



## Does intergenerational social mobility affect antagonistic attitudes towards ethnic minorities?

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### Abstract

Up till now, no study satisfactorily addressed the effect of social mobility on antagonistic attitudes toward ethnic minorities. In this contribution, we investigate the effect of educational and class intergenerational mobility on ethnic stereotypes, ethnic threat, and opposition to ethnic intermarriage by using diagonal mobility models. We test several hypotheses derived from ethnic competition theory and socialization theory with data from the *Social and Cultural Developments in The Netherlands* surveys (SOCON, waves 1995, 2000, and 2005) and *The Netherlands Kinship and Panel Study* (NKPS, wave 2002). We find that the relative influence of social origin and social destination depends on the specific origin and destination combination. If one moves to a more tolerant social destination position, the influence of the social origin position is negligible. If on the other hand, one is socially mobile to a less tolerant social position, the impact of the origin on antagonistic attitudes is substantial and may even exceed the impact of the destination category. This confirms our hypothesis that adaptation to more tolerant norms is easier than adaptation to less tolerant norms. We find only meagre evidence for the hypothesis that downward mobility leads to frustration and consequently to more antagonistic attitudes.

**Keywords:** Social mobility; prejudice; stereotypes; diagonal mobility models; diagonal reference models; ethnic intermarriage

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### Introduction

Empirical research has shown convincingly that educational achievement and social class are among the most important predictors of antagonistic attitudes toward ethnic out-groups, such as prejudices, ethnocentrism and opposition to ethnic intermarriage (Kunovich 2004; Scheepers, Gijsberts, and Coenders 2002; Tolsma, Lubbers, and Coenders 2008). The sociological literature

consistently finds that less educated persons hold less favourable attitudes toward ethnic out-groups than more educated persons and that manual workers and the self-employed hold less favourable attitudes toward ethnic out-groups than other social classes.

Besides one's current social position, one's social origin – parental educational attainment and social class of the father during the formative years – also explains attitudes toward ethnic out-groups, although it seems to a lesser extent than current social position (Tolsma, Lubbers, and Coenders 2008). If social mobility has an impact on antagonistic attitudes, newcomers into a specific social position may differ in their level of antagonistic attitudes from members who hold the same social position but who have not experienced social mobility. The relative impact of social origin and destination positions on antagonistic attitudes remains unclear as the impact of social mobility may have been underestimated in previous studies because standard approaches are inadequate for modelling mobility effects.<sup>1</sup>

Many theories in the Durkheimian tradition hypothesize that social mobility leads to instability, identity conflict, and subjective feelings of deprivation (Durkheim 1987[1897]). Social mobility – both upward and downward – is expected to cause alienation and abnormal strain. Without social and personal control, this may be manifested in dissatisfaction with life, antagonistic attitudes toward ethnic out-groups (Bettelheim and Janowitz 1950), and, in extreme cases, in suicide (Durkheim 1987[1897]). Despite these longstanding theoretical predictions, we know of no empirical research that has shown that experiences of social mobility affect prejudice through anomie or any other mechanism (Marshall and Firth 1999).

Conceptually, we view individuals' attitudes toward out-groups as affected both by the social position of their parents and by their own social position in adulthood. In addition, the experience of social mobility itself may affect attitudes independent of the social origin and destination (Marshall and Firth 1999). We stress that the two views are not in contrast with one another but rather complementary. Diagonal mobility models, which we apply in the present contribution, offer a parsimonious and elegant representation of origin, destination, and mobility effects and are well suited to model these potential mechanisms simultaneously (Hendrickx et al. 1993; Sobel 1981, 1985; Weakliem 1992).

In addition to the theoretical literature on causes of prejudice, our research contributes to the theoretical literature on the consequences of social mobility. Several scholars have applied diagonal mobility models to assess the relationship between mobility on the one hand and, on the other, voting behaviour, culture and material consumption behaviour, fertility, and lifestyles (De Graaf 1991; De Graaf, Nieuwbeerta, and Heath 1995; Nieuwbeerta, De Graaf, and Ultee 2000; Sobel 1985; Stein 2005; Weakliem 1992). These studies showed that

the level of acculturation depends on the specific origin and destination positions. Until now, consequences of intergenerational mobility on antagonistic attitudes toward ethnic out-groups have been neglected in the body of research on social mobility.

Both educational achievement and social class are important determinants of antagonistic attitudes. We, therefore, examine the effects of mobility in terms of both educational achievement and social class on attitudes toward out-groups. We employ three distinct measures of antagonistic attitudes toward out-groups: ethnic stereotypes, ethnic threat, and opposition to ethnic intermarriage. We use two data sets from The Netherlands that are distinctive in their inclusion of measures of antagonistic attitudes, education, and class: SOCON and NKPS.

## Expectations

### *Class origin and destination status*

Class of origin and class of destination are distinguished for individuals in that they occur at different points in the life course. Individuals experience their class of origin – their parent's class – most strongly during childhood and adolescence when they reside with their parents. They experience their destination class as adults after the completion of formal schooling. Persons who climb or fall from the social ladder thus experience two different class positions. We expect that both origin and destination class status may have an impact on attitudes, but their relative importance depends to a large extent on the relative importance of early socialization into the attitudes typical of the origin class by parents and other members of the origin class versus later circumstances on the formation of attitudes toward ethnic out-groups in adulthood.

