# Migration for necessity or proficiency: The Netherlands, 1750-1920

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# **1** Introduction

Throughout history men, women and their children have moved to other places in search for better lives. Approximately ten to more than thirty per cent of the European population migrated at least once between 1500 and 1900 (Lucassen and Lucassen 2009). Even though this has inspired a large literature, the process of migration is still not fully understood, especially for the premodern period (Kelly and O'Grada 2018). Many studies into migration focus on single moves, most notably trying to understand why people moved to cities (Pooley and Turnbull 1996; Townsend 2006; Moch 2003; Crymble, Dennett, and Hitchcock 2018).

While this has enlarged our understanding of push and pull factors, the sources that are commonly used by definition only give a single snapshot of a potentially much longer migration trajectory. People moving from A to B may have frequented other stops before, or they may have re-migrated again, but this is often not observed. For example, Klemp et al. (2013) found that a substantial share of migrants at some point returned to their parish of birth after their apprenticeship in London. Many other migration studies are constrained to specific groups of migrants (cf. Crymble, Dennett, and Hitchcock 2018; Kelly and O'Grada 2018). The on*dertrouwakten* (pre-marriage deeds) that are commonly used for Dutch migration studies, while very rich in information, are restricted to migrants who were fortunate enough to enter marriage at their destination (Kuijpers 2005; Zanden and Knotter 1987), thereby missing married migrants and single migrants who did not marry yet (or at all). Migration patterns of seafarers or unskilled seasonal workers may have been quite different from skilled workers (Lottum 2007; Lucassen 1984). The fate of all these migrants has remained elusive as well. How many could actually stay in destination cities, and how was this affected by marital status, skill and origin?

In this paper we combine two sources to examine migration in The Netherlands over a relatively long time period, adding to the migration literature in three respects. First, our sources provide information on the cities, towns or villages that migrants visited before and after they arrived somewhere, thus expanding our view of individual migration trajectories. Second, our data on migrants' characteristics is relatively rich and not restricted to particular groups. Third, we are able to compare migration trajectories between the eighteenth and the long nineteenth century. For the eighteenth century we use the Admissieregisters of The Hague (n = 2670), listing nearly every migrant (couples and singles) with his or her migration trajectory for an unusually broad range of occupations. For the long nineteenth century the Historical Sample of The Netherlands (HSN, n = 12356) has been tailored to obtain every move of a Dutch individual during his or her life-course.

Because the data allows to differentiate migration trajectories by marital status and skill in particular, our focus will be on the relation between migration and human capital formation. In this respect two strands of literature stand out. The first is about low or unskilled migrants who left their place of birth in search of a better life, sometimes voluntarily but probably most often out of necessity, called 'subsistence migration' by Moch (2003). For them migration was likely not given in by gaining skills but simply by trying to survive (Pol and Kuijpers 2005; Sogner 1993). On the other end of the spectrum we find skilled artisans or journeymen moving across Europe, arguably to become more skilled and specialised (Epstein 2004). This latter group has been ascribed a large role in technological progress and economic growth (Croix, Doepke, and Mokyr 2018; Mokyr 1990; Epstein 1998). In this reading the relatively free competition for skilled workers contributed to migration and human capital formation, thus enhancing the dissemination of knowledge and ultimately leading to technological progress. Interesting as this theory may be, empirical support is still quite thin.<sup>1</sup> Moreover, others have suggested that artisans on the move may not have gained access to labour markets easily (Vries 1994; Ogilvie 2019), and that journeymen were increasingly relegated to proletarianized wage-labourers during the eighteenth century (Lis and Soly 1994; Kuijpers 2005).

Whether industrialisation caused a 'mobility transition' has been fiercely debated (Zelinsky 1971; Hochstadt 1999; Pooley and Turnbull 1996). Lucassen and Lucassen (2009) have demonstrated that mobility rates in The Netherlands before and after industrialisation were relatively similar, but their method does not take into account multiple moves of individuals. Possibly, industrialisation stimulated unskilled workers to move for factory work, while the absence of guilds may have reduced journeymen tramping. There is also evidence that Dutch skilled workers in the nineteenth century had relatively less successful careers than other groups (Schulz and Maas 2012).

By comparing migration and settlement trajectories, we can examine if there indeed existed a skilled migration system different from subsistence migration in The Netherlands in both periods, or whether skilled and unskilled migrants both experienced unstable and short-term employment throughout. The remainder of this paper presents a tentative analysis of migration trajectories per period. Since the

<sup>&</sup>lt;sup>1</sup>With the exception of more occupation-specific journeymen studies by Kaplan (1996) and Reith (2008), but they too have been unable to trace journeymen in a wide range of occupation over multiple locations.

Admissieregisters and especially the HSN need some fine-tuning to facilitate comparison, each period begins with a discussion of the sources and methods employed.

# 2 Eighteenth century

### 2.1 The Admissieregisters

Although migrants were probably needed to make up for the high mortality rates that characterised premodern cities (Vries 1984), authorities usually did not welcome just anyone at their gates (De Munck and Winter 2012, passim). The 'geographical free-rider problem', caused by regional and urban differences in poor relief stimulated migration, notably to cities, where funds for the poor were probably more abundant (Bavel and Rijpma 2016, pp. 170-171; Winter 2012, p. 176). In the Dutch Republic but also in other regions, authorities at times tried to curtail free-riding by binding relief entitlements to the parish of birth. In eighteenthcentury Holland this entailed that immigrants had to demonstrate they were entitled to relief from another parish (usually their place of birth) before being allowed permanent access to the city. This ensured that migrants would not place too much of a burden on a the, often already quite stretched, funds for the poor. Other options for migrants to gain access were to waive their rights to poor relief, or to find a guarantor. From the beginning of the eighteenth century this system of demonstrating relief entitlements was formally regulated, whereby migrants had to hand over a akte van admissie, or akte van cautie (settlement deed) in which these rights were formally stated.<sup>2</sup> These deeds ensured that when a person or family would fall to poverty, a specific institution for poor relief, or the originating town would provide poor relief. Copies of these deeds were kept by poor relief institutions of receiving towns and cities as a guarantee.

For research into migration patterns these deeds are promising because they allow us to trace migrants through the Dutch Republic. However, many of the settlement deeds only give names and not occupations, and many have not survived. Moreover, because many were kept at Catholic or Reformed diaconates, it is cumbersome to collect all deeds. In some rare cases, however, urban authorities kept registers of all migrants entering the cities together with information on the deeds they provided. These registers were kept to oversee the settlement procedure of migrants, and to ensure migrants would not stay in the city without permission. Usually neighbourhood representatives would pass information on new migrants on to urban authorities, after which they would collect the deed from the migrant, or give him or her some time to sort out the paperwork. City messengers would actually visit the migrant to collect the necessary information, or asked around to see if the migrant was still present. When migrants could not provide a deed they were no longer allowed access. Migrants being offered to waive their rights or those providing a guarantor were also registered.

