**GEOB 472: Assignment 3**

**Data Journalism: Infographic of refugee data**

**Due**: Tuesday Oct. 11th at the beginning of class (2 weeks for assignment – week 1 plan, acquire, parse, filter, mine data; week 2 represent, refine data in infographic (not interactive)).

Background Scenario

You are a cartographer and data visualization expert working at Canada’s national newspaper, *The Globe and Mail*. You have been asked to work with a reporter on an article related to the Syrian refugee crisis and how these asylum seekers are processed by governments.

A year now after the Liberal government has been elected, and agreed to fast track 25,000 Syrian refugees, there is some public discussions on processing their applications, time and cost by government agencies, security surrounding the screening process etc. which have caused public concern in some host countries (particularly in the US with the pending election). You are going to create an infographic centering around more specific government data on processing asylum seekers from Syria.

The objective of this infographic is to:

* Communicate the number of Syrian asylum seekers to Canada and other ‘relevant’ countries of your choice over approximately the past 5 years (the beginning of the Syrian refugee crisis).
* Communicate the number of asylum seekers, and more detailed information on the number of claims process, accepted, rejected, pending by country.
* To help Canadian readers of this newspaper compare and contrast Canada to other countries when it comes to the Syrian asylum seekers and who have and have not obtained refugee status.

Assignment Steps and Deliverables

There are many datasets available on Refugee data. As a data journalist, you would have to search the internet to find the most relevant, accurate, ethical, up-to-date data.

This is complex data, and there are many options so I am giving you the web site with the accompanying data set:

<http://popstats.unhcr.org/en/overview>

Question 1: in approximately 300 words, comment on the front page interactive visualization: and effectiveness as an infographic (interactive maps, graphs, text).

**Acquire data**: review UNHR terms, understand data – definitions of asylum seekers, refugees, status of applications, government sponsored versus arriving by illegal boat…

From home page, Go to the Asylum-Seekers (refugee status determination) tab

Build Query and display this data:

**Years**: pick the years that have been affected by the Syrian refugee crisis, up to 2015

**Country of asylum**: *Canada*, + whatever other countries you want to use as comparison (US, countries surrounding Syria, Western Europe…)

**Origin**: *Syria*

**Data items to display**: select all options

Look at data displayed from query – you will need to think about how to later parse/filter/mine this data when you download it – for example, RSD procedure type/level differs – you need to select one for each country to map/graph – for example, for *RSD procedure type/level*, only look at G/FI for Canada, or G/IN for US, G/NA for Germany…). Also for *rejected* claims, and *otherwise* closed, if you want to map/plot these rejected data, you may want to add up these columns for ‘all rejected/closed’ for example. You may want to re do your initial query, changing countries etc.

Here is where you need to understand the data, what exactly you are visualizing, how to convey this complex information to the public, how to compare and contrast appropriately.

Download (export) data into an excel spread sheet.

Question 2: save and post your original data download to your blog.

**Parse and Filter data**

Look at data in excel or Access (ArcGIS) or QGIS or whatever program you use to read and edit data. You have downloaded all the possible data for this project, now you need to review the data, and modify the data to create your visuals - as per some suggestions above.

Question 3: Save your modified data set with metadata (comments) about how you modified the data for your visualizations (maps and plots). Post to your blog in an excel-like format that I can open and review.

**Mine data**

In GIS or Excel, etc conduct any analysis of the data – summary statistics, tables, maps, classifications

**Represent Data**

Create maps and plots and graphs etc to visualize the data to tell the ‘story’ of your infographic.

Your infographic should present your data clearly, concisely, and creatively and should include a variety of visual formats. The visual MUST include (a) map(s) and (a) graph(s) and a minimal amount of supplementary text; optional would be a photo(s) and/or illustration(s). Your visuals will be published in the print version or digital version of the paper as an 11 x 5 inch “visualization”. It is your choice whether landscape of portrait. You have full use of colour.

Question 4: post the .jpg of your final visual to your blog and print out a hard copy version of the infographic using the 11x17 inch printer in the geog building, or elsewhere.

Other Tabular Data sources

UNHCR sorts data by country and crisis. Here is the link to the Syrian crisis:  <http://data.unhcr.org/syrianrefugees/regional.php>

You can download the data behind many of the graphics.

(**WHAT WE HAVE USED FOR THIS ASSIGNMENT**) UNHCR also has a Population Statistics Database: <http://popstats.unhcr.org/en/time_series> You can create queries in the right panel to select particular refugee or displacement information by country of origin and current registration by country.

(A researcher at the University of Wisconsin Madison took this dataset and joined it to a countries shapefile from Natural Earth: <http://www.naturalearthdata.com/downloads/10m-cultural-vectors/> )

2. There are also data available at the **World Bank** website:

<http://data.worldbank.org/indicator/SM.POP.REFG>

3. And the **European Community** statistics web site.

<http://ec.europa.eu/eurostat/web/asylum-and-managed-migration/data/main-tables>

Explore the various tables and datasets related to refugees, and then select appropriate data and download the tables of interest. Note that there are some maps available on these web sites; please look at them for ideas, but ensure that any maps you create are your own.

Base maps

In the g:\course\data\basemaps\_gis\Word there are ESRI shapefiles for the world. (They are 2006).

As mentioned above, there is a shapefile from natural earth:

<http://www.naturalearthdata.com/downloads/10m-cultural-vectors/> )

Jose also suggests these opendata sites:

* UBC Library Abacus Dataverse Network  
  <http://dvn.library.ubc.ca/dvn/>   
  Use key words: ESRI data maps. There are 5 DVD—worth of layers for different areas of the world or the world as a whole. They can download just what they need
* Global Administrative Areas  
  <http://www.gadm.org/version2>   
  They can download by country or the whole world. It has multiple administrative area layers (country, province,county, etc…) depending on the country.

Software

ArcGIS and Adobe Illustrator CS4 are available in the geography labs. To access them:

* Lab fee is $20 payable at the main office between 10 & 2. It is optional since many are working on their own laptops. If using our labs, you need to buy printing credits from the main office as well. This is different from the Pay for Print system the library uses.
* There is GIS installed in Koerner Room 217 (<http://koerner.library.ubc.ca/services/gis-services/koerner-217/> ). Open same hours as library.
* Ike Barber Learning Commons also has Mac stations with CS6 suite installed.  
  <http://learningcommons.ubc.ca/tech-support-2/computers/>

Hand in:

* Bring to class the day it is due a paper printout of your map
* Post to your wordpress site by 2:00 the day it is due the answers to Question 1-4. (your write up on the UNHR web site, your 2 data files, the .jpeg of your image

Reading

Please use the teachings of Edward Tufte and Alberto Cairo for inspiration and guidance in making design decisions to best communicate to your audience. See particularly:

* Tufte E (2001). *Visual Display of Quantitative Information*. Graphics Press. pp. 74-75, 91-91, 126-129, 142, 177, 183.
* Review readings from week one in Tufte’s books.
* Cairo*: a functional art* is all about infographics – see his examples (copies in the GIC if you have not bought a copy).