Open Historical Map: re-using obsolete information

or, the world's most outdated map

David Evans[3] Jeff Meyer[2] Rob Warren[1] et al.

[1]rwarren@dal.ca
Dalhousie University, Canada

[2]jeff@gwhat.org
San Francisco, USA

[3]d.f.evans@derby.ac.uk
University of Derby, UK

State of the Map: Birmingham 2013

Presentation Outline

1. Introduction - Why OHM?
2. Use cases
3. Data Feeds to it
4. Conclusion

Introduction

- Born from many competing ideas about historical mapping.
- Using its own database, as opposed to **OpenSeaMap**.
- **OHM** prefix for tag namespaces (`ohm:military:wireObstacle`).
- Slightly modified toolchain.
- Primary interested in things that aren't there anymore, *or that have a historical value*.

Seattle, then (1860) and now - Jeff Meyer

http://www.openhistoricalmap.org/?lat=47.60075949&lon=-122.332471&zoom=17&layers=H

Initial Drivers

- Born from many competing ideas and projects dealing with historical mapping.
- Academic, government and hobby projects generate GIS data that needs a home.
- “Users” tend to be institutional / research employees that don’t want to hand edit things but provide data dumps.

OHM *vs.* OSM

- Data comes from scripted processes - if you break it, you fix it.
- Aggressive use of *start_date*, *end_date* and *historic:era* - both as a search key and rendering hint.

Use cases

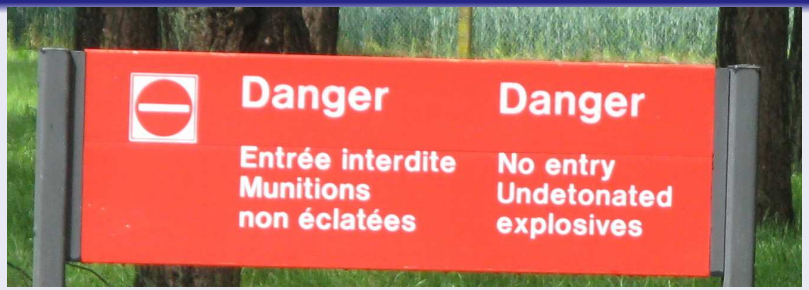
- Primary use as repository of historical GIS information.
- Recycling all of those edits that ended up deleted (or have date_end) from OSM.
- Useful as secondary layers - what was here before?.
- Search for lost features, places and things.
- An obvious “Killer App” is safety during excavation.

What was here before?!

Forgotten infrastructure can be deadly

Source: `http://myblog.it/`

What was here before?!

