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EDUCATIONAL ATTAINMENT, OCCUPATIONAL ACHIEVEMENTS, CAREER PEAKS

The Netherlands in the second part of the twentieth century

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ABSTRACT: This paper answers questions on the educational attainment and occupational career of men in The Netherlands whose working life began in the 1950s, 1960s, and 1970s, in so far as their job history is available until at least the age of 45 years. The analysis draws on five Dutch retrospective life-history surveys conducted between 1992 and 2003. The results show that a man's education depends upon his father's job, and that this effect has not changed for labour market entry cohorts. When explaining a man's first job, his father's job is influential once more, independent of a man's education. A man's education has a direct positive effect on his first job, his job after 10 and 20 years, and his peak job, but again the differences in status attainment between labour market entry cohorts are limited. Findings also reveal that advantages accumulate during a person's working life. Apart from a higher level of education, a higher first job has an independent positive effect on a man's job after 10 and 20 years, as well as on his peak status.
Key words: occupational career; social stratification; status attainment; The Netherlands

Sociology has witnessed several generations of social mobility research (Ganzeboom *et al.* 1991). This paper avoids drawbacks of the fourth generation and brings in undervalued features of the second one. It answers questions on the educational attainment and occupational career of men whose working life began in the 1950s, 1960s, and 1970s, in so far

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as their job history is available until at least the age of 45 years. This paper's first section details generational shifts. The second portion presents a string of questions, the third one argues hypotheses, the fourth prepares data, and the fifth displays results. The final part reviews findings, recasts hypotheses and proposes follow-up questions.

1. Dropping poor questions and proposing a series of appropriate questions

Successive generations of mobility research employed quite different techniques of data analysis. The first generation eyeballed tables classifying men's present job against their father's job (Lipset and Bendix 1959). The second generation estimated path models for the socio-economic life cycle (Blau and Duncan 1967), and the third one fitted log-linear models to father–son class mobility tables (Goldthorpe 1980; Erikson and Goldthorpe 1992). Presently, event history models are *en vogue*, after their introduction by Blossfeld and Mayer (1988).

In addition, every new technique of data analysis was accompanied by the collection of richer data. Each generation drew a representative sample from a country's population and took the job level of men as indicating their status in a society's stratification system. The Lipset generation made do with tables on a man's job and that of his father. The Duncan generation also ascertained a man's education and his job right after leaving school. The job of men 10 years on in their working life was added by the Goldthorpe (1980: 69) generation. Full occupational histories were collected by the Mayer generation, for men and women, as well as data for their father and mother.

Given the increasing wealth of data and the growing sophistication of their analysis, it may be surmised that early generations were interested in descriptive issues, later ones in comparative questions, and recent ones in explanatory problems. Yet each generation described and explained. Later generations deleted questions that 'pose the issue poorly' (Blau and Duncan 1967: 402). This often-overlooked aspect of generational shifts deserves top billing and is elucidated now.

By subtracting father's job from son's job, the first generation ascertained how many men were upwardly mobile, downwardly mobile and stationary. However, the second generation discarded the question of why some men move up and other men down. It demonstrated mathematically that a weak association between a man's education and the extent to which he ascended or descended compared with his father need not be surprising. Given a *strong* association between a man's education and his job, the *stronger* the association between father's job and son's education is, the *weaker* the association between education and the

mobility variable will be. Sons with more education have a higher job father to begin with – and because of this ceiling, only a few will ascend. Something similar holds for any association involving a difference score (Blau and Duncan 1967: 194–9).

The second generation barred difference scores, and went for associations between elementary variables. Questions should involve the strength of the association between the status of persons and that of their parents. In this way, the con question of the effect of education on mobility is replaced by two right-on-target questions: that of the effect of father's occupation on son's education, and that of the consequences of father's job and son's education for son's job.

Like the second generation, the third one settled for associations between elementary variables. However, it held that jobs cannot be arranged along one continuum, as path models assume, but belong to a limited number of categories. It also held that, even if a gradient was apposite, the strength of the association between parental and personal status may differ for sections of the breath of jobs. An example is more mobility in the middle than at the top and bottom. So, path models were not attuned to pertinent questions, and hence the third generation's interest was in the unequal outcomes of competitions between persons from different origins for higher and lower destinations, as indicated by odds ratios (Goldthorpe 1980: 77). Odds ratios are measures for the association between categorical variables, and the parameters of the log-linear models estimated in third generation research can be reworked into odds ratios.

The fourth generation held that the questions of earlier ones seem underspecified, and actually are compound questions that cannot be broken down into doable ones. Mobility questions should specify two points in time. The data of earlier generations do refer to the same year for every man's current job, but pertain to different dates for their father's job. If this is the case, origin effects will depend upon the length of the period considered. After all, experience might speed up a man's job level. This spoils the possibility of answering questions about the separate influence of factors like educational reforms and unemployment levels on current job. More generally: age, cohort, and period effects cannot be identified. That is why the fourth generation did away with questions on the association between origin and current job and ascertains complete careers. By explaining a person's job at the close of always equally short spells, questions sorting out the various kinds of effects can be answered. Depending upon the histories collected, this period is measured as a month or as a year.

