

## **Do Opposites Attract Divorce?**

Dimensions of Mixed Marriage and the Risk of Divorce in the Netherlands



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## **Trekken tegenpolen echtscheiding aan?**

Dimensies van gemengd huwen en de kans op echtscheiding in Nederland

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van de Sociale Wetenschappen

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*Voor mijn vader en moeder  
Voor Suziana  
En voor Maryam*



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With this book, I complete my PhD research project on mixed marriage and divorce, carried out in the Sociology section/ICS at the University of Nijmegen. Finishing the last part of a dissertation besides a full-time job elsewhere is not the most enviable combination. And I realize that this combination deprives one's family of the attention it deserves. It is recommendable to finish a dissertation as soon as possible. Therefore, I was somehow relieved when half a year before the end of my contract's extension – possible by NWO funding of this project – the final version of the Divorce in the Netherlands (SIN) data set finally became available within the research group. After all, three out of five of my empirical chapters (4, 5 and 6) are based upon analyses of these data. Besides, two empirical chapters (2 and 3) are based upon my traineeship at Statistics Netherlands (CBS) in 1997. As a PhD candidate, one gains many valuable experiences. The opportunity of working on my own research project, following courses and summer schools, visiting (inter)national conferences and presenting and sharing experiences and research findings with others from all over the world are highly interesting.

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# 1 Introduction

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**B**etween 1950 and 1985, the number of divorces per 10,000 married couples per annum in the Netherlands rose from 30 to 99 (CBS 2001). The overall increase in divorce rates throughout the past few decades is related to changes in society such as women's increasing economic independence and changing norms and values. This study investigates some specific social and cultural causes of divorce: spouse selection and mixed marriage in particular. In this introductory chapter, I will begin by subsequently discussing mixed marriage, divorce and the relationship between them. The meaning of these phenomena, their societal and scientific history and relevance and research findings will be discussed within this discourse. Next, the research questions of the present study will be derived. This will be followed by a brief overview of the theories and the data to be used to answer the research questions. The actual answers will follow in five empirical papers forming Chapters 2 to 6. The organization of these chapters will conclude this introductory chapter.

## 1.1 Mixed marriage

The main focus of this study is on the relationship between socially mixed marriage and divorce. There are several terms in use for the phenomenon of mixed marriage. If spouses resemble each other, we speak of a *homogamous* marriage. A couple in which husband and wife differ is called *heterogamous*. Other words for non-mixed marriage are *homogamy*, *endogamy*, *in-marriage* or *assortative marriage*; other words for mixed marriage are *heterogamy*, *exogamy*, *out-marriage* or *mixed marriage*.<sup>1</sup>

### 1.1.1 Mixed marriage and its relevance to society

The expression 'mixed marriage' in society is mainly associated with religion and sometimes with ethnicity. Nevertheless, there are more social characteristics which constitute dividing lines. This implies that marriages can be mixed with regard to all these social characteristics. This book will deal with mixed marriage regarding age, education, social status, religion, ethnicity and social status of origin. I will now discuss the relevance of these types of heterogamy.

Due to secularization, there is a large group of people not affiliated to any religion. The people who are affiliated are mainly Christian, although immigration throughout the past few decades has increased the number of affiliates to other religions, like Islam or Hinduism. The Christian group itself can be divided into several denominations. The main dichotomization of this would be between Catholics and Protestants. The Protestants mainly consist of two Calvinist mainstreams, the *Dutch reformed* (in Dutch: '*Nederlands hervormd*') and *Re-reformed* (in Dutch: '*gereformeerd*'), mostly the more conservative groups, which evolved out of several church schisms). An old Dutch expression says: "*Twee geloven op één kussen, daar slaapt de duivel tussen*" which may be translated into: "When two faiths share one pillow, the devil sleeps in-between". This expression refers to Catholic/Protestant mixed marriages. It took until 1971 before an official mutual recognition

between the Catholic church and several Protestant churches of mixed marriages came about.

Opinions have modernized, but some reservations towards mixed marriages can still be noticed. Surprisingly, religious heterogamy still attracts attention, even in Dutch society, which is highly secularized. This is illustrated by public interest in the Royal Family. In 1998, Prince Maurits, a nephew of Queen Beatrix and Dutch Reformed according to the tradition of the Royal Family, married the Catholic Marilène van den Broek. This union caused considerable consternation amongst the more traditionally minded of both denominations.<sup>2</sup> The commotion was not as profound as in 1964, when the marriage between the present queen's sister, Princess Irene with the Catholic French-Spanish Hugo Carlos was preceded by the princess's secret conversion to Catholicism. Mixed marriages in the Royal Family have again become a hot item in the Netherlands since Crown Prince Willem-Alexander announced his engagement to Máxima Zorreguieta, an Argentinean Catholic. The ethnic part as such does not seem to be the main part of the commotion, although it caused much ado years earlier, when Prince Willem-Alexander's mother, Queen Beatrix, married a German, Claus Von Amsberg. By marrying a German, Queen Beatrix was following in her mother and grandmother's footsteps. Royal families are often very international and in fact, Prince Willem-Alexander is a second generation allochthonous in the sense of the wide definition of Statistics Netherlands: one of his parents was born abroad; as a matter of fact, three of his grandparents were born abroad. In the case of Zorreguieta, the main cause of the commotion lies in the fact that her father was a minister in the junta regime of Videla in Argentina, during which many people were tortured and killed or disappeared without ever having been found.

