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## **A detailed examination of the role of education in intergenerational social-class mobility**

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**Abstract.** *This article analyses the role of education, particularly fields of study, in intergenerational class mobility in the Netherlands. In highly educated societies, children of all social classes need to invest in education to avoid downward mobility. We argue that members of the various social classes aim primarily for class maintenance, and apply educational strategies to realize this aim. Children of manual working-class families tend to prefer technical fields of study, in order to reach at least their parents' social class or probably even higher. Children of the self-employed or of small employers need financial and commercial skills to be able to take over the business. Children from farming backgrounds benefit from agricultural training in getting to work on a farm themselves. These strategies equip them with valuable types of skills and knowledge, even if they drop out of school early. Children of service-class origins tend to opt for general types of training at secondary school, and prestigious fields like law and medicine in tertiary education. Empirical results of analyses on two Dutch nationally representative surveys (N = 1566 men) generally support these claims. Because of these rather conservative strategies, relatively low mobility rates are found, which impedes upward mobility of working-class children.*

**Key words.** *Education – Field of study – Social class – Social mobility – The Netherlands*

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## Introduction

The mediating role of education in intergenerational class mobility has received much attention in recent years (Arum and Shavit, 1995; Goux and Maurin, 1997; Marshall et al., 1997; Erikson and Jonsson, 1998). This rise in attention paid to education originates in an awareness that sociological research should not only focus on macro-level observations on mobility tables of origin class and destination class of a specific society, but should particularly try to explain these aggregate outcomes by underlying actions of individual human beings (cf. Boudon, 1998; Breen and Goldthorpe, 2001). Such an analysis tries to explain why people from certain class backgrounds have a high likelihood of ending up in specific classes themselves. The importance of education in such an allocation of people into classes can hardly be exaggerated. Therefore educational achievements are held to be the mediating link between class of origin and class of destination; in general people from higher social-class backgrounds do better in school, and thus attain higher levels of education and have a greater propensity to attain higher-class jobs themselves (see also Blau and Duncan, 1967).

In studying the mediating role of education in class mobility, research has focussed particularly on educational *level*. However, since the choice of a *field* of study is dependent on family background, and since the field of study in turn influences various opportunities in life, such as those in the labour market, part of the intergenerational transmission of class position may run through the field of study. According to Erikson and Jonsson (1998) it is important to control for education in as detailed a way as possible, i.e. including both educational level and field of study, for only then can we assess the extent to which social origin has a direct impact on occupational outcomes, independently of educational attainments. From a theoretical point of view, we argue that mobility strategies of the various social classes may inspire children to select those fields that enhance entry possibilities into their class of origin (cf. Goldthorpe, 2000). Children from farming backgrounds would thus prefer the agricultural field, in order to gain the necessary skills to run a modern agricultural business. Children of self-employed and routine non-manual labour classes would then prefer fields that equip them with specific economic or administrative skills and knowledge. Furthermore, as a compensating strategy,

children of service-class origins may choose fields of study as channels to transmit opportunities in life, where educational level offers fewer possibilities through educational expansion. The research question to be answered is: *to what extent does field of study provide additional theoretical and empirical insight into inter-generational class mobility?*

We will focus on the Netherlands. This is an interesting country when it comes to questions of the role of educational specialization in social inequality. It is possible to enrol in specialized educational programmes early in the school career: at the transition from primary to secondary education, at age 12, children may choose technical, agricultural, caring or administrative fields in lower vocational school. This choice implies separate school environments and a highly vocationally oriented study programme, preparing for the labour market at an early age. However, at this point most pupils choose general tracks of various lengths and levels. Other types of specialized schooling are chosen at the upper secondary level (after 3 or 4 years of secondary training) and, obviously, in tertiary education. In total, 80 percent of Dutch men and women born in the late 1960s have obtained some form of specialized schooling, that is, outside general education (van de Werfhorst, 2001). In such a highly specialized country, field choice can be expected to be particularly helpful in class attainment. As Shavit and Müller (1998) have pointed out, in educational systems like the Dutch and German ones, with highly vocationally oriented tracks, employers strongly tend to select on educational qualifications, compared to systems where more general types of training are given, like the North American or British ones. This means that when, in the Netherlands, general education within certain levels gives better access to higher classes than vocational education, these differences can be expected to be even greater in other countries with less well-developed vocational training.

## **Theoretical considerations**

### *A rational-action approach to social mobility*

In highly educated societies, with complex labour markets where almost every job requires some form of schooling, choices of fields of study are important in the process of class mobility. As a

theoretical framework that gives insight into the impact of education on class mobility, I start from the assumption that individuals consciously make educational decisions. More precisely, a rational-action theory of social mobility starts from the assumption that families of different social classes make decisions in education as part of their “mobility strategy” (Goldthorpe, 2000).

Breen and Goldthorpe (1997; see also Goldthorpe, 1996) have developed a rational-action theory of inequality of educational opportunity that advances on Boudon’s (1974) work, which has recently been tested by Need and De Jong (2000) using Dutch data. The theory has now been expanded to cover the whole process of intergenerational class mobility (Goldthorpe, 2000). Although the rational-action theory of educational inequality was originally developed to explain class differences in educational-level attainment (e.g. continuing to a subsequent educational level or not, or choosing a higher-ranked academic track or the lower vocational track), the theory of educational inequality also gives insight into the impact of class background on field choice, and thus into the micro-processes that (partly) make for intergenerational class mobility.

The rational-choice approach to educational inequality rests on the assumption that children have in addition a general tendency for “relative risk aversion”; people try to minimize the risk of downward mobility, and want to achieve at least the same class as their parents. In addition, children of different social classes have different perceptions of the costs and benefits associated with specific educational choices. In making their choice, people are guided by the probability of success, the costs of failure, the resources they bring with them from their background, and the costs that are associated with the educational choice (e.g. direct costs of schooling or opportunity costs of forgone earnings while in school). Children of working-class families, even if they are bright students, are less likely to continue to a subsequent educational level than children of higher-class families with the same ability level. First of all, their perception of the probability of success is lower, for their parents cannot provide them with important information on the educational content and assistance with homework (Erikson and Jonsson, 1996). Second, the costs of additional schooling are perceived to be higher by working-class children, and the benefits of leaving the educational system to start a working career lower

by higher-class children. Relatively early in the school career, working-class children have already avoided downward mobility, so their relative risk-aversion does not keep them in school. Third, the costs of failure in the subsequent educational level are lower for higher-class children. Failure increases the chance of downward mobility (Breen and Goldthorpe, 1997), but less so for higher-class than for lower-class children. Children of more advantaged backgrounds have other ways to find good jobs in case they fail in school, for example through their parents' social network. Children of lower classes do not have this benefit, hence failure in school equates with having wasted time in the educational system.

