

Intermarriage and the risk of divorce in the Netherlands: The effects of differences in religion and in nationality, 1974–94

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A textbook hypothesis about divorce is that heterogamous marriages are more likely to end in divorce than homogamous marriages. We analyse vital statistics on the population of the Netherlands, which provide a unique and powerful opportunity to test this hypothesis. All marriages formed between 1974 and 1984 (nearly 1 million marriages) are traced in the divorce records and multivariate logistic regression models are used to analyse the effects on divorce of heterogamy in religion and national origin. Our analyses confirm the hypothesis for marriages that cross the Protestant–Catholic or the Jewish–Gentile boundary. Heterogamy effects are weaker for marriages involving Protestants or unaffiliated persons. Marriages between Dutch and other nationalities have a higher risk of divorce, the more so the greater the cultural differences between the two groups. Overall, the evidence supports the view that, in the Netherlands, new group boundaries are more difficult to cross than old group boundaries.

Keywords: divorce; ethnicity; heterogamy; intermarriage; marriage; nationality; religion

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Introduction

A classic hypothesis about divorce is that when husband and wife have dissimilar characteristics, their marriage is more likely to end in divorce. One reason to expect this relationship is that differences in religion, ethnicity, and other social characteristics, are correlated with differences in tastes, values, and communication styles (Kalmijn 1998). Such differences make it more difficult for spouses to understand each other, reduce the number of activities they enjoy doing together, and limit the degree to which they can confirm each other's values and world-views. A second reason to expect divorce to be more likely is that marrying someone with different characteristics implies crossing a social boundary in society. Because marrying outside the group is often normatively disapproved of, mixed marriages may receive less support from the social networks of the respective spouses than other marriages. Although lack of social support does not necessarily make a marriage unstable or unhappy, support or disap-

proval from friends and family members probably does make a difference when the relationship is troubled.

The notion that heterogamy increases the probability of the marriage ending in divorce is a 'textbook hypothesis' in the social sciences and is widely believed to be true in the general public (Glenn et al. 1974). Several designs have been used to test the hypothesis. The oldest studies relied on vital statistics and matched divorce records to marriage records (Monahan and Kephart 1954; Burchinal and Chancellor 1963). Using information about brides and grooms that is included on the marriage record, these studies were able to assess whether mixed marriages had a higher risk of divorce than other marriages. Later studies relied on cross-sectional survey data and used measures of perceived marital stability or marital satisfaction as a dependent variable (Heaton 1984; Shehan et al. 1990). The most recent studies used prospective or retrospective longitudinal survey data and applied regression models to compare the probability of divorce for heterogamous and homogamous couples

(Schwertfeger 1982; Lehrer and Chiswick 1993; Jones 1996).

What does the evidence show to date? The heterogamy hypothesis has been studied for a range of characteristics, including education (Tynes 1990), social class (Glenn et al. 1974; Jalovaara 2003), religion, and ethnicity. Our focus is on religion and ethnicity and we therefore limit our overview to these two. Studies using actual divorce risks as the outcome generally find support for the hypothesis, although most of the studies are now rather old (Bumpass and Sweet 1972; Becker et al. 1977; Michael 1979; Lehrer 1996; Brüderl and Engelhardt 1997). An important recent study comes from the USA (Lehrer and Chiswick 1993). Using a retrospective survey with detailed information on denominations, Lehrer and Chiswick show, among other things, that a marriage between a Catholic and a Protestant has a higher divorce risk than that of a marriage between two Catholics or between two Protestants. In addition, a marriage between members of different Protestant denominations also has a higher divorce risk.

An important recent study of the ethnic dimension of the heterogamy hypothesis has been conducted in Hawaii (Jones 1996). In this analysis, Jones analyses two Asian ethnic groups and shows that there are large differences between these groups in the risk of divorce. However, in ethnically mixed marriages, the risk of divorce was in between the risk for the two types of homogamous marriage between similar individuals in the same ethnic group. Jones interprets this as a convergence between groups rather than a heterogamy effect (Jones 1996). A recent European study focusing on linguistic heterogamy finds that marriages between a Swedish-speaking and a Finnish-speaking person have a divorce risk that is a little above the highest level of the two language groups, and concludes in favour of the heterogamy hypothesis (Finnäs 1997).

In sum, the evidence that religious and ethnic heterogamy affects the risk of divorce is moderately positive. The evidence accumulated in the USA is substantial, at least for religious intermarriage. Little is known about the relationship in European countries because less research has been done on the issue in these countries. In this paper, we present an examination of the effect on divorce of heterogamy in religion or nationality, by analysing vital statistics for the Netherlands. By matching marriage records and divorce records from the population registers of all Dutch municipalities, we are able to assess whether heterogamous marriages are more likely than homogamous marriages to end in divorce. An

obvious drawback of these data is that the number of characteristics on the marriage record is limited; the individual characteristics in our data are religion, nationality, age, and previous marital status. Despite this drawback, we believe that vital statistics provide a powerful opportunity to test the heterogamy hypothesis. The data cover the entire population of marriages in a given period rather than a sample of marriages and the number of marriages we are able to analyse is therefore quite large (nearly 1 million). Another advantage of our data is that they are prospective rather than retrospective. Hence, our measures of religiosity will not be coloured by recall bias. In sum, in this paper, we restore one of the older methods for evaluating the heterogamy effect, a method we believe was abandoned too soon.

The case of the Netherlands is a particularly interesting one because of its tradition of pillarization (the segmentation of Dutch society into four dominant interest groups based on religion or ideology and class) that has made the social, institutional, and geographical boundaries between religious groups quite strong. The period of pillarization was strongest in the first half of the twentieth century but the period since the 1950s has been characterized by rapid secularization. Church membership declined for all groups except for the most orthodox Protestant groups, church attendance among church members declined, traditional religious beliefs became less common, and religious intermarriage increased (Hendrickx et al. 1991; Becker and Vink 1994; Felling et al. 2000). In comparison with the USA or with Southern Europe, the Netherlands is now relatively secular and it has experienced stronger trends in this respect than other countries (Halman and Riis 1999; Stark 1999). The religious groups we consider in our work are: (i) Catholics, (ii) 'Dutch Reformed Protestants' (referred to as *Reformed*), (iii) 'Re-Reformed Protestants' (referred to as *Orthodox*), (iv) Jews, and (v) Unaffiliated persons. These represent the largest groups in the Netherlands (with the exception of Jews, who form a very small group).