Since socialization takes place primarily early in life (Alwin and Krosnick 1991) and many attitudes tend to be rather stable during the life course (Glenn 1980), a 'socialization' perspective would expect a larger role for origin position than destination position. As antagonistic attitudes are in part transmitted during childhood (Dalhouse and Frideres 1996), 'Once prejudices appropriate to one's class position are accepted, they may become traditions which are passed by childhood socialization from one generation to the next.' (Hodge and Treinman 1966: 91). Re-socialization may also occur later in life, but most theory and research suggests that socialization is a process that operates most strongly in childhood and adolescence, and thus class-based socialization influences should largely reflect origin class position. Under the view that socialization experiences are of primary importance in the formation of negative attitudes toward ethnic out-groups, we expect the '*Class Origin Hypothesis*' to hold: *The impact of the destination class on antagonistic attitudes is weaker than the impact of the origin class on antagonistic attitudes.*

Another approach suggests that attitudes toward out-groups are more closely related to individuals' perceptions of their material self-interest and related collective identities, especially their current class position. In line with this view, ethnic competition theories state that members of ethnic groups compete with each other for scarce resources such as jobs, housing, and income (Blalock 1967; Blumer 1958; Bobo and Hutchings 1996; Coser 1956; Olzak 1992; Tajfel 1982). Especially in conditions in which new competitors come from ethnically distinct groups, many individuals perceive this competition as reflecting collective competition between ethnic groups. Since workers and the self-employed can rely on fewer resources and are more directly in competition with ethnic out-groups than other social categories, these categories perceive competition most strongly. Perceived ethnic threat evoked by perceptions of ethnic competition enhances in turn negative sentiments against ethnic out-groups (Coenders and Scheepers 1998; Quillian 1995, 1996; Scheepers, Gijsberts and Coenders 2002). According to ethnic threat theories, members of a social class thus share similar attitudes toward ethnic out-groups because of their shared competitive economic environment and because of their perceived mutual interest to protect their social class from ethnic out-groups. These theories suggest the '*Class Destination Hypothesis*': *The impact of the destination class on antagonistic attitudes is stronger than the impact of the origin class on antagonistic attitudes.*

### ***Educational origin and destination status***

Past research has consistently found that level of education is one of the strongest correlates of prejudice and attitudes toward out-groups, with higher education associated with lower prejudice. Many have theorized that this holds in part because schools are socializing agents and transmit the prevailing norms of society, which in most Western societies favour tolerance. Moreover, education develops cognitive competence, increases open mindedness, and reduces authoritarian attitudes, all of which tend to foster a more tolerant stance toward ethnic out-groups (Hello, Scheepers, and Slegers 2006).

Studies have generally not examined the relative impact of parental level of education versus own educational achievement on attitudes toward ethnic out-groups. Applying the distinction we made earlier between socialization and instrumental theories of class position, socialization theory predicts that more educated parents are likely to transmit their tolerant attitudes to the child during both school and pre-school years. This suggests the '*Educational Origin Hypothesis*': *The impact of one's own educational achievement on antagonistic attitudes is weaker than the impact of father's educational achievement on antagonistic attitudes.*

While parental education is also likely to have an impact on attitudes, we expect a stronger impact of respondent's own education, consistent with past

research. There are two reasons for this. First, education itself has a socializing influence that increases acceptance of norms of tolerance, at least in societies in which tolerance is the dominant value orientation. Second, education is important because it has a strong impact on job and class position, and thus affects perceptions of ethnic competition experiences. In fact, Hello, Scheepers, and Slegers (2006) find education affects social distance attitudes toward ethnic out-groups largely because of its effect on perceived ethnic competition, suggesting this second mechanism is predominant. Because of the combined effect of these mechanisms, we suggest that the more likely hypothesis with regard to education is the '*Educational Destination Hypothesis*': *The impact of one's own educational achievement on antagonistic attitudes is stronger than the impact of father's educational achievement on antagonistic attitudes.*

### ***Tolerance and the national culture***

Individuals are influenced by 'the social pressure resulting from the shared values of the other members of the group' (Blau 1960: 191). We assume that this social pressure will not only originate from one's 'educational group' or one's 'social class' but also from the group formed by the people of a nation. The stronger the value climate of tolerance is in a country, the more individuals are thus stimulated to subscribe to these values. The Netherlands, like many other societies, officially condemn intolerance and discrimination. Although support for discrimination has been more widespread in times of high levels of immigration and during times of increasing unemployment, the Dutch majority did not support ethnic discrimination in the period from 1979 to 2002 (Coenders et al. 2008). Even after experiencing an ideological shift from multiculturalism toward assimilation (2001 to 2004), tolerance is the dominant attitude among older and younger generations in The Netherlands (Coenders et al. 2008). As can be seen from Table I, the majority of the Dutch people do not agree that ethnic minorities form a threat, do not hold ethnic stereotypical attitudes, and do not oppose ethnic intermarriage.

Intolerant attitudes are therefore difficult to express without facing social criticism; pressures of social conformity favour more tolerant attitudes. We expect that general social pressures make it less difficult for individuals to adopt attitudes that are in congruence with the dominant norms of society. In the case of prejudice toward ethnic out-groups, these happen to be more tolerant. In summary, we expect the '*Tolerance Dominance Hypothesis*' to hold: *Someone who moves to a social destination of which the immobile members are in general more tolerant than the immobile members of the social origin will be more likely to adopt the attitudes of the destination than someone who is mobile into a social position of which the immobile members express less tolerant attitudes than the social origin.*

**Table I:** Prevalence of ethnic threat, stereotypes and opposition to ethnic intermarriage in The Netherlands

<i>Ethnic Threat</i> (N = 2898) <sup>a</sup>	Agree (%)
The day will come that Dutch people will be forced to give jobs to ethnic minorities.	18
The coming of ethnic minorities to The Netherlands is a threat to our own culture.	30
<i>Stereotypes</i> (N = 2520) <sup>a</sup>	Agree (%)
With Moroccans you never know for certain whether they are going to be aggressive or not.	24
Most People from Surinam work quite slowly.	25
Gypsies are never to be trusted.	16
Turks have so many children because they do not know better yet.	7
When you do business with Jews, you have to be extra careful.	14
<i>Intermarriage</i> (N = 7420) <sup>b</sup>	I would mind (%)
Would it bother you if one of your children decided to marry someone of Turkish descent?	39
Would it bother you if one of your children decided to marry someone of Moroccan descent?	44
Would it bother you if one of your children decided to marry someone of Surinamese descent?	32