Although the theory is clearest with regard to the decision whether to leave the educational system or to stay, the class-related preferences for vocational or academic tracks can be accounted for by the same reasoning (cf. Goldthorpe, 1996). It is this issue that is most directly related to the problem of the present article, namely, identifying field choices of children from different social classes which might give insight into social mobility. To take the step to the issue of the field choices of various social classes, it is necessary to incorporate the *mobility strategies* that children of the various social classes apply (cf. Goldthorpe, 2000: ch. 11). According to Goldthorpe, there are two distinguishable strategies: a mobility strategy "from below" and one "from above". Another assumption is that children primarily want to reach the same class position as their parents, and only secondarily strive for upward mobility. In the "mobility strategy from below", which refers to strategies applied by children of less-advantaged social classes, the two goals of class maintenance and upward mobility are in conflict; if class maintenance is the primary goal, other choices in the educational career are made than if upward mobility were the primary goal. For people coming from a skilled manual working-class background, the best choice for realizing class maintenance would be to opt for vocational tracks in secondary school and leave the school system relatively early. If they prefer to obtain higher class positions than their parents, then they should at least stay in school longer, and probably first choose a general track in secondary school so as to enter vocational education at the upper secondary or tertiary level. In the "mobility strategy from above", on the contrary, both goals of class maintenance and upward mobility (if possible) lead to the same educational choices. Children coming

from service-class backgrounds, to whom the strategy from above applies, need to obtain higher-level credentials to be able to enter the service class.

However, as Goldthorpe and associates have rightly argued, social classes are not ranked solely according to a one-dimensional hierarchy (e.g. Erikson and Goldthorpe, 1992). Two other divisions are crucial in distinguishing social classes: that between self-employed and employed, and that between farmers and non-farmers. This multidimensional character of social class suggests that there are more mobility strategies than the two hierarchically ordered ones proposed by Goldthorpe (2000). Earlier research on the role of education in intergenerational social-class mobility argued that, in particular, children of the self-employed and from farming backgrounds rely less on education to reproduce their parents' class (Ishida et al., 1995). It is, however, doubtful that such a simple interpretation holds for modern Western societies. For these classes, it is not so much a matter of not having to invest in education, as part of a strategy to realize class maintenance, of having qualifications in the appropriate fields of study.

Elder (1963), for example, has pointed out that children of farmers have become more dependent on education across generations, particularly in agricultural training courses. This is a rational choice because, even if they drop out of school early, they have obtained valuable skills. Likewise, children of the self-employed benefit from training in financial and commercial skills when taking over the business. Working-class children prefer technical fields of study at lower levels to increase the likelihood of entering (skilled) manual work themselves. Such a choice would imply at least class maintenance, and probably upward mobility. By their choice of vocational programmes, working-class children increase their chances to enter skilled work, rather than unskilled work or unemployment. Vocational education thus serves as a "safety net" for children from lower social backgrounds (Arum and Shavit, 1995); instead of dropping out of school early, and thus being likely to enter unskilled work, lower-class children enter vocational training, thus increasing the likelihood of skilled employment. Indeed, children of working-class origins prefer technical and economic fields of study within a specific educational level in the UK, Norway, the US and the Netherlands (Kelsall et al., 1972; Davies and Guppy, 1997; Hansen, 1997; van de Werfhorst et al., 2001).

Children from higher social backgrounds enter the more general tracks in secondary education more frequently (Gamoran and Mare, 1989; Arum and Shavit, 1995). By making this choice, they are most likely to enter tertiary education, which is needed to ensure their class maintenance. But also in tertiary education itself, differences in “generality” exist among the various fields. According to Dronkers (1993), some fields are aimed more directly than others at providing students with job-oriented skills, even at higher levels such as university. Engineering science, for example, is more labour-market oriented than more “general” fields like the humanities or law. If the argumentation on service-class choices for general types of education is correct, then children of service-class origins may more often be enrolled in fields like law or the humanities. The intellectual and aesthetic aspects of these fields attract children from families with much cultural capital (van de Werfhorst et al., 2001).

#### *Field of study and class attainment*

Despite the attractive features of the rational-action theory for social-mobility problems, it pays little attention to selection and allocation mechanisms in the labour market. These processes have however to be accounted for, as they create the eventual association between educational choices and class destinations. More concretely, we must now specify how the vocationally oriented field choice of working-class children and the more general field choice of middle-class children affect their class attainment. In such an account, the impact of certain fields of study on the probability of entering specific social classes is probably more evident than that of educational levels. Selection into manual work, for example, will be based largely on acquiring the appropriate skills in school. Certainly in the Netherlands, where distinct fields of study exist at the lower secondary level, varying from agricultural, technical, administrative to caring, as well as higher up the educational system, such a selection for fields of study seems reasonable to expect.

With regard to the selection and allocation into skilled and unskilled manual work, the need for employees to possess technical skills is evident. Because of credential inflation, it can be expected



that, even for unskilled manual work, training will be required (cf. Wolbers et al., 2001). Selection into jobs in the self-employed class will often be carried out on the basis of the right stock of financial and commercial skills and knowledge; such selection is obviously a direct outcome not of employers' perceptions of these skills but of the fact that these skills are a prerequisite to being able to run a business. The farming class will also strongly select for appropriate skills, i.e. in agriculture, because of the increasing complexity of agricultural work. In general, then, appropriate skills enhance class placement. Specific human capital investments in fields of study make people more productive and easier to train in the jobs these fields train for.

One reason why more general types of education are beneficial for obtaining a service-class job is that employers, in their search for additional characteristics for selecting employees, prefer more abstract knowledge to vocational knowledge. The skills needed in the workplace are often learnt on the job, rather than in school. Education serves, according to Thurow (1975), mainly as a screening device to rank applicants on the basis of the cost of training them for the job rather than as an indication of already acquired skills. People who were trained in a more abstract field of study are, in the eyes of the employer, easier to train than vocationally skilled workers. In addition, workers who possess general types of knowledge and skills are more flexible than workers who have been trained for specific jobs (Witte and Kalleberg, 1995). Another reason why working-class children's field choice impedes their higher-class attainment, and middle-class children's choice enhances theirs, may be found in Bourdieu's cultural reproduction theory (1984; see also Bourdieu and Passeron, 1990). This theory states that, through the intergenerational transmission of cultural capital, children from the middle classes possess the necessary background for accessing the better jobs. Employers use education to select people with the right background or taste, rather than as an informative tool about individuals' skills and competencies (Collins, 1979; Hohn, 1988; Bourdieu and Passeron, 1990). Thus people who have equipped themselves with cultural capital in fields like the humanities or teacher education (which is itself related to family background) have more knowledge about culture, have expressed their taste, and are likely to come from higher-class backgrounds. Selection and allocation into higher-class jobs thus can be expected to run partly through the field of study.

## Design

### *Data*

Two Dutch data sets are used to examine the role of education in social-class mobility in the Netherlands. The first is the Family Survey of the Dutch Population 1992–3 (Ultee and Ganzeboom, 1993), the second the Family Survey of the Dutch Population 1998 (De Graaf et al., 1999). Both data sets contain information given by primary respondents and spouses. The primary respondents were sampled from a stratified sample of population registers of Dutch municipalities. Stratification of the sample was done on urbanization and region. In 1992–3, 1000 primary respondents and 800 partners were interviewed; in 1998 1140 primary respondents and 889 partners. Of these couples, I selected the male partner between the ages of 25 and 65. The advantage of this approach is that, with a reasonable number of primary respondents, a larger number of men can be selected. After exclusion of missing cases, the analytic data file consisted of 1566 men. Both data sets were gathered by the Department of Sociology at the University of Nijmegen, the Netherlands.