2. Models for the socio-economic life cycle reappraised and a string of questions proposed

One substantive argument against second generation path models has been their unimportance for sociology. In a graph with dots and arrows (Blau and Duncan 1967: 170), dots stand for properties of persons, and no property refers to the societies persons belong to (Lenski 1984: xvi). However, arrows do refer to societal features. For instance, one arrow stands for the status returns to an additional year of education, in a specific country at a certain moment. This yield was found to vary within one society across cohorts (Blau and Duncan 1967: 178), and comparisons of the strength of associations between elementary variables for cohorts-countries are blossoming (Rijken 1999). So, we beg to differ. Indeed, an underappreciated advantage of the second generation is that it addresses questions about societies in a neat sequence. It replaced the first generation question of the across time and between societies varying effect of origin on destination (in the singular) by three questions: the effect of father's job on son's education, the effect of father's job (net of that of son's education) on son's first job, and the effect of father's job (net of that of son's education and first job) on son's current job.

Against this background, this paper deals with a series of questions, with the first question referring to the earliest phase of the status attainment process, and later ones to successive stages and specific features of the whole process. This paper's first question (Q1) is: *Did a higher family background for men starting to work in the 1950s, 1960s, and 1970s make for more education, and was this effect the same for all three cohorts?* Our second question does not focus the outcome of a man's educational career, but the start of his occupational career (Q2): *Did, for each cohort, the effect of a man's education on his first job increase, while that of his origin, net of education, decreased?*

If a man's job history is available, it is easy to replace the off-the-mark second generation questions about a man's present job by look-alike right ones. Our third question (Q3) is on effects of background and education on a man's job 10 and 20 years after labour market entry: *Are effects of background and education on a man's job after 10 and 20 years so powerful, that they remain present after taking into account their effects on a man's first job, or do background and education achieve their results in one go?*

Path models have shown that a man's current job is higher if, independent of his education, his first job was higher. This neglected result is substantively interesting. Careers seem self-reinforcing: among men with the same education, those starting in higher jobs finish higher than those who begin in lower ones. This paper's fourth question (Q4) is:

To what extent is a man's job 10 and 20 years on in his working life higher, if his first job was higher, net of the effect of education and background?

Older men have had more chances to find a job matching wishes and skills than younger men. But then, after finding it, they risked losing it. The Netherlands is a market economy with varying unemployment rates. So, a fifth question (Q5) is on the spot: *Does a higher unemployment rate lower the level of a man's first job, and his job 10 years and his job 20 years on in his working life?*

Our two final questions deal with fourth generation drawbacks. By breaking job histories down into periods of equal length, this generation bypassed common sense features of careers: their progress and their peak. This paper deals with progress by highlighting first jobs, jobs 10 and jobs 20 years later.

To bring in peaks, our sixth question (Q6) is about a man's job during each and every month of his working life below his peak. *Do background, education, time on the labour market, and unemployment rate affect a man's chances of remaining below peak or arriving on top?* Our seventh question (Q7) recognises that peaks may differ. Its starting point is the highest job reached by persons 45 years or older. *Does the level at which a man's career peaks depend not only on his background and education, but also on his first job and the time he was on the labour market?* This question need not be about a man's job at age 45, since a man may peak before this age and slide after peaking.

3. Hypotheses: families, markets, and states

The Duncan generation has been heavily criticised from substantive points of view. The terms may have changed, but the old argument that 'status attainment research' is 'a-theoretical' stands behind its current name of abuse 'variable sociology' (Hedström 2005). However, Horan (1978) pinpointed quite specific hypotheses. He asserts effects of changes in a society's prime mode of subsistence: in societies like The Netherlands, the shift from agriculture, by way of manufacturing, to knowledge-intensive services was accompanied by a change in the norms regulating status attainment. Whereas agrarian norms stipulated ascription (following in father's footsteps), later ones prescribe achievement. Higher jobs go to persons with educational credentials, and education becomes independent of origin.

Of course, this from-ascription-to-achievement hypothesis may falter in research. However, it also may be the case that it faces obvious difficulties, or that more general theories imply its falsity. We discuss these points now.

To begin with, without surveillance norms wither away (Tittle 1980). The judiciary enforces laws about property, but there is no equivalent when it comes to fair decisions after job applications. Surely, profits suffer if firms reject applicants with better credentials, but companies sometimes are in the red. So, the chances that higher jobs go to persons with more education may remain unchanged.

Secondly, behind the from-ascription-to-achievement hypothesis stands the idea of education as a functional requirement of industrial societies (Kerr *et al.* 1960). This is an obscure notion. Persons have unsatisfied needs, so why would the needs of societies, if they have them, become fulfilled? A pervasive trend towards smaller effects of background on education may be absent too.

