GIS data

Week 7

Extracting historical geodata.

Due date (changed) November 6.

For this week, we'll be collaboratively digitizing some historic geodata.

In class

1. Download a map of the world from http://www.naturalearthdata.com/downloads/50m-cultural-vectors/

2. Set your CRS as the world.

3. Download Boston-Area shapefiles from benschmidt.org/GIS.zip

4. Load them in QGIS.

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1. Choose your map

We're using maps of Roxbury from 1915.

https://www.flickr.com/photos/mastatelibrary/albums/72157634973616960

You've selected one already.

2. Georectify the map

Using some of the Boston shapefiles we've seen in class, georectify your map.

You'll need something to use as a base layer! I've given you to download a set of roads; but there are a variety of other sources out there that may work as well. http://wsgw.mass.gov/data/gispub/shape/eotroads/eotroads_35.zip

Abby Mullen has posted a list of instructions for georectification online One additional note: be sure to choose "polynomial 2" as the method; otherwise, you might end up with a weirdly warped map.

3. Create a polygon layer.

Follow the directions here to make the layer. Make sure the attributes for each object include:

Be sure to follow the typology here exactly; don't make the column for "type" uppercase, for example! But do make sure it's a *polygon* layer, not a line layer, since buildings have shapes.

1. `id`
2. `type` let's try for a five-type taxonomy. Enter the term *exactly* as it appears below.

    - `Commercial`
    - 'Residential
    - `Industrial`
    - `Government`
    - `Communal` (churches, YMCAs, etc.)

3. `name`: The label for the object on the map.

4. Trace the five larges buildings in your map to the polygon layer.

Again, follow the directions here.

5. Save the exported shapefile into a new folder.

That folder will have several files in it; one that ends with `.shp`, one that ends with `.prj`, and so forth.

Zip the *entire folder* and mail it to me–we'll try to assemble all these pieces together into a partial map of Roxbury 100 years ago.