### *Operationalization of variables and some descriptive analyses*

The analyses in this article are based on six variables; social-class origin, parent's educational level, respondent's (i.e. child's) educational level, respondent's field of study, social-class destination, and year of the child's birth. The last variable is included because birth cohort determines the various educational options people face. Since educational expansion has caused many people to enrol in specialized schooling (outside the "general" field), later birth cohorts have a higher propensity to enter any of these specialized fields. In particular children of middle- and working-class families have increasingly entered higher education.

*Social-class origin* and *social-class destination* are operationalized with the Erikson and Goldthorpe (EG) class schema (Erikson and Goldthorpe, 1992). In order to have a reasonable number of respondents and fathers in each social class, I used the six-class distinction, comprised of the service class (classes I and II), class III (routine non-manual labour), class IVab (petty bourgeoisie, self-employed),

class IVc/VIIb (farm workers, both farmers and farm labourers), class V/VI (skilled manual labour) and class VIIa (non-skilled manual labour). This version of the EG schema is often used in inter-generational mobility research (e.g. Ishida et al., 1995). Table 1 shows the cross-classification of class position of fathers (class origin) and children (class destination), and the structural changes in the Dutch labour market; the service class has considerably increased, from 441 fathers to 763 sons; farming has become much smaller (243 versus 59), as has the petty bourgeoisie. Both skilled and non-skilled manual labour have however decreased. So, in general, structural mobility is apparent; many people have moved out of their origin class because of the structural changes in society.

*Educational level* (of parents and child) is operationalized in four categories, representing four clearly distinct levels in the Dutch education system. These are (1) primary education, (2) lower secondary education, (3) upper secondary education and (4) tertiary education. The distinction between lower and upper secondary levels is based on the length of the programme and the possibilities they offer for entering further education. The lower secondary level lasts four years and does not (directly) lead to tertiary education, while the upper secondary level lasts longer than four years and does give direct access to tertiary education. Parents' educational level represents the highest level of either parent.

*Field of study* is operationalized in six categories and refers to the field of the highest obtained education. The first, "general education", includes all general (i.e. non-vocational) tracks at primary and secondary level. The second, the "cultural field", consists of three fields that generate cultural capital: humanities, socio-cultural and artistic programmes, teacher training and care.<sup>1</sup> These fields are grouped together because they all provide students with cultural skills and knowledge (van de Werfhorst, 2001). The third field is "agriculture", and is distinguished for its expected high association with the farmer's social class through the transmission of agricultural property. Technical and engineering subjects, which all refer to mathematics, machinery and nature (engineering, transport, programmes preparing for skilled manual work, natural sciences, mathematics), are collapsed into the "technical field". The fifth field comprises the elite fields of medicine and law, leading to the professions that in general score highly in both economic and cultural capital. The sixth field is economics/administration, which comprise fields associated with economic resources (van de Werfhorst, 2001).

**TABLE I**  
**Class position of fathers and sons**

Social-class origin	I/II	III	IVab	Social-class destination				Total
				IVc/VIIb	V/VI	VIIa	VIIc	
I/II Service	300	58	18	1	39	25	441	
III Routine non-manual	93	18	4	2	18	14	149	
IVab Petty bourgeoisie	84	20	20	4	20	18	166	
IVc/VIIb Farm workers	82	23	9	43	54	32	243	
V/VI Skilled manual	136	49	10	5	81	59	340	
VIIa Non-skilled manual	68	25	12	4	80	38	227	
Total	763	193	73	59	292	186	1566	

**TABLE 2**  
**Field choice by social-class origin (row percentages)**

Social-class origin	General	Cultural	Agriculture	Field of study			Total
				Technical/ nature	Medicine/ law	Economics/ administration	
I/II Service	16.6	15.9	1.8	35.1	10.2	20.4	100.0
III Routine non-manual	21.5	15.4	1.3	32.9	8.1	20.8	100.0
IVab Petty bourgeoisie	20.5	14.4	2.4	39.2	3.0	20.5	100.0
IVc/VIIIb Farm workers	17.7	6.2	25.9	35.4	3.3	11.5	100.0
V/VI Skilled manual	23.8	10.0	2.3	42.4	6.2	15.3	100.0
VIIa Non-skilled manual	29.5	5.3	4.4	44.9	1.3	14.6	100.0
Total	21.0	11.4	6.1	38.4	6.0	17.1	100.0

Table 2 shows the cross-classification of origin class and field of study of sons. It shows that, among service-class children, relatively few have obtained only a general education (16.6% compared to 21.1% overall). Of the same group, many have chosen the cultural (15.9%) and medicine/law field (10.2%), and few the agricultural field (1.8%). People from working-class origins are over-represented in the general field and technical fields. As the general field typically prepares students for further education, most students who enrolled in this field have become specialized in another field in their subsequent educational choice. So, although it may still be that children from service classes are over-represented in the general field once in the secondary stage of education (compared to vocational fields like technical fields, agriculture and economics/administration), they are unlikely to be classified in general education here as they have often pursued further specialized training. The cultural and medicine/law fields are most clearly positively associated with social class; the percentage of children attaining these fields decreases with working-class origins. The opposite is true for the technical field; this becomes more popular when we move from higher to lower social classes. The economics/administrative field is a true intermediate class choice. It has increased in popularity during the last decades (Dronkers, 1993; van de Werfhorst et al., 2001), together with increasing enrolments of intermediate-class children in higher education. This suggests that the rise is caused particularly by educational expansion, which has made middle-class children choose fields that are valuable on the labour market (Dronkers, 1993).

However, the same field can be chosen at many levels, so Table 2 does not give a complete picture of educational choices of various social classes. Table 3 shows in more detail than Table 2 where children of different social-class origins end up. It cross-classifies social-class origin with combinations of educational level and field of study of children. Furthermore, instead of (relative or absolute) frequencies, cells contain logged residuals of the cross-classification between class origin and educational attainment. These log-residuals indicate to what extent each cell is over-represented in the table, compared with what one would expect based on the margins of the table. If the log-residual has a positive value, then more individuals are classified in that cell than would have been expected based on the distributions of origin class and educational attainment alone. Conversely, a negative log-residual indicates an under-representation