The role of nationality in the Netherlands is different from that in traditional immigrant societies. The most important immigrant groups in the Netherlands are the Moroccans and the Turks. Both these groups were initially recruited as labour immigrants during the 1960s and 1970s, and both have since then grown in size, partly through family reunification in the 1980s and partly through the marrying of spouses from abroad in the 1990s. The two groups are nonetheless small, constituting about 4 per cent of

the population. Levels of intermarriage remain very low and many Turks and Moroccans marry a spouse from abroad (Esveldt and Schoorl 1998; Harmsen 1998; Van Huis and Steenhof 2003). The ethnic groups we consider in our analyses are: (a) Moroccan, (b) Turkish, (c) Western European, (d) Southern European, and (e) Dutch. We use nationality to measure ethnicity but, recognizing that nationality is a narrow definition of ethnicity, we use the term 'nationality intermarriage' rather than 'ethnic intermarriage' to refer to marriages between partners of different national origin.

We analyse religion and nationality in one study because they represent old and new bases for group identification and group solidarity in society. Owing to secularization on the one hand, and increasing immigration on the other, we suspect that in contemporary times religious boundaries are less salient than ethnic boundaries. As a consequence, we also believe that intermarriage across religious boundaries will have a weaker impact on divorce than intermarriage across nationality boundaries.

Theoretical background and hypotheses

The general hypothesis we test is that marriages between individuals who differ in religion or nationality have a higher risk of divorce than homogamous marriages. The underlying reasoning is that differences in these characteristics will make it more difficult for partners to understand each other, will make it more difficult for them to make joint decisions (e.g., about childbearing and upbringing), and will lead to more disapproval from their immediate social world. In further specifying this hypothesis, we need to take into account the fact that religious groups and nationalities also have different risks of divorce. More orthodox religious groups tend to have a lower risk of divorce than more liberal groups and the unaffiliated generally have more unstable marriages than the various religious groups (Lehrer and Chiswick 1993; Booth et al. 1995; Wagner and Weiss 2003; Kalmijn et al. 2004). Similarly, there may be differences among nationality groups in the risk of divorce, depending, for example, on the value orientation of the sending country (Jones 1996).

We therefore introduce two hypotheses. The first hypothesis is the *main-effects hypothesis*, which argues that the more traditional the value orientation of a religious or national origin group, the lower the risk of divorce. In the Netherlands, the Orthodox Protestants are the most traditional, the Unaffiliated

are the most liberal, and the Reformed Protestants and Catholics are in between these extremes (Felling et al. 2000). The position of Jews in the list is more difficult to determine but is probably somewhere at the more liberal end of the continuum (Van Solinge and De Vries 2001). Using data from the World Values Studies and from immigrant surveys in the Netherlands, we expect that Moroccan and Turkish persons are more traditional, that Western European and Dutch persons are the most liberal, and that Southern Europeans are in between (Inglehart 1997; Uunk 2003).

Our second hypothesis concerns the effect of the spouses' religion and national origin, and argues that when the religions or national origins of the two spouses are dissimilar, the risk of divorce is higher. We call this the *heterogamy hypothesis*. Assuming that the main-effects hypothesis is valid, we need to decide what constitutes evidence for the heterogamy hypothesis. If the divorce risk of a mixed marriage (between, say, a member of group A and a member of group B) is higher than the divorce risk of AA marriages but lower than the divorce risk of BB marriages, we argue that adaptation is taking place. The behaviour of those couples is in between the two groups, and one can argue that this is simply the average of the two group effects and not a heterogamy effect (Jones 1996). To analyse real heterogamy effects, we employ both a strong and a weak form of the heterogamy hypothesis. According to the *strong heterogamy hypothesis*, AB marriages will have a divorce risk that is higher than the maximum divorce risk of AA and BB marriages. For example, we expect that a marriage between a Catholic and an unaffiliated person will have a divorce risk that is higher than the (already) high risk for unaffiliated couples. According to the *weak heterogamy hypothesis*, AB marriages will have a divorce risk that is higher than the average risk of AA and BB marriages. In our example, the risk of the mixed group will be higher than the average of the low risk for Catholics and the high risk for unaffiliated couples.

There are different types of heterogamous marriages and this allows us to formulate two additional hypotheses (cf., Lehrer and Chiswick 1993). One of these is that the more dissimilar are two groups in their value orientation, the higher the risk of divorce. This implies that the highest risk of divorce will be observed for mixed marriages when one partner is Orthodox and the other unaffiliated. The lowest risk will be observed for a marriage in which one partner is Catholic and the other Reformed. The other mixed marriages will be in between these two

extremes. For nationality groups, we expect the highest risk for mixed marriages between Dutch and Moroccan spouses or between Dutch and Turkish spouses. A somewhat lower risk will exist for a marriage between a Dutch spouse and one from Southern Europe, and the lowest risk will exist for a marriage in which one spouse is Dutch and the other a Western European immigrant.

A second hypothesis is that there can also be a social boundary between religious or nationality groups, regardless of the value orientation they have. We would expect that the stronger the social boundary between groups, the higher the risk of divorce. When social boundaries are strong, the support for the marriage in the social worlds of the two spouses will be weaker and this may lead to a higher risk of divorce. This line of reasoning applies most clearly to the contrast between Catholics and Protestants, which has historically been an important divide both in the Netherlands and elsewhere (Lenski 1961; Hendrickx et al. 1991; Kalmijn 1991). We would therefore expect marriages between Catholics and Orthodox or Reformed spouses (both Protestant) to be more unstable than other mixed marriages. A similar argument applies to the position of Jews. When looking at intermarriage in the Netherlands, there appears to be a clear social divide between Jews and other groups (Ultee and Luijkx 1998; Van Solinge and De Vries 2001). Hence we expect mixed marriages involving Jews to be more unstable than other mixed marriages.

The hypothesized effects of social boundaries and value differences may both apply at the same time. In Table 1, we present our predictions in a more systematic fashion. The assumed cultural distances in Table 1 are indicated by the letter A and the assumed social boundaries by the letter B. In most cases, the combined implications of the two hypotheses are clear, but there are also cases when predictions cannot be made. Marriages between the equally traditional Catholics and Reformed Protestants may be more or less stable than marriages between Reformed and Orthodox Protestants,

depending on whether it is the social boundary or the value differences that have the greater effect.

A potential problem of interpretation in the analysis of heterogamy effects is that heterogamous marriages may have confounding characteristics that predispose them to higher divorce rates. This is probably most likely to occur in the case of religion. It is likely that religiously heterogamous couples attach less meaning than homogamous religious couples to religious norms and values. Since fidelity to religious norms and values reduces the risk of divorce, mixed couples may be more likely to divorce, not because they have dissimilar tastes and values, but because they are less religious (Shehan et al. 1990). Although the causal nature of the influence of heterogamy can best be studied in longitudinal surveys, our register data contain a unique variable allowing us to rule out a substantial part of this competing religious interpretation. More specifically, we know whether couples married in church, and this gives us information about the degree to which couples observed religious norms and values at the time of their wedding. If the heterogamy hypothesis is true, we would expect the effect of religious heterogamy to be present both for couples who did not marry in church and for couples who did.