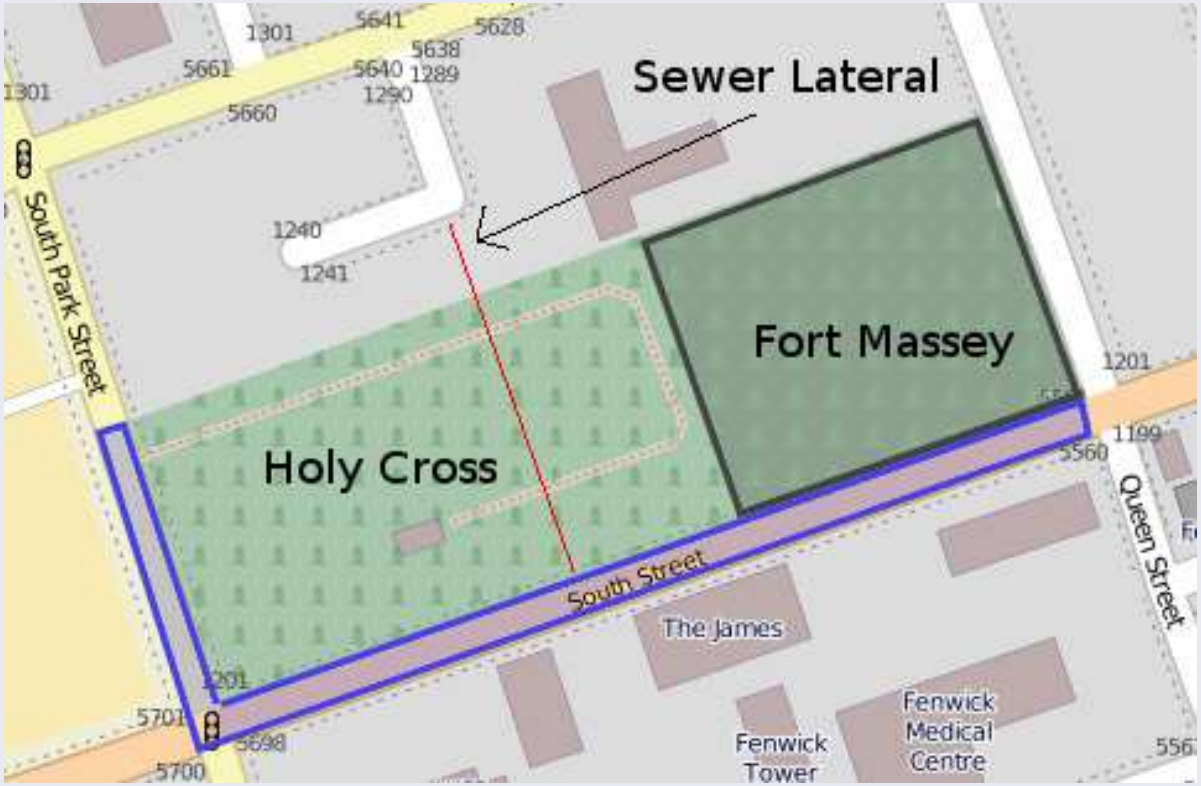


Punctured pipeline was unmapped

A natural gas leak that forced more than 40 people from their homes along the Burnaby-Coquitlam border occurred when a road crew struck an old service pipeline not on FortisBC's map, a spokeswoman for the energy company said Wednesday.

BY VANCOUVER SUN FEBRUARY 9, 2012

Corpses need mapping too!



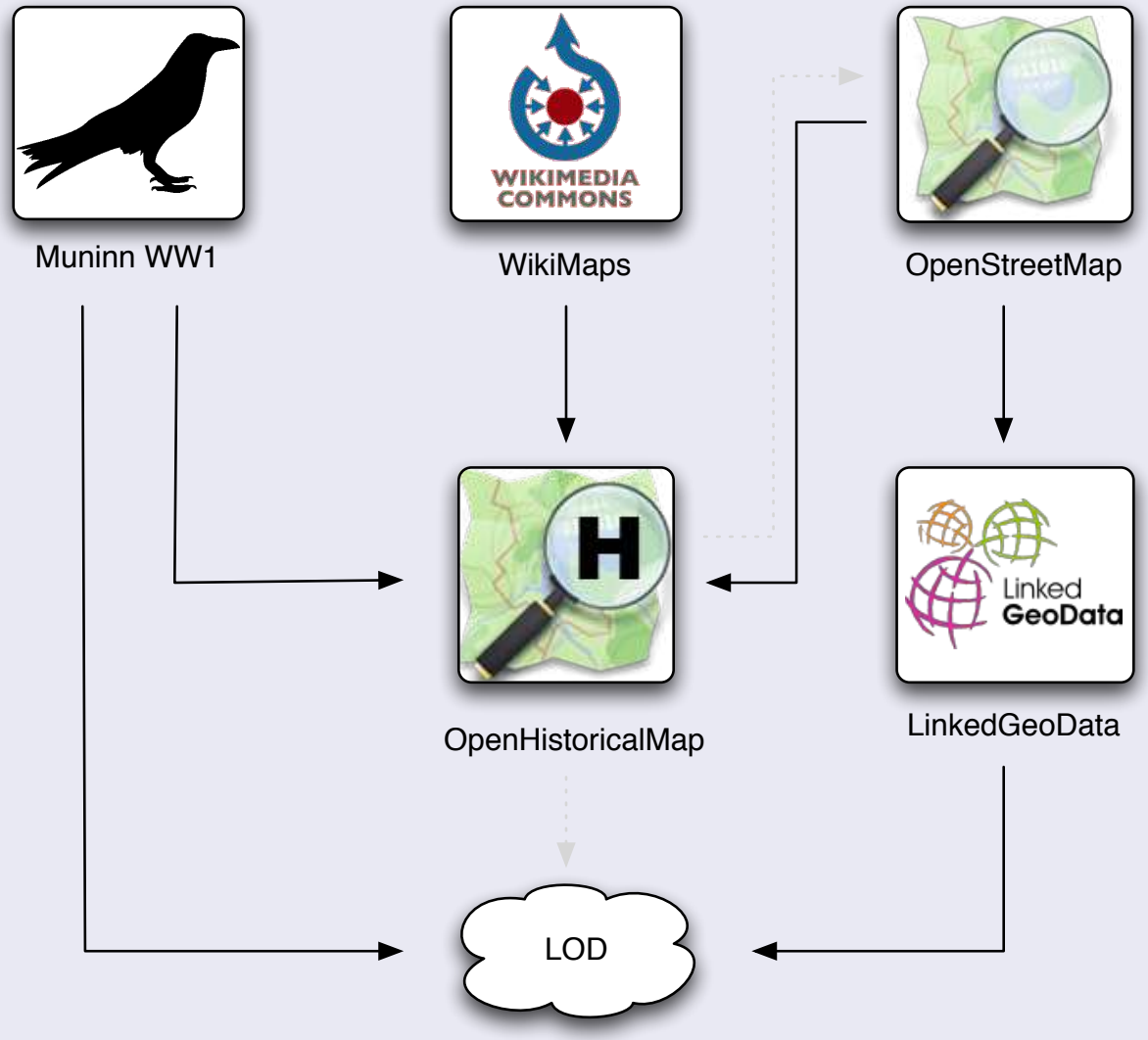
http://www.openstreetmap.org/#map=17/44.63910/-63.57568