<sup>&</sup>lt;sup>2</sup> For more on this system see Davids (1985).

The Dutch city of The Hague has an unusually detailed collection of settlement registers running from 1750 to the end of the French period. Apart from housing the Estates General and the court of the Stadtholder, The Hague was a fairly typical and medium-sized Holland city, with about 38,000 inhabitants in 1750. A large share of migratory movements probably involved modest cities like these, and not the metropolises that the migration literature usually studies. Moreover, because of their size and the inability to monitor migration to the same degree as smaller cities, metropolises likely attracted a different kind of migrant, most notably more unskilled workers and migrants from farther away (Kuijpers 2005, pp. 20-22).

It is difficult to test how complete the Admissieregisters are. A sample from the settlement registers of the comparable city of Haarlem from the same period (n=1 011) lists fewer migrants annually (32 vs. 104 on average). The occupational distribution of the The Hague migrants is much more diverse as well, ranging from unskilled workers to high-skilled occupations such as engineers and doctors.<sup>3</sup> We take this to suggest that the registers were kept not to only monitor poor migrants, but that the authorities of The Hague at least aimed to register them all. After arrival the settlement procedure was meticulously recorded: from the moment the migrant requested to settle in the Hague up until the point s/he was permitted access based on a settlement deed, obtained citizenship, or when the migrant left for another destination.

Besides the outcome of their settlement procedure (stay or go) and their length of stay in The Hague leading up to this event, the information on individual migrants is quite detailed. For most migrants we know their occupation, place of birth, religious affiliation, and marital status. More irregularly but also recorded was place of origin (i.e. last place visited before The Hague other than their place of birth), their destination when leaving The Hague again, and the number of children. We can further differentiate between migration 'winners' and 'losers' because the acquisition of citizenship rights has been recorded as well.

At present we have data on migrants arriving at The Hague between 1750 and 1769 (with one odd migrant recorded to have arrived in 1776).<sup>4</sup> For the period 1751-61 all migrants were collected. Halfway through the 1761-69 register we switched to taking a random sample using half of all pages. The registers are first ordered by neighbourhood and then alphabetically, so the sample should be fairly representative. Comparing the current sample (n=558) with the full collection (n=2 128) shows that distributions of sex, religion, and occupational coded are not significantly different. Nevertheless, time spent in The Hague of migrants leaving again is significantly higher in the sample group (27 vs. 37 months). Because there is overlap between the two sets during 1761-69, we can test whether this a sampling effect

<sup>&</sup>lt;sup>3</sup> A comparison with guild records is not possible for The Hague because only the surgeons' guild recorded journeymen and masters, and only a handful of migrants were surgeons. Lists of guild masters are not a suitable comparison because most migrants and journeymen never made it that far (Schalk et al. 2017).

<sup>&</sup>lt;sup>4</sup> Gemeentarchief Den Haag, 0350-01 Oud archief van de gemeente 's-Gravenhage 1313-1815, inv. 1121-1122. With thanks to David van Oeveren for entering the data.



Figure 1: Length of stay of remigrating men.

or related to labour-market cycles. Although there still is a difference in length of stay between the two groups during 1761-69, this is mainly caused by sampled women staying longer before migrating again. Differences are less pronounced for males. Indeed, the almost identical trends in their median length of stay in Figure 1, suggest both were subject to the same labour-market cycles.

Occupations were coded first into HISCO and then into HISCLASS and HIS-CAM to obtain skill levels and occupatinal status respectively (Leeuwen, Maas, and Miles 2002; Leeuwen and Maas 2011; Lambert et al. 2013). Place names were georeferenced using the GeoNames API and checked manually.<sup>5</sup> Population data of cities were obtained from an expanded version of the dataset by Bosker, Buringh, and Zanden (2013), provided by Eltjo Buringh.<sup>6</sup> Towns with fewer than 1 000 inhabitants are not considered urbanised. Figure 2 gives the descriptive statistics, showing that information on sex, religion, marital status, place of birth, and to a smaller extend occupation is quite comprehensive.

## 2.2 Results

Comparing occupations before and after migration would be the best measure to connect migration with skill formation. The Admissieregisters do not measure this since occupations were recorded only upon arrival. A more indirect measure is to examine the relation between skill level and the share of migrants in an occupation. If high-skilled occupations consisted of relatively many migrants, skills could have been picked up by migration to a larger extend when compared to occupations with fewer migrants. The relation could also be the other way around, with unskilled occupations consisting of many migrants moving around in search of work. Using pre-marriage records, Knotter and Van Zanden found no significant relation

<sup>&</sup>lt;sup>5</sup> https://github.com/cmharlow/geonames-reconcile

<sup>&</sup>lt;sup>6</sup> https://druid.datalegend.net/dataLegend/Baghdad-to-London

variable		mean	сd	median	min	may	
id	2670	2006.09	2562.20	1225 50	1	LEE0	-
10	2070	3090.08	2303.36	1555.50	1	0338	
sex	2000						
place_ol_birtil_(pob)	2551	53.55	101.49	18.00	0	675	
distance neb dephase	1555	32.35	101.46	136.00	0	0/5	
uistance_pob_dennaag	2510	257.20	509.72	130.01	0	11408	
ongin nob aquala arigin	430	0.24	0.49	0.00	0	1	
pob_equals_origin 1750	412	0.54	0.46	0.00	2	1	
population_origin_1750	334	113.99	158.73	44.00	2	6/5	
distance_origin_dennaag	434	194.81	841.10	52.43	4	12169	
distance_pob_origin	407	2/5./8	956.04	52.52	0	12059	
married_dummy	2500	0.40	0.49	0.00	0	1	
children	514	1.75	1.34	1.00	0	/	
sex_dummy	2665	1.35	0.48	1.00	1	2	
religion_fact	2122	1.75	0.97	1.00	1	3	
occupation	2114						
hisco	1873	75360.68	20728.55	79510.00	2000	99920	
hisco_minor	1873	75.04	20.63	79.00	2	99	
hisclass	1873	8.44	2.09	8.00	1	13	
foreign_dummy	2510	0.48	0.49	0	0	1	
skill_num	1873	2.33	0.78	2.00	1	4	
hiscam	1873	54.15	8.84	51.47	40	99	
date_arrival	2643						
month_arrival	2643	5.95	3.02	6.00	1	12	
year_arrival	2643	1759.05	5.53	1761.00	1750	1776	
month_leaving	496						
length_stay_if_left	1047	29.50	40.29	16.16	0	379	
settlement_type	1433						
left_dummy	2669	0.42	0.49	0.00	0	1	
citizenship_dummy	1433	0.19	0.39	0.00	0	1	
min_length_stay_if_settlement	1029	25.69	39.56	9.00	0	336	
destination	913						
dest_eq_pob	422	0.33	0.47	0.00	0	1	
pop_dest_1750	335	136.76	185.11	44.00	2	675	
distance_dest_denhaag	442	353.06	1547.99	52.43	4	11404	
distance pob dest	433	454.70	1647.28	60.03	0	11714	