Source: <sup>a</sup>: SOCON 1995, 2000, 2005 (pooled); <sup>b</sup>: NKPS 2002

### ***Losers of modernization***

The importance of social mobility for attitudes toward ethnic out-groups is also found in the ‘losers of modernization’ thesis (Scheuch and Klingemann 1967). Downward mobility may determine that people lose connections with society and that problems accumulate among those who experience downward mobility (Bernhardt 2001; Durkheim 1987[1897]). Downward mobility is likely to fuel feelings of subjective deprivation and economic competition. Since intergenerational progress is an important expectation in society, lack of mobility may lead to frustration. Feelings of subjective deprivation, perceptions of competition, and frustration may find a release in antagonistic attitudes toward ethnic out-groups whom become scapegoats (Bettelheim and Janowitz 1964). Consequently, the downward mobile may be especially likely to develop antipathy toward ethnic out-groups (Weller and Tabory 1984). These theories suggest the ‘*Frustration Hypothesis*’: *Intergenerational downward mobility induces antagonistic attitudes toward ethnic out-groups above and beyond social origin and destination effects on attitudes.*

We test our hypotheses on two different datasets, for two types of mobility (educational and class) and on three different attitudes. We assume that the same mechanisms apply and our results should therefore be consistent.

### **Data and methods**

In this contribution we used the Dutch national *Social and Cultural Developments in The Netherlands* (SOCON) surveys, waves 1995, 2000, and 2005 and

The Netherlands *Kinship and Panel Study* (NKPS) wave 2002.<sup>2</sup> Within the SOCON a random stratified sampling method is followed: 81 municipalities were randomly selected according to their level of urbanization, followed by a random selection of residents aged 18–70. The response rate of these surveys is approximately 50 per cent. The cooperation rates are: SOCON 1995 51.5 per cent; SOCON 2000 43.7 per cent; SOCON 2005 66.2 per cent. The NKPS is a random sample of individuals within private households in The Netherlands, with a minimum age of 18 and a maximum age of 79. To collect data from the main respondents, Computer Aided Personal Interviewing (CAPI), supplemented with self-completion questionnaires, was used. The overall response rate was 44.7 per cent. Response rates tend to be rather low in The Netherlands, and the response rates of the SOCON and the NKPS are not exceptionally low. The samples of the SOCON are to a large extent representative for the Dutch population. The distribution by sex, urbanization, and matrimonial status in the NKPS sample significantly differs from that in the comparison population. Results based on a weighted sample do not lead to different conclusions as those presented below (results available on request). For further information with regard to the sampling procedure, response rates and the construction of the weight variable we refer to the respective codebooks (Eisinga et al. 1999; Eisinga et al. 2002; Eisinga et al. 2008; Dykstra et al. 2004).

For the present study we selected respondents with Dutch-born parents. With regard to the educational mobility analyses, we only included respondents older than 25 at which age most people finished their educational career. For the class mobility analyses we excluded all students. The sample sizes used in this contribution depend on the type of intergenerational mobility (educational or class) and the dependent variable in question (see Tables II and III).

Based on the SOCON data sets, we constructed an *ethnic stereotype scale* and an *ethnic threat scale* as dependent variables.<sup>3</sup> The ethnic stereotype scale score was based on the mean score of the following items: ‘With Moroccans you never know for certain whether they are going to be aggressive or not’, ‘Most people from Surinam work quite slowly’, ‘Gypsies are never to be trusted’, ‘Turks have so many children because they do not know better yet’, and ‘When you do business with Jews, you have to be extra careful’ With answer categories: (4) agree entirely, (3) agree, (2) don’t agree/don’t disagree, (1) disagree, and (0) disagree entirely. The Cronbach’s alpha of the ethnic stereotype scale is 0.79. For the 1995, 2000, and 2005 waves this is 0.78, 0.83, and 0.76, respectively. If a respondent had one or two missing values on these ethnic stereotype items, we substituted these with the mean values based on the other stereotype items. Missing values were distributed more or less equally across these items (approximately 4 per cent). Results based on a sub-sample of respondents who had valid scores on all five items do not lead to substantially different results (available on request). The ethnic threat scale was a mean score of the items ‘The day will come that Dutch people will be

fired to give jobs to ethnic minorities' and 'The coming of ethnic minorities to The Netherlands is a threat to our own culture', both with answer categories: (4) agree entirely, (3) agree, (2) don't agree/don't disagree, (1) don't agree, and (0) don't agree at all. The inter-item Pearson correlation coefficient is 0.52. For the 1995, 2000, and 2005 waves this is 0.51, 0.62, and 0.48 respectively. Confirmatory factor analysis showed that the stereotype and ethnic threat dimension are empirically distinguishable (results available on request).

Based on the NKPS data we constructed an *opposition to ethnic intermarriage* scale by adding the scores on three items on views related to ethnic intermarriage with specific ethnic groups. The question is: 'Would it bother you if one of your children decided to marry someone of [Turkish/Moroccan/Surinamese] descent?', with answer categories (4) 'bother me a lot', (3) 'bother me a little', (2) 'neutral', (1) 'not bother me', (0) 'not bother me at all'. Opposition to mixed marriages is an indicator of ethnic exclusionism and is highly related to prejudice and other antagonistic attitudes toward ethnic out-groups (Tolsma, Lubbers and Coenders 2008). The Cronbach's alpha of the opposition to ethnic intermarriage scale is 0.95.

