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Intergenerational and Marriage Mobility of University Professors in the Netherlands During the 19th Century

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ABSTRACT

In this study we ask the question to what extent 19th-century university professors were a closed occupational group in the sense that they had little intergenerational and marriage mobility. We do so in honor of Kees Mandemakers, who is about to retire as a professor, but whose younger family members may follow in his footsteps. We derive competing hypotheses from cultural capital theory and the meritocracy thesis and test them using civil marriage records for the period 1813–1922 in six Dutch provinces (N = 1,180,976 marriages). Although only 4.4% of all university professors had a father in the same occupation, the odds ratio of 331 shows that this is much more likely than to be expected under independence. Similarly, professors were much more likely to marry the daughter of a professor. Compared to other elite occupations the intergenerational immobility of professors was not especially high, but their marriage immobility was exceptional. Cultural capital theory receives more support than the meritocracy thesis. We hope that Mandemakers, Mandemakers and Mandemakers will accept the challenge and investigate whether these findings can be generalized to contemporary society.

Keywords: Intergenerational mobility, Marriage mobility, Homogamy, Elites, Cultural capital theory, Meritocracy thesis

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Whereas Kees Mandemakers is about to retire as a professor, his son Jornt and his nephew Luuk have just joined the faculty. It may make people wonder whether this is pure coincidence, or whether it was helpful for Jornt’s (or Luuk’s) academic career that his father (or uncle) was a professor? Answering this question for this particular case is not only next to impossible, it is also hardly relevant from a scientific point of view. It does relate, however, to an important topic in the stratification literature, namely whether occupations are relatively open to outsiders or closed off by being reserved for incumbents and their relatives. Most people desire an open and meritocratic society where occupational attainment depends on achieved characteristics such as talent and hard work, and not on ascriptive factors such as the family one is born into.

An important contribution of Kees Mandemakers’ work is to help show that the Netherlands in the 19th and early 20th century was far from such an open society. Intergenerational mobility was much lower than it is nowadays: many sons had an occupation of similar standing as their father’s (Knigge, Maas, van Leeuwen, & Mandemakers, 2014). Likewise, there was relatively little marriage mobility as many people married a partner from within the same social layer (van Leeuwen, Maas, & Mandemakers, 2005).

However, it is unknown whether professors were an exception to or an exemplification of these patterns. On the one hand, universities can be thought of as progressive places where meritocratic principles are especially valued and only the brightest can become professor. On the other hand, a university is also thought to require a lot of cultural capital and one’s cultural capital depends largely on socialization during childhood. We therefore ask the question: To what extent were university professors a closed occupational group in the sense that they had little intergenerational and marriage mobility?

We will derive competing hypotheses from cultural capital theory and the meritocracy thesis. These hypotheses will be tested using data from Genlias, which in the present shape is a co-creation of Kees Mandemakers and others. We only study men because the first occurrence of a woman becoming university professor in the Netherlands happened as late as 1917 (Johanna Westerdijk).

Kees Mandemakers has been an icon of the Historical Sample of the Netherlands and similar datasets such as WieWasWie/GENLIAS (see e.g. Mandemakers, 2013, 2014, and iisg.amsterdam/hsn). We have had the pleasure both of profiting from these data and collaborating with him in writing articles (e.g. Knigge et al., 2014; van Leeuwen et al., 2005; Mandemakers, Maas, & van Leeuwen, 2009) as well as coding occupations (Mandemakers et al., 2013), Mandemakers has also ventured in an important historical domain that has not had many visitors in recent times: the historical sociology of education (Mandemakers, 1996; Zijdeman & Mandemakers, 2008).

2 THEORY

2.1 CULTURAL CAPITAL THEORY

Becoming a university professor required a lot of cultural capital. To begin, cultural capital was needed to enter secondary education, which was a rare event during this period (Mandemakers, 1996). And then more cultural capital was needed to successfully finish secondary education and university. Finally, the university itself is a bastion of cultural capital. In order to fit in and have a successful career one needs to know what to talk about, and how to behave (Bourdieu & Passeron, 1990). Because cultural capital is so important at the university, university professors will also appreciate if their children marry someone who also possesses a lot of cultural capital. Therefore, they might bring their daughters in contact with their (younger) colleagues and they might introduce their sons to colleagues with daughters in a marriageable age. Based on this reasoning one would expect the following:

Hypothesis 1. University professors more often have a university professor as a father/father-in-law than one would expect on the basis of the assumption of independence.

Hypothesis 2. University professors more often have a university professor as a father/father-in-law than people with other ‘elite’ occupations have a father/father-in-law with the same occupation.
2.2 MERITOCRACY THESIS

Becoming a university professor requires talent and knowledge that cannot easily be transferred from one generation to the other. Parents can help their children only to a certain extent. They can help them enter secondary education or university, but in order to become a professor they need to excel in school. That is something that even university professors cannot guarantee for their children. Moreover, for people in other elite occupations that depend less on talent and more on the possession of economic or social resources, it is easier to transfer their occupation to their son. If men become university professors because of their own talent and perseverance, they will probably also independently choose a marriage partner that has talents of her own.

**Hypothesis 3.** University professors do not more often have a university professor as a father/father-in-law than one would expect on the basis of independence.

**Hypothesis 4.** University professors less often have a university professor as a father/father-in-law than people with other ‘elite’ occupations have a father/father-in-law with the same occupation.

