

## **On the Vanguard of the Fertility Transition: “Yankee” Women in the American Midwest , 1870-1880.**

J. David Hacker

February 28, 2023

A proposal for annual meeting of the Social Science History Association conference in 2023

**Abstract:** *Women in New England, a census region in the United States settled by English Puritans in the seventeenth century, were on the vanguard of the fertility transition, not just in the United States, but in the world. This paper estimates the influence of “Yankee” birth, ancestry, and religion on fertility independent of economic and demographic factors. To do so it relies on area fixed-effects regression analysis of marital fertility among 533,457 women of both Yankee and non-Yankee heritage living in the Midwest region of the United States in 1870. Data are obtained from a panel of married couples linked between the 1870-1880 IPUMS full-count datasets by the IPUMS Multigenerational Longitudinal Project (IPUMS MLP). This dataset has a unique combination of features—including the direct measurement of individuals’ wealth—that allows the effect of Yankee ancestry to be measured independent of other factors.*

\* \* \*

John Herbert Quick was born in Grundy County, Iowa in 1861 to “Yankee” parents. In his autobiography, Quick reported that his mother had confessed his birth had not been desired. It was, Quick contended, becoming increasingly common among Yankee women—which he defined as “old stock” women of New England and New York state ancestry—to want smaller families, even in the sparsely-population frontier county of Grundy, where economic incentives for small families were largely absent. Yankee women “had for decades before I was born been slowly gaining a reputation for parsimony in bestowing on the world the treasures of their progeny,” Quick explained. “We used to have a neighbor, an Englishman I think, who habitually sneered at the Yankees for this. ‘Give me a good old-fashioned family of ten or twelve,’ he would say, ‘and not a ‘Yankee company’ of two or three!’” (Quick 1925).

Although Quick expressed familiarity with economic theories of fertility decline, his explanation for the small size of Yankee families was cultural, centering on Yankee women’s desire to have fewer children and the lack of an effective religious impediment to their practice of birth limitation strategies. “These women had come to regard the bearing of children as a part of the primal curse which they were, in large numbers, resolved to avoid,” Quick asserted. “Their conversation among themselves, their advice to their daughters, their whole mental attitude, was against the large family. They recognized no binding force in the command, ‘Multiply and replenish the earth.’”

There is no doubt that women *living* in New England, especially native-born women of native parentage, were on the leading edge of the fertility transition, not just in the United States, but in the world. At the time of the 1870 census, New England women who survived their childbearing ages bore an average of only 3.2 children, 0.9 children fewer than that estimated for women in the Middle Atlantic census (which included a significant proportion of the population with Yankee parentage), and 2.0 to 3.1 children fewer children than other census regions (Hacker 2016, figure 1). They also bore 1.7 fewer children (38%) than English-speaking women across the Atlantic in England in 1871. The contrast to the period a century earlier is dramatic. In 1750, women in the colonies of New England had *more* children than women in England (Main 2003).

As a vanguard group in adopting one of the most important behavioral revolutions in human history, Yankee women should be a focus of much study. Much is still unknown or debated about these early adopters of conscious fertility control, however, including the relative importance of economic, demographic, and cultural factors in their fertility, their fertility outside of New England and New York state, and the degree to which Yankee women's childbearing patterns were imitated by non-Yankee women. It is surely no coincidence that the Yankee states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont were on average significantly more urban and industrial than other states and had the highest rates of school attendance and literacy. Female factory employment began in the 1820s in Massachusetts, the most populous New England state, and the state was also the first in the nation to adopt compulsory education laws, followed shortly by New York and the other New England states. Female literacy rates were higher in New England in the mid nineteenth century than any other place in the world. Women in New England also married later, and greater proportions never married, than women in other parts of the United States. Can we truly say that the region's low fertility rates were primarily the result of Yankee culture and not economic modernization or demographic factors?