Another potential problem lies in the possibility of conversion. Heterogamous couples may become homogamous before their wedding if one spouse switches to the faith of the other. Religious switching is a frequent response to intermarriage and it can occur both before and after marriage (Sherkat 1991). Lehrer and Chiswick (1993) found that marriages in which conversion had taken place were equally stable and in some cases more stable than homogamous marriages. This can be due to such couples having a stronger religious orientation. Alternatively, we can regard conversion as an investment in the relationship and assume that only someone in a very strong relationship would be willing to make such an investment. The data we use do not allow us to examine conversions, but we

Table 1 Sources of possible differences in divorce risks between spouses in mixed marriages in the Netherlands:¹ value orientation (A) and social boundary (B)

	Unaffiliated	Catholic	Reformed	Orthodox	Jewish
Unaffiliated	–				
Catholic	A	–			
Reformed	A	B	–		
Orthodox	2A	A+B	A	–	
Jewish	B	A+B	A+B	2A+B	–

¹Reformed are 'Dutch Reformed Protestants', Orthodox are 'Re-Reformed Protestants'.

do need to consider the bias that may stem from including in the homogamous category couples in which one spouse converted before marriage. If we could have classified the convert marriages as heterogamous—which would probably have been more true to the facts—the risk of divorce in the homogamous group would probably not have changed but the risk of divorce in the heterogamous group would have declined. Hence, we are probably overestimating the heterogamy effect somewhat.

A partly similar problem lies in the effect of naturalization. We are using nationality to define groups, and a small segment of immigrants are naturalized (CBS 1997). Like conversion, naturalization can be a response to the entry into a mixed marriage. If naturalization occurs before marriage, the marriage will be classified as homogamous when in fact it is mixed. Naturalization can also occur for other reasons, however, and in such cases, the possibility exists that some of our mixed marriages may in fact be homogamous, that is, between a naturalized and a non-naturalized immigrant. Because both misclassifications may occur, it is unclear what the direction of the bias would be. We are not aware of studies that investigate the relationship between naturalization and intermarriage.

Our final hypothesis concerns the timing of divorce. We compare divorce after the first 5 years with divorce in the next 5 years for marriages still intact after the first 5 years. If religious or nationality differences form an impediment to the viability of the marriage, we think this will probably become apparent early on in the marriage. Later in the marriage, such differences will either have been resolved—people can learn to live with their differences and the social surrounding can gradually become more accepting of the marriage—or the marriages with the greatest differences will not have survived, leaving a less divorce-prone heterogamous group behind (South and Spitze 1986). For that reason, we expect the heterogamy effect to be more pronounced in the first 5 years than in the second.

Data

All municipalities in the Netherlands provide information about all marriages and divorces registered in their municipality. For our analysis, we consider all marriages formed in the period 1974–84 and we trace these marriages in the divorce records for the period 1974–94. This design enables us to assess the risk of divorce in the first 10 years of

marriage. For the earlier marriages, we could also examine divorce risks at longer durations, but for the sake of simplicity, we focus on the 10-year risk only. Note that divorces that occurred abroad cannot be studied with the data at hand, which may lead to an underestimation of the divorce risk for foreign nationality groups.

To match divorce to marriage records, we used a combination of characteristics that are available in both files: the municipality of the marriage, the exact date of the marriage, and the years of birth of *both* spouses. In combination, these characteristics provide an almost unique key; only 3 per cent of the marriages in the period 1974–84 have a duplicate key. We removed these duplicates before tracing marriages in the divorce records. After these preparations, the total number of marriages that we could analyse was 931,198. Of these marriages, 116,269 (12.5 per cent) were divorced within 10 years.

The accuracy of the matching operation was vulnerable to registration and coding errors. The only way of assessing the number of errors was by tracing ‘in reverse’, that is, tracing from divorce to marriage records. For every divorce, we should have been able to find a marriage, and the number of marriages we were unable to find provides a clue to the quality of our matching procedure. Of the divorces in the period 1974–94 (occurring to marriages registered in 1974–84), we were able to find 92 per cent in the 1974–84 marriage records. We conclude that, although it was not 100 per cent accurate, the matching operation was relatively successful.

Measurement of religion and national origin

All characteristics of husband and wife are taken from the marriage registration data and refer to the time of marriage. With respect to church affiliation, seven categories are available: no church affiliation, Roman Catholic, Reformed, Orthodox, Otherwise Protestant, Jewish, and Other/Unknown. A possible disadvantage of our measure is that some people may have abandoned their religious affiliation without officially reporting this on the municipal registration form on the day of their wedding. We do not believe this is a problem, however. Survey data of the 1970s and 1980s indicate that, in the period under investigation, about 25–30 per cent of the population were not church members (Becker and Vink 1994), and these figures correspond quite well

with the number of non-church members in the marriage files.

Our approach to nationality intermarriage is based on the information available on the marriage record: the nationality of husband and wife. Nationality is recoded into six categories: Dutch, Western Europe, Southern Europe (Portugal, Spain, Italy, the former Yugoslavia, and Greece), Turkey, Morocco, and Other. As noted earlier, nationality is a relatively narrow definition of ethnicity. In the 1990s, about a third of first-generation Turks and about a quarter of first-generation Moroccans had Dutch nationality (CBS 1997). When someone has both Dutch and a foreign nationality, Statistics Netherlands codes this on the marriage record as Dutch nationality. For the second generation, the percentages of Turks and Moroccans with Dutch nationality are somewhat higher than for the first generation.

The 'Other' categories of the religion and nationality variables cannot be differentiated further. Since these categories are heterogeneous, their marriage parameters are difficult to interpret and we do not present them in the tables and text. Because the 'Other Protestant' group is also mixed, containing both liberal and more fundamentalist groups, we do not use marriages with a spouse in this category for testing the heterogamy hypothesis. We do keep all the 'Other' categories in the analyses. We do not have a special category for Islam in the data. Since virtually all Turks and Moroccans in the Netherlands are Islamic (Van Tubergen 2003), analysing these two dimensions simultaneously would not yield more information.

The percentage distribution of brides and grooms married between 1974 and 1984 by religion, nationality, and other characteristics is presented in Table 2.