Figure 2: Descriptive statistics of settlement registers of The Hague.

between skill levels (measured by literacy rates) and the share of migrants in an occupation (Zanden and Knotter 1987, p. 408), even though the share of migrants corresponded negatively with skill. Pre-marriage records only give single migrants that were able and willing to stay in Amsterdam and find a partner, which may affect the results. It is therefore worthwhile to replicate their exercise for eighteenth-century The Hague.

For an overview of the The Hague labour market we used the 1811 Register Civique. The Register Civique was introduced under the Code Napoleon and lists all male inhabitants aged 21 and over with their occupations, except criminals and inhabitants enlisted in foreign armies, to oversee who could vote for municipal elections. Although this register misses approximately 10 to 30 per cent of male inhabitants, especially unskilled seasonal workers (Zanden 1987, p. 53), it still is the most comprehensive population register available that roughly corresponds to our period of investigation. From the Register Civique about one third of all observations were collected, sampled on neighbourhoods "G" through "Q" (n=3 114).<sup>7</sup>. The underregistration of unskilled workers was corrected by multiplying unskilled occupations by two (hisclass  $\geq 11$ ). Figure 3 gives the distribution of male occupations in the

<sup>&</sup>lt;sup>7</sup> Gemeentarchief Den Haag, 0350-01 Oud archief van de gemeente 's-Gravenhage 1313-1815, inv. 1042

labour market of The Hague together with the distribution of male migrants over these occupations obtained from the Admissieregisters. Dividing the two shares in the last column gives an idea of the overrepresentation of migrants in an occupation, where a value above one indicates that migrants were overrepresented.

hisco	occupation	hisclass	hiscam	share in labour market (%)	n_migrants	foreign migrants (%)	share migrants (%)	relative migrant presence
42220	Trader/ buyer	4	71.23	1.39	33	60.61	2.22	1.59
54010	Domestic servant	9	40.24	0.07	22	82.61	1.48	20.71
57090	Wig maker	7	54.36	0.53	26	64.00	1.75	3.26
62700	Gardener	11	53.11	4.71	21	44.44	1.41	0.30
71220	Stone splitter	9	52.47	0.21	32	67.74	2.15	10.04
75622	Cloth dyer	10	53.95	1.16	31	58.62	2.08	1.79
79100	Tailor	7	51.4	4.49	209	59.39	14.04	3.12
80110	Shoe-maker	7	50.66	4.17	66	65.67	4.43	1.06
80320	Saddle maker	7	51.47	0.53	40	66.67	2.69	5.02
81120	Cabinetmaker	7	52.81	1.21	36	68.42	2.42	1.99
83110	Blacksmith	6	52.52	1.18	48	64.44	3.22	2.74
88010	Jeweller	7	73.25	0.43	54	86.27	3.63	8.47
88050	Gold and silversmith	7	69.12	0.61	20	31.58	1.34	2.22
93120	House painter	9	54.61	2.25	21	38.10	1.41	0.63
95120	Bricklayer	7	48.24	1.78	53	28.85	3.56	2.00
95410	Carpenter	6	52.5	4.85	151	17.01	10.14	2.09
98620	Coachman	9	49.22	0.5	32	59.38	2.15	4.30
99900	Worker	13	48.7	6.99	68	56.76	4.57	0.65
99910	Labourer	11	49.75	2.64	30	65.38	2.01	0.76

#### Figure 3: Distribution of occupations and migrants in The Hague (males).

Contrary to expectations migrants were not overrepresented among day-labourers and unskilled workers. Some city-specific occupations drew quite some migrants, such as coachmen and domestic servants (often lackeys). Migrants were overrepresented in quite different occupations, ranging from cloth dyers and stagecoach drivers to jewellers and gold and silversmiths. There were quite some migrants among tailors, which has been found for other cities as well (Panhuysen 2000). The comparison also shows that migrants were present in occupations usually considered to be dominated by locals, such as jewellers, carpenters, and gold and silversmiths (Zanden 1991, p. 58). This suggests that pre-marriage registers may underestimate the share of migrants across occupations, because many migrants were already married before arrival, and many moved away again before marriage. Indeed, in The Hague almost half of all migrants left again, and more than forty per cent was already married upon arrival. It is difficult to distinguish a connection between skill and the share of migrants. Some occupations with relatively high skill demands had a low migrant share, such as gold and silversmiths and traders, while others, such as jewellers, had a high migrant share. Conversely, some unskilled occupations as gardeners, house painters and labourers even had an underrepresentation of migrants, while other low-skill occupations had many, such as servants. Overall, measured by either hisclass or hiscam, there is no significant relation between skill and the relative migrant share in an occupation.

The share of foreigners among migrants (column seven) is highly and significantly correlated with overrepresentation of migrants in an occupational group. In other words, the overpresence of migrants in many occupations was driven in particular by non-Dutch migrants. Even though the distribution of Dutch migrants over the The Hague labour market also did not follow the general occupational distribution, with an overrepresentation of Dutch migrants among servants, stone cutters, coachmen, and carpenters, the overrepresentation of foreign migrants in The Hague occupations was much more pronounced. There are relatively many foreigners among servants, jewellers, and stonemasons. The share of foreign migrants was, however, also not related to skill levels. It was very high among jewellers but not among gold and silversmiths. Carpenters had a relatively low share of foreign migrants whereas the comparable group of cabinetmakers had a high share. When looking only at single migrants across occupational groups (hisco minor), there is some segmentation between Dutch and foreign migrants. For example, single migrants in construction work (83 per cent) were predominantly Dutch, while migrants in tailoring (69 per cent) and book printing (80 per cent) were to a large extend foreign. Thus, while migrants and foreign migrants did cluster in specific occupations, this cannot be explained by skill. The fact that we find (foreign) migrants in a broad range of occupations at least suggests they were not actively discriminated by guilds or local authorities.