Thirdly, when 'positive externalities' of education are highlighted, a new difficulty arises. The theory of collective goods (Van den Doel 1979) states that markets do not optimally produce positive externalities, and The Netherlands is a market economy. Yet it also holds that states sometimes provide collective goods from taxes. Now, schooling is compulsory in The Netherlands, the school-leaving age was raised, and state-funded stipends for post-compulsory schooling are considerable. *The hypothesis answering this paper's question about educational attainment* (Q1) therefore reads that, at least for The Netherlands in the period considered, for later cohorts origin effects on education are smaller than for earlier ones.

Finally, this hypothesis comes with a rider. Educational reforms may have done away with effects of 'material resources', but these reorganisations brought in consequences of 'cultural resources'. Bourdieu's (1979: 177) theory of compensatory strategies posits that higher class parents compensate for state-funded stipends, by transferring more cultural resources to their children. So, origin effects will not vanish.

Since the mid-1980s, when youth unemployment soared, Dutch governments invest heavily in easing the transition from school to work (Visser and Hemerijck 1998). *The answer to this paper's question about the possibly changing impact of a man's education on his first job* (Q2) states that the effect of a man's education on his first job increased, whereas the net effect of origin decreased. Again, net effects of background will not have disappeared. Higher origins make for the possession of less tractable and more tacit resources valuable within corporations too.

When applying for jobs, persons state their education and experience. Although employers will take experience of persons into account, they will not bypass credentials. So, to *answer our question on non-initial jobs* (Q3), we postulate net effects of a man's education on his job after 10 and 20 years. The same reasoning *answers our question on first job effects* (Q4): a

man's job 10 years after his first one will be higher if his first job was higher, and so will his job after 20 years.

This paper's next question is about effects of aggregate unemployment rates. The Netherlands witnessed full employment until the 1970s. With the two global oil crises, the business cycle resurfaced. In the 1980s the decline of manufacturing took a big toll. In those years, the growth of the Dutch economy was at its post-war low. Hence, *the hypothesis pertinent to our unemployment rate question* (Q5) postulates independent effects of the unemployment rate on job level.

We now answer our last but one question on factors affecting career peaks. *The prime hypothesis answering it* invokes the time a person has spent on the labour market. On the one hand, hypotheses about technological exigencies hold that persons almost start at their peak. On the other hand, hypotheses about fortuitous markets predict that the time it takes for persons to reach their peak may be quite long. Since the size of each effect is unclear, it cannot be stated how they add up. But then, if there is an effect of unemployment rates, given their trend in The Netherlands, it should be stronger for later cohorts than for earlier ones.

Our final question is not about factors making for a peak, but about the level of this peak. Here our *hypotheses* are straightforward. Higher current unemployment rates make for a lower peak in a man's occupational career, more education leads to a higher peak, as does a higher origin and a longer working life.

4. Research design

4.1. Data

In this paper we analyse data from five retrospective surveys: Netherlands Family Survey 1992–1993 (Ultee and Ganzeboom 1992), Households in the Netherlands 1995 (Weesie *et al.* 1995), and Family Surveys Dutch Population 1998, 2000, and 2003 (De Graaf *et al.* 1998, 2000, 2003). Each survey involves a random sample from all Dutch inhabitants and face-to-face interviews with respondents at home. The number of respondents in the surveys was 1,800, 3,354, 2,029, 1,561, and 2,174, respectively, yielding in total 10,918 respondents. The analyses to be presented refer to men, since the few women with a complete job history would be atypical. We deleted men below the age of 45 years at the moment of survey. We deemed it unwise and unnecessary to select only men who have definitively stopped working, and opted for the age of at least 45 years to

be pretty sure that men have reached their career peak. Indeed, one third generation study compared cohorts by assuming that the occupation of men had matured around the age of 35 years (Goldthorpe 1980). Nevertheless, the choice for men at least 45 years old severely reduced the number of cases for modelling. After list-wise deletion of respondents for whom information is missing on any of the variables, a set of 1,087 men remained. We lost about half of our original samples by selecting men only, and more than half of these men by deleting those below the age of 45 years. We return to our decision to restrict our analysis to men in this paper's final section.

The surveys ascertained all the jobs persons held in the past, although with some difference in detail. For each job held by a respondent, the start and end dates are reported, as well as features of the job. In the Netherlands Family Survey 1992–1993, work histories were organised by job spells, in the other surveys by employer spells. Within each employer spell, information was gathered on the jobs held. For the survey Households in the Netherlands 1995, this was limited to the first and last job.

4.2. Measurements

Job level is measured by assigning to each job title a score from the International Socio-Economic Index of Occupational Status (ISEI) (Ganzeboom *et al.* 1992). This scale ranges from 16 for occupations with the lowest to 90 for those with the highest status. In the analysis, five jobs are considered: the job of the father when the respondent was 15 years old, the first job of men, their job after 10 years, the job after 20 years, and their peak job.