**TABLE 3**  
**Log-residuals of social-class origin and detailed educational attainment of sons**

	Primary education			Lower secondary level					Upper secondary level					Tertiary level				
	G	G	C	A	T	E	G	C	A	T	M	E	C	A	T	M	E	
Social-class origin																		
I/II Service	-.77 <sup>d</sup>	.21	-.76	-.92	-.77 <sup>d</sup>	-1.13 <sup>a</sup>	.67 <sup>d</sup>	.17	-.66	.07	-.04	.21	.72 <sup>d</sup>	.12	.86 <sup>d</sup>	1.31 <sup>d</sup>	.70 <sup>d</sup>	
III Routine non-manual	-.26	.22	-.14	-.26	-.26	.56	.21	-.30	-.57	-.56 <sup>b</sup>	-.04	-.03	.46 <sup>b</sup>	-.71	.31	.77 <sup>c</sup>	.24	
IVab Petty bourgeoisie	-.18	.16	-.10	-.26	-.03	.77 <sup>b</sup>	.29	.27	-.70	.09	-.08	.06	.29	.27	-.13	-.36	-.01	
IVc/VIIb Farm workers	.18	-.57 <sup>a</sup>	-.40	2.21 <sup>d</sup>	.20	-.78	-.62 <sup>a</sup>	-.73	1.57 <sup>d</sup>	-.11	-.38	-.31	-.40 <sup>a</sup>	-.95 <sup>c</sup>	-.37	-.10	-.32	
V/VI Skilled manual	.30 <sup>a</sup>	.00	.37	-.89	.26 <sup>a</sup>	.28	-.09	.45	-.07	.17	.39	.03	-.21	-.76	-.12	.27	-.39 <sup>a</sup>	
VIIa Non-skilled manual	.74 <sup>d</sup>	.29	.86	.01	.61 <sup>d</sup>	.30	-.45	.13	.42	.34 <sup>a</sup>	.07	.04	-.86 <sup>d</sup>	.13	-.55 <sup>b</sup>	-1.88 <sup>c</sup>	-.22	

Notes: G = general; C = cultural; A = agriculture; T = technical; E = economics/administration; M = medicine/law.  
<sup>a</sup>  $p < .10$ ; <sup>b</sup>  $p < .05$ ; <sup>c</sup>  $p < .01$ ; <sup>d</sup>  $p < .001$  (two-tailed).

of that specific cell. The extent to which cells are under- or over-represented can be computed as  $e^\lambda$ , where  $\lambda$  is the log-residual. So, if we take the first cell of Table 3 as an example ( $-.77$ ), we see that the combination of coming from a service-class background and being educated at the primary level is less frequently observed in the data than we would expect from the number of primary educated and the number of service-class origins alone. To be more precise, this cell frequency is [ $e^{-0.77} =$ ] 0.46 times the cell frequency that would result if there were no association.

If we look at the log-residuals of Table 3, we see that service-class sons are relatively unlikely to have obtained their highest qualification in the technical and economic types of lower secondary education. Furthermore, they are over-represented in the general field at the higher secondary-education level, and in all fields in tertiary education (except agriculture). The strongest over-representation is found in the prestigious fields of medicine and law. Children of the petty bourgeoisie often choose the economics/administrative field at the lower secondary level, plausibly to acquire skills that are helpful in taking over the business of their parents. Also important to note in Table 3 is that children from farming backgrounds are often educated in the agricultural field at all levels. Finally, children of working-class origins are often educated at lower secondary technical vocational schools. They are less often found in tertiary education, particularly in the cultural and medicine/law fields. But they are also under-represented in the technical field, indicating that their vocationally oriented preference for the technical field is not exemplified at the tertiary-education level.<sup>2</sup>

Although highly indicative of the true educational attainments of children of various social class backgrounds in terms of both educational level and field of study, Table 3 still intertwines educational level and field of study. It is thus still not known whether or not children from working-class backgrounds make different choices *within* a specific educational level. Therefore, similar descriptive statistics are presented separately for upper secondary and tertiary levels.

Table 4 shows the log-residuals. It should be interpreted with some caution, because sample sizes are relatively small. In the upper part of Table 4, we see that children from the service class still often end up in general education at the upper secondary level. Even among those who do not go on to subsequent educational levels (i.e. tertiary education), service-class children are hesitant to choose vocationally oriented fields of study. The agricultural field



**TABLE 4**  
**Log-residuals of social-class origin and field of study by educational level**

	<i>Upper secondary level*</i>					
	<i>G</i>	<i>C</i>	<i>A</i>	<i>T</i>	<i>M</i>	<i>E</i>
Social-class origin						
I/II Service	.58 <sup>d</sup>	.03	-.68 <sup>a</sup>	.03	-.14	.17
III Routine non-manual	.34	-.02	-.27	-.39	.23	.12
IVab Petty bourgeoisie	.25	.22	-.54	.07	-.04	.04
IVc/VIIb Farm workers	-.49	-.49	1.46 <sup>d</sup>	-.03	-.24	-.22
V/VI Skilled manual	-.21	.23	-.23	.08	.20	-.07
VIIa Non-skilled manual	-.48	.03	.25	.25	-.01	-.04
	<i>Tertiary level**</i>					
	<i>G</i>	<i>C</i>	<i>A</i>	<i>T</i>	<i>M</i>	<i>E</i>
Social-class origin						
I/II Service	-	-.03	-.62 <sup>a</sup>	.12	.57 <sup>c</sup>	-.04
III Routine non-manual	-	.24	-.92	.10	.56 <sup>a</sup>	.03
IVab Petty bourgeoisie	-	.28	.26	-.14	-.37	-.02
IVc/VIIb Farm workers	-	-.35	.99 <sup>d</sup>	-.32	-.06	-.27
V/VI Skilled manual	-	.04	-.52	.12	.51 <sup>a</sup>	-.14
VIIa Non-skilled manual	-	-.18	.81 <sup>a</sup>	.13	-1.21 <sup>a</sup>	.45

Notes: \*  $N = 495$ ; \*\*  $N = 538$ .

G = general; C = cultural; A = agriculture; T = technical; E = economics/administration; M = medicine/law.

<sup>a</sup>  $p < .10$ ; <sup>b</sup>  $p < .05$ ; <sup>c</sup>  $p < .01$ ; <sup>d</sup>  $p < .001$  (two-tailed).

Due to limited number of observations no log-residuals can be produced for the lower secondary level.

again appears to be highly attractive to children of farming origins. Other interesting figures represent the low likelihood of those with farm and manual labour backgrounds attending general education at the upper secondary level (although this is non-significant due to sample size).

At the tertiary level, service-class children are unlikely to enter the agricultural field, but likely to attend the medicine/law field. So, even among people with equal educational capacities, the elite fields are preferred by the service class. Certainly in the Netherlands, where hardly any limitations are imposed upon students as regards the choice of fields of study once they have completed the necessary type of secondary education, this finding is important. The routine non-manual class shows comparable results, implying that the

main barriers in terms of field choice are found between white-collar classes, on the one hand, and self-employment and blue-collar work, on the other. Another important thing to note in Table 4 is that children of working-class origins are no longer under-represented in the technical field at the tertiary level.

If we summarize these descriptive findings on class origin and field choice, we can conclude that working-class children often choose technical fields of study, particularly at the lower secondary level and to a lesser extent at the upper secondary level. Furthermore, at the upper secondary level, general education is particularly preferred by children of service-class origins. At the tertiary level, service-class children are over-represented in the prestigious medicine/law fields. Children from farming backgrounds often choose the agricultural field, independent of the level that they achieve.