Method

In the analyses we look at the observed divorce risks after 10 years of marriage for every combination of church affiliation and nationality. Next we look at divorce risks obtained from a logistic regression model, in which the influence of the two types of heterogamy are analysed simultaneously, and in which we also statistically control for other demographic characteristics. We initially focus on the contrast between divorce and no divorce within 10 years. To test our hypothesis about the timing of

Table 2 Percentage distribution of brides and grooms married in the Netherlands 1974–84, by religion, nationality, and other characteristics

		Husband	Wife
Religion	None	26.6	25.0
	Catholic	41.7	42.9
	Reformed	17.9	18.4
	Orthodox	9.2	9.5
	Other Protestant	0.7	0.7
	Jewish	0.1	0.1
	Other	3.8	3.4
	Nationality	Dutch	95.5
Western		1.3	1.2
European			
Southern		0.6	0.4
European			
Turkish		0.4	0.3
Moroccan		0.3	0.2
Other		1.8	2.0
Age	<20	2.0	14.9
	20–24	48.4	58.8
	25–29	32.7	16.9
	30–34	9.4	5.4
	35–39	3.9	2.3
	40–44	2.1	1.1
	45–49	1.4	0.5
Previous marital status	Never married	90.3	91.5
	Widowed	0.7	0.4
	Divorced	9.1	8.0
Married in church	Yes		51.0
	No		49.0
Population size in municipality of marriage	>100,000		17.6
	50,000–100,000		19.9
	20,000–50,000		20.0
	10,000–20,000		22.7
	<10,000		19.0

Source: Marriage and Divorce Files, Statistics Netherlands (CBS), $N=931,198$. Province and year of marriage not presented.

divorce, we estimate the model separately for divorce after the first 5 years and for divorce in the ensuing 5 years for marriages still intact after the first 5 years. We abstain from applying event history techniques, primarily because it was not possible to estimate such models with the sample size available. Since we do not have time-varying covariates, we do not think this is an important disadvantage.

Our logistic regression model contains the two central independent variables: (i) a set of 48 (7×7 categories minus 1 reference category) dummy variables for the combination of husband's and wife's church affiliation, (ii) a set of 35 (6×6 minus 1) dummy variables for the combination of husband's and wife's nationality. These dummy

variables capture both the main effects and the interaction effects. The model also contains the following control variables: (i) a set of 48 dummy variables for the combination of husband's and wife's age group at marriage, (ii) a set of 8 dummy variables for the combination of husband's and wife's previous marital status, (iii) a set of 10 dummy variables for each year of marriage, (iv) a set of 4 dummy variables for the degree of urbanization of the municipality in which the marriage took place, (v) a set of 11 dummy variables for the province in which the marriage took place.

Using the parameters of this model, we calculate predicted divorce risks. To calculate the predicted risk, all the independent values were set at a mean value and the marital-status variable was set to the most common value (never married). The corrected risks give us the possibility of determining the net contribution of heterogamy in religion and nationality, which is necessary since these types of heterogamy may be correlated with other variables. It is also important to consider nationality and religion in one model because the religious composition of the nationally mixed marriages will not be random. For example, it is plausible that the native spouse of someone of different national origin will be unaffiliated, and this alone will already lead to a relatively high risk of divorce. We note that not all combinations will be present in the data (e.g., there will be few Catholic Turks). This would be a statistical problem only if interaction effects between religion and nationality on divorce were considered, but we do not consider them.

Note that the data do not allow us to detect mortality. If one or both spouses die, the marriage is treated as 'not divorced'. Although we did not expect strong biases from mortality in the effects of heterogamy on divorce, we still decided to limit our analysis to marriages in which both spouses were younger than age 50 at the time of marriage. Because we focus on the first 10 years of marriage, this reduces mortality effects considerably. Survival chances between ages 50 and 60 are high in the Netherlands—90 per cent for men and 93 per cent for women.

Analyses and results

In Table 3 we show the 10-year probabilities of divorce for marriages representing all combinations of husband's and wife's religious affiliation. Table 7 shows the probabilities for all combinations of husband's and wife's nationality. When testing our

hypotheses, we draw attention to the corrected risks of divorce. Tables 4–6 present results from the models focusing on the effects of religious heterogamy. Tables 8 and 9 present information on the effects of nationality differences between husband and wife.

Religion

Table 3 shows the risk of divorce by the religious affiliation of husband and wife and the frequencies of occurrence of all combinations of religious affiliation in marriages in the Netherlands between 1974 and 1984. It is clear that most people marry within their own group. Since intermarriage is highly dependent on the relative size of a group—smaller groups being less able to marry endogamously—we need to use odds ratios to measure differences in the likelihood of marriage within the same group (Kalmijn 1998). The odds ratios, which are not presented in Table 3, can be defined as the odds that, for example, a Catholic marries a Catholic (rather than a non-Catholic) divided by the odds that a non-Catholic marries a Catholic (rather than a non-Catholic). The odds ratios are highest for the Jews (759) and the more orthodox segment of the Protestant church, the Orthodox (31). The odds ratios are also strong for the Catholics (19), perhaps as a result of geographic segregation. The Reformed, which is the most liberal religious group in the Netherlands, have the lowest odds ratio (10), even lower than the non-church members (12).

Table 3 also allows us to test the main-effects hypothesis. To do this, we focus on the observed divorce risks of homogamous couples (on the diagonal). Homogamous marriages between non-church members have the highest risk of divorce: 18.6 per cent divorce within 10 years. The 10-year divorce risks are lowest for the three main religious groups in the Netherlands: 9.7 per cent for Catholics, 6.7 per cent for the Reformed, and 4.5 per cent for the Orthodox. The 10-year divorce risk is 16.9 per cent for marriages among Jews. This order of divorce risks is in line with our main-effects hypothesis. The Unaffiliated (and the Jews) are the most liberal in their value orientations and consequently have the highest risk, whereas the Orthodox are the most traditional and consequently have the lowest risk. The divorce risk of Catholics is somewhat higher than expected, however.

Is the risk of divorce higher for heterogamous marriages? To assess the impact of heterogamy,

Table 3 Observed 10-year probabilities (percentages) of divorce for marriages representing all combinations of husband's and wife's religion in the period 1974–84, the Netherlands (number of marriages in parentheses)

Religion of husband	Religion of wife					
	Unaffiliated	Catholic	Reformed	Orthodox	Other Protestant	Jewish
Unaffiliated	18.6 (162,221)	16.9 (42,680)	13.6 (27,401)	13.2 (9,756)	18.0 (1,875)	32.4 (204)
Catholic	18.3 (34,956)	9.7 (307,713)	12.0 (31,575)	12.4 (8,485)	18.8 (1,949)	26.3 (133)
Reformed	14.5 (22,230)	12.4 (33,071)	6.7 (89,836)	7.3 (17,734)	13.2 (1,310)	– (65)
Orthodox	14.0 (7,327)	12.0 (8,527)	6.7 (17,791)	4.5 (50,531)	11.7 (472)	– (27)
Other Protestant	17.7 (1,285)	14.0 (1,774)	11.2 (1,286)	10.0 (468)	11.7 (1,081)	– (3)
Jewish	34.4 (337)	27.6 (196)	23.1 (130)	– (60)	– (12)	16.9 (278)

Note: For cells in which $N < 100$, percentages were not calculated. 'Other' categories not presented in the table.