This paper attempts to estimate the influence of Yankee birth and ancestry on fertility independent of economic and demographic factors. To do so it relies on a regression analysis of marital fertility among 533,457 women living in the Midwest region of the United States in 1870. Data for the comparison were obtained from a panel of married couples linked between the 1870-1880 censuses by the IPUMS Multigenerational Longitudinal Project (IPUMS MLP). This dataset has a unique combination of features that allows the effect of Yankee ancestry to be measured independent of economic and demographic factors. Briefly, because the dataset is comprised of couples who were married in 1870 and remained married in 1880, potential biases from differential nuptiality and marital disruption can be eliminated. Second, the 1880 census was the first census to collect information on parental places of birth. It is therefore the first census that can be used to measure Yankee parentage or ancestry. Third, the 1870 census is one of only two censuses in U.S. history to collect direct information on individuals' real and personal estate wealth, which can be used (together with occupation) to control for couples' economic well-being and orientation. Finally, the large number of cases in the IPUMS MLP dataset allows the construction of area-level fixed effects models to control for any remaining unobserved heterogeneities.

The focus on Midwestern states, which were settled by diverse subgroups of the population including Yankees, "upland southerners," Mid-Atlantic Quakers and native-born individuals of German ancestry, and European immigrants, is an ideal laboratory for testing hypotheses. For the most part these states were settled in the half century prior to 1870, ensuring that most childbearing couples or their parents were relatively recent in-migrants to the region. Yankee parentage can therefore be measured and separated from Yankee residence. Whatever being a "Yankee" meant in terms of culture and demographic behavior, the childbearing couples in the study population and their parents carried it with them to the Midwest.

## **Background**

Background and literature review, including adaptation to innovation/diffusion theories, to be provided.

## **Data**

This section will describe the IPUM MLP project and datasets, variable construction, and provide basic descriptive analysis of the analytical dataset. Currently, I am measuring parental ancestry using four indexes that range from 0 to 1: New England and New York, Midwestern, Southern, Other United States (mostly individuals with parental ancestry in the Mid-Atlantic region), and Foreign Born. The indexes are a simple sum of four parental birthplaces (two for each spouse), with a score of 0.25 for each parent. If a woman's mother was born in New England, her father was born in New England, her spouse's mother was born in New England, and her spouse's father was foreign born, for example, the New England index would equal 0.75 ( $0.25 * 3$  parents) and the foreign-born index would equal 0.25 ( $0.25 * 1$  parent). For couples of childbearing ages in the 1870-1880 MLP dataset, the mean values for each index was:

Table 1: Ancestry of Childbearing Couples in the Midwestern United States, 1870-1880

Ancestry	Mean value of index
New England	0.179
Midwestern	0.146
Southern	0.208
Other United States	0.126
Foreign Born	0.331
Total	1.000
N	553,457

### Analysis

The analysis will rely on the STATA module `ppmlhdfc`, which allows fixed effects Poisson pseudo-likelihood regression analysis. Poisson models have already been constructed and the results provide strong support the hypothesis that New England couples were outliers in their fertility. All models employ county-level fixed effects and control for women's age, age difference from spouse, spouses' occupation, and wealth decile. In Figure 1 below, I show the exponentiated coefficient (the fertility incidence rate ratio) the various parentages above (southern parentage was the reference group), as well as other coefficients for urban/rural residence, occupation, and literacy. Reference groups are shown in black.

As illustrated in the figure (bright red column), couples with New England parentage had a fertility incidence rate of 0.75, or 25% fewer children on average than the reference group of couples with southern parentage, all else being equal. This difference exceeded the differences between couples with no wealth and couples in the highest decile of wealth (7% fewer children in the wealthiest decile), farmers and white-collar workers (the latter having 21% fewer children), rural and urban residence (8% fewer children among couples in urban areas), and illiterate and literate couples (8% fewer children among literate couples). The only category that exceeds the importance of Yankee parentage was immigrant parentage, which had 30% higher marital fertility than the reference group. Clearly nativity—and the cultural differences among the different groups—played a massive role in the level of fertility and the timing of the transition. New England couples and couples with New England parentage were on the vanguard of the change.

Figure 1. Fertility incidence rate ratios relative to reference categories (in black)

