, multiple voices, conflicting ideas; how is agreement reached? democratic?
- Fascinating stories of cross cultural difference
- Tensions in accepting local difference, and cartographic rationality of imposing universal order

Authorship of mapping:
fractures anonymous authority?

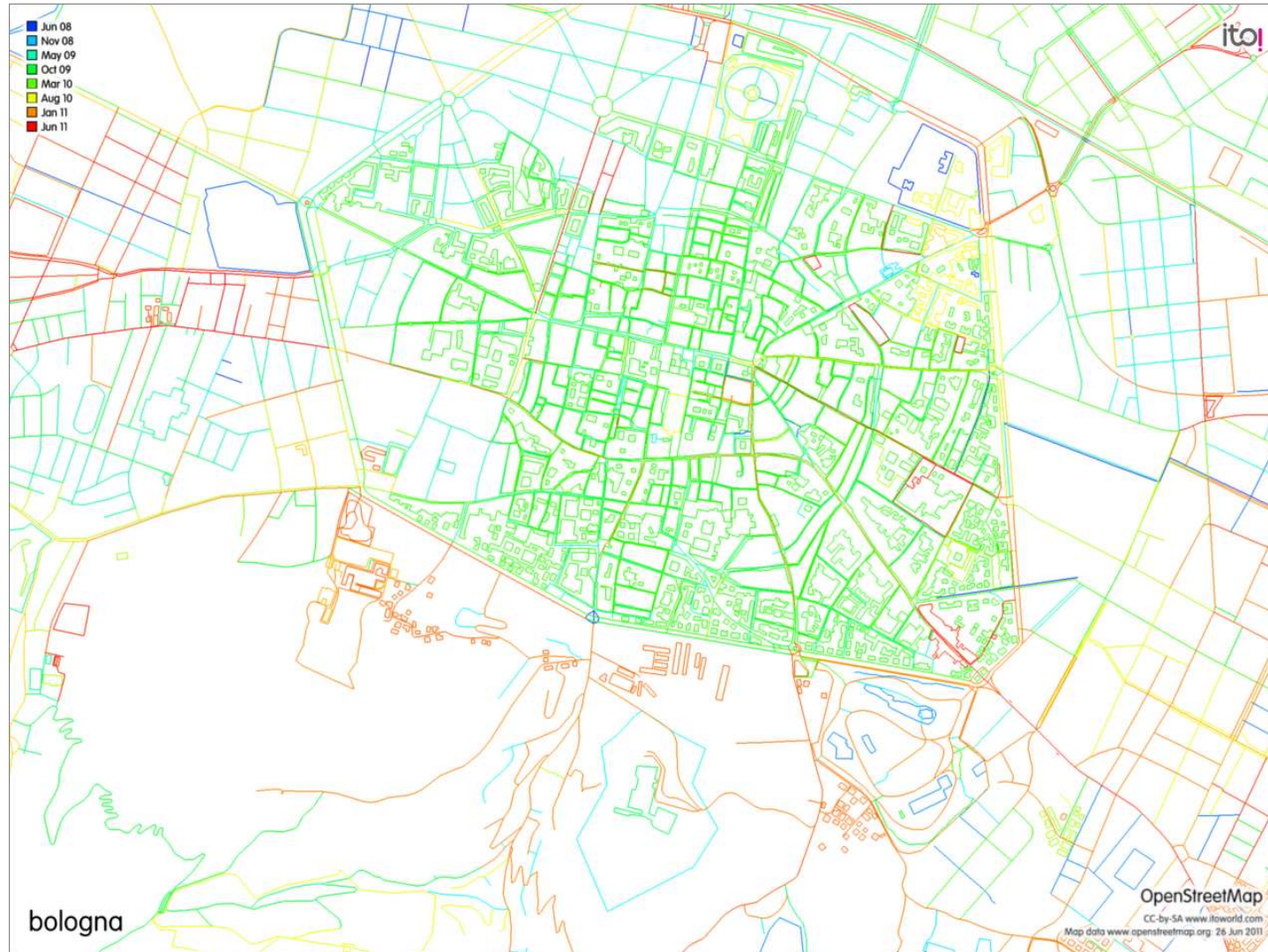Created with ITO!'s OSM Mapper service, www.itoworld.com

Who is mapper Alberto58???
Is 'he' reliable??

Maps as memories
explodes myth of temporal fixity?

