One of the goals of this essay is to demonstrate how humanities research can benefit from the integration and incorporation of the latest digital technologies, including GIS (Geographic Information System). Used as a tool, GIS allows one to visualize, analyze, and interpret data to identify and understand relationships and patterns, specifically the exploration of immigration as a facet of the human experience.

Nineteenth-century census abstracts can only provide data at an aggregate level; state, county, city, and occasionally a smaller subset such as city ward are the lowest measurable demographics available. While these statistics are useful when compared against other similar entities, in an immigrant city like Cleveland, there really was no ‘average’ as the demographics were very different from one neighborhood to the next. At a time in history when Cleveland was poised for exponential economic and industrial growth, the immigrants who propelled this expansion can only be measured at the level of a city ward. This project will demonstrate two different concepts related to further understanding of the ethnic heritage of a city like Cleveland: first, in the absence of a single source of street address data, one can combine three different data sources – the 1850 Federal Census, the 1850 Cleveland City Directory, and Cuyahoga County deed and tax records – to show that the census marshal took a linear path and that, assuming this, we can accurately predict where an individual lived in 1850 Cleveland. The second component to the project is that once the addresses are geocoded, one can attach various other social attributes to the individual - wealth, ethnicity, disease, mortality, etc. - and then map these attributes using GIS to produce a spatial representation at a household level. Using maps, this project
will contend that by successfully reporting location data at the individual level, the process can then be expanded to provide additional analysis of other social categories and different ethnic groups, providing future research opportunities for the Greater Cleveland academic community and continued research into Cleveland’s ethnic heritage.