Source: As shown in Table 2.

we need to compare each mixed combination in two ways—with the maximum risk of divorce in the two corresponding homogamous groups, and with the average risk of divorce in the two groups. These comparisons are made directly in Table 4. The first column of numbers shows the divorce percentage for the mixed group, the second shows, as a ratio, the deviation of this percentage from the maximum level, and the third shows, again as a ratio, the deviation of this percentage from the average level. Thus, a deviation with a value over one indicates a heterogamy effect. Note that because we have population data, significance tests for these ratios are not applicable.

We first look at the average of the ratios of all the combinations, presented at the bottom of Table 4. These averages show that support for the heterogamy hypothesis is weak. The overall deviation from the maximum is 1.06, and the overall deviation from the average is 1.29. Hence, for all mixed marriages combined, we find little support for the strong heterogamy hypothesis but clear support for the weak heterogamy hypothesis. These figures merely present a summary of the results and do not reveal effects that may exist for specific combinations.

When we look at combinations involving two religious groups, there is clearer evidence for a heterogamy effect. The strongest effects are observed for marriages between Catholics and Protestants. Marriages between a Catholic and an

Orthodox person have a 16–22 per cent higher risk than the maximum and a 51–57 per cent higher risk than the average (depending on whether the husband or the wife is the Catholic). Similarly, a marriage between a Catholic and a Reformed person (the most common mixed combination between church members) has a 20–22 per cent higher risk of divorce than the maximum level and about a 34–36 per cent higher risk of divorce than the average level. These deviations are clear and consistent with the heterogamy hypothesis. Less convincing evidence exists for the combination of different Protestant denominations. Marriages between the Reformed and the Orthodox, another common combination, have a higher risk of divorce only when they are compared to the average level (a deviation of 16–27 per cent). When we compare the divorce risks of marriages within the Protestant Churches to the maximum level of divorce, no effect can be observed. In other words, religiously mixed combinations of Protestants and Catholics show a heterogamy effect but combinations within the Protestant Churches do not. These findings point more strongly in the direction of the hypothesis about a social divide than towards a difference in value orientations. Catholics and Reformed Protestants do not have very different values, but they do experience a sharp, historically grown, social boundary. Their divorce risk is consequently high. Reformed and Orthodox Protestants do not have a

Table 4 Corrected¹ 10-year probabilities of divorce for religiously heterogamous couples compared with corrected probabilities for homogamous couples, the Netherlands, marriages 1974–84

Religious affiliation of spouses		Type of mix	Corrected probability of divorce (per cent)	Ratio of corrected divorce risk to maximum/average risk in corresponding homogamous groups	
				Ratio to maximum	Ratio to average
Unaffiliated	Catholic	H–W	14.3	0.917	1.113
		W–H	15.1	0.978	1.175
Unaffiliated	Reformed	H–W	13.1	0.840	1.110
		W–H	13.2	0.846	1.119
Unaffiliated	Orthodox	H–W	12.6	0.808	1.200
		W–H	13.0	0.833	1.238
Unaffiliated	Jewish	H–W	15.7	1.006	1.189
		W–H	18.8	1.205	1.424
Catholic	Reformed	H–W	12.1	1.198	1.337
		W–H	12.3	1.218	1.359
Catholic	Orthodox	H–W	12.2	1.208	1.574
		W–H	11.7	1.158	1.510
Catholic	Jewish	H–W	12.2	1.130	1.167
		W–H	15.7	1.454	1.502
Reformed	Orthodox	H–W	8.5	1.063	1.269
		W–H	7.8	0.975	1.164
Reformed	Jewish	H–W	13.1	1.213	1.394
		W–H	–	–	–
Average				1.062	1.285

¹Probabilities corrected using logistic regression with the following variables: combination of husband's and wife's religious affiliation, national origin, age, and marital status, and the province and urbanization of the place of marriage.

Note: H means husband, W means wife. H–W means the first column applies to the husband and the second column applies to the wife.

Source: As shown in Table 2.

sharp social divide. They do have very different values but this difference does not increase their divorce risk.

Another very common type of mixed marriage is a marriage between a religious person and someone not affiliated to any church. In Table 4, we observe that these mixed marriages provide less support for the heterogamy hypothesis. First of all, the level of divorce in these types of marriages is never higher than the maximum level. More specifically, when we compare these couples to marriages between two unaffiliated persons, the latter always have the highest risk. Following Jones (1996), this suggests that some form of adaptation is taking place. Second, when we compare mixed marriages involving unaffiliated persons to the average level of divorce in the two corresponding homogamous unions, we do find some heterogamy effects but

these are not always very strong: 11–12 per cent higher when marrying a Reformed Protestant, 20–24 per cent higher when marrying an Orthodox Protestant, and 11–18 per cent higher when marrying a Catholic. The findings are partly in line with the hypothesis about differences in value orientations. The sharpest differences in value orientations are between unaffiliated and Orthodox groups, and these also have the highest deviation from the average. We should note, however, that this conclusion does not apply to deviations from the maximum.

Because our database is so large, we can also focus on small religious groups in Dutch society. As is clear from Table 4, evidence for heterogamy effects is strongest for the Jewish combinations, especially when the husband is Jewish. Marriages between a Catholic wife and a Jewish husband have a 45 per

Table 5 Comparison of ratios of corrected¹ divorce risk to maximum and average risk in corresponding homogamous groups in religiously heterogamous marriages in the first and second 5 years of marriage, the Netherlands, marriages 1974–84

Religious affiliation of spouses		Ratio to maximum		Ratio to average	
		0–5 years	6–10 years	0–5 years	6–10 years
Unaffiliated	Catholic	0.957	0.917	1.174	1.130
Unaffiliated	Reformed	0.854	0.827	1.148	1.101
Unaffiliated	Orthodox	0.804	0.821	1.261	1.200
Catholic	Reformed	1.218	1.243	1.374	1.374
Catholic	Orthodox	1.096	1.275	1.526	1.599
Reformed	Orthodox	1.007	1.047	1.288	1.207
Average		0.989	1.022	1.295	1.269

¹See footnote to Table 4.

Source: As shown in Table 2.

cent higher risk of divorce than the maximum and a 50 per cent higher risk than the average. Even more striking is the fact that heterogamy effects are also found for combinations involving unaffiliated persons. Marriages between a Jewish husband and an unaffiliated wife have a 21 per cent higher risk of divorce than marriages between two unaffiliated persons, and a 42 per cent higher risk than the average for homogamous marriages of unaffiliated persons and of Jews. These findings are clearly more in line with the hypothesis about social boundaries than with the hypothesis about value differences. Both Jews and unaffiliated persons are liberal in their values and behaviour, as can also be seen in their divorce behaviour, but a mix between them nonetheless increases the chance of divorce.