The background of migrants, in particular their stage in the life-cycle, then probably mattered more for migratory decisions. Tramping journeymen in France were often single and married only after becoming master somewhere (Sonenscher 1989, pp. 101-102), and this travelling around may have enabled journeymen to pick up skills along the way (Epstein 1998). This implies that skilled migrants could have been single relatively often and that they were also more mobile than married migrants. We do observe this for The Hague (Figure 1) Skill levels (hisclass or hiscam) correlate negatively with being married. Of all the jewellers only seventeen per cent was married, whereas more than three quarters of unskilled labourers and textile workers arrived with their wife. Moreover, these married couples were significantly less likely to leave The Hague again. This could suggest that two distinct groups of migrants arrived at The Hague: relatively skilled single young men travelling to become more skilled, who clustered in specific occupations, and a group of unskilled couples migrating for subsistence and choosing to settle in The Hague more often if they could find work. While there is no significant difference in travelled distances between married and single migrants, unskilled males did travel shorter distances than skilled male migrants. With mean distances of 87 and 290 kilometres respectively between their last known city and The Hague this difference was quite

	singles	married
Hiscam (mean)	55.57	54.45
Hisclass (mean)	8.08	8.49
Unskilled (%)	23.37	43.56
Distance between PoB - The Hague (km)	242	303
Left The Hague again (%)	62.81	30.1

sizeable. This suggest that migration trajectories were a combination of marital status and skill.

Notes: unskilled defined as hisclass nine or higher.

Table 1: Skill and re-migration by marital status (males).

Length of stay in the Hague gives a feeling for labour-market cycles and the possibility for journeymen to actually obtain new skills. Since the complete settlement procedure is registered we can compute the interval between arrival and departure of migrants. Note that this only relates to migrants who at some point left The Hague again (42 per cent). Dividing single male migrants into skilled (hisclass < 9) and unskilled workers (hisclass  $\ge 9$ ) demonstrates that unskilled male migrants stayed significantly shorter: 22 versus 32 months. Every step lower on the hisclass scale decreased length of stay by about five months. Unskilled workers were therefore possibly forced to leave the city sooner than skilled workers. In general length of stay before leaving again was quite short for all migrants. A median stay of 20 months for skilled workers seems a short period to become more specialised in a craft. On the other hand, the majority of migrants was able to get a settlement and stayed in The Hague for an undefined period of time. Chances of obtaining this settlement were related to skill as well. Higher skilled workers were more likely to stay. Seeing that they had more resources and could possibly easier present a settlement deed this is not surprising. It is perhaps contrary to expectation that foreign male migrants were as likely to stay as Dutch migrants, and even as likely to obtain citizenship rights. Since citizenship was a prerequisite for guild membership, this again indicates that the guilds of The Hague appear to have been quite accessible to outsiders (cf. Prak et al. 2018, pp. 98-100).

Because we also know how long migrants were initially allowed to stay by the urban authorities, actual lengths of stay can be compared with allowed stay to see if skilled migrants we treated differently. The urban authorities of The Hague did not noticeably discriminate against certain groups of migrants. Although permitted length of stays varied between six months and two years, there was no significant difference in the allowed length of stay allowed between Dutch and foreign migrants, or between skilled and unskilled migrants. The number of months male and female migrants were allowed to stay did differ significantly, but only by about two months on average (12.5 vs. 10.5 months). The absence of noticeable differences in allowed stays is probably a reflection of the settlement procedure, whereby all migrants were given a comparable amount of time to submit their settlement papers.

Figure 4 shows that migrants in effect stayed longer than allowed, likely because it took some time to look up who was supposed to leave the city and then have a city messenger track them down. Migrants' stay seems to have been affected by quite short-term labour market cycles, which are apparent both in the allowed and actual stay. Perhaps these cycles were partly an effect of the settlement policy itself, where migrants had to leave quite soon, only to be replaced with new migrants. The figure further shows increasing divergence between allowed and actual lengths of stay over time. The average migrant stayed almost a year longer in the 1760s when compared to the 1750s. Whether this was caused by lax authorities or demand for migrants is difficult to say, although actual lengths of stay of skilled and unskilled migrants increased on a comparable scale between the 1750s and 1760s. Nevertheless, when comparing to the HSN (see below) lengths of stay before migrating again were noticeably shorter in the eighteenth century.



Figure 4: Allowed stay versus actual stay of male migrants.

When looking at how far migrants travelled next if they left, unskilled workers stayed closer by The Hague than skilled workers. This difference was sizeable. Unskilled workers travelled to places on average about 100 kilometres away, while skilled workers travelled more than 400 kilometres. However, if we control for foreigners in both groups it appears that Dutch migrants in general travelled far less kilometres than foreigners. Of the unskilled migrants, foreigners travelled on average 150 kilometres to their next destination after The Hague, compared to only 52 kilometres for Dutch unskilled migrants. Skilled foreign migrants traversed almost 250 kilometres, while Dutch skilled migrants only travelled about 72 kilometres. Thus, the difference in travelled distances for The Hague migrants was a combination of skill and origin. Dutch migrants stayed in the region much more often than foreign migrants. This can be seen in Figure 5.

Differences between Dutch and foreign migrants are quite pronounced and suggest the intersection of two distinct migration systems. Between their birthplace and visiting The Hague, Dutch migrants rarely went abroad. Also when leaving The Hague only the odd Dutch migrant left for cities far away. For foreign migrants, The Hague appears to have been one of multiple stops along a more internationally oriented migration trajectory. After leaving The Hague a larger share of them left for foreign cities. What is more, these were often not cities they had visited before. It is possible that we are observing migrants in a different stage of their life here. Although we do not know their ages, the same share of migrants from both groups was married (33 vs. 36 per cent), and also the number of children they reported was comparable on average (1.75 vs. 1.77). It therefore appears as though the migration trajectories of Dutch skilled male migrants were structurally different from foreign migrants. Even though their chances of becoming citizen of The Hague were not lower, the same share of foreign and Dutch migrants left The Hague again (about half). This suggest that foreign migrants left for relatively far destinations on their own accord, possibly to hone their skills somewhere else (cf. Pooley and Turnbull 1996), while Dutch journeymen were more regionally oriented.



Figure 5: Places visited by male migrants.