Social destination is measured either as respondent's current social class or as respondent's highest achieved educational degree. Social origin is either father's social class when the respondent was 15 or father's highest achieved educational degree. The *social class* of respondent's current class position and *father's social class* when the respondent was 15 were measured using a condensed version of the original eleven-category EGP classification scheme created by Erikson, Goldthorpe, and Portocarero (Goldthorpe 2000).<sup>4</sup> In The Netherlands, the majority of the employed male population works in the service class, i.e. as high- and low-grade professionals and managers (classes I and II of the EGP class scheme) (Ganzeboom and Luijkx 2004). Güveli, Need and De Graaf (2007a) argue that in post-industrial societies, within this service class two sub-classes may be distinguished: the socio-cultural specialists (e.g. social workers, teachers, lawyers) and the technocrats (e.g. engineers, accountants, and office managers). These subclasses are defined according to two criteria: controllability of the work performance and the socio-cultural character of the work tasks. It is relatively harder for employers to monitor socio-cultural specialists than technocrats in their work tasks. Furthermore, socio-cultural specialists have specific skills and knowledge involving social services and social-cultural issues. Extensive validation tests strongly supports this class distinction for The Netherlands (Güveli 2006; Güveli and De Graaf 2007; Güveli, Need, and De Graaf 2007b). The final class background categories we used were: (1) technocrats, (2) socio-cultural specialists, (3) routine non-manual occupations; (4) small employers, (5) manual supervisors and skilled manual occupations, and (6) semi-unskilled manual occupations and farm labourers. We measured the *education* of the respondent and *father's education* in six categories: (1) university (WO), (2) college (HBO), (3) O and A levels

(HAVO/VWO), (4) secondary vocational (MBO), (5) lower secondary education (MAVO) and (6) elementary school and lower vocational school (LBO).<sup>5</sup>

Although the impact of class and educational intergenerational social mobility on antagonistic attitudes is the main focus of this contribution, we also take into account other relevant variables which are likely to affect antagonistic attitudes and which possibly intervene with the impact of social origin and destination positions on these attitudes. *Sex* was coded as (0) male and (1) female. *Church attendance* was used as an indicator for religiosity and was measured in times per year. With regard to the class mobility analyses we controlled for respondent's educational attainment since both father's class position and respondent's educational attainment are causally prior to respondent's class destination. To take into account over time changes in antagonistic attitudes we included the variable *birth cohort*. Birth cohort was coded as survey year minus age at time of survey. Taking into account social position specific birth cohort trends in antagonistic attitudes did not alter our findings (results on request).

We are aware of other alternative explanations for negative attitudes, such as, for example, contact with ethnic minorities and neighbourhood contexts. However, only omitted variables that are related to both the specific negative attitude *and* social mobility possibly bias our estimation of mobility effects. We expect to find mobility effects due to socialization mechanisms or due to a change of competition environment following mobility. Testing whether mobility effects could be explained by for example more or less contact with ethnic minorities or due to a change in residential environment following mobility, although interesting, is beyond the scope of this paper.

Descriptive statistics can be found on the website accompanying this contribution as well as the six mobility tables on which we base our conclusions ([www.jtolsma.nl](http://www.jtolsma.nl)).

### ***Diagonal mobility models and formalization of hypotheses***

We use diagonal mobility models (Hendrickx et al. 1993; Sobel 1981) to assess the relative impact of social origin and destination position on ethnic stereotypes, ethnic threat and opposition to ethnic intermarriage. Diagonal mobility models offer a parsimonious and theoretically interpretable method to model interactions between social origins and destinations (see also note 1). To stress the theoretical importance of diagonal mobility models for the social sciences, Cox used these models as an example of how social science can bridge empirical and substantive concerns. According to Cox:

These models aim to explain what is observed in terms of processes (mechanisms), usually via quantities that are not directly observed, and some theoretical notions as to how the system under study 'works'. (Cox 1990: 169)

Interested scholars can find a short tutorial on the application of diagonal mobility models on the website accompanying this contribution ([www.jtolsma.nl](http://www.jtolsma.nl)).

Diagonal mobility models model the relative impact of the origin and destination position on the dependent variable. The central idea behind diagonal mobility models is that the immobile represent the ‘core’ of each social position and express attitudes ‘appropriate’ to the class position in question. In our case, these core attitudes will be expressed by respondents who have the same social class position as their father or the same educational degree as their father. In a mobility table showing respondent’s social class by father’s social class when the respondent was 15, the immobile respondents will fall on the main top-left to bottom-right diagonal. Members of these core positions establish their attitudes toward ethnic minorities without mobility experiences.

Formally, within diagonal mobility models, the attitudes of respondents in the  $ij$  cell of the mobility table are modelled as a function of the attitudes of the immobile respondents in social origin position  $i$  (cell  $ii$ ) and of the immobile respondents of social destination position  $j$  (cell  $jj$ ). The additive diagonal mobility baseline model without covariates for a dependent interval variable is given by:

$$Y_{ijk} = p\mu_{ii} + (1-p)\mu_{jj} + \varepsilon_{ijk} \quad (\text{Model 0})$$

And the baseline model with covariates is given by:

$$Y_{ijk} = p\mu_{ii} + (1-p)\mu_{jj} + \sum_b \beta_b x_{ijb} + \varepsilon_{ijk} \quad (\text{Model 1})$$

Where  $\varepsilon_{ijk}$  is a stochastic term with expectation 0, and  $\mu_{ii}$  and  $\mu_{jj}$  are the population means of the  $ii$ th and  $jj$ th cells of the mobility table. The parameter  $p$  indicates the salience of origin status relative to destination status to the dependent variable in question. Parameter  $p$  can thus be interpreted as the relative weight, or importance, of the origin category and  $1 - p$  the relative weight, or importance, of the destination category for the explanation of the dependent variable,  $Y_{ijk}$ . If  $p$  is smaller than 0.5 the destination has a stronger relative impact on the dependent variable than the origin position. During the estimation procedure, we restricted the origin and destination weights to the [0,1] interval in which they should theoretically lie. The covariates are expressed by different  $x_{ijb}$  variables and the corresponding covariate parameters by  $\beta_b$ , which should be interpreted just as in ordinary least square regression analysis. The interpretation of the parameters will be illustrated further by several examples in the result section.