The highest level of education attained by men comprises six categories for the most distinct qualifications awarded by Dutch schools: elementary education (lo), lower secondary education (lbo/mavo), higher secondary vocational education (mbo), higher secondary general education (havo/vwo), lower tertiary education (hbo), and higher tertiary education (wo).

As stated, three labour market entry cohorts are distinguished: the 1950s, 1960s, and 1970s. Yearly unemployment rates are taken from Statistics Netherlands (CBS 2007). Work experience is measured as the number of months in employment since entering the labour market. We model a possible curvilinear effect of work experience by including both a linear and quadratic term.

5. Results

5.1. Educational attainment

Table 1 contains multinomial and ordered logit models for a man's highest level of education. Model 1 reveals that men from recent cohorts have more education than men from earlier ones. In addition, it shows that father's status increases his son's education. Model 2 divulges that the effect of father's job remained constant over time. This result speaks against the *hypothesis of smaller effects for later cohorts*, which answered Q1.

5.2. Occupational achievement at labour market entry

Table 2 presents linear regression models for the status of a man's first job. Model 1 shows that men from recent labour market entry cohorts started in jobs with a higher status score. For instance, men who started their career in the 1970s have a job almost seven points higher than those who started out in the 1950s. Furthermore, the model tells that father's job status positively affects his son's job status. The unemployment rate at the time of labour market entry does not affect the level of a man's entry job.

Model 2 shows the importance of education in the allocation of men to jobs. The R^2 increases from 0.139 to 0.380. High educated men entered the labour market in much higher jobs than low educated ones. The difference between the most and least qualified men (the contrast between those with primary school only and university graduates) amounts to 23 status points. In addition, Model 2 reveals that cohort effects disappear when taking account of educational differences. So, the advantageous position of recent cohorts in terms of the status of their first job can be attributed to their, on average, higher qualifications at labour market entry. The direct effect of father's status on his son's status is reduced considerably, once controlled for educational qualifications. Around half (that is, 49 (1−0.161/0.316) percent) of the status inheritance gets channelled by education.

None of the interactions between education and father's status on the one hand and cohort on the other is significant (Model 3). So, the direct effect of this achieved, respectively, ascriptive property at labour market entry did not change over time, which undermines our *hypothesis regarding this paper's question on first jobs* (Q2). Nevertheless, at this stage achievement overshadows ascription, given the stronger impact of education on a man's first job, compared with that of father's status.

TABLE 1. Determinants of highest level of education attained (multinomial and ordered logit analysis)

	Level of education					
	Multinomial					
	Lbo/mavo	*Mbo*	*Havo/vwo*	*Hbo*	*Wo*	*Ordered*
Model 1						
Labour market entry cohort (1950s = ref.)						
1960s	0.275	0.481	0.429	0.531*	0.949**	0.410**
1970s	1.096	2.090**	2.475**	2.446**	3.219**	1.260**
Status father's occupation (ISEI)	− 0.009	− 0.003	0.043**	0.023**	0.054**	0.033**
Constant	1.075**	0.630	− 3.050**	− 0.502	− 3.169**	
Constant (cut 1)						− 0.584**
Constant (cut 2)						1.031**
Constant (cut 3)						2.118**
Constant (cut 4)						2.360**
Constant (cut 5)						3.984**
Model χ^2	208**					172**
df	15					3
Number of men	1,087					1,087
Model 2						
Labour market entry cohort (1950s = ref.)						
1960s	1.086	2.064**	1.260	1.203	0.926	0.269
1970s	− 1.463	1.667	0.098	0.631	− 0.044	0.861*
Status father's occupation (ISEI)	− 0.005	0.019	0.047*	0.029*	0.043**	0.029**
*1960s	− 0.019	− 0.038*	− 0.019	− 0.016	− 0.003	0.003
*1970s	0.069	0.016	0.061	0.050	0.078	0.009
Constant	0.893	− 0.274	− 3.180**	− 0.714	− 2.588**	
Constant (cut 1)						− 0.741**
Constant (cut 2)						0.869**

TABLE 1 (*Continued*)

	Level of education					
	Multinomial					
	Lbo/mavo	*Mbo*	*Havo/vwo*	*Hbo*	*Wo*	*Ordered*
Constant (cut 3)						1.954**
Constant (cut 4)						2.196**
Constant (cut 5)						3.827**
Model χ^2	226**					173**
df	25					5
Number of men	1,087					1,087

Note: reference category of dependent variable in multinomial logit analysis is Lo.
*$P < 0.05$, **$P < 0.01$.