To test our hypothesis about the duration of marriage, we re-analyse the model for two divorce risks: the risk in the first 5 years, and the conditional risk in the second 5 years. To simplify the interpretation, we use a more basic model for this analysis. The model focuses only on the four large

religious denominations and ignores the asymmetries in the effects of heterogamy.

Table 5 shows small differences in the effects of heterogamy on the risk of divorce at different points in the marriage. For example, couples in which one spouse is Catholic and the other unaffiliated have a 17 per cent higher-than-average risk of divorce in the first 5 years and a 13 per cent higher risk in the next 5 years. Comparing the percentages for other combinations leads to similar conclusions: differences are either absent or small. This evidence contradicts our hypothesis.

To what extent can the effect of heterogamy be attributed to mixed couples being less religious? To answer this question, we incorporate information on whether couples married in church. Table 6 shows the effects of religious intermarriage on the risk of divorce for couples who married in church and for other couples. We present the results for the first 5 years only.

The results in Table 6 first show that heterogamy effects also exist for couples who did not marry in

Table 6 Comparison of ratios of corrected¹ divorce risk to maximum and average risk in corresponding homogamous groups in religiously heterogamous marriages for couples who married in church and those who did not, the Netherlands, marriages 1974–84

Religious affiliation of spouses		Ratio to maximum		Ratio to average	
		In church	Not in church	In church	Not in church
Unaffiliated	Catholic	0.808	1.027	1.042	1.018
Unaffiliated	Reformed	0.777	0.867	1.117	1.068
Unaffiliated	Orthodox	0.769	0.860	1.198	1.111
Catholic	Reformed	1.120	0.905	1.310	1.121
Catholic	Orthodox	1.104	0.863	1.456	1.122
Reformed	Orthodox	1.088	1.183	1.260	1.260
Average		0.944	0.951	1.230	1.117

¹See footnote to Table 4.

Source: As shown in Table 2.

church. For example, couples in which one spouse is Catholic and the other spouse is Reformed have a 12 per cent higher-than-average risk of divorce if they did not marry in church. Next, we observe that the effects of heterogamy are generally higher if couples married in church. For example, the divorce risk of a Catholic–Reformed couple is 31 per cent higher than average if the couple married in church. Similar differences are found for other combinations. The unweighted average of the heterogamy effects is 12 per cent for couples who did not marry in church and 23 per cent for couples who married in church. Our conclusion is that the heterogamy effects are only partially spurious. Part of the overall heterogamy effect is due to mixed couples being less religious (as indicated by whether the wedding was in church). But since, even for couples who did not marry in church, a heterogamy effect occurs, the effect of heterogamy cannot be attributed completely to the selectivity of religiously heterogamous marriages.

Nationality

In Table 7, we present the absolute numbers of nationality combinations and their observed divorce risks. In Table 8, we present our calculations of the heterogamy effects. The frequencies in Table 7 show that the percentages of mixed marriages vary greatly

from group to group. The Turkish and the Moroccans have the highest degree of endogamy. Of the Turkish who married in the Netherlands between 1974 and 1984, 74 per cent of marriages were endogamous. For Moroccans, the figure is 54 per cent. Percentages for Western Europeans and Southern Europeans are much lower (14 and 21 per cent, respectively). Odds ratios (not presented in the table) reveal that all groups are more likely than expected to marry within their own group, and that the Turkish group is most closed (8,421), followed by the Moroccans (1,992), the Southern Europeans (68), the Western Europeans (15), and the Dutch (12). Finally, we observe in Table 7 the well-known tendency toward gender asymmetry: if there are ethnically mixed couples, it is usually minority men marrying Dutch women, and not the other way around (cf., Kalmijn 1993; Qian 1997).

To test the main-effects hypothesis, we first look at the diagonal in Table 7. The divorce risk of homogamous marriages between two spouses who have Dutch nationality is the highest (11.4 per cent). Marriages of Western Europeans and marriages of Southern Europeans have a lower risk of divorce (7.6 and 9.3, respectively). In line with what one would expect on the basis of traditional value orientations, we find that Turkish marriages and Moroccan marriages have the lowest risk of divorce.

Table 7 Observed 10-year probabilities (percentages) of divorce for marriages representing all combinations of husband's and wife's nationality in the period 1974–84, the Netherlands (number of marriages in parentheses)

Nationality of husband	Nationality of wife				
	Dutch	Western European	Southern European	Turkish	Moroccan
Dutch	11.4 (862,995)	22.3 (8,572)	28.1 (2,712)	39.2 (158)	63.6 (275)
Western European	15.8 (9,742)	7.6 (1,570)	– (39)	– (0)	– (3)
Southern European	24.3 (4,708)	– (63)	9.3 (1,047)	– (1)	– (4)
Turkish	56.0 (1,385)	– (19)	– (20)	0.7 (2,288)	– (3)
Moroccan	52.2 (1,706)	– (26)	– (34)	– (2)	1.6 (1,258)

Note: Western European countries are Belgium, France, Germany, Luxembourg, and UK. Southern European countries are Greece, Italy, Portugal, Spain, and (former) Yugoslavia. Percentages are not presented for cells in which *N* < 100. 'Other' nationalities not presented in the table.

Source: As shown in Table 2.

Table 8 Corrected¹ 10-year probabilities of divorce for couples heterogamous in nationality compared with corrected probabilities for homogamous couples, the Netherlands, marriages 1974–84

Nationality of spouses			Type of marriage	Corrected probability of divorce (per cent)	Ratio of corrected divorce risk to maximum/average risk in corresponding homogamous groups	
					Ratio to maximum	Ratio to maximum
Dutch	Western European	H–W	13.7	1.522	2.108	
		W–H	9.8	1.089	1.508	
Dutch	Southern European	H–W	18.0	2.000	2.222	
		W–H	15.6	1.733	1.926	
Dutch	Turkish	H–W	19.4	2.156	3.079	
		W–H	29.3	3.256	4.651	
Dutch	Moroccan	H–W	41.7	2.673	3.390	
		W–H	29.7	1.904	2.415	
Average				2.020	2.614	

¹See footnote to Table 4.

Note: H means husband, W means wife. H–W means the first column applies to the husband and the second column applies to the wife.

Source: As shown in Table 2.