London Crossrail Dig Sites

http://www.crossrail.co.uk/sustainability/archaeology/

case-study-archaeology-at-crossrail-liverpool-street-site

Process

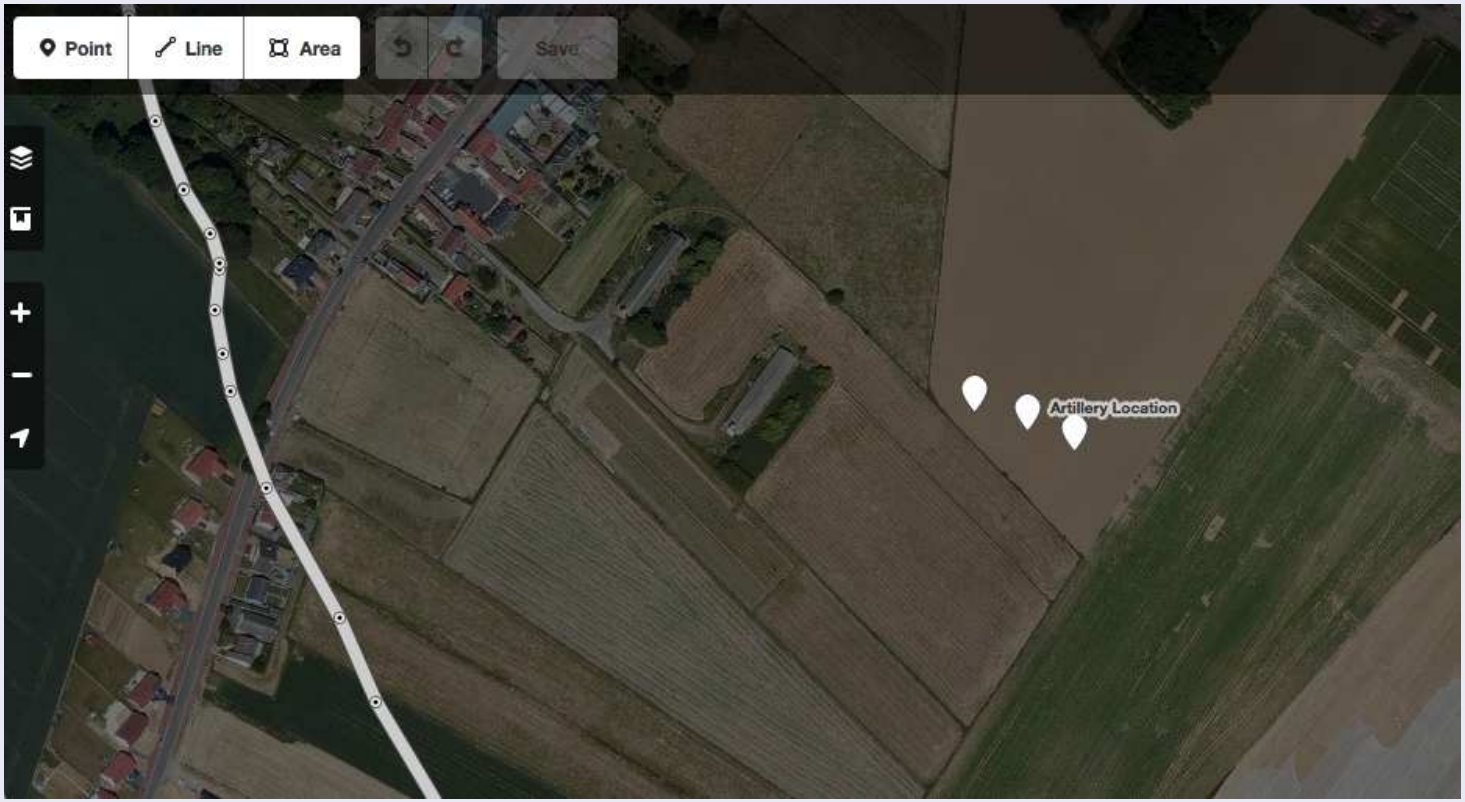

Muninn WW1
WIKIMEDIA COMMONS
WikiMaps
OpenStreetMap
H
OpenHistoricalMap
Linked GeoData
LinkedGeoData
LOD