TABLE 2. Determinants of occupational status of job at labour market entry (linear regression analysis)

	Status at entry		
	Model 1	*Model 2*	*Model 3*
Labour market entry cohort (1950s = ref.)			
1960s	3.248**	1.687	4.436
1970s	6.746**	2.750	2.958
Status father's occupation (ISEI)	0.316**	0.161**	0.203**
*1960s			− 0.079
*1970s			− 0.019
Level of education (Lo = ref.)			
Lbo/mavo		− 1.519	− 1.898
*1960s			1.331
*1970s			− 3.220
Mbo		2.631	2.720
*1960s			− 1.325
*1970s			1.471
Havo/vwo		8.288**	8.009*
*1960s			2.137
*1970s			− 2.881
Hbo		14.767**	14.199**
*1960s			0.432
*1970s			0.705
Wo		22.796**	21.363**
*1960s			3.868
*1970s			− 1.176
Current aggregate unemployment rate	0.409	0.251	0.211
Constant	29.192**	30.431**	29.316**
R^2	0.139	0.380	0.386
Number of men	1,087	1,087	1,087

*$P < 0.05$, **$P < 0.01$.

5.3. Occupational achievement during the career

Status attainment does not stop at labour market entry since persons try to improve on the level of their first job. Aggregate trends during the working career are displayed in Figure 1, for labour market entry cohorts (left part) and for levels of education (right part). First of all, it becomes evident that status increases over the career, irrespective of cohort and education. Second, the career profiles for these categories run by and large parallel, despite their different starting point. At least one exception can be spotted. Men who began to work in the 1970s reached the top of their career earlier than those from older cohorts. In addition, tertiary educated men peaked earlier than lower educated ones.

Figure 1. Average occupational status for different labour market entry cohorts (left part) and levels of education (right part) by working experience (in months).

Linear regression models for the status of men 10 and 20 years after their first job inform more about career progress. They are presented in Table 3. As results resemble the findings on a man's first job (see Table 2), we will be brief. First, the 1960s cohort reached a higher job after 10 and 20 years of working experience than the 1950s cohort (Model 1). Second, father's status positively affects son's status, although this effect seems weaker than that at labour market entry. This result supports our *hypothesis explaining the level of later jobs* (Q3). Third, qualifications – as in the case of the status of the first job – strongly and positively impact status after 10 and 20 years.

When modelling the level of a man's entry job in Table 2, we found no effects of the current unemployment rate. Table 3 shows that it does not affect a man's job after 10 years either. However, macro-economic conditions matter for a man's status after 20 years of working experience: the higher the unemployment rate is, the lower the status achieved at that stage. Findings regarding our *unemployment rate hypothesis* are mixed, the answer to Q5 is not simple.

Model 2 reveals – in accord with our *hypothesis of an independent effect of a person's first job* – that the status of the first job strongly affects status at later career moments. Moreover, first status largely interprets the education effect. The difference in status of the least and highest qualified persons is 10 (13) points 10 (20) years on in men's working life. It was 22 (22) points in Model 1, so that half the direct effect of education can be attributed to differences in first status. The impact of father's job is interpreted by the status of the first job as well. In Model 2 the remaining effect is not significant anymore. Whereas Model 1 for the job after 10 (20) years had an R^2 of 0.369 (0.304), it rose to 0.529 (0.398) with Model 2. This attests to the independent effect of a man's first job on his later jobs, which seems smaller for his job after 20 years (0.360) than for is job after 10 years (0.491). The answer to Q4 is that a man's job history indeed is a self-reinforcing process.

Model 3 shows no significant changes over time. The exception is the effect of a respondent's first job on his job after 10 years. It is smaller for the 1970s cohort than for the 1950s one.

A comparison of Model 3 for job after 10 years and Model 3 for job after 20 years yields three more results. First, the constants show that the job after 20 years is higher than the job after 10 years. Second, the effects of all the dummies for the education contrasts seem stronger. Third, the effect of first job on job after 20 years is smaller than that on job after 10 years.

TABLE 3. Determinants of occupational status of job after 10 and 20 years of working experience (linear regression analysis)

	Status after 10 years			*Status after 20 years*		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Labour market entry cohort (1950s = ref.)						
1960s	2.566*	2.411**	0.426	4.578**	4.088**	4.753
1970s	2.495	3.504*	6.421	1.243	0.517	1.122
Status father's occupation (ISEI)	0.099**	0.018	− 0.006	0.106**	0.046	0.018
*1960s			0.017			0.052
*1970s			0.053			0.007
Level of education (Lo = ref.)						
Lbo/mavo	− 0.101	0.642	− 0.687	2.984*	3.516*	2.251
*1960s			3.176			2.581
*1970s			0.139			4.768
Mbo	3.511*	2.240	1.741	4.987**	4.037**	3.165
*1960s			1.601			1.769
*1970s			0.460			3.887
Havo/vwo	12.612**	8.557**	6.594*	12.144**	9.205**	7.248*
*1960s			− 0.178			− 0.945
*1970s			7.485			11.357
Hbo	16.245**	9.095**	8.880**	16.572**	11.311**	10.427**
*1960s			0.199			1.678
*1970s			1.608			4.294
Wo	21.567**	10.483**	6.353*	21.624**	13.462**	10.567**
*1960s			3.192			4.315
*1970s			8.838			7.496
Status first occupation (ISEI)		0.491**	0.543**		0.360**	0.439**
*1960s			− 0.008			− 0.106
*1970s			− 0.168*			− 0.125