By comparing places of birth with destinations it is possible to detect circular migration (returning to their place of birth). The ratio behind circular migration could have been manifold. Unskilled migrants often returned home after seasonal work ended, yet others left home for good (cf. Lucassen 1984; Lottum 2007). Klemp et al. (2013) found that approximately a quarter of London-bound apprentices at some point had a vital event (marriage, death, or birth of children) recorded in their home parish, indicating that also skilled workers returned home. When their parents were still alive, these apprentices 'could hope to advance themselves within their parental business, or with its near support, rather than relying on their own resources in a city far from their birthplaces' (Klemp et al. 2013, p. 227). When looking at The Hague migrants, both explanations can hold. Skilled and unskilled single male workers returned home in comparable (high) shares (40 vs. 45 per cent respectively). There is also no significant difference in skill level (hisclass or hiscam) between circular migrants and migrants leaving The Hague for another destination. However, as Table 2 demonstrates, being foreign or not goes a long way in explaining circular migration. Single Dutch migrants came directly from their birthplace in relatively large numbers, whereas all other groups had more often visited another city before coming to The Hague. Dutch singles were also most likely to return to their place of birth. Migrating married couples in general sought to settle somewhere away from home for good - most often in The Hague or relatively close-by. But also here foreign married couples were less likely to return home than Dutch couples. Single foreign migrants were not only less likely to return home, when leaving The Hague their next destination was four times as far away compared to Dutch singles re-migrating. Perhaps singles moved on when they could not find a partner in The Hague, but they could also have moved to another employer in another city to become more skilled. It is quite likely that we are observing a source-bias here. Foreign migrants arriving in The Hague already made the choice for long-distance migration, which possibly made it easier to re-migrate over longer distances again, instead of returning home.

	Stayed in The Hague	Direct from PoB	Return PoB	Dist. Origin-The Hague (mean)	Dist. The Hague-Dest. (mean)
Foreign - single	37 %	18 %	28 %	260	200
Dutch - single	38 %	61 %	53 %	69	52
Foreign - married	70 %	15 %	9 %	135	72
Dutch - married	69 %	30 %	25 %	46	48

Notes: moves over 5,000 km and circular migration excluded from mean distances.

Table 2: Migration trajectories of male migrants.

It is still striking that so few Dutch migrants choose to re-migrate over long distances after coming to The Hague. Did Dutch migrants in general rarely move to foreign places, or was The Hague not a promising stop before doing so? Partially the answer may be in the opportunities provided by migrants' hometowns. With every 1 000 inhabitants in the hometown of Dutch migrants the probability of returning increased by almost one percentage point. This seems logical: large cities would have provided more opportunities in general. However, this effect is absent for foreign migrants. Possibly this indicates that foreign migrants had moved because their birthplace offered them little, regardless of the size of their hometown. Whereas many Dutch single migrants returned home if they had come from large cities, foreign migrants had left their hometown for good more often, irrespective of the size of their birthplace. This does not imply that all foreign migrants were subsistence migrants. It only suggests that foreign migrants arriving in The Hague were not able or not willing to return home to the same degree as Dutch migrants. This decision may have been given in by subsistence, but just as well by the desire to become more skilled.

Since we know places of birth, origin, and destination for a share of migrants, we can examine if there was a relation between city sizes, migration trajectories, and skill. In theory the fact that foreign migrants visited more distinct cities and cities far and wide while Dutch migrants did not, affected the diversity of techniques and skills they were exposed to and able to imitate (Croix, Doepke, and Mokyr 2018). This is difficult to observe empirically, but one way to proxy for this is by city sizes. Large cities provided many opportunities for unskilled workers, but more specialised skills were concentrated in large cities alone. Occupations such as silversmiths, surgeons, printers, apothecaries, and clock or watchmakers were only found in the larger cities of Holland (Vries and Van der Woude 1997, pp. 522-523). Specialisation and city size were closely correlated, since specialisation was only worthwhile with large agglomerations of people (Duranton 1998, p. 555). At the same time specialisation maximises 'returns to human capital accumulation because utilization of costly skills is pushed to the limit' (Rosen 1983, p. 47). For migrants then, becoming more specialised seems to have been a smart move, but this could only occur by frequenting large cities. City size can therefore be taken as a (crude) proxy for human capital formation. Although we only have one occupational observation per migrant, on an individual level hiscam scores changed quite little even during the nineteenth century (Schulz, Maas, and Leeuwen 2015; Schulz and Maas 2010). The assumption that occupations were stable throughout migration trajectories should therefore not be too worrisome.

Figure 6 plots the relation between city size and skill (hiscam score) for every known destination of Dutch and foreign migrants. A red regression line indicates a significant relation at the five per cent level, and black signals no significance. For both groups there is a positively significant relation between the size of their birthplace and their skill, suggesting that the majority had picked up skills as apprentices in their home town (cf. Schalk et al. (2017)). The larger the town, the more training facilities it would have provided. The size of the city visited before coming to The Hague was not related to skill for both groups. We do not know whether these migrants visited other places between their place of birth and their last destination before coming The Hague, which makes it difficult to interpret this result. When leaving The Hague there is a positive relation between city size and skill, but only for foreign migrants. Holding other factors constant, migrants with occupations rated one hiscam higher left for cities with nine thousand more inhabitants. This suggests that skilled foreign workers were drawn to larger cities to a



Figure 6: Correlation between city size and skill during migration (circular migration excluded).

greater extent than Dutch skilled workers, possibly because the former re-migrated to become more specialised. For example, Louis Cachemaille, a single watchmaker from Bern left The Hague after 1,5 years for London. Johannes Volker, a watchmaker from Ghent, even left to work in St. Petersburg. This effect is absent for Dutch migrants, who seem to have moved to other cities more randomly. Some skilled Dutch migrants did end up in Amsterdam, but also in small towns like Rijswijk, Wassenaar or Breukelen. Measured like this specialisation seems to have occurred among foreign migrants in particular.

Career advancement, through increased specialisation, can further be observed by individual migrants moving to ever larger cities. Figure 7 shows how the average city size increased during the migration trajectory of different migrants. Unskilled migrants are grouped because there was no significant difference in city sizes between unskilled Dutch and unskilled foreign migrants. These did differ between skilled Dutch and skilled foreign migrants. The figure shows that Dutch skilled migrants did not noticeably move to ever larger cities, just like unskilled migrants. The picture is again different for skilled foreign migrants. Their migration trajectory shows a clear upward trajectory, only being interrupted by visiting The Hague. The city of the Hague, with the presence of a court of the Stadtholder and the Es-



Figure 7: Mean city sizes during migration trajectory of men (circular migration excluded).

tates General, attracted a large crowd of foreign representatives and elites, which may have offered migrants opportunities not otherwise available in a city of that size (cf. Duindam 2003, pp. 48-52). It is in that respect not surprising that so many foreign jewellers, coachmen and servants stopped at The Hague. When leaving The Hague, almost 70 per cent of foreign migrants departed for larger cities when only 45 per cent of Dutch migrants did. Moreover, the places migrants had visited before coming to The Hague were often larger than their birthplace – something we do not see for Dutch migrants who frequented another city before coming to The Hague. Consequently, it seems that a larger share of skilled foreign migrants deliberately moved to ever larger cities.