Up to now, two types of mixed marriage have been mentioned: with respect to religion and with respect to ethnicity. Even though the term 'mixed marriage' often makes people think of religion and ethnicity, other types are also of social relevance. The aforementioned public interest in the Royal Family reminds us of other types of mixed marriage. According to old fairy tales, a (handsome) prince always marries a (pretty) princess, yet in more recent royal marriages, the princes have married commoners without a trace of blue blood. This study does not investigate mixed marriage regarding nobility, but will examine other characteristics of descent. Husband and wife may be mixed by stemming from a different economic or cultural background. They may come from a rich or a poor family, or from a culturally more or less sophisticated family. This notion manifests itself in society in the form of questions such as: "What does his (or her) father do for a living?" Apparently, people are interested in the profession of their girlfriend's or boyfriend's parents. It gives a good impression of his or her social background. This question often comes from the parents as well, who would like their children to have the best future possible. This wish extends to a desire that their children marry someone from an advantageous social background.

The characteristics mentioned up till now are those inherited from the parents: parental social status, ethnicity and religion. Although religion is one's own choice, in most instances, it is something that one has been brought up with. Most cases in the Netherlands of a person not following his or her parental religion refer to people who have left the church. Since society has become more meritocratic, one's own social characteristics have become more relevant as a quick indicator of one's (social) position in society. That is why I will study mixed marriages with respect to social characteristics which come about by one's own achievement. These characteristics are

age, level of education and social status of the spouses themselves. In this way, we make a distinction between inherited characteristics of ascription and meritocratic characteristics of own achievement.

Thus, instead of looking at parental profession, people also pay attention to their future spouse's own profession and education. These characteristics indicate where a person stands when it comes to money, culture and future perspectives. If someone marries a spouse with a higher social position or education – or one from a high status background for that matter – this can be interpreted as a success. This, however, implies that the spouse in question marries someone with a lower social position. From this point of view, the person with the lowest social position might be looked upon as a sponge. Age can be added to this list of characteristics. It is considered 'normal' if spouses are of about equal age or if the husband is somewhat older. An older man with a young woman may derogatorily be called an old rake, whereas an older woman with a young man is even more uncommon.

The description above implicitly considers the level of homogamy or heterogamy as an outcome of the spouse selection process. Depending on how suitable a spouse one has chosen, the level of social heterogamy will be higher or lower. When reasoning from spouse similarity, many people will think of personality characteristics on which spouses can differ or resemble. Heterogamy regarding these mainly psychological personality characteristics will not be a part of the analyses in the present study. Preferences which have to do with the spouse selection process are correlated with the social characteristics studied here. These social characteristics, interesting by themselves, may also be seen as an indicator for a whole array of personality and life style characteristics.

### 1.1.2 Mixed marriage, mobility research and the openness of society

This study fits in a historical sequence of sociological research in which sociological questions related to social inequality and social cohesion or integration come together.<sup>3</sup> The starting point is that inequality does not need to be constant within society or within persons in a society. People can be upwardly or downwardly mobile. Therefore, a branch in this historical sequence in sociological research is labelled *mobility research*. A society can be considered more open as more people have access to other positions than their previous one. Developments in this field of research have been very rapid throughout the past few decades and have been guided both by the subject of study and by methodological progress (Ganzeboom, Treiman & Ultee 1991).

In Figure 1.1, the left upper cell indicates research into intergenerational social mobility. This has been methodologically split into two groups. The first is indicated by keywords such as social class and mobility tables. A very well-known class scheme has been developed by Erikson, Goldthorpe and Portocarero (1982; Erikson & Goldthorpe 1992). Models of analyses are built around cross tabulations of fathers' and sons' occupational positions (for a basic overview, see Hout 1983), in which odds ratios of intergenerational positional changes play a central role. Mobility tables have been widely used and compared cross-nationally (Ganzeboom, Luijkx & Treiman 1989). Formally, the class indications' measurement level is nominal, but in practice they are treated as discretely ordinal, since researchers speak of going up and going down the social scale. Therefore, the second methodological group in the upper left cell in Figure 1.1 is based on

continuous scales. Socio-economic indices of statuses of occupations have been developed and used already since Blau and Duncan (1967). Later, distinctions between dimensions were added (e.g. De Graaf & Kalmijn 1995). Also the prestige in society was measured (Van Tulder 1962; Treiman 1977; Ultee & Sixma 1984).