TABLE 3 (*Continued*)

	Status after 10 years			*Status after 20 years*		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Current aggregate unemployment rate	0.214	− 0.075	− 0.043	− 0.469*	− 0.481*	− 0.501**
Constant	35.857**	21.158**	20.809**	40.493**	29.519**	28.426**
R^2	0.369	0.529	0.538	0.304	0.398	0.405
Number of men	1,082	1,082	1,082	1,069	1,069	1,069

*$P < 0.05$, **$P < 0.01$.

5.4. Career peaks

To model for each man the timing of his career peak, we constructed a person-month file. For each month since labour market entry, we established whether a man is at the top of his career by comparing the status of his job in that month with the status of his job(s) in all the working months thereafter (until retirement or the moment of interview). An event is defined for the month when the respondent reaches (for the first time) his maximum status during the observed career.

We repeat that we did not ascertain for all men their career peak after observing their whole occupational history until retirement from the labour market. We observed careers that stretched at least until the age of 45 years and assumed that no more upward mobility would occur in the unobserved period of a man's career after the end of the observed period, which for some men was 45 years (their age at the time of interviewing), but for others, say, 60 years (their age at the moment of survey). This supposition may, of course, be somewhat off the mark and weaken our results a bit.

Figure 2 depicts the cumulative percent of men who reached their career peak, once again for cohorts and for levels of education. It shows that a minority of men reached their peak immediately at labour market entry: their first job had the maximum status reached during their career span. So, a majority experienced upward mobility. Recent cohorts reached their career peak faster than earlier ones (see the left part of Figure 2). Almost 50 percent of the 1970s men reached their top within 30 months, whereas for the 1960s and 1950s cohort this occurred after 100 and 120 months, respectively. After some 20 years (240 months) in their working life, the 1970s cohort has converged to the other two cohorts.

The right part of Figure 2 indicates that men with tertiary education are most likely to peak immediately. In their first job, 40 percent were at their top, whereas it was below 20 for those with higher secondary education, and below 10 for the others. During their career, qualification groups converge. All the same, the cumulative percentage of men at their peak always is highest for tertiary educated men.

This analysis is refined in Table 4. Its discrete-time event history models include effects of covariates on the logged hazard rate for making it to the peak. This rate stands for the conditional probability that a man reaches his career peak in a particular month, given that he did not do so earlier. Parameters represent the change in the log odds of the conditional probability of peaking, caused by a one-unit increase in the associated covariate.

Model 1 confirms Figure 2. The men of the 1960s and 1970s cohorts still below their peak are more likely to peak in a certain month than the

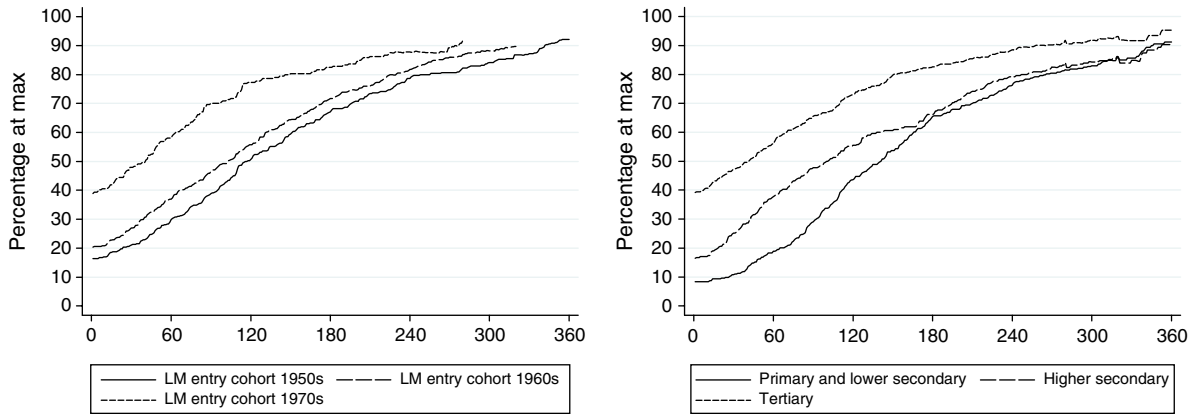

Figure 2. Percentage having reached career peak for different labour market entry cohorts (left part) and levels of education (right part) by working experience (in months).