Based on these patterns foreign migrants arriving at The Hague as a group were probably more specialised and skilled than their Dutch colleagues. This divergence between Dutch and foreign artisans can be related to some self-selection bias. Some Dutch artisans did move upwards to become more skilled, while others possibly were not able or willing to. It seems likely that this filtering had already taken place among the group of foreign artisans – probably in a city closer to their home. When arriving at The Hague the lesser talented foreign artisans had dropped out already, while this selection had not taken place to the same degree among Dutch migrants. Foreign single male migrants were indeed significantly more skilled than single Dutch male migrants, with a hiscam score difference of more than two points. We also find significantly more master artisans among skilled foreign migrants. Going by the adjectives 'knecht' and 'gezel', which would be used for journeymen but not for masters, 24 per cent of foreign skilled migrants were masters compared to 14 per cent of Dutch skilled migrants (cf. Zanden and Knotter 1987, pp. 408-409).

## **3** Nineteenth century

#### 3.1 The HSN

Our investigation of migration patterns in the nineteenth century is based on the Historical Sample of the Netherlands (HSN, Mandemakers 2000). It is based on a sample of 0.5 % of all births in the Netherlands for the period 1812–1922. For a number these research persons (RP) the entire life course has been reconstituted from the population registers. Especially relevant for us is the information on occupation and changes of address, as well as further information such as marital status, sex, and date of birth. While the HSN contains this information for all of the house-hold members as well, we focus on the RPs because it is only for them that we are sure we are following them through their entire life course. The full HSN currently contains life course data on 37 173 RPs, but in the data preparation described below we lose a substantial number of them.

The HSN has been used extensively by researchers for topics such as social mobility (Schulz, Maas, and Leeuwen 2015; Schulz and Maas 2010; Maas and Leeuwen 2016), fertility (Bavel and Kok 2005; Schellekens and Poppel 2012), and mortality (Schellekens and Poppel 2016; Kok and Mandemakers 2016). Migration has also been studied using the HSN (Mönkediek, Kok, and Mandemakers 2016; Mandemakers, Moenkediek, and Kok 2015; Jennings and Gray 2015), though usually the focus is on the decision to migrate from the place of birth, not their full migration trajectory.

Here we tailor HSN as much as possible to allow for a comparison with the results of the Admissieregisters. First of all, this means we only include RPs who have migrated at least once after age 14. The HSN shows that in our period some 55–58% of people born and 50% of people who reached age 14 never moved. We are thus left with less than half the dataset. We moreover only use the data from the population registers. In the population registers, people could reside at multiple places at once. These 322 RPs have been removed to make sure we do not create inconsistencies between the occupational and migration careers. <sup>8</sup> This leaves us with 12 356 RPs. Two kinds of datasets were constructed from the full life courses of these individuals. One is focused on careers, and gives us each recorded occupation in the population registers to which we add the place of residence at that time. The other one is migration focused, giving all places of residence for the RPs, to which we add occupational information (the first or last occupation, and in the case of occupational status, the average as well). To maximise comparability with the Admissieregisters, we typically work with the latter version of the dataset. This

<sup>&</sup>lt;sup>8</sup> This is unfortunate because these typically short stays may have been for education or apprenticeships.

	by move	by RP
share men	0.514	0.481
share married	0.499	0.605
mean hiscam	52.730	52.209
mean hisclass	8.737	8.761
mean dist pl. birth	40.690	36.171
mean dist dest.	55.167	52.557
mean size pl. birth	51423.795	54342.581
mean size dest.	114639.932	114685.410
share remigration	0.087	0.157
final destination	0.467	NA
N moves	NA	2.140

means that the unit of analysis is usually a move. Therefore the same individual can be observed multiple times, and this sample is younger, more frequently male, and less often married (table 3).

Table 3: Descriptive statistics from HSN migration, by move and by RP.

Further information is drawn from a number of datasets. Population totals for Dutch municipalities come from the Historical Database of Dutch Municipalities (HDNG, Boonstra et al. 2003). Occupations were coded to HISCO and the accompanying HISCAM and HISCLASS scores using a file of coded occupations (Mandemakers, Muurling, et al. 2013; Leeuwen, Maas, and Miles 2002; Leeuwen and Maas 2011; Lambert et al. 2013). The migration patterns were geocoded using a dataset of Dutch historical toponyms that we modified to maximise coverage (Huijsmans 2013).

While we aim for consistency with the Admissieregisters, some important differences do remain. For one, the Admissieregisters contain information on migrants from outside the Netherlands, whereas by definition the HSN RPs can only be from the Netherlands. Of course, foreign migrants still frequented Dutch cities but we cannot observe them here (cf. Schrover 2000; Kooij 1997). Second, while the Admissieregisters can observe at most three moves, the HSN has full migration trajectories from birth to death, and in the HSN we can also observe occupations in the new locations. Note however that there are censoring issues due to the change from population registers to personal cards in 1938. We discuss these censoring issues explicitly where relevant. Also note that there is a substantial gap between the first observation in the HSN based data (1851) and the last observation in the Admissieregisters (in the current version of the dataset the last migrant arrived in 1776). Finally, the HSN sample is too small to look at The Hague only. We therefore look at all places in the Netherlands, and sometimes focus on the four largest cities. In 1851 those cities were Amsterdam, Rotterdam, The Hague, and Utrecht.

#### 3.2 Results

In this section we try to reconstruct migration patterns for the 1851–1920 period on the same points as was done for the Admissieregisters for The Hague in the eighteenth century. In table 4 we repeat the comparison of the occupational shares amongst migrants to that in the overall labour market. To capture the overall labour market, we use the full set of occupational observations in the HSN, so including migrants and non-migrants. We compare this with the occupations of the migrants in the HSN after they have moved at least once. We focus on the same occupations as in the Admissieregisters.

occupation	hiscode	hiscam_nl	share migrants	share HSN	rel. migrant presence
Trader/ buyer	42220	71.23	0.03	0.05	0.68
Domestic servant	54010	40.24	0.31	0.23	1.30
Gardener	62700	53.11	0.53	0.55	0.98
Stone splitter	71220	52.47	0.08	0.09	0.93
Cloth dyer	75622	53.95	0.03	0.07	0.46
Tailor	79100	51.40	0.66	0.78	0.84
Shoe-maker	80110	50.66	0.59	0.90	0.65
Saddle maker	80320	51.47	0.06	0.06	0.99
Cabinetmaker	81120	52.81	0.27	0.38	0.70
Blacksmith	83110	52.52	1.42	1.18	1.21
Gold and silversmith	88050	69.12	0.05	0.09	0.59
House painter	93120	54.61	0.92	1.11	0.82
Bricklayer	95120	48.24	0.30	0.56	0.54
Carpenter	95410	52.50	1.93	2.14	0.90
Coachman	98620	49.22	0.71	0.60	1.19
Worker	99900	48.70	6.27	6.94	0.90
Labourer	99910	49.75	0.81	0.98	0.82

Table 4: Distribution of occupations and migrants in the HSN.