In our *origin hypotheses* we stated that the influence of the origin position is likely to be more important than the influence of the destination position. According to these hypotheses, the salience parameter  $p$  should be larger than 0.5. The *destination hypotheses*, which stated that the destination position will be more important than the social origin, implies that  $p$  is smaller than 0.5.

The *tolerance dominance hypothesis* states that adaptation to the attitudes of the destination position will be stronger when these norms are more tolerant than the origin position. To order social classes and educational degrees on the level of antagonistic attitudes, we use the mean level of antagonistic attitudes as expressed by the immobile respondents. To test the tolerance dominance hypothesis we constructed a dummy variable  $x_{ijt}$  which takes the value 1 if someone moved to a position of which the immobile members express lower levels of antagonistic attitudes than the immobile members of the origin position and 0 otherwise. Henceforth, we refer to these respondents as respectively the tolerant-destination and intolerant-destination mobile. The tolerance model is given by:

$$Y_{ijk} = (p + tx_{ijt})\mu_{ii} + (1 - (p + tx_{ijt}))\mu_{jj} + \sum_b \beta_b x_{ijb} + \epsilon_{ijk} \quad (\text{Model 2})$$

and we find confirmation for our hypothesis if  $t$  is negative. In this case the impact of the origin is smaller for the tolerant-destination mobile (i.e.  $p + t$ ) than for the intolerant-destination mobile (i.e.  $p$ ).

Finally, we expected that downward mobility may have an additional effect independent of the origin and destination categories due to the frustration that accompanies downward mobility. The full model is given by:

$$Y_{ijk} = (p + tx_{ijt})\mu_{ii} + (1 - (p + tx_{ijt}))\mu_{jj} + fx_{ijf} + \sum_b \beta_b x_{ijb} + \epsilon_{ijk} \quad (\text{Model 3})$$

Where the dummy variable  $x_{ijf}$  takes the value 1 for the downward mobile and 0 otherwise. An  $f$  larger than 0 is corroborative evidence for the *frustration Hypotheses*.

In the result section below we discuss the parameter estimates of model 2 and 3. These models show the relative impact of origin and destination for the tolerant-destination and intolerant-destination mobile and whether there are additional mobility effects above origin and destination specific acculturation mechanisms.

## Results

### *Intergenerational class mobility*

Before we discuss class mobility effects we briefly describe the distribution of antagonistic attitudes across immobile respondents and the impact of the included covariates. Table II shows that in The Netherlands, social class has a non-linear relationship with antagonistic attitudes. The estimates of the diagonal cell parameters ( $\mu_{11}$ ,  $\mu_{22}$ ,  $\mu_{33}$ ,  $\mu_{44}$ ,  $\mu_{55}$ ,  $\mu_{66}$ ) refer to the mean values as expressed by the stable members of the specific social position. Thus, the immobile socio-cultural specialists have the lowest level of stereotypical attitudes (1.55) and feelings of ethnic threat (1.75), and have the least opposition to an ethnically mixed marriage (6.22) (Table II, models 2). Of the respondents

**Table II:** Parameter estimates from diagonal mobility models for intergenerational class mobility in The Netherlands (native Dutch only, students excluded)

	Stereotypes						Ethnic threat						Intermarriage					
	Model 2		Model 3		Model 2		Model 3		Model 2		Model 3		Model 2		Model 3			
	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE		
<i>Mobility Parameters</i>																		
p: Salience parameter (weight of origin)	0.46	0.22	0.26	0.28	0.76	0.19	1.00	0.29	0.81	0.23	1.00	0.23	0.81	0.23	1.00	0.23		
t: Tolerance parameter	-0.46	0.31	-0.26	0.34	-0.76	0.27	-0.99	0.33	-0.74	0.30	-0.90	0.28	-0.74	0.30	-0.90	0.28		
f: Frustration parameter	N.A.		-0.04	0.05	N.A.		0.08	0.07	N.A.		0.29	0.13	N.A.		0.29	0.13		
<i>Attitudes of immobile (estimated means)</i>																		
$\mu_{11}$ : Technocrats	1.67	0.05	1.67	0.05	1.84	0.07	1.84	0.07	1.84	0.18	1.84	0.20	1.84	0.18	1.84	0.20		
$\mu_{22}$ : Socio-cultural specialists	1.55	0.07	1.54	0.07	1.75	0.08	1.76	0.08	1.75	0.21	1.76	0.22	1.75	0.21	1.76	0.22		
$\mu_{33}$ : Routine non-manual occupations	1.71	0.05	1.72	0.05	1.92	0.07	1.92	0.07	1.92	0.19	1.92	0.19	1.92	0.19	1.92	0.19		
$\mu_{44}$ : Small employers	1.95	0.09	1.94	0.08	2.08	0.08	2.06	0.07	2.08	0.36	2.06	0.37	2.08	0.36	2.06	0.37		
$\mu_{55}$ : Manual supervisors and skilled manual occupations	1.78	0.05	1.79	0.05	2.25	0.09	2.16	0.06	2.25	0.26	2.16	0.27	2.25	0.26	2.16	0.27		
$\mu_{66}$ : (Semi-)unskilled manual occupations	1.89	0.05	1.89	0.05	2.19	0.06	2.27	0.08	2.19	0.17	2.27	0.19	2.19	0.17	2.27	0.19		
<i>Covariates</i>																		
$\beta_{sex}$ : Sex (male is ref. category)	-0.03	0.03	-0.03	0.03	0.05	0.04	0.03	0.04	0.05	0.10	0.15	0.11	0.05	0.10	0.15	0.11		
$\beta_{cohort}$ : Birth year (1960 = 0)*10	-0.09	0.01	-0.09	0.01	0.02	0.01	0.02	0.01	0.02	0.05	-0.25	0.05	0.02	0.05	-0.25	0.05		
$\beta_{church}$ : Church attendance*10	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.03	0.14	0.03	0.02	0.03	0.14	0.03		
<i>Educational level respondent (elementary and lower vocational is ref. category)</i>																		
$\beta_{edu1}$ : University	-0.46	0.06	-0.46	0.06	-0.68	0.08	-0.68	0.08	-0.68	0.20	-1.23	0.20	-0.68	0.20	-1.23	0.20		
$\beta_{edu2}$ : Professional college	-0.39	0.05	-0.39	0.05	-0.63	0.06	-0.63	0.06	-0.63	0.16	-0.90	0.16	-0.63	0.16	-0.90	0.16		
$\beta_{edu3}$ : O and A levels	-0.32	0.06	-0.32	0.06	-0.53	0.07	-0.53	0.07	-0.53	0.22	-0.61	0.22	-0.53	0.22	-0.61	0.22		
$\beta_{edu4}$ : Secondary vocational	-0.18	0.04	-0.18	0.04	-0.26	0.05	-0.26	0.05	-0.26	0.15	-0.30	0.15	-0.26	0.15	-0.30	0.15		
$\beta_{edu5}$ : Lower general secondary	-0.14	0.05	-0.14	0.05	-0.15	0.06	-0.15	0.06	-0.15	0.20	-0.35	0.20	-0.15	0.20	-0.35	0.20		
R <sup>2</sup>	0.15		0.15		0.16		0.16		0.16		0.06		0.16		0.07			
N	2518		2518		2517		2517		2517		3425		2517		3425			