Figure 1.1 Mobility research, heterogamy and divorce

<p><i>Intergenerational mobility of occupation</i></p> <ul style="list-style-type: none"> <li>- social class (EGP), mobility tables, odds ratios, nominal/discrete measurement, 'upward' &amp; 'downward'. (Erikson, Goldthorpe, Ganzeboom, Treiman)</li> <li>- status, prestige, continuous scales (ISEI), path models besides mobility tables. (Blau, Duncan, De Graaf, Kalmijn, Van Tulder, Treiman, Ultee)</li> <li>- development of loglinear models, multivariate.</li> </ul>	
<p><i>Marriage patterns</i></p> <ul style="list-style-type: none"> <li>- classes (see above). (Hout, Jones, Ultee, Luijkx, Smits)</li> <li>- status (see above). (Blau, Duncan, Warren)</li> <li>- development of loglinear models, multivariate ; extension to e.g.:             <ul style="list-style-type: none"> <li>- level of education;</li> <li>- religion.</li> </ul>             (Kalmijn, Hendrickx, Uunk)           </li> </ul>	<p><i>Divorce patterns</i></p> <ul style="list-style-type: none"> <li>- Given the marriage patterns, what are the divorce risks? Integration of discrete and continuous measurement (references in text)</li> <li>- Full integration of many types of homogamy. (this study)</li> </ul>

In the left lower cell of Figure 1.1, a similar distinction between class and status is made for the investigation of marriage patterns. It was recognized early on that marriage patterns have a lot to say about mobility and the openness of society. From the view of mobility, the reasoning would be like this: if someone is socially mobile when he or she moves to a higher or lower position than his or her father, then he or she is also mobile when marrying someone in a different position. Obviously, the economic position of one's spouse has consequences for one's own economic position. Analogously, marriage has social and cultural consequences. People will mingle in the social circles of their spouse. If moving to another position than the one held by one's father indicates a flow between groups and, therefore, some sort of openness between those groups, then moving to another position by marrying someone in another position indicates the same sort of openness.

In fact, some status mobility researchers went into status homogamy research (Blau & Duncan 1967; Warren 1966). Researchers treating social class as categorical entities applied their models to homogamy (Hout 1982; Jones 1987; Ultee & Luijkx 1990; Smits 1996). This went along with a further development in mobility research, mentioned in Figure 1.1, in which loglinear models were further developed. An integration took place in which the cross tabulation format



could be integrated with multivariate analyses in this field of research and in which several characteristics besides status or class, like education and religion, could be studied (Kalmijn 1991b, Hendrickx 1994, Uunk 1996). In this way, the openness of society can be studied in many social aspects. After all, openness is about integration and accessibility between social groups and this can refer to any social characteristic.

## **1.2 Divorce**

The number of divorces in the Netherlands has risen considerably in the last few decades. In 1950, 30 divorces per 10,000 married women occurred, whereas in 1985, there were 99 divorces per 10,000 married women. In subsequent years, the level of divorce stabilized or even decreased slightly (Tas 1989).<sup>4</sup> Predictions indicate that about one third of existing marriages will end in divorce (Van Praag 1997).

The increase in the risk of divorce in the 1970s and 1980s can also be seen by following the survival chances of marriage cohorts. Of all marriages contracted in the Netherlands in 1976, 6.6 percent had divorced after five years, 14.0 percent after ten years, 18.4 percent after fifteen years and 22.3 percent after twenty years. For marriages which started in 1981, 9.5 percent had divorced after five years, 16.1 after ten and 21.0 percent after fifteen years (CBS 1997a).

### *1.2.1 Divorce: some implications for society*

The strong increase in divorce risks is generally explained by changes in society such as women's increased economic independence and changing norms and values (e.g. Janssen, Poortman, De Graaf & Kalmijn 1998). The growing independence of women is illustrated by the number of women who have paid jobs. In the situation of a traditional division of labour, the wife takes care of the household without investing in her career, whereas the husband has the opportunity to invest in his career. Economic theory (Becker 1981) has stressed the advantages of specialization in marital relationships. These advantages are the reason for more stable marriages among couples with a traditional division of labour. A more feminist perspective points to the fact that the result of this division of labour is that the wife is financially dependent on her husband and has fewer chances on the labour market after a divorce. In less traditional households, the wife has a paid job or the potential to earn a living. This makes divorce more accessible to her (Cherlin 1979, 1981, Hannan, Tuma & Groeneveld 1977; Spitze & South 1985), even though the possibly accompanying double income may reduce financial problems and, therefore, marital instability (Cutright 1971). The relationship between female labour force participation and divorce is also studied the other way around: the risk of divorce promotes the wife to work in order to be able to make a living on her own if necessary (Diekmann 1994).

Changing norms and values can be seen in an increasing level of acceptance in Western countries towards divorce as a solution for marital problems (Dumon & Kooy 1983; Kooy 1977; Thornton 1995). This increasing level of acceptance of divorce is part of a more general increase in the permissiveness and acceptance of other than traditional living arrangements (SCP 1996). This includes the increasingly less negative way in which people in society think about phenomena such as extramarital cohabitation, staying single, family planning and self-chosen childlessness,

homosexual relationships and divorce.<sup>5</sup> It is clear that we are dealing with a coherent system of opinions regarding family matters.