Great War Trenches Overlays

Moeuvres, France

http://www.openhistoricalmap.org/?lat=50.16668&lon=3.053815&zoom=16&layers=H

Great War Artillery Locations



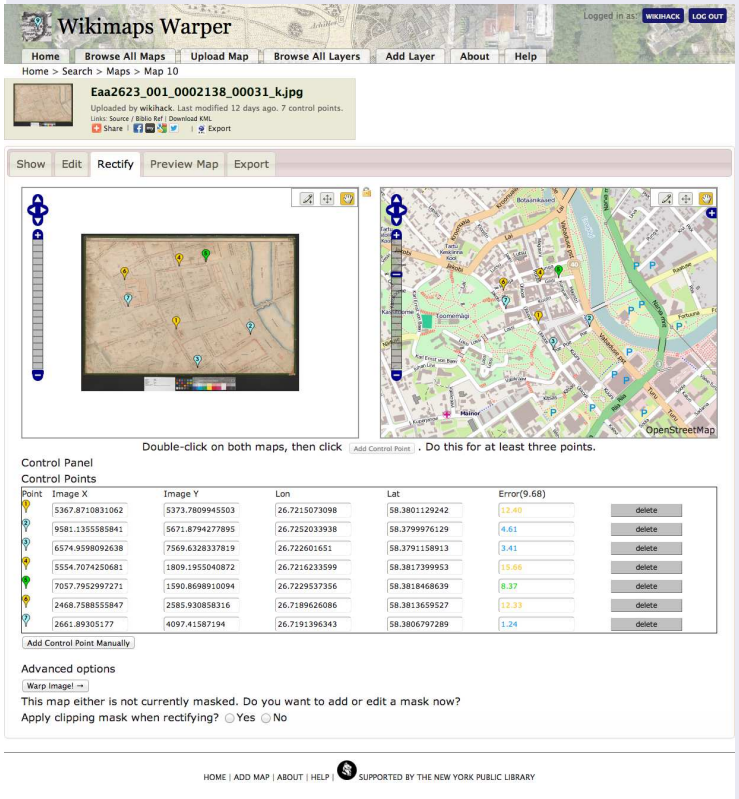
Inchy-En-Artois, France

`http://www.openhistoricalmap.org/?lat=50.17405&lon=3.05191&zoom=16&layers=H`

Wikimaps 1/3

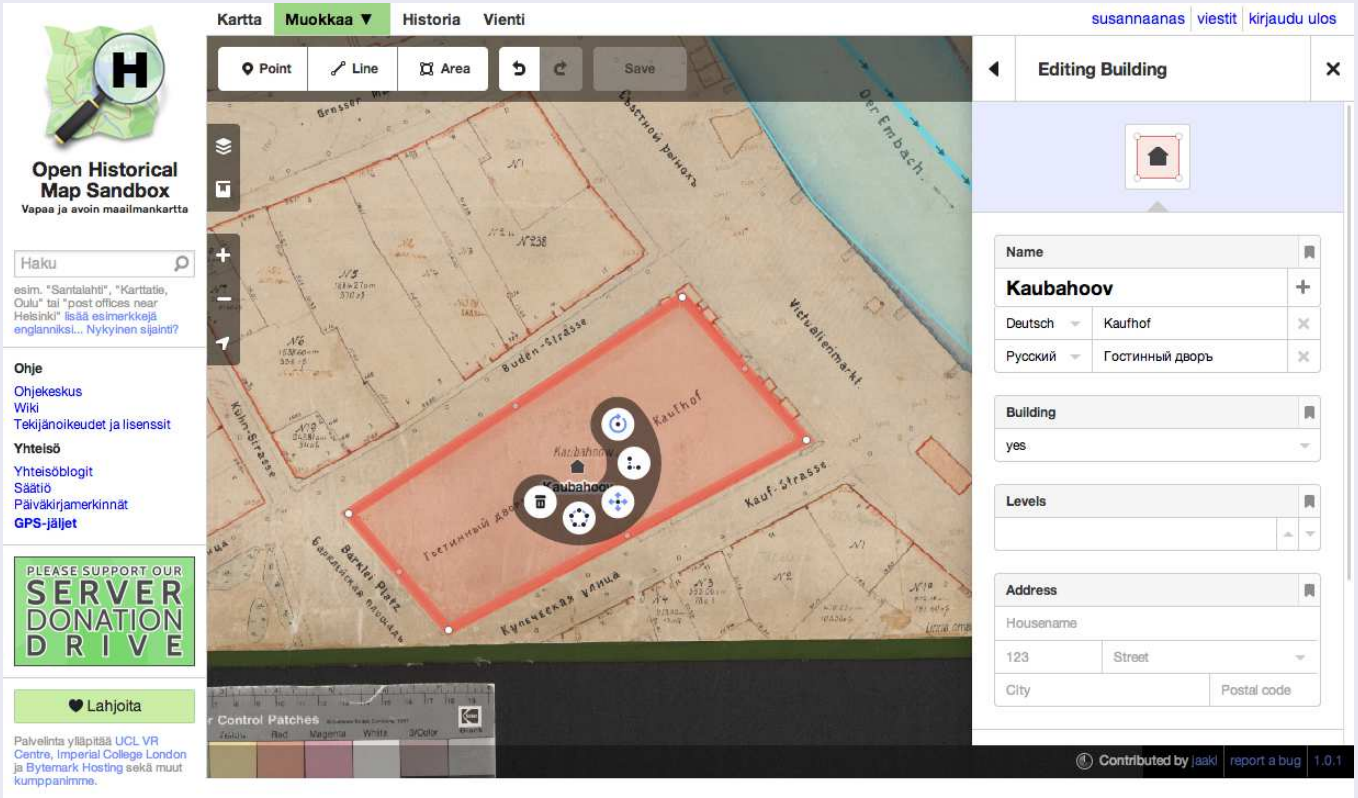
- Record mapping meta-data in Commons.
- Extract data from maps images already available.

Wikimaps 2/3



- Warp / Re-project the Map.
- Available as a web service.
- Acts like a WMS and OSM xyz tile server.

Wikimaps 3/3


Kartta
Muokkaa ▼
Historia
Vienti
susannaanas
viestit
kirjaudu ulos
Point
Line
Area
Save
Editing Building
Open Historical Map Sandbox
Vapaa ja avoin maailmankartta
Haku
Ohje
Ohjekeskus
Wiki
Tekijänoikeudet ja lisenssit
Yhteisö
Yhteisöblogit
Säätiö
Päiväkirjamerkinnät
GPS-jäljet
PLEASE SUPPORT OUR SERVER DONATION DRIVE
Lahjoita
Name
Kaubahoov
Deutsch
Kaufhof
Русский
Гостинный дворъ
Building
yes
Levels
Address
Housename
123
Street
City
Postal code
Control Patches
Contributed by jaakl
report a bug
1.0.1

Rendering with OHM

