MOOC: Cartography

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1. What is generalization? Explain with your own words, and state when it is necessary.

Generalization is the process to simplify the representation of geographical data to produce a legible map at a certain scale. Clearness and Readability of map is important since maps are meant to be shared with large audience or when the data contains lots of information. Especially, the maps that are to be shared with general public, generalization should be considered. When data contains high amount of data, the data could appear to be cluttered this could lead to a map that is not readable quite well. It is also done to create maps at different scales to make maps more understandable for audience. The process of generalization is not new, It has been used in traditional or manual cartography. Similarly, it is used for digital cartography. Generalization might lead to lesser accuracy however, it is still worth doing in most cases. Generalization is done through various methods such as smoothing, exaggerating, simplifying, reclassifying, merging, and filtering. One or more generalization techniques can be used in a map depending upon the need and outlook as judged by the cartographer.

2. In section 2, you have explored a range of classification techniques. Please list some of them and choose one for a detailed description.

There are are various data classification techniques many of which we explored during the MOOC. A few of them are listed below:

- Fixed Interval or Equal Interval
- Quantile
- Natural breaks
- Geometrical Interval
- Standard deviation
- Manual Interval

Quantile Classification

My favourite classification technique is Quantile Classification. I prefer it for most of my mapping tasks. It is because it provides visual information with regards to quantity of data in different groups. Every class or group contains an equal number of features in this type of classification. So in this way, all classes have balanced amount of data so classes are well balanced. No class have dominance in terms of number of data points it has.

However, with every type of classification technique, there are few shortcomings or disadvantages. There are also some disadvantage of using quantile classication. Since features are grouped in equal numbers, the resulting map could be sometimes confusing . As similar features might be placed in different classes. If the threshold of a class is reached, in order to balance the classes, so to contains equal features, related features could end up in different classes.