Tristan Van Kote - Thanks to the Gibbons fellowship and Ms. Snow, I worked for Professor Albaugh during the summer of 2014. I worked for eight weeks to assist her gather data for one of her new projects. Professor Albaugh is exploring language spread in Africa. This summer research’s purpose was to provide a blueprint to enable professor Albaugh analyze data and test her research hypothesis, which inquires if civil war, foreign intervention and ethnic conflict influences language spread more than does education, trade, urbanization and topography.

My main task was to map language spread in each country of interest in Africa. We separated countries in different clusters, including the West Cluster (Cote d’Ivoire, Ghana, Togo, Benin, Western Nigeria, Burkina Faso), the Central Cluster (Nigeria, Niger, Chad, Cameroon, Central African Republic) and the Northeast Cluster (Eritrea, Ethiopia, Djibouti, Somalia, Ethiopia, Uganda and Kenya). I used Ethnologue as my primary source. I scanned maps representing the 2009 language spread in each country. Subsequently, using ArcMap, I georeferenced the scanned images to countries’ international boundaries and I created polygons along the lines of language boundaries. This work was a times rigorous since some countries have more than four hundred and fifty languages and many languages overlap. To symbolize the numerous overlapping languages on my maps required some thought and organization. At the end of the eight weeks, I was able to map language borders for Mali, Liberia, Cote d’Ivoire, Burkina Faso, Nigeria, Niger, Gabon, Equatorial Guinea, Congo-Brazzaville, Kenya, Uganda, Ethiopia, Eritrea, Djibouti and Somalia. Once I created every polygon for each shapefile, I joined data to the layers’ attribute tables that included information such as the number of speakers per language, the number of languages individuals spoke in one region or village and if the language was increasing, stable or decreasing.

In addition to language borders, we were interested in including census data on each map. The census data, generally from Afrobarometer or governmental surveys, informed us on the evolution of literacy rate, education rate, population and percentages of individuals speaking French or English from the beginning of decolonization to nowadays. Some surveys also gather data from representative samples regarding identity affiliations and individuals’ proficiency in mother tongues and lingua franca. I linked the census data to the maps by mapping several historical administrative boundaries, including ones for Cote d’Ivoire and Liberia, and then by joining the surveys to the administrative layers. These joins permitted us for example to create maps illustrating language proficiencies in different districts or education rate among counties throughout time. These studies are fundamental information to understand the role of each variable influencing language spread in Africa. The creation of some administrative boundaries was complicated. Indeed, some administrative boundaries that I downloaded were incorrect and other maps were hand drawn which made it difficult to georeference with international boundaries. To elaborate our maps, my professor and I decided to include conflict events to each country of interest, such as Liberia, Sierra Leone and Cote d’Ivoire. We sorted conflict events by symbolizing them differently depending on time, intensity and actors. We also added topography and infrastructures. With the groundwork produced this summer, Professor Albaugh will be able to compare regions with similar geography, education rate and urbanization but with dissimilar conflict impacts to determine if her hypothesis is accurate.