TABLE 4. Determinants of reaching career peak (discrete-time event history analysis) and occupational status of job at career peak (linear regression analysis)

	Reaching career peak			*Status at career peak*		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Labour market entry cohort (1950s = ref.)						
1960s	1.295*	2.129**	− 2.280	2.255**	1.349	7.842*
1970s	5.775**	5.667**	− 9.518*	1.770	1.167	0.653
Status father's occupation (ISEI)	0.055**	− 0.036**	0.016	0.111**	0.038	0.054
*1960s			− 0.012			− 0.022
*1970s			− 0.024			− 0.047
Level of education (Lo = ref.)						
Lbo/mavo	− 1.144	1.396	− 1.139	1.667	2.083	2.000
*1960s			− 0.176			− 0.008
*1970s			3.682			4.907
Mbo	0.576	1.220	− 1.316	6.204**	5.248**	5.161**
*1960s			2.101			− 0.829
*1970s			10.606*			6.827
Havo/vwo	2.502*	3.859*	− 1.491	11.953**	8.415**	6.659*
*1960s			3.924			− 0.704
*1970s			4.439			12.929*
Hbo	4.297**	4.703**	− 1.528	15.506**	9.215**	9.511**
*1960s			2.487			− 0.701
*1970s			7.978			5.813
Wo	9.203**	9.915**	− 1.350	21.117**	11.466**	7.329**
*1960s			7.274**			4.236
*1970s			5.047			13.308*
Status first occupation (ISEI)		0.282**	0.222**		0.501**	0.579**
*1960s			0.043			− 0.122*
*1970s			0.220			− 0.105

TABLE 4 (*Continued*)

	Reaching career peak			*Status at career peak*		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Working experience	0.078**	0.100**	0.074**	0.027**	0.078**	0.078**
Working experience squared	− 0.000**	− 0.000**	− 0.000**	0.000	− 0.000**	− 0.000**
Current aggregate unemployment rate	− 0.081*	− 0.033	− 0.069	− 0.067	− 0.003	− 0.026
Constant	− 16.537**	− 28.039**	− 21.107**	41.910**	22.239**	18.607**
lnsig2u constant	4.567**	4.804**	4.159**			
Model χ^2	1,245**	918**	1,691**			
df	11	12	26			
R^2				0.325	0.520	0.529
Number of men	1,086	1,086	1,086	1,086	1,086	1,086
Number of man-months	134,684	134,684	134,684			

*$P < 0.05$, **$P < 0.01$.

Note: 'lnsig2u constant' denotes the log of the panel-level variance of the intercept.

men of the 1950s cohort. This supports the *hypothesis that technological developments make for quick peaking* (part of our answer to Q6). Men with a high status father are more likely to peak, too. The education effects indicate that during a certain month men with higher secondary general education and tertiary education have higher chances of attaining their maximum than less educated ones. Furthermore, men with more work experience are more likely to reach their top than less experienced men. In addition, in times of high unemployment chances of peaking are below those in times of low unemployment.

Results remain unchanged when a man's first job is taken into account (Model 2), with the exception of the origin effect and the unemployment rate effect. Upon introducing the level of a person's first job, the effect of the current unemployment rate upon reaching a peak vanishes. The origin effect now is negative. Perhaps some ceiling effect, so feared by the Duncan generation, shows up here. A person's first job has a strongly positive effect on reaching the top.

Model 3 shows two significant interactions. They pertain to education and cohort. First, men with higher secondary vocational education reached the top relatively more often when they started working in the 1970s. Second, men with higher tertiary education relatively more likely reached their career peak in a certain month when they belonged to the 1960s cohort.

Linear regression models for a person's peak status are presented in Table 4 as well. Model 1 shows significant differences in peak status between the 1950s and the 1960s labour market entry cohorts, after taking origin, education and first job status into account, but no significant differences between the 1950s and the 1970s cohort. So, of the three cohorts, the 1960s one fared best. Its peak status was two points higher.

Furthermore, Model 1 tells that father's status matters. The peak in the career of advantaged origin sons is higher than that in the career of men from low origins. Education has a strong positive impact on maximum status. However, at this stage of a man's career the education effect seems a bit weaker than at labour market entry. For the first job, the difference in status between men with the highest and the lowest education was 23 points (Table 1). For the peak job it is 21 points.

Model 2 adds a man's first job, and it strongly affects maximum status. Moreover, it to a large extent mediates the effect of education. In Model 1, the difference in status points between the least and the most qualified men was 21 points; in Model 2, it is 11 points. This implies that half of the direct effect of education can be statistically explained by the status of a man's first job. The effect of father's occupation is interpreted to a strong degree by the status of the first job as well: the significant impact of 0.111 of father's occupation in Model 1 is reduced to an insignificant 0.038 in

Model 2. Furthermore, the effect of working experience is significant after controlling for first job. Men with more working experience have a higher job at their career peak than those with less experience. Finally, the effect of the 1960s cohort compared with the 1950s cohort becomes insignificant. The 1960s cohort apparently had higher labour market entry jobs. All in all, these findings confirm our *hypotheses regarding the level of a person's peak* (and answer our Q7).