Are there effects of heterogamy on the risk of divorce? Table 8 shows that the answer is clear: most mixed combinations have a risk of divorce that is higher than the highest level of divorce in the two homogamous groups. The average ratio is 2.02, indicating that mixed marriages have a risk of divorce twice as high as that of the maximum level of divorce in the two corresponding groups. This effect is quite strong and clearly supports the strong heterogamy hypothesis.

We also find variations in the magnitude of the effects that are consistent with our hypothesis about value orientations. Combinations of Dutch and Turkish or Moroccan persons reveal a stronger heterogamy effect than combinations involving Dutch and Western European persons. The effects for combinations involving Southern Europeans are in between the combinations with Turks or Moroccans and the combinations with Western Europeans. When looking at combinations involving minority men, the differences are quite strong. The ratio is 4.7 for combinations involving Turkish men, 2.4 for combinations involving Moroccan men, and 1.5 for combinations involving Western European men. Because European groups are more similar than Moroccan and Turkish groups to the Dutch in values and lifestyle, this finding is consistent with theoretical interpretations of the heterogamy effect in terms of value similarity.

The observed probabilities of divorce are quite high for mixed marriages (Table 7). The high divorce rates of marriages between persons of Dutch nationality and persons with another nationality may be partly a consequence of marriages conducted solely for the purpose of securing legal residence documents. After 3 years of temporary residence while married to a Dutch person, a foreigner obtains permanent residence documents. Recent analyses indicate that the divorce rate of Dutch–foreigner couples increases sharply in the third year of marriage, especially for those in which the foreign spouse is Moroccan, suggesting that these paper marriages do indeed occur (Van Huis and Steenhof 2003). Consistent with this, we also find that effects of nationality heterogamy decrease with the duration of marriage (Table 9). For example, couples with a Moroccan husband and a Dutch wife have a divorce risk that is 4.6 times higher than average in the first 5 years but only 2.7 times higher in the next 5 years. Similar differences occur in the other combinations. On average the factor is 3.4 and 2.4, respectively.

Conclusion

We matched marriage records to divorce records and calculated the 10-year risk of divorce, using multivariate logistic regression analyses. Using

Table 9 Comparison of ratios of corrected¹ divorce risk to maximum and average risk in corresponding homogamous groups for marriages heterogamous in nationality in the first and second 5 years of marriage, the Netherlands, marriages 1974–84

Nationality of spouses			Ratio to maximum		Ratio to average	
			0–5 years	6–10 years	0–5 years	6–10 years
Dutch	Western European	H–W	1.571	1.490	2.151	2.030
		W–H	1.166	1.082	1.820	1.475
Dutch	Southern European	H–W	2.513	1.663	2.760	1.745
		W–H	1.932	1.780	4.107	1.867
Dutch	Turkish	H–W	2.454	2.109	3.316	3.108
		W–H	4.015	3.375	3.613	4.972
Dutch	Moroccan	H–W	4.086	1.093	5.213	1.451
		W–H	2.119	2.015	4.611	2.675
Average			2.482	1.826	3.449	2.416

¹See footnote to Table 4.

Source: As shown in Table 2.

straightforward analyses of nearly a million marriages, we have demonstrated that there is a modest relationship between religious heterogamy and divorce and a strong relationship between nationality heterogamy and divorce. This conclusion is based on registration data for all marriages contracted in the Netherlands between 1974 and 1984, and registration data for all divorces between 1974 and 1994.

The effects of religious heterogamy are strongest for combinations involving Catholics and combinations involving Jews. Mixed combinations *within* the Protestant population reveal weaker effects. For combinations involving the unaffiliated, we also find somewhat elevated divorce risks, but not when comparing the risk to that of homogamous unaffiliated marriages. Overall, the religious heterogamy effect is about 6 per cent when using a strict definition of a heterogamy effect (higher than the maximum of the two corresponding homogamous combinations). In many cases, the divorce risk of a mixed marriage is located somewhere in between the risks of the two groups. However, this is always above the average, not below the average. More specifically, the risk is 29 per cent above the average, which means that the risk is clearly pulled in the direction of the most divorce-prone partner. We consider this a weak form of a heterogamy effect.

Comparing specific types of mixed marriages yields additional insights into the underlying reasons for a heterogamy effect. The evidence suggests that for religion, the social boundaries between groups have a more important effect than value disagreements on the risk of divorce. Combinations involving Catholics and Protestants have an increased risk of divorce, but there is no clear additional tendency

towards instability for mixed marriages involving the more traditional Orthodox Protestants. In addition, marriages between Catholics and Reformed Protestants have an elevated risk of divorce, while these groups have rather similar values, especially in the important domain of family values (Felling et al. 2000). Hence, the social divide between Catholics and Protestants dominates the results, rather than the value differences between these groups. Similarly, Jewish mixed marriages are more unstable, and this is also true when the spouse is unaffiliated. Since Jewish persons in the Netherlands are as liberal as unaffiliated persons, this also points to social boundaries rather than to value differences.

For the divorce risk of nationality heterogamy, the effects are much stronger, and simpler to interpret. Marriages of Dutch persons to foreigners have an average divorce risk twice the maximum level of the two combinations. This effect is much stronger than the effect of religious heterogamy, suggesting that new boundaries in society have become more important than old boundaries. We also found that the heterogamy effect is stronger for those nationality groups that are culturally more dissimilar from the Dutch, and this further supports the value interpretation of the heterogamy effect. Hence, for religion, the effect of social boundaries seems the more important, while for nationality, it is the effect of value differences that seems more important.

We have found nuanced evidence for the heterogamy hypothesis, a hypothesis which has not often been tested in Europe. Although we find that heterogamy matters, the question of its theoretical interpretation is still open. One argument focuses on selectivity and suggests that heterogamous couples

have special traits that tend to make their marriages more unstable. We have been able to address one such possibility by looking at information about church weddings. Using church wedding as an indicator of religiosity, we find that part but not all of the heterogamy effect can be attributed to heterogamous couples being less religious. For the effect of nationality intermarriage and for other possible forms of selectivity, we did not have appropriate controls. While our data source is unique and powerful, it primarily serves to assess and describe a possible heterogamy effect in all its detail. To explain such effects, a more comprehensive set of variables is needed, a set that cannot be found in vital statistics. Our approach is a precursor to such an enterprise, not an alternative.

Notes

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References

Becker, Gary S., Elisabeth M. Landes, and Robert T. Michael. 1977. An economic analysis of marital instability, *Journal of Political Economy* 85: 1141–1187.

Becker, J. W. and R. Vink. 1994. *Secularisatie in Nederland 1966–1991. Sociaal-Culturele Studies No. 19 [Secularisation in the Netherlands 1966–1991]*. Rijswijk: Sociaal en Cultureel Planbureau (SCP).