Norms and values are related to religion. In Christianity, historically the most influential religion in the Netherlands, reservations and restraint towards divorce were or are common. This is based on Jesus's teachings, according to Matthew (19, 3-9) and Marc (10, 2-12):

"God said, '[...] a man will leave his father and mother and unite with his wife, and the two will become one.' [...] No human being must separate, then, what God has joined together. [...] Any man who divorces his wife for any cause other than her unfaithfulness, commits adultery if he marries some other woman." (GNB 1994: Gospel according to Matthew).

In the Netherlands, there are some differences between denominations. In most Dutch Calvinist Protestant mainstreams (Dutch Reformed church, in Dutch: *Nederlands hervormde kerk*), divorce is possible, but frowned upon. In the official Roman Catholic church, divorce as such is unknown: under certain special conditions marriages can be annulled. Obviously, people in the Netherlands do not rely on their church for either a legal divorce or a civil marriage. I will go into legal changes with respect to divorce later. Not all church members follow official church policy. This depends on the level of secularization. It is to be noted that levels or moments of occurrence of secularization are not equal between denominations, also in relation to divorce (Dumon & Kooy 1983).

Changes in public opinion with respect to divorce run parallel to trends of individualization and secularization (Lesthaeghe & Van de Kaa 1986). The clearest indicator of this is the percentage of church members. Census data show that in 1971, 24 percent of the population did not belong to any church. Subsequent estimations of trends based on surveys show that in 1975, about 26 percent of the adult population was not a member of any church. In 1980, this was 29 percent, in 1985, 31 percent and in 1990, 38 percent (Becker & Vink 1994). Survey questions in two steps – first asking: "Do you consider yourself a church member," then, if yes: "Which church are you a member of?" – yield higher percentages of non-church members but reveal a similar trend towards secularization. The percentage of non-church members then runs from 42 in 1975 to 50 in 1980, 52 in 1985 and 57 in 1991 (*ibid.*).

Changes in Dutch divorce law reveal how reluctance to accept divorce in the past was replaced by more permissive attitudes. The first Civil Law of the Netherlands after Napoleon in 1838 only allowed divorce on serious grounds, like adultery, long term abandonment or a criminal sentence to long term imprisonment. No-fault divorce based on mutual consent was not allowed. However, a verdict of the Netherlands High Court in 1883 sustained a guilty plea or non-appearance of the defending spouse as a valid proof of adultery. This led to the practice of mutual consent divorce under the guise of a pretended adultery of one of the spouses, a practice also known as 'the big lie'. Officially, a legal increase of permissiveness only came about in 1971. This present law allows divorce if both spouses agree upon a 'durable disruption' (in Dutch: *duurzame ontwrichting*) of the marriage provided that the custody of the children and the division of the property are arranged. This change in law was followed by a considerable increase in divorce figures in 1972 and 1973. After that, however, the annual increase in divorce rates returned to the previous level (Van Poppel & De Beer 1991). In the short period after the new law was passed, a backlog of legal divorces for people who had already separated took place.

Therefore, the law did not cause the rising divorce rate, but merely reflected changes in society.<sup>6</sup>

### 1.2.2 Dutch research into divorce

In the Netherlands, sociological research into divorce has been less extensive and systematic than in some other countries, such as the United States.<sup>7</sup> There are a few exceptions to this rule. The best-known large-scale study into divorce in the Netherlands was done by the family sociologist Kooy (1969). He investigated marital success in the 1960s, using a survey which was nationally representative for the Dutch population. This 'marital success' referred to the level to which the spouses are happy with the relationship and to intentions or disagreements within the relationship. In this way, Kooy conducted cross-sectional research in which marital satisfaction is taken as an indicator for the stability of a marriage. In 1983, Kooy (1984) again conducted a similar research for *Libelle*, a popular magazine, once more indicating the topic's relevance to society. The few other, demographic studies into the social causes of divorce include Klijzing (1992), Manting (1993, 1994).

That sociological research into divorce in the Netherlands has, for a long time, lagged behind that in the United States, may be related to the relatively low, though increasing, divorce risks in the Netherlands (CBS 1976, 1996).

Another possible reason for the lack of systematic research into the causes and consequences of divorce is that research questions into divorce have, for a long time, been considered as implicitly defending the traditional family (Dronkers 1997). In the 1970s and 1980s, the period of increasing diversity in living arrangements other than the traditional family, researchers tried to stress the equality of alternative individual choices. Analysis of social determinants of divorce could easily be considered politically incorrect. In this way, political correctness, under the guise of research free of ethics, does not guarantee that this research will be free of norms and values. On the contrary, the norm of acceptance of more modern living arrangements adopted by researchers, led to the avoidance of investigating divorce. In this line of reasoning, the decision to avoid research into certain subjects related to divorce is actually based upon ethics.

The lack of systematic research into the social causes of divorce is noteworthy. It is not only remarkable because of its social relevance, but from a social science point of view. After all, questions about the formation of primary relationships constitute an important part of the cohesion question in the social sciences. This means that questions about the dissolution of those relationships are important as well.

## 1.3 Mixed marriage and divorce

I would now like to relate mixed marriage and divorce to each other.

