

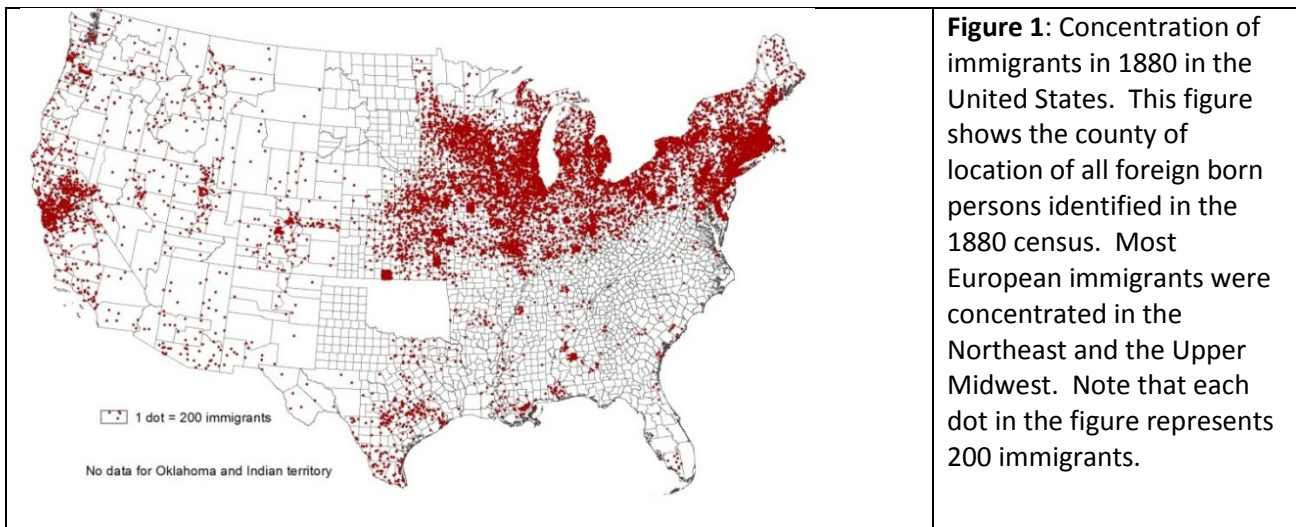
Movement and Occupational Hierarchy of Working White Males: A Longitudinal Analysis of First and Second Generation European Immigrants in the late 19th Century

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Introduction and Background:

Immigration into the United States peaked around the turn of the 20th century with 22 million European immigrants entering the country between 1880 and 1900.^{3,4} During this period, the number of foreign born living in the United States doubled from almost 7 million to about 14 million.⁴ Figure 1 shows the location of all foreign born persons identified in the 1880 census. Most of these immigrants were of working age, thus comprising a larger fraction of the labor force than that of the total population.^{1,4} The immigrants raised a second generation whose social, cultural, and economic characteristics were heavily influenced by their culturally diverse parents.³ The assimilation of first and second generation immigrants has been qualitatively and quantitatively analyzed by a number of scholars.⁴ There have also been several studies on occupational mobility in the United States.^{2,5} In our paper, we look at the assimilation of first and second generation immigrants by looking at their occupational characteristics and spatial location at two different time points - 1880 and 1900.

In this study we will answer two specific empirical questions. First, did immigrants and second generation immigrants move up the occupational ladder and how did their occupational mobility compare to that of the native-born? And second, how did the first and second generation immigrants move spatially within the United States and is their spatial movement related to occupational mobility? We address our questions using historical longitudinal data - IPUMS "Linked Representative Samples" and Geographical Information Systems (GIS)⁹ - both of which were produced by the Minnesota Population Center (MPC)^{7,9}.



Data and Methods:

The Minnesota Population Center has created IPUMS Linked Representative Samples of the United States, which consist of the 1880 US complete count database⁸ linked to one in one hundred national random samples of the population of the 1850, 1860, 1870, 1900, 1910, 1920, and 1930 censuses.⁷ All of the IPUMS datasets are harmonized through time with uniform coding schemes. For the purposes of this study, we use the IPUMS linked representative sample of males from 1880 to 1900. The longitudinal datasets contain two types of linked records: primary links and household links. The linkage process was designed to produce primary links that are as representative and accurate as possible. The household links were added in a separate step only to allow for easier study of the primary link's family over time. Our study takes into account only the "primary" links.