Booth, A., D. R. Johnson, A. Branaman, and A. Sica. 1995. Belief and behavior: does religion matter in today's marriage?, *Journal of Marriage and the Family* 57: 661–671.

Brüderl, Josef and H. Engelhardt. 1997. Trennung oder Scheidung? Einige methodologische Überlegungen zur

Definition von Eheauflösungen, *Soziale Welt* 48: 277–289.

Bumpass, Larry L. and James A. Sweet. 1972. Differentials in marital instability: 1970, *American Sociological Review* 37: 754–766.

Burchinal, L. B. and L. E. Chancellor. 1963. Survival rates among religiously homogamous and interreligious marriages, *Social Forces* 41: 353–362.

CBS [Statistics Netherlands]. 1997. Eerste en Tweede Generatie Turken en Marokkanen naar Nationaliteit en Leeftijd [First and second generation Turks and Moroccans by nationality and age], *Maandstatistiek van de Bevolking* 45(July): 4.

Esveldt, Ingrid and Jeannette J. Schoorl. 1998. Veranderingen in de huwelijksluiting van Turken en Marokkanen in Nederland [Changes in marriage formation of Turks and Moroccans in the Netherlands], *Bevolking en Gezin* 27: 53–86.

Felling, A., J. Peters, and P. Scheepers. 2000. *Individualisering in Nederland aan het eind van de twintigste eeuw [Individualization in the Netherlands at the End of the Twentieth Century]*. Assen: Van Gorcum.

Finnäs, Fjalar 1997. Social integration, heterogeneity, and divorce: the case of the Swedish-speaking population in Finland, *Acta Sociologica* 40: 263–277.

Glenn, N. D., S. K. Hope, and D. Weiner. 1974. Social class heterogamy and marital success: a study of the empirical adequacy of a textbook generalization, *Social Problems* 21: 539–550.

Halman, Loek and Ole Riis (eds.). 1999. *Religion in Secularizing Society: The European's Religion at the End of the 20th Century*. Tilburg: Tilburg University Press.

Harmesen, C. N. 1998. Naar geboorteland gemengde huwelijken [Mixed marriages with respect to country of origin], *Maandstatistiek van de Bevolking* 46: 13–15.

Heaton, T. B. 1984. Religious homogamy and marital satisfaction reconsidered, *Journal of Marriage and the Family* 46: 729–733.

Hendrickx, John, Jan Lammers, and Wout Ultee. 1991. Religious assortative marriage in the Netherlands, 1938–1983, *Review of Religious Research* 33: 123–145.

Inglehart, Ronald 1997. *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies*. Princeton, NJ: Princeton University Press.

Jalovaara, M. 2003. The joint effects of marriage partners' socioeconomic positions on the risk of divorce, *Demography* 40: 67–81.

Jones, Frank L. 1996. Convergence and divergence in ethnic divorce patterns: a research note, *Journal of Marriage and the Family* 58: 213–218.

- Kalmijn, Matthijs 1991. Shifting boundaries: trends in religious and educational homogamy, *American Sociological Review* 56: 786–800.
- Kalmijn, Matthijs 1993. Trends in black/white intermarriage, *Social Forces* 72: 119–147.
- Kalmijn, Matthijs 1998. Intermarriage and homogamy: causes, patterns, trends, *Annual Review of Sociology* 24: 395–421.
- Kalmijn, Matthijs, Paul M. De Graaf, and Anne-Rigt Poortman. 2004. Interactions between cultural and economic determinants of divorce in the Netherlands, *Journal of Marriage and Family* 66: 75–89.
- Lehrer, Evelyn L. and Carmel U. Chiswick. 1993. Religion as a determinant of marital stability, *Demography* 30: 385–404.
- Lehrer, Evelyn 1996. The determinants of marital stability: a comparative analysis of first and higher order marriages, in Paul Schultz (ed.), *Research in Population Economics*. Greenwich: JAI Press, pp. 91–121.
- Lenski, Gerhard 1961. *The Religious Factor: A Sociologist's Inquiry*. Garden City: Doubleday.
- Michael, Robert 1979. Determinants of divorce, in Louis Levy-Garboua (ed.), *Sociological Economics*. London: Sage, pp. 223–269.
- Monahan, T. P. and W. M. Kephart. 1954. Divorce and desertion by religious and mixed-religious groups, *American Journal of Sociology* 59: 454–465.
- Qian, Z. 1997. Breaking the racial barriers: variations in interracial marriage between 1980 and 1990, *Demography* 34: 263–276.
- Schwertfeger, M. M. 1982. Intraethnic marriage and divorce in Hawaii: a panel study of 1968 first marriages, *Marriage and Family Review* 5: 49–59.
- Shehan, C. L., E. W. Bock, and G. R. Lee. 1990. Religious heterogamy, religiosity, and marital happiness: the case of Catholics, *Journal of Marriage and the Family* 52: 73–79.
- Sherkat, Darren E. 1991. Leaving the faith: testing sociological theories of religious switching using survival models, *Social Science Research* 20: 171–187.
- South, Scott. J and Glenna Spitze. 1986. Determinants of divorce over the marital life course, *American Sociological Review* 51: 583–590.
- Stark, R. 1999. Secularization, R.I.P, *Sociology of Religion* 60: 249–273.
- Tynes, S. R. 1990. Educational heterogamy and marital satisfaction between spouses, *Social Science Research* 19: 153–174.
- Ultee, Wout. C and Ruud Luijkx. 1998. Jewish–Gentile intermarriage in six European cities 1900–1940. Explaining differences and trends, *Netherlands, Journal of Social Sciences* 34: 165–195.
- Uunk, Wilfred 2003. The cultural integration of immigrants in the Netherlands: a description and explanation of modern attitudes of Turks, Moroccans, Surinamese, Antilleans, and the indigenous population, in L. Hagendoorn, J. Veenman, and W. Vollebergh (eds.), *Integrating Immigrants in the Netherlands: Cultural versus Socio-economic Integration*. Aldershot: Ashgate.
- Van Huis, Mila and Liesbeth Steenhof. 2003. Echtscheidingskansen van allochtonen: Specifieke groepen [Divorce rates of immigrants: specific groups], *Bevolkingstrends* 54–57.
- Van Solinge, Hanna and Marlene De Vries (eds.). 2001. *De Joden in Nederland anno 2000 [The Jews in the Netherlands in 2000]*. Amsterdam: Aksant.
- Van Tubergen, Frank. 2003. Religieuze participatie en geloof van immigranten in Nederland [Religious participation and belief of immigrants in the Netherlands], *Mens & Maatschappij* 78: 331–354.
- Wagner, Michael and Bernd Weiss. 2003. Balanz der Deutschen Scheidungsforschung: Versuch einer Metaanalyse, *Zeitschrift für Soziologie* 32: 29–49.