### 1.3.1 Societal relevance and scientific relevance related

As I have already mentioned, questions about the dissolution of primary relationships, in addition to questions regarding their formation, constitute an important part of the cohesion question in

the social sciences. Possibly because of its high societal relevance, early research into divorce sometimes took a therapeutic direction. Examples of this therapeutic attitude can be found even for the specific topic of this present research, mixed marriage and divorce. In 1949, Judson T. Landis published an article about the comparison of divorce risks among religiously homogenous and religiously mixed couples. Unfortunately, the couples under research were a selective sample of the parents of the students following Landis's lectures on sociology of the family who answered some questions about their parents. The article states:

"The teacher of courses treating modern marriage becomes a counselor on many types of courtship problems whether or not he wishes to counsel. In Michigan we are often asked for help from students contemplating mixed marriages. They want to know what their chances are for success in such a marriage."

The last sentence in this quote is exactly the core question posed by research into the consequences of mixed marriage with respect to the risk of divorce. The fact that people are asking about it, already indicates its societal relevance. The use of the word 'counsellor', however, seems to suggest that the task of a social scientific researcher is intertwined with that of a personal counsellor. It may be obvious that counselling requires different skills than conducting social scientific research and the other way around, but undoubtedly, knowledge arising from social scientific research may be a helpful tool to specific kinds of counselling. Of course, systematic research into the matter of interest would be necessary in that case.

### *1.3.2 Heterogamy and divorce, mobility research and the openness of society*

When investigating the relationship between spouse selection characteristics – with the main focus on heterogamy – and divorce risk, we are taking the next step in the sequence of mobility research followed in subsection 1.1.3. This step is taken in Figure 1.1 by going from the left lower cell to the right lower cell. If marriage patterns are indicators of mobility and of the openness of society, then it is worthwhile to see the other end. Rising divorce levels make it interesting to see whether it is especially those 'open-society' mixed marriages which are prone to divorce. If so, this sheds new light upon the image of the openness of society. The type of analysis done on this side of Figure 1.1 is different from the previous because the sorting – in this case the mating of spouses – has already taken place. The starting point is formed by the marriages as they come into existence and the fate they undergo as they progress.

I will now discuss this step in research from the left lower cell to the right lower cell. First, I would like to point out that Figure 1.1 is only meant to give an indication of how this research is embedded in mobility research. Many more directions taken by sociological research could be logically added as a dimension to this scheme. We can think of research into the mechanisms of and resources in social reproduction (Blau & Duncan 1967; De Graaf 1987; Niehof 1997), intergenerational and spousal influences on voting behaviour (Need 1997), comparative mobility research, labour market positions and unemployment in couples (Bernasco 1994), poverty, being single or divorced and exclusion (Paugam 1993; Paugam, Zoyem & Charbonnel 1993). Uunk (1996) presented an extended scheme of the history of research into homogamy in his dissertation.

As mentioned above, the level of occurrence of mixed marriage is an indicator for the extent to which members of different groups in society mingle or stay separated. In other words, the level of heterogamy in a society is an indicator for the openness of that society. For that reason, research has been carried out to assess the level of homogamy. In the Netherlands, generally, husband and wife resemble each other fairly strongly, that is to say they are fairly homogamous, with respect to social characteristics. This has been investigated for level of education, age, social background and religion (Hendrickx 1994, 1998; Hendrickx, Lammers & Ultee 1991; Hendrickx, Schreuder & Ultee 1994; Hendrickx, Uunk & Smits 1995; De Hoog 1982; Smits 1996; Smits, Ultee & Lammers 1999; Uunk 1996).

The level of heterogamy does not necessarily remain constant over the years, as shown regarding the Netherlands by Hendrickx (1994), Smits (1996) and Uunk (1996). The change in the level of heterogamy will be regarded as a change in the openness of society. However, we can get an extended view on the openness of society by examining how long these mixed marriages last. This 'other side of the coin' is another indicator for the openness of society: to what extent do mixed marriages end in divorce compared to homogamous marriages? Thus, by answering questions concerning the relationship between heterogamy and divorce, this research contributes to the general sociological field of the openness of society. Rising divorce rates make this extension into the consequences of heterogamy for divorce both interesting and possible to investigate.

In the United States and some other countries, the relationship between heterogamy and divorce has been studied for several decades. Nevertheless, this research was not very systematic and only took one or a few heterogamy characteristics into account per study. All the pieces of the puzzle together shed a light on the influence of many types of mixed marriage on the risk of divorce. Age differences between spouses increase divorce risks (Bumpass & Sweet 1972). Marriages in which spouses have different levels of education, too, have a higher risk of divorce (Bumpass & Sweet 1972; Tzeng 1992; Wagner 1993), even though it is not always present when controlled for heterogamy with respect to job characteristics (Tzeng & Mare 1995). Ethnically mixed marriages are less stable than ethnically homogamous marriages (Jones 1994, 1996; Roloff 1998), even though an American research shows that racially mixed marriages do not need to be less stable than racially homogamous ones, depending on age at marriage and marriage number (Cunningham 1990). Being mixed with respect to religion leads to less satisfaction and higher levels of divorce compared to couples who share the same religion (Burchinal & Chancellor 1963; Bumpass & Sweet 1972; Heaton 1984; Lehrer & Chiswick 1993). The question whether Catholic/Protestant mixed marriages have higher divorce risks have interested American researchers for a long time, even before surveys among proper samples were available (Bell 1938, Weeks 1943, Landis 1949). American intermarriage between Protestants and Catholics increased dramatically in the 20<sup>th</sup> century, while intermarriage between different educational groups has decreased (Kalmijn 1991a, b, Mare 1991). This seems to indicate an increase in the strength of educational boundaries and a decrease in the strength of religious boundaries. Nevertheless, with respect to divorce risks, effects of educational differences are small when compared to heterogamy effects of age and religion (Bumpass & Sweet 1972). Job status heterogamy is found to have a positive effect on divorce (Philliber & Hiller 1983), contrary to heterogamy with respect to income (Tzeng & Mare 1995). Sometimes, effects of heterogamy go in a specific direction, namely of a higher divorce risk in the case of a better situated wife. Divorce risks increase if a wife has a