### **Origin class, education and destination class**

The strategy for analysing the impact of origin class and education on destination class is as follows. To begin with, three multinomial logistic regression models are estimated. The first, the *parental-background model*, incorporates social-class origin and parental educational level, as well as birth year. The second model, the *educational-level model*, adds the son's educational level to model 1. This model shows (a) to what extent educational level accounts for the class that children attain, and (b) to what extent the impact of parental characteristics runs through the educational level of their children. This model is comparable to the Blau and Duncan model of status attainment (1967), although with a class-based interpretation of occupational origin and destination rather than a one-dimensional linear interpretation. Model 3, the *field-of-study model*, adds field of study to the second model. This model gives insight into the question of which fields of study lead to higher-class attainments.

However, as will become clear below, the field of study *in general* does not give full information on the impact of the field of study on class destination. Given the Dutch educational system, with specialization in fields of study at various educational levels, it may be that the impact of having reached a field at one level is not the same as at another level. A further analysis that incorporates detailed combinations of educational level and field of study is therefore conducted to

**TABLE 5**  
**Multinomial logistic regression of class destination, models without field of study**

	<i>Model 1: Parental characteristics</i>					<i>Model 2: Parental characteristics and son's educational level</i>				
	<i>III</i> vs <i>I/II</i>	<i>IVab</i> vs <i>I/II</i>	<i>IVc/VIIb</i> vs <i>I/II</i>	<i>V/VI</i> vs <i>I/II</i>	<i>VIIa</i> vs <i>I/II</i>	<i>III</i> vs <i>I/II</i>	<i>IVab</i> vs <i>I/II</i>	<i>IVc/VIIb</i> vs <i>I/II</i>	<i>V/VI</i> vs <i>I/II</i>	<i>VIIa</i> vs <i>I/II</i>
<b>Social-class origin</b>										
I/II Service	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
III Routine non-manual	-.179 (.308)	-.401 (.585)	1.675 (1.283)	.081 (.324)	.310 (.375)	-.223 (.316)	-.479 (.596)	1.540 (1.293)	-.080 (.356)	.087 (.413)
IVab Petty bourgeoisie	.001 (.308)	1.234 <sup>c</sup> (.396)	2.296 <sup>a</sup> (1.204)	.136 (.323)	.554 (.361)	-.061 (.316)	1.144 <sup>c</sup> (.412)	2.209 <sup>a</sup> (1.221)	.021 (.351)	.421 (.395)
IVc/VIIb Farm workers	.082 (.305)	.468 (.482)	4.651 <sup>d</sup> (1.122)	.954 <sup>d</sup> (.275)	1.023 <sup>c</sup> (.332)	.039 (.313)	.392 (.496)	4.607 <sup>d</sup> (1.144)	.847 <sup>c</sup> (.307)	.927 <sup>b</sup> (.368)
V/VI Skilled manual	.264 (.247)	.082 (.454)	2.049 <sup>a</sup> (1.189)	.928 <sup>d</sup> (.247)	1.037 <sup>d</sup> (.293)	.140 (.254)	-.099 (.464)	1.844 (1.205)	.677 <sup>b</sup> (.272)	.692 <sup>b</sup> (.322)
VIIa Non-skilled manual	.217 (.307)	.932 <sup>b</sup> (.458)	2.417 <sup>b</sup> (1.220)	1.373 <sup>d</sup> (.270)	1.133 <sup>d</sup> (.329)	.011 (.316)	.638 (.472)	2.091 <sup>a</sup> (1.241)	.985 <sup>d</sup> (.299)	.614 <sup>a</sup> (.363)
<b>Parental educational level</b>										
Primary	1.135 <sup>d</sup> (.326)	.130 (.489)	.576 (1.161)	2.021 <sup>d</sup> (.377)	1.702 <sup>d</sup> (.427)	.667 <sup>b</sup> (.339)	-.582 (.515)	-.424 (1.190)	1.084 <sup>c</sup> (.412)	.643 (.468)
Lower secondary	.750 <sup>b</sup> (.301)	.253 (.447)	.664 (1.151)	1.081 <sup>c</sup> (.369)	1.147 <sup>c</sup> (.410)	.462 (.310)	-.262 (.470)	-.052 (1.173)	.454 (.401)	.504 (.447)

Upper secondary	.527 <sup>a</sup> (.312)	-.122 (.485)	-.444 (1.235)	.711 <sup>a</sup> (.388)	-.055 (.477)	.316 (.321)	-.474 (.500)	-.801 (1.249)	.260 (.418)	-.497 (.509)
Tertiary	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Birth year	.030 <sup>d</sup> (.008)	-.007 (.012)	-.014 (.014)	.027 <sup>d</sup> (.007)	.040 <sup>d</sup> (.009)	.034 <sup>d</sup> (.009)	-.001 (.012)	.000 (.015)	.039 <sup>d</sup> (.008)	.061 <sup>d</sup> (.010)
Son's educational level										
Primary						1.512 <sup>d</sup> (.359)	2.228 <sup>d</sup> (.517)	3.263 <sup>d</sup> (.618)	3.429 <sup>d</sup> (.372)	5.104 <sup>d</sup> (.522)
Lower secondary						1.659 <sup>d</sup> (.249)	2.415 <sup>d</sup> (.393)	2.907 <sup>d</sup> (.544)	3.769 <sup>d</sup> (.311)	4.365 <sup>d</sup> (.490)
Upper secondary						.920 <sup>d</sup> (.202)	1.496 <sup>d</sup> (.356)	1.828 <sup>d</sup> (.531)	2.265 <sup>d</sup> (.296)	2.869 <sup>d</sup> (.479)
Tertiary						Ref.	Ref.	Ref.	Ref.	Ref.
Intercept	-60.042 <sup>d</sup> (16.254)	11.409 (23.476)	22.087 (27.627)	-55.076 <sup>d</sup> (14.373)	-80.699 <sup>d</sup> (17.183)	-67.964 <sup>d</sup> (16.996)	-2.418 (24.353)	-6.762 (29.132)	-81.005 <sup>d</sup> (16.385)	-124.956 <sup>d</sup> (19.745)
Fit statistics	-2LL $\Delta\chi^2$	4100.72 376.70 <sup>d</sup>	d.f. = 1516 d.f. = 40 (model 1 – intercept/ birth year model)			-2LL $\Delta\chi^2$	3662.87 437.85 <sup>d</sup>	d.f. = 1501 d.f. = 15 (model 2 – model 1)		

Notes: Standard errors of estimates are given in brackets.

<sup>a</sup>  $p < .10$ ; <sup>b</sup>  $p < .05$ ; <sup>c</sup>  $p < .01$ ; <sup>d</sup>  $p < .001$  (two-tailed).

see whether specific field choices within educational levels are of consequence for class destination.