Finally, Model 3 includes interactions of cohorts with origin, education and first job. Three interactions are significant, and the significant main effect in Model 1 for the 1960s cohort compared with the 1950s cohort shows up again. Once again, people from the 1960s cohort have a higher peak, this time by 8 points. Moving on to the significant interactions, intriguingly, for men from the 1960s cohort, the level of their first job had a smaller effect on their peak status than for men of the 1950s cohort. The other two significant interactions pertain to education variables. The effect of the highest level of education (wo), compared with the lowest (lo), on status at career peak is stronger for the 1970s cohort, and the same goes for the effect of the highest but two level of education (havo/vwo). It is puzzling why the highest but one level (hbo) does not show a significant interaction.

6. Discussion

This paper broke down the question of the effect of origin on destination, which occupied various generations of mobility research, into a series of questions. It raised questions about effects on a men's level of education, the level of their first job, the level of their job 10 and 20 years later, and their peak job. Each time, this paper raised questions about effects of parental background, a man's education, and his previous jobs. The questions pertained to men entering the Dutch labour market in the 1950s, 1960s, and 1970s, in so far as their job history has been ascertained until the age of 45 years.

A man's education, of course, was found to depend upon his father's job, and it also affected his own first job. When explaining a man's first job, his father's job was influential once more, independent of a man's education. Apart from that, a man's education directly affected his first job, his job after 10 and 20 years, and his peak job. However, the job of a man's father neither directly affected his job after 10 and 20 years, nor his peak job. These results show the importance of 'recurrent effects', but also underline the limits of this notion.

Results also show that advantages accumulate during a person's working life. A higher level of education made for a higher first job and a higher job

after 10 and 20 years, but a higher first job also had an independent positive effect for a man's job after 10 and after 20 years, as well as for his peak status. Therefore, hypotheses on 'cumulative advantages' deserve elaboration (DiPrete and Eirich 2006). Our finding that the effect of a man's first job for his job after 10 years is stronger than the effect of his first job for his job after 20 years, provides a pointer.

This paper found limited differences between cohorts. The effect of origin on education was stable. Later cohorts did have higher job levels at the outset of their career, but not after taking father's job level into account. We found a direct effect of father's job on a man's first job, but it did not differ from cohort to cohort. The effect of education on a man's first job did not differ across cohorts either. When explaining a man's job after 10 years, after 20 years, and a man's peak job, after taking into account the effect of father's job on first job and of first job on later job, no direct effects of father's job was found. One theoretical implication of our findings therefore is that the various generations of research have spent too much time on changes supposedly induced by industrialisation and states.

We did find that the effect of a man's first job on his job 10 years later was smaller for the 1970s cohort than for the 1950s cohort. We found other cohort differences in effects too. Effects of two out of five contrasts for level of education on the chances of career peaking turned out to differ across cohorts, and so did two out of five contrasts for education on peak status. However, these effects did not pertain to the same contrasts and the same cohorts.

The second generation of mobility research went after one measure for associations between ascribed and achieved properties of men, while the third generation aimed for the more detailed characterisation of an association. Here we applied this point not to the effect of father's job on son's job at various moments of his working life, but instead we used it, with some success, to determine the consequences of a man's educational qualifications for various stages in their occupational career.

The result of limited differences of effects between cohorts may seem at variance with other findings for The Netherlands. However, these studies stacked data-sets more heterogeneous than the ones analysed here. They also pertain to more and other cohorts than the ones considered here (De Graaf and Ganzeboom 1990) and lump men early in their career together with men at the end of their career (De Graaf and Luijkx 1992). Indeed, findings on trends always should invoke the period studies.

Although the present paper estimated quite a few models, it may be held that we skipped some obvious ones. For instance, we presented the effect of the aggregate unemployment rate on a man's entry job, his job after 10 and 20 years and his peak job, but bypassed the issue of whether individual unemployment at labour market entry forms an obstacle for the

later career (Luijkx and Wolbers 2009). We did not do so, since we found no effect of the unemployment rate on entry job, job after 10 years and peak job.

Another model we did not present ascertains the effect of a man's job 10 years after entering the labour market on a man's job another 10 years later. We here state the result of this model: a man's job after 20 years is not only higher if this man's level of education is higher, but also if this man's entry job was higher, and, net of this, if this man's job after 10 years was higher. This is additional evidence for the notion that a man's occupational career is a self-reinforcing process. We skipped this model so as not to spoil a test of hypotheses about changing effects of a man's education and of his first job.

One question the present paper did not address was that of career dips for men. It deserves separate attention. In addition, until now no neat series of questions on women, stratification and mobility has been addressed for The Netherlands. Indeed, already the wording of a neat series of questions on this theme is an exercise on its own. Questions should not only seek to explain job levels, but also (non)employment, and they should incorporate not only effects of family background, but also of spouses (Bernasco *et al.* 1998).

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