higher level of education than her husband (Wagner 1993) or if the traditional division of labour is broken and the wife works more than the husband (Tzeng 1992; Tzeng & Mare 1995).

In the Netherlands, the relationship between mixed marriage and divorce has not been investigated systematically in large scale surveys. For the Netherlands, there are a few bivariate statistical notes and a study which show that marriages have a higher risk of divorce if they are mixed with respect to ethnicity (Van der Heijdt 1996; Harmsen 1998), church affiliation or age (CBS 1958; Dumon & Kooy 1983). Besides the fact that not many characteristics are taken into account, another drawback of these studies is that, although data are available in most instances, the comparison of homogamous and mixed categories is not made in the proper way. This is especially prevalent with respect to church affiliation, where both denominational and heterogamy effects are present, so that they can intertwine and become invisible. Suppose that we would like to know whether Catholics married to Protestants have a higher risk of divorce because of their marriage being mixed. We should compare their divorce risk to Catholics and Protestants, leaving out non-church members. The latter can be expected to have a higher divorce risk because of their non-church membership. The relationship between heterogamy and divorce will be obscured if we fail to take this into account.

There is more to be studied in the relationship between mixed marriage and divorce. The level of mixed marriage can be seen as a result of the spouse selection process. When people search for a suitable spouse, they may search for a long time or they may find the one they want to share their lives with quickly. A long search period may result in waiting until a more mature age, by dating more candidates or by observing a candidate spouse for a longer period of time before being sure to have found the Mr. or Ms. Right. This sounds like a conscious and thorough calculation, but obviously, this process is much more subtle and partly unconscious. However, selecting a spouse is a task that may take time in order to find the perfect match.

If the spouses suit each other well, this means that their characteristics are sufficiently compatible. With regard to social characteristics, this means that they have corresponding social characteristics. The outcome of the spouse selection process may also turn out to be an 'imperfect' match. I will go into indicators of the intensity of the search behaviour itself. How long did the spouses search and how well did they look for their match? Research has indicated that the younger the couple is at the time of marriage, the higher the risk of divorce (Becker, Landes & Michael 1977; Manting 1994; Wagner 1993). The same goes for interruption of searching for a spouse because of a sudden decision to marry due to an unintended premarital pregnancy (Morgan & Rindfuss 1985). In theory section 1.5, I will go into this matter further.

#### **1.4 Research questions**

Up to now, I have explored the field of research and discussed some previous research on spouse selection, mixed marriage and divorce. The present study aims at systematically extending the previous research in this field. In this section, I will present the main research questions which are to be answered in the empirical Chapters 2 to 6. In my research questions, I will begin by examining the main topic, mixed marriage and divorce, and end with other aspects of spouse selection. First of all, I aim to present a picture as complete as possible of the impact of mixed

marriage on divorce risks, systematically taking as many aspects as possible into account. To these ends, I will combine many social characteristics on which spouses may be homogamous or heterogamous. This implies a combination of characteristics which were previously studied separately or not at all. The accompanying descriptive research question reads:

1 *Does heterogamy with respect to (1) age, (2) level of education, (3) social status, (4) religion, (5) ethnicity, and (6) social origin, have an influence on the risk of divorce in the Netherlands? And which types of heterogamy have the largest impact?*

This combination of several types of heterogamy is necessary to take into account that some characteristics may be related. Of course, it is interesting to look at the divorce risk of a couple who is mixed with respect to education, for instance, without looking at possible other social differences, but not taking the relationship between social characteristics into account could give an incomplete image. For example, people who have a higher education went to school for a longer period of time. Those people will generally marry at a later age (Smeenk 1998). If those people meet each other more often in school, age at marriage and homogamy with respect to age can be expected to be correlated with educational homogamy. Another example has to do with the level of education and social origin. If it is true that the level of education constitutes a criterion on which spouses select each other and at the same time the level of education is related to one's social origin, then social origin homogamy arises automatically alongside educational homogamy (Blau & Duncan 1967; Warren 1966). To assess levels of homogamy of these kinds simultaneously, sophisticated loglinear dual trait models have been used (Kalmijn 1991c; Uunk 1996). Similarly, dual trait models have been applied to simultaneously assess religious and educational homogamy (Hendrickx 1994). The level of religious homogamy is affected by the level of education of the spouses and the level of educational homogamy is affected by the religious denominations of the spouses.