In Table 5 the parameter estimates of the first two models are presented. If we look at model 1, the parental-background model, we see that class of origin has an impact mainly on class destinations in the lower echelons of the class system. Apparently, because here the difference with the reference class is larger in hierarchical terms, more significant estimates appear than in higher classes. Whether one comes from a service- or a routine non-manual-class background makes no difference in class destination, as can be seen from the non-significant coefficients for routine non-manual origin. Coming from a petty-bourgeoisie background (self-employed) makes it likely to obtain the same class position eventually, as can be seen from the positive diagonal coefficient of 1.234. The strongest direct inheritance of social class is apparent in the farming class. Children from a farming background have a strong likelihood of entering the farming class themselves, compared to entering the service class ( $b = 4.651$ ). These positive associations in the self-employed and farming classes can be explained by the direct inheritance of capital, such as shops and farms. In skilled and non-skilled manual work the direct transmission of class is also apparent. Thus, independently of parental educational level, sons of manual working-class fathers have a high propensity to enter the manual working class themselves, compared to entering the service class. If we look at the off-diagonal parameter estimates, we see that children from farming backgrounds end up not only in the farming class themselves, but also relatively often in skilled and unskilled manual work. Thus, the outflow of the farming class, which is strongly decreasing in industrial and post-industrial societies, runs into these less attractive jobs.

With regard to parental-educational level, we see that nearly all coefficients are positive. This means that children from non-tertiary-educated parents have a relatively high propensity to enter other classes than the service class. Particularly children of parents with only primary or lower secondary education are likely to enter routine non-manual and manual labour. Differences in class destination between children of parents with upper secondary and tertiary education are negligible.

Model 2 in Table 5 adds the son's educational level. Three things are noteworthy here. First, the impact of class of origin on class destination is hardly affected by the inclusion of son's educational

level. So the intergenerational reproduction of class position is not entirely a consequence of class differences in educational attainment. However, some parameters do change. Notably, the upward mobility of children of fathers in unskilled manual labour into the petty bourgeoisie, farm work and skilled manual labour is caused by their educational attainment. Second, the impact of parental-educational level on class of destination is to a large extent a matter of differences in educational attainment of sons. So children of more highly educated parents have a greater propensity to attain a service-class occupation themselves *because* their educational attainment is higher. Third, the educational level that people have obtained is highly consequential for class placement. People of higher educational levels in general obtain higher-class positions than people of lower educational levels. For people educated at an educational level lower than tertiary education, the chance to enter any class but the service class is higher than for people educated at tertiary level. This can be seen from the decreasing coefficients from top to bottom in each column, and the increasing coefficients from left to right in Table 5, model 2. These three findings are in line with the status-attainment model of Blau and Duncan (1967: 170). The status-attainment model too shows that father's education has no direct effect on son's occupational status once son's educational level is controlled for. Also, father's occupation has a direct impact on son's occupation, but the strongest effect on occupational status comes from son's own education.

The third multinomial logistic-regression model that is estimated brings in the field of study people have chosen. The estimates of this model are given in Table 6. The first important thing to note in this table is that the fit of the model increases when field of study is added. With 25 degrees of freedom, the  $\chi^2$  reduces with 289.38, which makes the field-of-study model fit the Dutch data better than the educational-level model. The second interesting result of this model pertains to the impact of social-class origin on class destination. Whereas educational level reduced the impact of class of origin slightly (model 2 compared to model 1), the inclusion of field of study in model 3 further decreases the direct impact of class origin on class destination. This means that, once we control for educational characteristics in a detailed way, i.e. incorporating both educational level and field of study, it becomes apparent that intergenerational class (im)mobility is almost entirely a consequence of class differences in educational choices. Erikson and Jonsson

**TABLE 6**  
**Multinomial logistic regression of class destination, model with field of study**

	<i>Model 3: Parental characteristics, son's educational level and field of study</i>				
	<i>III vs I/II</i>	<i>IVab vs I/II</i>	<i>IVc/VIIb vs I/II</i>	<i>V/VI vs I/II</i>	<i>VIIa vs I/II</i>
<b>Social-class origin</b>					
I/II Service	Ref.	Ref.	Ref.	Ref.	Ref.
III Routine non-manual	-.277 (.326)	-.492 (.596)	1.400 (1.348)	-.120 (.376)	.032 (.417)
IVab Petty bourgeoisie	-.083 (.327)	1.104 <sup>c</sup> (.415)	2.065 <sup>a</sup> (1.249)	-.254 (.367)	.302 (.400)
IVc/VIIb Farm workers	.111 (.330)	.386 (.515)	3.220 <sup>c</sup> (1.203)	.537 (.328)	.671 <sup>a</sup> (.382)
V/VI Skilled manual	.216 (.264)	-.128 (.467)	1.563 (1.251)	.421 (.286)	.586 <sup>a</sup> (.327)
VIIa Non-skilled manual	.019 (.326)	.597 (.477)	1.440 (1.277)	.729 <sup>b</sup> (.312)	.468 (.366)
<b>Parental educational level</b>					
Primary	.599 <sup>a</sup> (.352)	-.595 (.518)	.246 (1.252)	1.160 <sup>c</sup> (.427)	.695 (.473)
Lower secondary	.411 (.322)	-.259 (.474)	.275 (1.237)	.636 (.415)	.599 (.452)
Upper secondary	.294 (.330)	-.459 (.501)	-.646 (1.319)	.446 (.435)	-.400 (.513)
Tertiary	Ref.	Ref.	Ref.	Ref.	Ref.
Birth year	.031 <sup>d</sup> (.009)	.000 (.013)	.026 (.017)	.044 <sup>d</sup> (.009)	.065 <sup>d</sup> (.010)

Son's educational level					
Primary	1.809 <sup>d</sup> (.466)	2.826 <sup>d</sup> (.678)	5.273 <sup>d</sup> (1.262)	5.927 <sup>d</sup> (.550)	6.153 <sup>d</sup> (.631)
Lower secondary	1.978 <sup>d</sup> (.311)	3.805 <sup>d</sup> (.472)	2.603 <sup>d</sup> (.682)	4.086 <sup>d</sup> (.352)	4.705 <sup>d</sup> (.530)
Upper secondary	.975 <sup>d</sup> (.226)	1.732 <sup>d</sup> (.395)	1.274 <sup>b</sup> (.619)	2.423 <sup>d</sup> (.317)	2.977 <sup>d</sup> (.497)
Tertiary	Ref.	Ref.	Ref.	Ref.	Ref.
Son's field of study					
General education					
Cultural	Ref. .230 (.396)	Ref. .962 <sup>a</sup> (.573)	Ref. 1.400 (1.516)	Ref. 2.520 <sup>d</sup> (.534)	Ref. 1.107 <sup>a</sup> (.601)
Agriculture	.188 (.513)	.375 (.737)	4.592 <sup>d</sup> (1.095)	2.037 <sup>d</sup> (.561)	1.508 <sup>c</sup> (.501)
Technical/nature	−.461 (.292)	.321 (.392)	.557 (1.181)	2.870 <sup>d</sup> (.378)	1.004 <sup>d</sup> (.312)
Medicine/law	−.257 (.468)	.304 (.720)	−7.812 (117.041)	.074 (1.092)	−.100 (.811)
Economics/administration	1.079 <sup>d</sup> (.297)	.513 (.473)	1.961 <sup>a</sup> (1.173)	1.506 <sup>d</sup> (.469)	1.108 <sup>c</sup> (.385)
Intercept	−64.261 <sup>d</sup> (17.449)	−3.664 (24.748)	−58.879 <sup>a</sup> (32.785)	−92.871 <sup>d</sup> (17.423)	−132.576 <sup>d</sup> (20.129)
Fit statistics					
	−2LL	3373.486	d.f. = 1476		
	$\Delta\chi^2$	289.38 <sup>d</sup>	d.f. = 25 (model 3 – model 2)		

Notes: Standard errors of estimates are given in brackets.