Source: SOCON 1995, 2000, 2005; NKPS 2002

who have not experienced mobility, the small employers hold the most stereotypical views regarding ethnic out-groups (1.95, Table II, model 4) and opposition to ethnic heterogamy is most prevalent among the self-employed as well (7.91, Table II, models 2). Feelings of ethnic threat are however most prevalent among manual labourers. This may reflect the level of objective economic competition members of these groups face from ethnic minorities. While the order of social classes on the level of antagonistic attitude is usually similar across stereotypes, ethnic threat, and intermarriage, the exact ordering of social classes on the level of antagonistic attitude depends on the specific attitude in question.

Men and women do not differ in the level of stereotypical attitudes and feelings of ethnic threat but women express more opposition to ethnic intermarriage than men. Younger birth cohorts express lower levels of stereotypes, ethnic threat, and ethnic exclusionism. People who more frequently attend church express higher levels of antagonistic attitudes than those who attend less frequently. The higher one's educational level the lower the level of antagonistic attitudes expressed (Table II, models 2).

To test our hypotheses we now turn to the estimates of the mobility parameters. The relative influence of the class of origin compared to the class of destination is  $p$  for the intolerant-destination mobile and  $p + t$  for the tolerant-destination mobile. Downward mobility was expected to increase feelings of subjective deprivation, frustration, and perceptions of economic competition. Effects of downward mobility which work independently of the acculturation mechanism are expressed by the frustration parameter  $f$ . First we notice that with respect to stereotypes and ethnic threat there are no such downward mobility effects (Table II, models 3) and it suffices to look at the parameter estimates of models 2. With respect to opposition to ethnic intermarriage however, we do find a significant effect of downward mobility independent of origin and destination effects ( $f = 0.29$ ,  $SE = 0.13$ , Table II, model 3). This provides corroborative evidence for the downward mobility hypothesis. That we only found confirmation for the frustration hypothesis with respect to opposition to ethnic intermarriage may be related to the fact that ethnically mixed marriage is the most intimate form of inter-ethnic contact and the one to which there is by far the highest level of expressed antagonistic attitudes toward ethnic out-groups. It may be more acceptable to express frustrations openly regarding ethnic marriage given the high level of opposition to it.

For all distinguished negative attitudes, we find that the destination class provides a stronger reference point for those whose father was a member of a less tolerant social class (i.e. the tolerant-destination mobile) than for those whose father was a member of a more tolerant social class (i.e. the intolerant-destination mobile). The tolerance parameters  $t$  are  $-0.46$  ( $SE = 0.31$ ),  $-0.76$  ( $SE = 0.27$ ), and  $-0.90$  ( $SE = 0.28$ ) for respectively stereotypes, ethnic threat,

and opposition to ethnic intermarriage (Table II). This clearly supports the tolerance hypothesis in which we stated that acculturation to the attitudes of a new social position would be easier if the norms are more in line with the dominant (i.e. more tolerant) attitudes of society.

The relative impact of the origin and destination class thus depends on the tolerance direction of mobility. For the tolerant-destination mobile the impact of the origin is negligible since the  $p$  and  $t$  parameter estimates add up to approximately zero: 0.46–0.46; 0.76–0.76; 1.00–0.90, respectively for stereotypes, ethnic threat, and opposition to ethnic intermarriage (Table II). But strikingly, the class origin has a substantial influence compared to the destination class for the mobile who moved to a less tolerant destination class. With respect to stereotypes the origin class is then equally important ( $p = 0.46$ , Table II, model 2) and the origin class then even has a stronger impact among the intolerant-destination mobile with respect to ethnic threat ( $p = 0.76$ , Table II, model 2) and is the sole influence with respect to ethnic intermarriage ( $p = 1.00$ , Table II, model 3).

To illustrate the impact of mobility, consider a male born in 1960 who does not go to church and has only minimal schooling and whose father worked in a factory as an unskilled labourer (unskilled manual occupation). If this man starts his own small business (small employer) he would move up to a class where the core members are more opposed to ethnic intermarriage. We would predict that he would not acculturate to these attitudes since  $p = 1.00$  and would predict his score on the intermarriage scale resembles the score of the core members of the origin category (6.81). If on the other hand, he were able to move up the social ladder even further, say to the class of socio-cultural specialists, his upward mobility would take him into a class where the core members are less opposed to ethnic intermarriage than the core members of his origin position. In the latter case we predict that his score on the intermarriage scale closely resembles the score of core members of his new and more tolerant class (6.27).<sup>6</sup>

### ***Intergenerational educational mobility***

Immobile respondents within the highest educational position consistently express the lowest level of antagonistic attitudes: 1.15, 1.11, and 5.53 for respectively ethnic stereotypes, ethnic threat, and opposition to ethnic intermarriage, as shown in models 2 of Table III. Immobile people with no or only elementary education express the highest levels of ethnic stereotypes (1.75), feel more threatened by ethnic minorities (2.03), and are in general more opposed to ethnically mixed marriages (7.07) (Table III, models 2). Not surprisingly, the estimates of the covariates do not differ substantially from the estimates obtained from the class mobility models and are therefore not further discussed.