In order to gain insight into the real impact of different forms of heterogamy on divorce, I will simultaneously investigate the effects of these different forms. Once the influences of several forms of heterogamy on the risk of divorce have been determined, the question remains as to what causes the influence. This question is an explanatory question:

2 *How can the relationship between heterogamy and divorce be explained?*

For this explanation, I will look at what existing literature has to say about heterogamy and divorce. The literature demonstrates that homogamy is advantageous for marriage. These advantages of homogamy imply the disadvantages of heterogamy for marriage. I will demonstrate this in the theory section and show that these disadvantages are embedded both within the couples themselves and within the social environment in which they live.

Besides giving descriptions and explanations, I also intend to discuss trends. As mentioned earlier, society has changed in many respects relevant to the research topic. I stressed the changes towards more acceptance with respect to divorce and the trends in levels of mixed marriage and the openness of society. All these changes have taken place within the past few decades. It would,

therefore, be naive to assume that the relationship between heterogamy and divorce is destined to be stable. This leads to my macro-trend research question:

3 *Which trends can be discerned in the past few decades with respect to the relationship between heterogamy and divorce?*

The first type of change in society which is important with respect to this research question is a trend towards individualization and secularization and, alongside, a shift in norms and values (SCP 1994). The second type of change is related to the first. Society has shifted from being one in which positions can be acquired based on one's social origin towards one in which one achieves positions on one's own merits (Blau & Duncan 1967). This latter change has been applied to account for rising or stable levels of educational homogamy alongside declining levels of homogamy regarding social origin (Forsé & Chauvel 1995, Uunk 1996). If this is so important for homogamy, then it is important for evaluating the impact of heterogamy on the risk of divorce.

The third research question into macro-changes brings me to the question of micro-changes: changes in the life course. Things can change within marriages. In this respect, two types of changes are of interest: firstly the influence of heterogamy levels on the risk of divorce and secondly the heterogamy levels themselves. The former change follows the macro-trend question. If the importance of mixed marriage for the risk of divorce can change over time, it can also change over the course of marriage, even when taking the macro-level changes into account. Why should the impact of mixed marriage on divorce stay the same during marriage? Maybe people become increasingly tired of their differing spouse during marriage. Or, on the contrary, spouses become more accustomed to each other's social differences.

Or maybe they adapt in another way – and this brings me to the second possible micro-level change: spouses can adapt by moving towards each other, for instance when the lower educated one attains additional degrees of education, or when one spouse in a religiously mixed couples converts to the religion of the other. Obviously, these personal changes can go in the opposite direction of alienation, of socially growing apart, as well. So, overall there are two sub-questions in the research question into changes in the life course:

4a *Does the impact of mixed marriage on the risk of divorce change over the course of marriage and in which direction?*

4b *What happens to the risk of divorce when heterogamy changes during marriage in either direction?*

The questions above are descriptive, explanatory, trend and life course questions on the impact of mixed marriage on the risk of divorce. Six types of heterogamy are taken into consideration. I have already indicated the importance of taking all types of heterogamy into account simultaneously. This implies that the main characteristics of the individual spouses – age, education, social status, religion, ethnicity and social origin – are taken into account. These, too, will influence the risk of divorce. There are even more social characteristics related to spouse selection which have to be considered. Did the spouses look well enough when selecting a spouse or did they marry in a hurry or under social pressure? Above, these characteristics have been treated implicitly in



relation to how heterogamy occurs. Now, I will focus explicitly on spouse selection. Therefore, the last research questions extend on to the previous ones by looking into the intensity of search behaviour, such as a short search period or a hastily ended search period. Question 5 is descriptive, question 6 is explanatory.

5 Does the intensity with which persons look for a spouse before deciding to marry influence the risk of divorce?

6 If yes, can this relationship be explained by mixed marriage?

## 1.5 Theory

Let me now go into the main theoretical ideas which are relevant to the present research of spouse selection, heterogamy and divorce. In Chapters 2 to 6, I will draw from these ideas and hypotheses will be derived from them to be tested. The results will yield the conclusions by which the research questions can be answered.

### 1.5.1 Heterogamy and divorce: main considerations

I have already noted that previous research indicates that homogamy with respect to several social characteristics occurs regularly and is more common than heterogamy. Why, then, does homogamy occur so frequently? Several reasons can be given, which I will share under the keywords of personal preferences, preferences of the social environment and opportunity. I will now examine these reasons and demonstrate that they constitute arguments as to why heterogamy will lead to a higher risk of divorce.