<sup>a</sup>  $p < .10$ ; <sup>b</sup>  $p < .05$ ; <sup>c</sup>  $p < .01$ ; <sup>d</sup>  $p < .001$  (two-tailed).



(1998) have shown for Sweden that controlling for level and field of education largely mediates the effect of origin class on destination class, but their analysis did not show to what extent field of study contributes to this compared to a model containing only educational level.

The parameter estimates in the lower part of Table 6 show that, once we control for educational level, the general field is not at all detrimental to class attainment; for people with equal educational levels, it is not necessary to obtain labour-market-oriented schooling to obtain a higher-class position. Being educated in the agricultural field makes it very likely to obtain a farm-class destination. As this field is highly related to farming origins too, we may conclude that a reasonable part of the reproduction of the farming class is established in the educational system. With increasing mechanization and related complexity of the farming profession, children of farmers need agricultural education to be able to take over the farm from their parents. Technical fields are strongly related to skilled and even unskilled manual labour. People educated in the economics/administrative field are likely to obtain a routine non-manual class destination. The medicine/law field shows no differences with the general field as regards class destination.

In terms of fit and interpretation of other explanatory variables, field of study gives important information. However, in terms of effects of fields of study, the results are somewhat hard to interpret. General education indeed is a good option for those with equal educational levels, but since there is no general education at the tertiary level, we are still left with some important questions. Therefore, another multinomial logistic model is estimated, which takes as an independent variable the combined score on educational level and field of study, as in Table 3. This model, presented in Table 7, is comparable to an interaction model, where educational level and field are interacted. This way of modelling gives direct information on the differences in class placement of people with different educational level and field attainments.

Table 7 shows that the model which allows field-of-study differences to vary across educational levels does not fit the data any better than model 3, which did not allow this. If we look at the parameter estimates of educational categories in Table 7, we see that many are negative. This implies that, for any educational category other than primary education, the odds of obtaining any class other than the service class compared to primary education are

low. So, primary-educated people have a low propensity to enter the service class, which is no surprise. More important is that the impact of the economics/administrative field on entering the routine non-manual class is completely attributable to this type of training at the lower secondary level. Compared to people with primary education, people educated in economics/administrative types of education are even more likely to enter the routine non-manual working class than the service class. The lower technical field more often leads to skilled manual work than the general field does. Fields at the tertiary level all offer higher chances to attain the service class. The strongest impact comes from the tertiary cultural, tertiary technical and tertiary medicine/law fields. Thus, the prestigious fields of medicine and law, and the cultural-capital fields that are preferred by higher-class children, do lead to advantageous class positions.

In sum, these results indicate that, at lower secondary and upper secondary levels, general education is not a bad option when it comes to class destination. Indeed, this middle-class field leads to higher-class positions more often than do more vocationally oriented fields at the same level. Furthermore, the specific high-class choice for cultural and prestigious fields leads to higher-class destinations. This suggests that field of study is an important way of establishing class immobility among the service classes, and limiting upward mobility of working-class children.

## **Conclusions**

This article has addressed the question of the extent to which field of study, in addition to educational level, provides insight into inter-generational social-class mobility in the Netherlands. It started from the assumption that, in a highly educated society like the Netherlands, we need to look at other educational assets than educational level if we want to understand who gets into higher social classes. As too many people in the labour market achieve higher educational levels, employers need other characteristics in order to screen out the most valuable workers (Grusky, 1983), particularly the field of study people reached.

When focussing on the role of education in the social-mobility process, two steps should be observed. First, we should pay attention to the impact of class origin on field choice. This step has already been analysed for a number of countries, such as Norway

**TABLE 7**  
**Multinomial logistic regression of class destination, model with detailed educational attainment**

	<i>Model 4: Parental characteristics, son's detailed educational attainment</i>				
	<i>III vs I/II</i>	<i>IVab vs I/II</i>	<i>IVc/VIIb vs I/II</i>	<i>V/VI vs I/II</i>	<i>VIIa vs I/II</i>
<i>Social-class origin</i>					
Parental educational level			Effects not shown		
Birth year	.032 <sup>d</sup> (.009)	.001 (.013)	.025 (.017)	.044 <sup>d</sup> (.009)	.064 <sup>d</sup> (.010)
Son's detailed educational attainment					
Primary	Ref.	Ref.	Ref.	Ref.	Ref.
Lower secondary general	.114 (.417)	-.033 (.564)	-2.423 <sup>b</sup> (1.092)	-1.887 <sup>d</sup> (.472)	-1.628 <sup>d</sup> (.400)
Lower secondary cultural*					
Lower secondary agriculture	1.097 (.980)	1.253 (1.111)	2.330 <sup>c</sup> (.853)	.585 (.889)	.312 (.895)
Lower secondary technical	-.429 (.473)	-.049 (.569)	-1.875 <sup>b</sup> (.817)	.974 <sup>c</sup> (.323)	-.437 (.343)
Lower secondary economics	1.861 <sup>b</sup> (.886)	1.860 <sup>a</sup> (.975)	-7.997 (65.188)	.438 (.912)	.396 (.864)
Upper secondary general	-.776 <sup>a</sup> (.461)	-1.104 (.682)	-10.709 (58.895)	-3.474 <sup>d</sup> (.777)	-2.747 <sup>d</sup> (.498)
Upper secondary cultural	.048 (.803)	1.081 (.802)	-8.645 (64.298)	-.043 (.675)	-.998 (.742)
Upper secondary agriculture	-1.386 <sup>a</sup> (.838)	-9.147 (52.416)	.562 (.578)	-1.536 <sup>b</sup> (.607)	-1.658 <sup>c</sup> (.563)