**Table III:** Parameter estimates from diagonal mobility models for intergenerational educational mobility in The Netherlands (native Dutch only, age > 25)

	Stereotypes						Ethnic threat						Intermarriage					
	Model 2		Model 3		Model 2		Model 3		Model 2		Model 3		Model 2		Model 3			
	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE		
<i>Mobility Parameters</i>																		
p: Salience parameter (weight of origin)	0.19	0.19	0.54	0.34	0.24	0.15	0.39	0.26	0.73	0.18	0.87	0.28						
t: Tolerance parameter	-0.19	0.24	-0.54	0.35	-0.24	0.18	-0.38	0.26	-0.66	0.24	-0.79	0.31						
f: Frustration parameter	N.A.		0.09	0.09	N.A.		0.07	0.11	N.A.		0.15	0.22						
<i>Attitudes of immobile (estimated means)</i>																		
$\mu_{11}$ : University	1.15	0.05	1.16	0.05	1.11	0.06	1.11	0.06	5.33	0.15	5.31	0.15						
$\mu_{22}$ : Professional college	1.23	0.05	1.22	0.05	1.20	0.06	1.20	0.06	5.64	0.13	5.62	0.14						
$\mu_{33}$ : O and A levels	1.38	0.06	1.39	0.06	1.33	0.07	1.33	0.08	6.2	0.17	6.20	0.17						
$\mu_{44}$ : Secondary vocational	1.52	0.04	1.52	0.04	1.64	0.05	1.63	0.05	6.71	0.11	6.71	0.11						
$\mu_{55}$ : Lower general secondary	1.58	0.05	1.56	0.05	1.78	0.06	1.78	0.06	6.45	0.14	6.44	0.14						
$\mu_{66}$ : Elementary school and lower vocational school	1.75	0.04	1.76	0.04	2.03	0.05	2.03	0.05	7.07	0.11	7.06	0.11						
<i>Covariates</i>																		
$\beta_{sex}$ : Sex (male is ref. category)	-0.05	0.03	-0.05	0.03	0.03	0.04	0.02	0.04	0.13	0.08	0.13	0.08						
$\beta_{cohort}$ : Birth year (1960 = 0)*10	-0.12	0.01	-0.12	0.01	-0.01	0.02	-0.01	0.02	-0.37	0.03	-0.37	0.03						
$\beta_{church}$ : Church attendance*10	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.10	0.02	0.10	0.02						
R <sup>2</sup>	0.15		0.15		0.14		0.14		0.10		0.10							
N	2339		2339		2341		2341		5483		5483							

Source: SOCON 1995, 2000, 2005; NKPS 2002

The estimates of the downward mobility parameters are in the predicted direction but they never reach significance (Table III, models 3). We have to reject the downwards mobility hypothesis. Within Table III, models 2, the estimates of the tolerance parameter are in the predicted direction (negative) but only reach significance with respect to ethnic intermarriage ( $t = -0.66$ ,  $SE = 0.24$ ).

From Table III models 2, one's own educational achievements are more important compared to father's educational position for the explanation of stereotypical attitudes and feelings of ethnic threat. This holds for both intergenerational mobile respondents who obtained a higher degree – and in this case inherently occupy a more tolerant position – than their father and for respondents who did not succeed in obtaining a degree as high as their father. This supports the educational destination hypotheses. The educational destination hypothesis is also supported among the tolerant-destination mobile with respect to opposition to ethnic intermarriage ( $p + t = 0.73 - 0.66 < 0.5$ , Table III, model 3). Although the impact of the origin category on attitudes related to ethnic intermarriage is negligible for the mobile who reach a more tolerant educational position than their father, the impact of the origin category is even larger than the impact of the destination for the mobile who do not reach a more tolerant educational level ( $p = 0.73$ ,  $SE = 0.18$ ).

## Conclusion

Intergenerational mobility has a notable impact on antagonistic attitudes. People adapt to the attitudes of the destination category, but the extent of this attitudinal adjustment depends on the specific origin and destination combination. We view social strata as having core or typical attitudes which are expressed by the members who have not experienced intergenerational social mobility. If someone is socially mobile and enters a new social position with core members who are in general more tolerant toward ethnic minorities than the core members of the origin position, acculturation is easier and the impact of the origin is negligible. This holds for both types of intergenerational social mobility we investigated – intergenerational class and educational mobility – and for all three types of negative attitudes we consider: stereotypical attitudes, feelings of ethnic threat, and opposition to ethnic intermarriage. On the other hand, when the origin position is more tolerant than the destination position, the relative impact of the origin is substantial and sometimes exceeds the impact of the destination.

We interpreted origin effects as resulting from socialization processes taking place early in life. Destination effects could be both due to re-socialization later in life and due to shared experiences of ethnic threat (instrumental effects). With regard to educational mobility it is likely that the destination

affects antagonistic attitudes due to both instrumental and socialization effects since schools are important socializing agents. This may explain why the destination is more influential with respect to educational mobility than with respect to class mobility.

In The Netherlands, mobility affects antagonistic attitudes by origin and destination dependent acculturation. Acculturation to tolerant attitudes is easier than acculturation to intolerant attitudes. This finding supports what we have called the tolerance dominance hypothesis: acculturation to the level of antagonistic attitudes of the achieved social position will be stronger when these attitudes are more in congruence with the dominant culture of tolerance within society.