The results of this in table 4 show that, compared to the full HSN, migrants were more likely to be domestic servants, blacksmiths, and coachmen. They were less likely to traders, cloth dyers, bricklayers, and gold- and silversmiths. While migrants are over-represented in low-status occupations like domestic servant, they are somewhat under-represented in other low-skill occupation like general workers or labourers. Like in eighteenth-century The Hague then, no clear pattern of over-or under-representation in skilled or high-status occupations can be found.

While table 4 shows that migrants did tend to end up in certain occupations, overall the occupations of migrants resemble the overall distribution of occupations more closely than the comparison of the Admissieregisters with the Register Civique showed. Similar patterns can be found when we look at the most frequent occupations overall or among the population of migrants in the HSN, rather than the same set of occupations in the Admissieregisters.

	single	single	married	married
sex_op	m	V	m	V
N	3986	2282	1243	126
hiscam	55.9	46.0	56.0	50.0
hisclass	8.29	9.87	8.02	9.43
% unskilled	44.2	83.9	43.3	75.4
dist. orig	50.3	49.9	46.6	32.3
dist. PoB	46.7	48.0	47.2	42.5
dist. dest.	51.0	48.0	52.0	49.9
% return to PoB	11.57	15.73	9.41	6.35

Table 5: Occupational status, skill and migration by marital status and sex.

In table 5 we again look at the migration and skill profile of migrants in different stages of their life-cycle. The HSN gives us enough observations to not only distinguish between married and unmarried men, but also between men and women. We find that in the 1851–1920 period, women, both married and single, tended to have lower skill occupations (that is, higher hisclass scores) and lower status (lower hiscam scores) than men. Comparing unmarried and married men, we find that married men had somewhat higher skilled and higher status occupations(0.4 on the 13-point hisclass scale). This is the opposite of what was found in eighteenth century The Hague where married men had somewhat lower skilled and lower status occupations.

When we observe single men in a new location, they had travelled further from their previous location than their married counterparts. If we look at distance from their place of birth and the distance to the next destination, however, the differences are negligible. This is again different from eighteenth-century The Hague, where Dutch singles on average travelled further than married men from their previous location and to their next destination (table 2). The share of moves that are followed by a return to a place of birth are c. 10% for men. Single men returned to their place of birth more often than married men (12 v. 9%), but both are far less frequent than is shown by the Admissieregisters for The Hague.

Overall the differences between single and married migrants in the nineteenth century are smaller than they are in the eighteenth century. If anything, singles were now in less skilled occupations. Single men did not travel much farther and did not show more return migration. This suggests that a group of single men travelling to gain skills was less a feature of migration in the 1851–1920 period, although it should be remembered that foreign migrants were the most predominant group that showed such a migration pattern.

Figure 8 shows the length of stay of migrants estimated from the HSN. It is not straightforward to make statements about the length of stay of migrants on the basis of the HSN. The change in 1938 from population registers to personal cards, ,



Figure 8: Mean length of stay in cities by year, from population registers (black) and personal cards (red). Thin lines give 90% confidence intervals.

means the lengths of stay are censored at 1938.<sup>9</sup> To overcome this, we calculate average length of stay over time from both registration systems separately. This shows when the population registers are becoming censored and from which moment the estimates from the backdated personal cards should be preferred.<sup>10</sup>

With the exception of potentially noisy estimates in the 1850s and 1860s, it can be seen that the length of stay in a location after a move was fairly stable over the entire period. What stands out above all, however, is that the length of stay was substantially longer than what can be observed in the Admissieregisters. On average, migrants resided in a location some 100 months before moving again, more than twice as long as can be found at the end of the period in The Hague. This finding makes sense: legal restrictions like The Hague's on how long one could stay in a city were no longer present. The comparison with the HSN thus shows that such restrictions could have a substantial impact on mobility, even if they were not perfectly enforced (figure 4).

If we look at circular migration in the HSN, we see far less of it than was the case in the Admissieregisters. Overall, only about 9% of the moves in our dataset are a return to a place the RP lived earlier.<sup>11</sup> Figure 9 shows how circular migration differs

<sup>&</sup>lt;sup>9</sup>Specifically, adding the personal cards to the population register-based dataset to fix the 1938 censoring, would undo the intentional censoring of address observations to match the RP's presence there that we had to do because the HSN recorded address changes of households even if the RP has already left.

<sup>&</sup>lt;sup>10</sup>The final place of residence of an RP is excluded from these estimates.

<sup>&</sup>lt;sup>11</sup>Tracking the share of circular migration over time does not suggest the low number is driven by a censoring effect due to the end of the population registers.



Figure 9: Share of return moves by hisclass.

by occupational skill level. Twice as many moves were to a place migrants had lived earlier if the RPs held unskilled jobs (hisclass  $\geq$  9). The fact that agricultural workers (hisclass 8 and 10) displayed lower return migration shows that this was not due to seasonal agricultural migration. This gradient is steeper than that found in the Admissieregisters. By the nineteenth century, migration was thus not only more permanent in terms of the period migrants stayed in new cities, but also in terms of returning home.

Figure 10 shows the catchment areas and the next destination for migrants to the four large cities of the Netherlands. Catchment areas, both in terms of places of birth and previous location, are generally large and cover most of the Netherlands, though Rotterdam migrants have a tendency to come from Zeeland and the Rhine/Meuse areas. Utrecht had a small catchment area compared to the other cities. With this exception, these Netherlands-wide catchment areas match what we see for The Hague in the eighteenth century. Differences can however be seen in the next destination of migrants after residing in one of the large cities. While migrants moving out of The Hague stayed in Holland, out-migrants from the four large cities in the HSN were more spread out over the entire Netherlands.

In figure 11 we explore whether there was a relation between occupational status and city size in the HSN-based dataset. The expected positive relation is found for all three measures: place of birth, place of origin, and next destination. Migrants who were observed to have a higher occupational status, tended to come from larger places. Likewise, migrants with a high status occupation tended to move to larger places. The effect size is very similar. An additional point on the hiscam scale was



Figure 10: Migrant places of birth, origin, and destination, normalised by population size for four Dutch cities.

associated with a move from/towards a 2% larger city. For the four large cities, the effect size is somewhat smaller at 1.5%.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup>aAricultural workers who probably had little training and would have come from small villages could have been driving this, However the pattern also holds if we exclude them.