For our immigrant study group, we selected white working-age male European immigrants. We take those who were 20 to 50 year old in 1880, and subsequently 40 to 70 years old in 1900, to be of working age. Most of the linked males selected were born in Germany (n=324), followed by England (n=156), and Ireland (n=70). There were also a few immigrants from Belgium, Spain, and Iceland. It should be noted that European immigrants comprise the bulk of the immigrating population in the late 19th century United States. Also, more than 99% of the linked European immigrants in the IPUMS 1880-1900 linked dataset listed their race as "white". For the control group, we selected white working-age native-born males. The final N for this part of the study is 822 for the immigrant cohort and 5,887 for the native-born cohort. In addition to comparing immigrant occupational status to that of the native-born, we also do an occupational status comparison of 551 native-born working-age white males whose "both" parents were foreign-born with 5,095 white males who were native-born and whose "both" parents were also native-born.

The IPUMS longitudinal dataset lists the occupation of a linked person in 1880 and in 1900 using the same occupational coding scheme - the 1950 Census Bureau occupational classification system.⁷ Although the system's codes range from 0 to 997, we have collapsed them into a hierarchy of seven classes.⁶ Broadly speaking, the IPUMS "major occupation groups" (Table 1) correspond to levels of perceived occupational status. As the number of the major occupation group increases, the occupational hierarchy changes from white to blue collar. Our collapsed occupational classification is based on Roberts' 2011 classification but is modified to separate farm owners and managers from farm laborers. Farm owners in this study are considered to be high on the occupational ladder, above skilled trades like carpenters while below white collar professional workers, managers, and sales workers. Farm laborers, on the contrary, are treated as unskilled laborers lower in hierarchy than service workers like waiters, watchmen, and guards. We have assigned an occupational rank (Table 1) to each of these occupational groups for statistical modeling purposes. An occupational rank of 9 corresponds to unskilled labor jobs that are lowest within the occupational hierarchy, while a rank of 1 corresponds to white collar professional workers, the category highest in the hierarchy.

In Figure 2 we plot the occupational hierarchy of both the immigrant and native born groups from 1880 to 1900. The immigrants in Figure 2 are shown in dashed lines and the native-born in solid lines. Farm owners and farm managers dominate the occupational landscape in the late 19th century United States. A greater proportion of native-born were involved in the agricultural sector than the foreign-born. The most notable change is the decrease in the unskilled and semi-skilled immigrant workers from 1880 to 1900 as compared to no significant change in unskilled and semi-skilled native-born workers.

Figure 3 maps the first generation immigrants in our longitudinal sample, where each point represents one immigrant. Each immigrant is represented by the geographical center of their county of residence in 1900. An immigrant that migrated within the United States from 1880 to 1900 is marked in red while an immigrant that did not migrate is marked in blue. A triangle of the same color represents a migrant/non-migrant with a change in occupation from 1880 to 1900. In other words, a blue triangle represents a person in our longitudinal sample who did not move between 1880 and 1900 but had a change in occupation between the two years. We will analyze changes in occupational hierarchy based on internal migration and map second generation immigrants for the final paper.

Occupational hierarchy	Major occupational groups, 1950 basis	Occupational ranking	Immigrants in 1880, % (n)	Native-born in 1880, % (n)
White collar (Professional workers, managers, and sales workers)	0, 2, 3, 4	1	17.15 (141)	15.70 (924)
White collar (farm managers)	1	2	28.22 (236)	41.35 (2,434)
Skilled trades (Carpenters and other named trades)	5	5	17.76 (146)	9.97 (587)
Semi-Skilled trades (Apprentices, operatives, stationary engineers, and makers)	6	6	18.25 (150)	8.99 (529)
Service (Janitors, waiters, watchmen, and guards)	7	7	1.82 (15)	0.82 (48)
Unskilled (Farm laborers)	8	8	3.53 (29)	11.86 (698)
Unskilled (Laborers)	9	9	10.34 (85)	6.13 (361)
Total			97.08 (798)	94.8 (5,581)
Unknowns			2.92 (24)	5.20 (306)

Table 1: Occupational hierarchy of immigrants and native-born in 1880. As we go up in the ranking of the major occupational groups, the occupations change from blue to white collar. Any person with a non-occupational response in both 1880 and 1900 was omitted from this analysis.⁶

Preliminary Results and Discussion:

To answer whether immigrants moved up the occupational ladder between the years 1880 and 1900, we performed non-parametric Wilcoxon signed rank sum tests. In our longitudinal dataset, we take the difference of the "occupational ranks" for the same person between the years 1880 and 1900. A statistically significant difference in occupational ranks ($p < 0.001$) from 1880 to 1900 was observed suggesting that immigrants did move up the occupational ladder. To answer the question if immigrants moved up faster than the native-born, we found no statistically significant difference ($p = 0.3294$) in the changes in occupational rank between the two groups. In other words, to answer our research questions, we would argue that immigrants have moved up the ladder and have definitely assimilated to the mainstream US livelihood, but their advance is in no way significantly greater than that of the native-born.