Due to modernization processes and educational expansion upward mobility is more prevalent than downward mobility. Although upward mobility is often synonymous with mobility to a more tolerant stratum, this is not always the case. Hence, we cannot deduce from our data that as time goes there will necessarily be a reduction in social intolerance. Moreover, antagonistic attitudes may become more prevalent among all social classes because of shifts in macro-sociological conditions such as public events linked to ethnic conflict (e.g. hate crimes), large scale immigration fluxes, or economic recessions.

We expected that downward social mobility would foster antagonistic attitudes due to feelings of frustration and increased perceptions of ethnic competition. This mobility effect should be visible on top of the acculturation effects following mobility. We only found corroborative evidence for the frustration hypothesis with respect to class mobility and opposition to ethnic intermarriage. We tentatively conclude that it is not the frustration of being downwardly mobile but more likely frustration of not reaching a social position higher than one's father that influences antagonistic attitudes. The frustration of not achieving intergenerational progress may also be felt by the immobile, whose upward social mobility has been blocked.

Our findings suggest that mobility effects may be generalized across different types of antagonistic attitudes and different forms of mobility. Even after taking into account respondent's education we find significant class mobility effects. This stresses the importance of class mobility effects. However, ideally one would want to analyse the consequences of educational and class mobility simultaneously. Unfortunately, our data does not permit this, since this would involve a four-dimensional table with many sparsely filled or empty cells. We hope that future research disentangles class mobility effects from educational mobility effects more clearly.

Previous empirical research found a modest influence of social origin on antagonistic attitudes toward ethnic minorities. We note, however, that these studies mostly applied standard regression and that mobility effects are not adequately modelled with standard regression or similar approaches. Diagonal mobility models allow the relative importance of origins and destinations to be

estimated. If they are not equally important this indicates a mobility effect. Past applications of diagonal mobility models identified various other effects of mobility (cf. De Graaf 1991; De Graaf, Nieuwbeerta and Heath 1995; Kelley and De Graaf 1997; Monden, De Graaf and Kraaykamp 2003; Sobel et al. 2004). We are the first to make a distinction between on the one hand upward and downward mobility and on the other hand mobility in the direction of dominant attitudes. We find that mobility to more tolerant destinations is associated with increased tolerance, but mobility to a less tolerant destination has hardly any influence on tolerance.

We hope that future research will further test our interpretation that acculturation is easier in the direction of 'dominant' attitudes. A necessary step in this analysis would be to theoretically define the 'dominant' attitudes in a society. At least three criteria are relevant: (1) the prevalence of the attitude in the society at large; (2) the extent to which state institutions actively promote the attitude in question; and (3) the extent to which expression of the opposite attitude is sanctioned by state institutions. Cross-societal comparative research provides a promising approach to better understand how variation in norms of tolerance conditions the effects of individual factors that predict antagonistic attitudes toward out-groups.

(Date accepted: November 2008)

## Notes

1. Suppose that  $Y_i$  is our dependent variable of interest and that  $x_f$  is a measure of the social status of the father and  $x_c$  is the social status of the child. Mobility may be conceptualized as the difference between these two statuses:  $x_f - x_c$ . Since:

$$Y_i = \alpha_f x_f + \alpha_c x_c + \alpha_m (x_f - x_c) + \varepsilon_i,$$

is equivalent to:

$$Y_i = \beta_f x_f + \beta_c x_c + \varepsilon_i, \text{ where } \beta_f = \alpha_f + \alpha_m \text{ and } \beta_c = \alpha_c - \alpha_m,$$

these models can not test for the presence of a social mobility effect since they incorporate this effect in the main effects of social origin and destination. Thus in the conventional standard regression approach there is nothing in between the additive model and the model in which every origin and destination combination cell is considered as unique.

The advantage of diagonal mobility models is that they offer parsimonious and

structured models of interactions. More importantly, diagonal mobility models are theoretically interpretable; the parameters refer to well conceptualized mobility mechanisms. See also Sobel (1981, 1985) and Sobel, Becker and Minick (1998).

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3. Our focus in this analysis is on openly expressed antagonistic attitudes expressed on survey measures asking about opinions of ethnic out-groups. We recognize some research suggests the existence of implicit attitudes of which respondents may be incompletely aware, but we lack measures of these constructs in our data, and moreover

we note that there remain many questions of interpretation of measures of implicit attitudes (Quillian 2006). We believe that openly expressed attitudes remain highly important in affecting ethnic relations.

4. People who became unemployed involuntarily and who want to work but remain unemployed for a long time are likely to feel frustrated. Note however that most unemployment in The Netherlands is frictional unemployment which may be voluntary. Unfortunately, within our data it is not possible to distinguish between frictionally unemployed and structurally unemployed. We therefore decided not to treat the unemployed as a separate social class position.

5. We ordered the educational levels from high to low as followed: (1) university, (2) college (HBO), (3) O and A levels (HAVO/VWO), (4) secondary vocational (MBO), (5) lower secondary education (MAVO) and (6) elementary school and lower vocational school (LBO). We ordered

the social classes as followed: (1) technocrats and socio-cultural specialists, (2) routine non-manual occupations; (3) small employers, (4) manual supervisors and skilled manual occupations, and (5) semi-unskilled manual occupations and farm labourers. Note that the technocrats and socio-cultural specialist are assumed to be of equal status. Movement out of the service class may be the most significant (downward) mobility experience. In subsequent analysis, a dummy variables referring to mobility out of the service class did not lead to different results than the dummy variable capturing more general downward mobility experiences (results on request).

6. This is calculated as:  $(1 - 0.9) * 6.81 + (1 - (1 - 0.9)) * 6.21 = 6.27$ . Note that if his father would have belonged to the socio-cultural specialists and the respondent himself would have ended up in the lowest class, we would predict a different score on the intermarriage scale, namely:  $1 * 6.21 + (1 - 1) * 6.81 + 0.29 = 6.50$ .

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