Figure 11: Correlation between city size and skill during migration (circular migration excluded).

These observations fit the idea that the higher occupational specialisation and educational opportunities that a large city could offer, drew in migrants who wanted to gain such experience. While this could already be observed in the eighteenth century, the effect can be more consistently observed in the 1851–1920 data.

Another way to look at migration up the urban hierarchy is to track the average population of each location in the the migration trajectory of migrants (figure 12). After the first move a slight decline in size of destination can be seen (from c. 130 000 to 120 000 inhabitants on average), but after that we can see that migrants tended to move on to larger cities in each successive migration step, peaking at an average size of 150 000 at the fifth move. While the average population sizes stay high after that move, we are left with too few observations to get precise estimates as the number of migrants who actually made at least this many moves is small (388).

Finally we look at occupational changes following a move. This could not be observed from the Admissieregisters because migrants exited that data once they moved, but the HSN does allow us to observe occupational change after moving. When doing this it is important to note that a large number of RPs in the HSN showed little or no changes throughout their careers (Schulz and Maas 2012, similar observations in). This makes it hard to distinguish clear patterns and already



Figure 12: Average population by move number and 95% confidence intervals.

puts some bounds on the importance of migration for skill formation and career advancement in the nineteenth century: while half the people moved, very few actually made careers progress.

If it changed though, occupational status was likely to increase than decrease after a move. Likewise, RPs who moved, if they entered an occupation of a different skill level at all, tended to obtain more skilled occupations (higher hisclass: see the annualised hiscam and hisclass changes per move in table 6).

However, these figures need to be compared with careers of non-migrants, as we would expect to see some career progress in absence of a move as well (table 7). Upward careers changes are proportionally more frequent after a move than they are in lifetime careers of RPs who did not move. Calculating both for the entire career of RPs who did and RPs who did not move, shows that on average, a migrant had an annualised hiscam change of 0.05 compared to 0.02 among non-migrants. For hisclass the improvement was 0.02 for migrants versus 0.01 for non-migrants. While this is only a preliminary analysis of migration and occupational change, overall the HSN shows that moves in the nineteenth and early twentieth century were associated with modest career improvements.

	hiscam	N	hisclass	N
1	(-70,-20]	9	(-21,-4]	9
2	(-20,-10]	19	(-4,-3]	7
3	(-10,-5]	37	(-3,-2]	18
4	(-5,-2]	127	(-2,-1]	109
5	(-2,-0.001]	1678	(-1,-0.001]	2035
6	(-0.001,0.001]	30607	(-0.001,0.001]	32451
7	(0.001,2]	2808	(0.001,1]	933
8	(2,5]	260	(1,2]	40
9	(5,10]	55	(2,3]	17
10	(10,20]	25	(3,4]	9
11	(20,70]	11	(4,21]	8

Table 6: Annualised hiscam (left) and hisclass (right) change after a move.

	hiscam	N	hisclass	N
1	(-70,-20]	2	(-21,-4]	4
2	(-20,-10]	1	(-4,-3]	2
3	(-10,-5]	7	(-3,-2]	1
4	(-5,-2]	24	(-2,-1]	17
5	(-2,-0.001]	1190	(-1,-0.001]	1710
6	(-0.001,0.001]	8602	(-0.001,0.001]	9591
7	(0.001,2]	2217	(0.001,1]	783
8	(2,5]	64	(1,2]	8
9	(5,10]	7	(2,3]	1
10	(10,20]	3	(3,4]	2
11	(20,70]	2		1

Table 7: Annualised hiscam (left) and hisclass (right) change for RPs who did not move

## 4 Conclusion

In this paper we have tried to compare the migration patterns of migrants into eighteenth-century The Hague to those who migrated between municipalities in the late-nineteenth and early-twentieth century Netherlands as a whole. Compared to research so far, the data from the Admissieregisters and the HSN allow us to chart migration patterns in periods that cover different institutional and economic contexts. The data contains a comprehensive samples of migrants and includes information on places of birth, origin, and destination. It thus allows us to follow migrants beyond the move into one place. In combination with occupational information about the migrants, this data allows us to investigate how these migration patterns could have related to human capital formation.

When we compare migration patterns between the eighteenth and the late nineteenth/early twentieth century, some differences can be observed. We find that migrants in the Admissieregisters were characterised by far shorter stays, less than half what can be observed in the HSN. After these shorter stays, eighteenth-century migrants were also more likely to return to their place of birth.

In the eighteenth century single migrants were more differentiated from their married counterparts. Singles were more mobile, they migrated over longer distances, and were more likely to move on from The Hague. They could also be found in higher skilled and higher status occupations compared to married migrants. Such differences between single and married migrants were harder to find in the late nine-teenth/early twentieth century. By this the relation between marital status and occupational skill and status had also reversed: married migrants now held higher status and higher skilled occupations. This suggests that the eighteenth century still had a group of migrants that behaved like "tramping journeymen". By the late-nineteenth century such a group can no longer be easily distinguished.

Catchment areas for migrants of cities were similar and covered most of the Netherlands. The Admissieregisters show that migrants who moved on from The Hague stayed in Holland, while migrants from the large cities in the late nineteenth and early twentieth century were less Holland-focused. In both periods migrants moved up the urban hierarchy, though in the eighteenth century this was mostly a trait of foreign migrants. The propensity of Dutch migrants in the eighteenth century to migrate back to their place of birth may have driven this difference. Unfortunately the HSN does not allow us to include foreign migrants as the Admissieregisters do.

What the HSN does allow us to see is what happened to migrants after they moved. While the majority of individuals and migrants in the HSN showed little or no occupational change, it can still be seen that migrants had more career advancement, both in terms of skill and occupational status, than those who never left their place of birth.

Speculating about the implications of these findings, we first observe that, conditional on migration in the first place, the eighteenth century was more mobile than one might think based on ideas of a nineteenth-century mobility transition (Lucassen and Lucassen 2009). The data suggests foreign guilds forcing journeyman to migrate is part of this, but we also want to emphasise the role of settlement laws. They played a dual role in this. They increased mobility by limiting the duration migrants could stay, but they also encouraged migration back to migrants' place of birth where they had relief entitlements, rather than repeat the cycle in a new city. A benefit of this system is that skills gained in larger, more specialised labour markets could be brought back to smaller cities. A downside is that further specialisation and skill formation were discouraged, especially among migrants from the Netherlands. While this limitation was lifted in the nineteenth century, fewer migrants moved on to these opportunities.

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