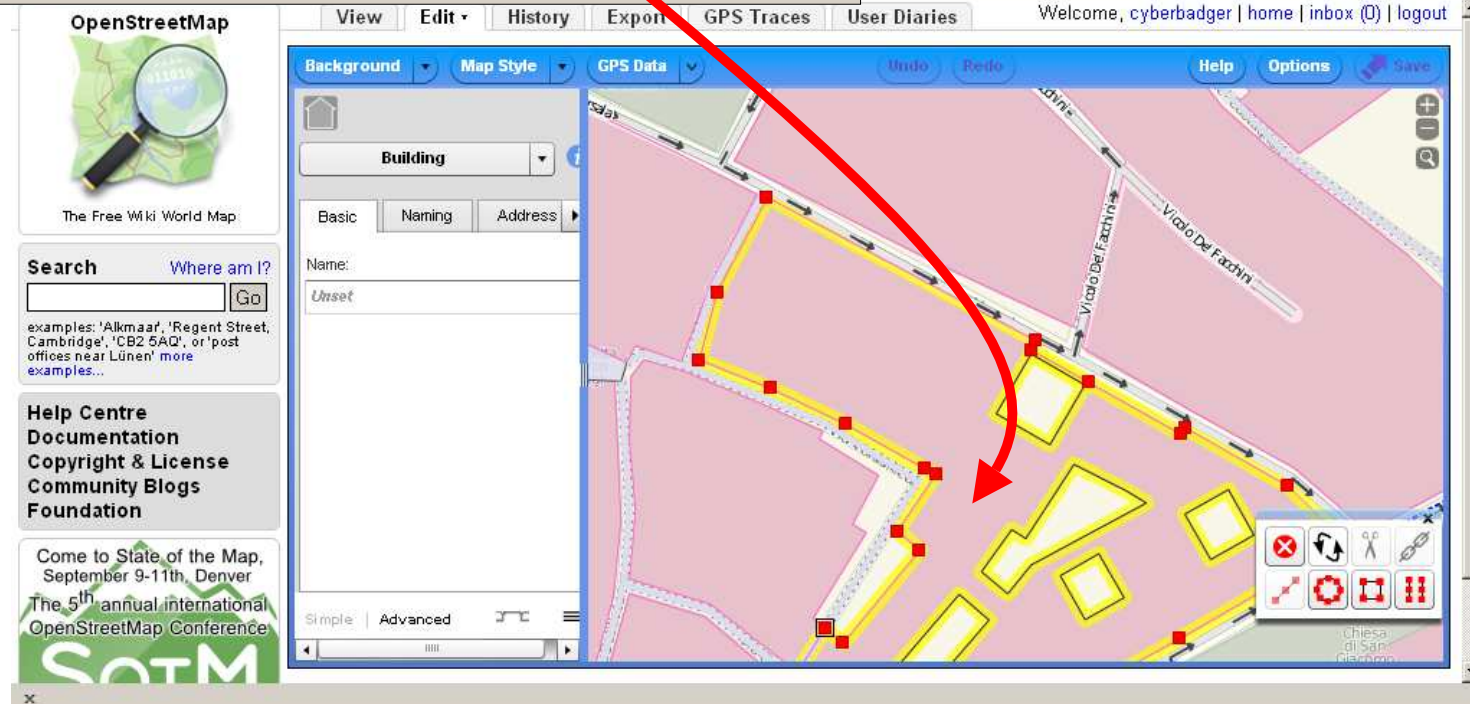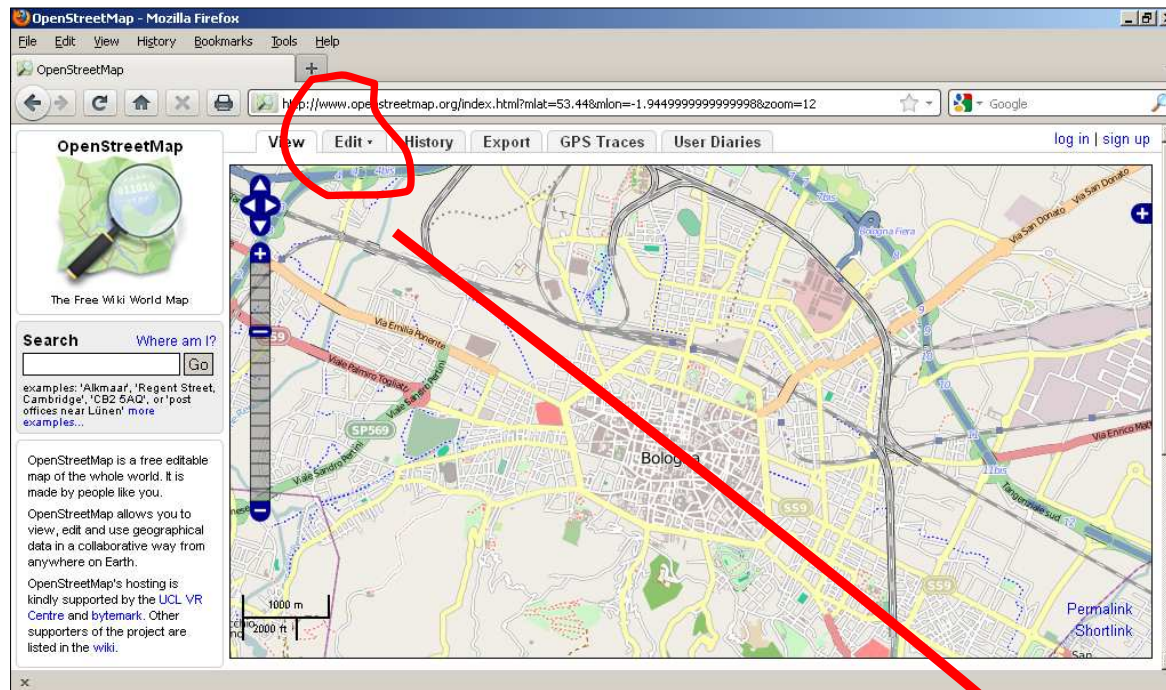Created with ITO!'s OSM Mapper service, www.itoworld.com

Concluding thoughts

- Opensource cartography offers an exciting opportunity to gain some genuinely new insights
  - into the nature of place and their representations,
  - embodied mapping practices,
  - and to reveal some of deeper social and political implications of 'prosumer capitalism'
- Ethical research that will exploit but not being parasitic
- Researching by becoming an OSMer

Reading the map

Doing mapping

- Ritzer G, 2010, "Production, consumption … prosumption?", mimeo, <www.georgeritzer.com>
- Goodchild M F, 2007, "Citizens as sensors: the world of volunteered geography", *GeoJournal*, 69: 211–21
- Carr, N G, 2007, "The ignorance of crowds", *Strategy+Business Magazine* 47: 1-5