For the purposes of this abstract, we focus our analysis on first generation immigrants. We plan on repeating the same set of statistical analyses on second generation working age male immigrants ($n=551$) whose "both" parents were European-born compared with working white males whose both

parents were native born. We will additionally repeat these statistical analyses on the same first and second generation immigrant groups but go further by taking their migration status between 1880 and 1900 into account. With the results of these analyses we will discuss the assimilation of these new age immigrants into U.S. society.

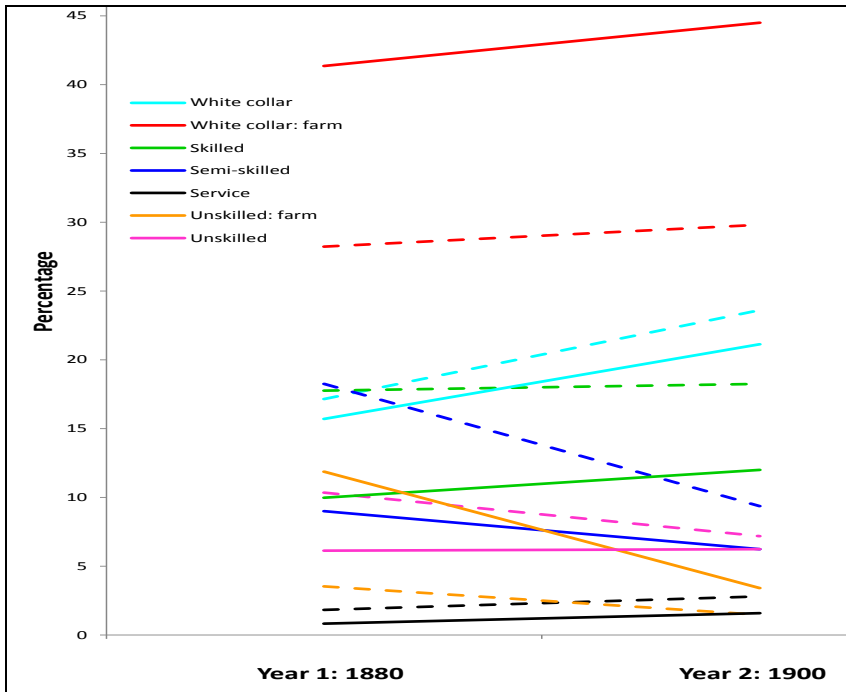


Figure 2: Change in occupational groups for immigrants and native-born from 1880 to 1900. All immigrant workers are shown in dashed lines and all native-born workers are shown in solid lines. Note the large gap in farm owners (red) between immigrants and the native born. Also, note the differential decline in semi-skilled (dark blue) and unskilled workers (pink) for immigrants and the native-born.

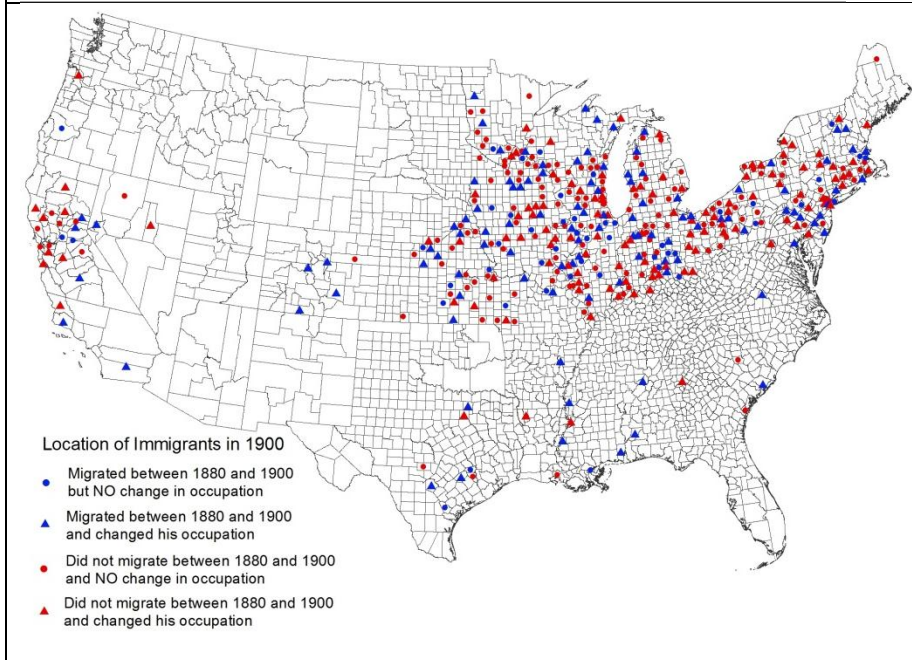


Figure 3: First generation European immigrants identified in the longitudinal sample. Each point in the figure represents one linked immigrant in our dataset. Red represents an immigrant who moved between 1880 and 1900. Blue represents an immigrant who did not move. The triangle signifies a change in occupation between 1880 and 1900.

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