Upper secondary technical	-.935 <sup>b</sup> (.410)	-.376 (.504)	-3.443 <sup>d</sup> (1.081)	-.523 <sup>a</sup> (.308)	-2.172 <sup>d</sup> (.352)
Upper secondary medicine/law	-.932 (.662)	-1.304 (1.136)	-11.076 (109.511)	-3.183 <sup>c</sup> (1.075)	-3.125 <sup>d</sup> (.815)
Upper secondary economics/ administration	-.089 (.389)	-1.419 <sup>b</sup> (.668)	-2.413 <sup>c</sup> (.822)	-2.602 <sup>d</sup> (.479)	-2.463 <sup>d</sup> (.405)
Tertiary cultural	-1.659 <sup>d</sup> (.438)	-2.186 <sup>d</sup> (.666)	-3.663 <sup>d</sup> (1.083)	-3.862 <sup>d</sup> (.642)	-14.344 (85.444)
Tertiary agriculture	-.997 (.848)	-1.307 (1.143)	-1.051 (.923)	-12.483 (145.224)	-12.868 (144.802)
Tertiary technical	-2.859 <sup>d</sup> (.562)	-3.039 <sup>d</sup> (.836)	-12.491 (76.416)	-3.167 <sup>d</sup> (.454)	-5.074 <sup>d</sup> (.763)
Tertiary medicine/law	-2.185 <sup>d</sup> (.617)	-2.073 <sup>b</sup> (.850)	-12.665 (143.716)	-14.173 (144.770)	-14.739 (144.060)
Tertiary economics/administration	-.457 (.397)	-1.721 <sup>b</sup> (.675)	-2.517 <sup>c</sup> (.831)	-3.246 <sup>d</sup> (.582)	-4.100 <sup>d</sup> (.652)
Intercept	-62.662 <sup>d</sup> (17.449)	-3.868 (25.097)	-51.845 (32.803)	-87.560 <sup>d</sup> (17.434)	-125.884 <sup>d</sup> (20.077)
Fit statistics	-2LL	3323.79	d.f. = 1436		
	$\Delta\chi^2$	49.70	d.f. = 40 (model 4 – model 3)		
	$\Delta\chi^2$	339.08 <sup>d</sup>	d.f. = 65 (model 4 – model 2)		

Notes: Standard errors of estimates are given in brackets; \* not estimated due to limited number of observations.

<sup>a</sup>  $p < .10$ ; <sup>b</sup>  $p < .05$ ; <sup>c</sup>  $p < .01$ ; <sup>d</sup>  $p < .001$  (two-tailed).

(Hansen, 1997), the United States (Davies and Guppy, 1997), Sweden (Dryler, 1998) and the Netherlands (van de Werfhorst et al., 2001). These studies have found considerable class differences in field choice, particularly technical and economic choices of working-class children, and more general types of training of middle- and higher-class children. Comparably, others have concentrated not so much on specific fields of study as on class difference in preferences for general (or academic) versus vocational tracks (Gamoran and Mare, 1989; Breen and Jonsson, 2000). These studies also found that children from higher-class backgrounds tend to choose general tracks in secondary school, whereas working-class children prefer vocational tracks.

The second step in the mobility process regards the impact of field of study on class destination. Evidence for this step is scarce and less unambiguous. In general, technically and economically oriented field choices are beneficial for labour-market opportunities like wage or status attainment (Wilson and Smith-Lovin, 1983; Kalmijn and Van der Lippe, 1997; Loury, 1997). However, since these studies concentrate on tertiary education, we do not know whether technical or economic (vocational) choices at the secondary level are beneficial compared to general education. Research on labour market returns to the vocational/general distinction found significantly higher chances for people from a general track to obtain a higher social class (Arum and Shavit, 1995). This implies that, although motivated by labour-market opportunities, the working-class preference for economic and technical fields restricts their opportunities to obtain advantageous positions in society.

The results showed that, first, indeed the general track in upper secondary education is strongly preferred by service-class children. Technical fields are often chosen by working-class children, but particularly at the secondary level. At the tertiary level, prestigious fields like medicine and law are strongly related to service-class origins, whereas working-class children often enter the technical and agricultural fields. The economics/administrative field is middle-class, with a particularly strong association with self-employed origins. The strongest association was found between farming origins and the agricultural field of study.

With regard to the impact of field of study on class destination, it was found that adding field of study to a model containing the independent variables origin class, parents' educational level, son's educational level and birth year significantly improved the fit of

the model with our Dutch data. When educational level and field of study are treated as two separate variables, we found that general education is an asset positively related to service-class placement. The economics/administrative field is strongly related to the routine non-manual class, and the agricultural field to the farming-class destination. So we know from this model that some classes are strongly reproduced through specific field choices. Further analyses broke down educational attainments into detailed combinations of educational level and field of study. This model shows that typical higher-class choices, such as medicine and law, have a strong impact on higher-class placements. The agricultural field at the tertiary level, which is clearly related to working-class origins, does not give that much of a benefit in terms of higher-class placements.

These results indicate that higher-class children choose educational specializations that enhance their opportunities to obtain jobs in the service class. Likewise, children of intermediate and working-class origins choose fields that increase their chances to obtain the same classes themselves. We explain this finding by differences in mobility strategies among the various social classes. According to Goldthorpe (2000), educational decisions are guided primarily by the motivation to attain the same class as the parents. Only secondly do people aim for upward mobility. Such conservative behaviour on the part of individuals makes for a relatively low level of social mobility. So, in one way people generally realize their goal, for class maintenance is evidently realized through choices of fields of study. In other words, one way to avoid downward mobility is to choose fields that are related to one's class of origin. In another way, however, we may conclude that the strategy applied by lower-class children is not successful; the reason they choose technical fields at the secondary level is that these fields provide transparent skills that are supposedly valuable on the labour market and lead to upward mobility (Davies and Guppy, 1997). Given the fact that these fields are not valuable in terms of higher-class placements, we may conclude that the upward mobility of working-class children is impeded by their own choices. This is striking because these "horizontal" choices are more or less free in terms of financial and time investments in the Netherlands, and similar in ability constraints imposed by the educational system.

The fact that our analysis of the Netherlands shows that vocational choices are a bad option, and that service-class children find their way to advantageous positions by choosing prestigious fields

of study, suggests that it is even worse elsewhere. In countries with school systems that prepare students for specific labour-market positions in vocational tracks, such as the Netherlands and Germany, employers are thought to select employees on detailed educational credentials, thereby strengthening the link between (vocational) education and the labour market (Shavit and Müller, 1998). When, in such a society, general education provides better opportunities for specialized fields of study, the division may be even sharper in countries with less well-developed vocational training programmes. In other words, in countries where selection and allocation on the labour market are strongly regulated through screening and signaling mechanisms, such as the United States and the UK, even stronger preferences should exist on the part of students for more general types of training.

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## Notes

1. Inclusion of the caring field within the cultural field is less obvious than for the other fields. However, since in Bourdieu's work (1984) caring fractions of the labour market are in essence related to the cultural domain, we grouped this field together with the other “cultural” fields. The caring field is relatively small ( $n = 16$  of our sample of  $N = 1566$ ).

2. One disadvantage of the data used is that no information is available on ability. Ability is related to choices of general tracks in secondary education, and medicine and natural sciences at the tertiary level. We do not believe, however, that our results are strongly biased. The first reason for this is that the Dutch educational system does not impose strong restrictions upon students with regard to possible fields of study related to ability levels. Rather, having completed the appropriate type of secondary school, any pupil may enrol in basically any field of study at the tertiary level at all institutions. Secondly, as ability is strongly related to social class, inclusion of ability would plausibly reduce the direct social-class impact on field choice, but would have hardly any implications for the central interest of this article, namely the impact of field of study on class destination.

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