3 DATA

We use data from civil marriage records for the period 1813–1922 in six Dutch provinces: Groningen, Drenthe, Overijssel, Gelderland, Zeeland, and Limburg (N = 1,180,976 marriages). All occupations were coded into HISCO (van Leeuwen, Maas, & Miles, 2002). Professors have HISCO-codes from 13100 to 13190. We distinguish the following other elite occupations: Mayors and other legislative officials (20110), General managers (21110), Officers in the army (58320), Engineers (02000–02990), Physicians (06105), Jurists (12110–12410), and Clergymen (14120). Table 1 shows the frequencies of these occupations in the data.

| Occupation       | Groom | Father | Father-in-law |
|------------------|-------|--------|---------------|
| University professor | 94    | 106    | 106           |
| Mayor            | 885   | 1,261  | 1,715         |
| General manager  | 4,396 | 2,334  | 2,380         |
| Officer          | 2,454 | 401    | 567           |
| Engineer         | 1,642 | 526    | 454           |
| Physician        | 2,326 | 1,013  | 1,054         |
| Jurist           | 2,100 | 914    | 1,114         |
| Clergyman        | 2,292 | 1,717  | 1,629         |

Note that there are very few missing values on groom’s occupation (4.9%), but almost half the occupations of the father and father-in-law are unknown (respectively 48.5% and 43.0%), which is not unusual at all for historical datasets and is mainly due to the fact that fathers might have been deceased, or absent for other reasons, at the wedding of their child. Keeping this in mind, it becomes clear that men become university professors relatively late in their occupational careers, which is also true for mayors and clergymen (2*N father > N groom). General managers, physicians and jurists are found in equal numbers in all age groups (2*N father = N groom) and the other elite occupations (Officer and Engineer) are more often performed at a young age.

Because the occupations differ in the number of incumbents and there also unequal numbers of grooms and fathers/fathers-in-law, we will present odds ratios to indicate the amount of immobility. The odds ratios relate to a two-by-two crosstabulation of the elite occupation versus all other occupations (excluding missing values). We also present inflow percentages. They show the likelihood that if you would have met someone with this specific occupation this person’s father (or father-in-law) would have the same occupation.
If one would have been able to meet a university professor in the six Dutch provinces that we study during the 19th century, the likelihood that the father of this university professor would have appeared to be a university professor too would have been rather low: only 4.4%. However, if one considers that the number of university professors was really low, this is far more than one would expect if there was no association between occupation of father and son. The odds ratio is 331.4, which means that the odds that university professors have a father with the same occupation are \((331.4-1)*100 = 33,040\)% higher than the odds that they have a father with a different occupation.

If one would meet the same professor and ask him about his father-in-law, he would in truth answer with a likelihood of 16.3% that his father-in-law is also a university professor. The accompanying odds ratio is enormously high: 1,588.4. It is clear that hypothesis 1 is supported and hypothesis 3 is not. 19th century university professors did not reach their position based on talent alone. Some form of capital was transferred from father to son making it more likely that the son reached the same position as the father. And some form of capital also made it more likely that the university professor married the daughter of a (elderly) colleague.

Table 2

| Occupation            | Father Inflow % | Father-in-law Inflow % | Odds ratio | Odds ratio |
|-----------------------|------------------|------------------------|------------|------------|
| University professor  | 4.4              | 16.3                   | 331.4      | 1,588.4    |
| Mayor                 | 31.7             | 16.1                   | 284.8      | 87.0       |
| General manager       | 45.2             | 12.6                   | 414.7      | 49.8       |
| Officer               | 17.0             | 11.9                   | 577.1      | 251.2      |
| Engineer              | 17.5             | 2.1                    | 363.0      | 33.6       |
| Physician             | 24.2             | 7.3                    | 300.5      | 61.4       |
| Jurist                | 30.6             | 16.4                   | 516.6      | 162.9      |
| Clergyman             | 40.8             | 23.1                   | 412.8      | 173.3      |

Notes: The inflow immobility % is the percentage of sons that have a father/father-in-law with the same occupation. All odds ratios are significant \((p < 0.001)\).

When we compare the odds ratio’s for university professors with those for other elite occupations, we find that intergenerational immobility is not especially high for university professors. They are at the lower end of the scale followed by mayors, physicians, and engineers. The intergenerational immobility is highest for army officers, followed by jurists.

The order is rather different if we look at marital mobility. The immobility of university professors is six times that of the second highest group (the officers) and 47 times that of the engineers who have the lowest marital immobility. Our hypothesis 2 stating that immobility is higher for university professors than for other elite occupations is thus confirmed with respect to marital mobility, but not with respect to intergenerational mobility.

5 DISCUSSION

In this contribution, we showed that professor was a rather closed occupation in the Netherlands in the 19th century: professors were much more likely to have followed in the footsteps of their fathers and fathers-in-law than would be expected by mere chance. With this, professors certainly did not form a positive exception compared to other elite occupations. Whereas the intergenerational immobility of professors was comparable, marital immobility was much larger than for other elite occupations.
These observations are in line with cultural capital theory. If it was indeed the case that professor as an occupation was closed off to those without the appropriate cultural capital, it would mean that university hiring was not based on merit. However, in their own defense, a professor with a professor as a father or an uncle might point out that talents are transmitted from parent to child through genes (Trof, Barban, Mills, Snieder, & Mandemakers, 2015). This could also explain why sons of professors have such a high chance of becoming professors themselves. Moreover, the high marriage immobility of university professors is not necessarily a sign of nepotism either. Especially scholars fully devoted to work may only meet other university people (and through them their family). In other words, the opportunity structure of the marriage market could also produce the observed patterns.

An interesting follow-up study would be to see how our findings compare to intergenerational and marriage mobility of professors in contemporary Dutch society. To prevent boredom after retirement, we can imagine that Kees might take up this task, perhaps together with his son Jornt and nephew Luuk. We believe Mandemakers, Mandemakers & Mandemakers would certainly be a group of good men for the job, although admittedly too few good men to top the study by Goodman, Goodman, Goodman & Goodman (2015).

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