- Trying to get rendering of the map is ... annoying. Fighting with the renderd codebase while trying to make sense of multiple ways of seeing time. (How do we transform "The 1860's" into a date query?)
- Attempting to use a simple rendering system based on start_date and end_date.
- Some rough starts - *We need help with rendering!*

Links within and without OHM

- Experimenting with OHM:SameAs - add a owl:sameAs to the LOD?
- Lessons from Time Ontology - `start_date:before` and/or `start_date:after`?
- Link nodes in OHM imported from OSM using OHM:OSMOriginal?
- Linked Open Data has interesting applications to fuzzy information.
- before, after, during, partOf
- Very Experimental.
- *Record whatever data we have now and let the renderer decide later...*

Help wanted!

- Different rendering styles needed (NATO,Archaeological,Hazmat Map styles?).
- Historical applications abound - let's use the data!
- OHM/OSM are great data integration points with other databases (wikipedia, LOD).

FREEDOM IS
IN PERIL
DEFEND IT
WITH ALL
YOUR MIGHT
MAKE A MAP!

More Talking

- Open Historical Map mail-list: `http://lists.openstreetmap.org/listinfo/historic`
- Open Historical Map irc: #hosm on `irc.freenode.net`
- github `https://github.com/OpenHistoricalMap`
- `http://www.openhistoricalmap.org/`