I would first like to go into personal preference as a cause of social homogamy. Some people may state that specific types of social differences are not relevant to them when choosing a spouse. They refer to an old expression saying: "Love is blind". In this case, we are talking about people who are, consciously or unconsciously, blind to specific social dividing lines. An even more extreme reasoning is that people who choose a spouse who socially differs from them are not blind. On the contrary, they have deliberately and consciously chosen these differences, like in the old proverb: "Opposites attract". However, it can generally be expected that most people will look for someone with whom they have things in common. That is why another proverb seems to have much more power: "Birds of a feather flock together". Plainly speaking, people choose a person with similar social characteristics simply because they want to, because they like them more, because they share the same characteristics. This does not only pertain to the social characteristics which are under investigation here, but to many more personal characteristics. The idea is that people look for someone who has similar likes and tastes, and this ensures social homogamy. Life tends to be easier when both spouses have the same preferences, expectations and opinions about the organization of daily life, lifestyle, the organization of the relationship, the division of labour and having and raising children. In this way, spouses have the same interests and a common room for discourse. With respect to social characteristics, spousal preferences would translate into

preferring a spouse who is as similar in status as possible (Kerckhoff & Davis 1962; DiMaggio & More 1985). There is, nevertheless, a competing theory, but leading to the same result of homogamous marriage patterns. It is argued that people prefer to marry someone with a status as high as possible (Elder 1969; Mare 1991). High-status candidates will get the first proposals and high-status proposers will be accepted first, which implies that the least attractive will be left for each other.

The second reason for the wide existence of homogamy is found in the preferences of the social environment. Candidate spouses have preferences, but so do their parents and other family and friends. If the husband and the wife have equal characteristics, there will be more resemblances between their respective friends and relatives. This means that people within the social networks of both spouses are more able to get along with each other. If the relationship with the in-laws and with mutual friends is good, they will be more willing to support the marriage. This can be extended to the period before the marriage, when the candidate spouses are dating. In this way, the preferences of the social environment play an important role in the mate selection process.

A third explanation for a strong resemblance between marriage partners is related to the second explanation in the sense that it is related to the environment. But this third reason has nothing to do with preferences but can be found in opportunity. Possible marriage partners often meet in school, at work, when going out or at a friend's place. That is why they will relatively often get in contact with people sharing their social characteristics (Kalmijn 1998; Smeenk 1998).

A theory of heterogamous divorce can be derived by going back to the first two causes of homogamy. These causes were related to preferences: preferences of spouses and preferences of their social environment. The chances of finding someone of one's liking and of one's social environment's liking are higher if that someone has matching social characteristics, such as age, level of education, social status position, religious and ethnic background and social status of origin.

According to these theoretical considerations, a pattern evolves which relates social homogamy, personality, expectations, taste and a good interpersonal interaction between spouses mutually and between spouses and in-law families. Spouses who are similar will probably get along with each other better than spouses who do not resemble each other. Likewise, the odds will be that the families, friends and acquaintances of both spouses will be more alike and that they will be able to get along much better with each other and with those spouses. This implies that they will give greater support to the marriage, including in bad times, and that the step towards divorce is less easily taken than in mixed marriages. However, if a marriage is mixed, the interaction with the social environment may be worse and those people may have more reservations towards the marriage and the couple. When troubles arise, there is a higher chance that parents and friends may say something like: "I warned you. Maybe you should think about divorce". They may try to make their son or daughter turn against his or her spouse. Of course, it does not need to be so explicit. A lack of support may manifest itself in a more subtle way, for example by a repetitive lack of attention and advice or by giving more attention to another son or daughter and his or her spouse who are not heterogamously married. The way in which I describe it here suggests that these considerations are always made consciously and deliberately, but of course that does not need to be the case.

All the above leads to the expectation that mixed marriages are less stable. However, one may object that heterogamous couples have thought through all possible disadvantages before marriage and have come to the conclusion that their love is strong enough to withstand those disadvantages. According to this objection, mixed marriages, even though they are less likely to occur, are a special selection of stable marriages. Furthermore, these people, for the very reason that they get involved in mixed networks, may take all the effort to get along with those different people in the mixed networks (Blau & Schwartz 1984). Their attitude would be more tolerant, and conflict and disagreement as a result of social differences with, for example, the in-law family, would be avoided.

People might be able to get over different preferences and a lack of support by the social environment in the beginning of a relationship or during the honeymoon period. Nevertheless, the expectation here is that the lack of a common social background will bring about a higher divorce risk when the marriage reaches later stages, like after child birth, a characteristic that has to be taken into account. Besides, even though the marriage partners may be willing to overcome differences and accept the in-law family and respective friends as they are, those family and friends may not be willing to do so in return. The support for the marriage will then be low. This is beyond the control of the married couple. Thus, it can be expected that mixed marriages, on average, have a higher risk of divorce.

This does not mean that the assimilation process of getting along in the case of a mixed marriage, as just described, does not work at all. A Dutch study shows that evading the differences promotes acceptance (Hondius 1999). Unfortunately, such studies use in-depth interviewing among still existing mixed relationships only. In this way, divorced and non-divorced couples cannot be compared and no inferences can be made about the influence of mixed marriage on divorce.

### *1.5.2 Heterogamy and divorce: additional considerations*

The outlines of a theory have now been developed which generally predicts more stability for homogamous marriages and, reversely, a higher probability of divorce for marriages mixed with respect to social characteristics. The theory identifies the main causes for this relationship between mixed marriage and divorce, namely differences in tastes and preferences and, therefore, disagreements between spouses on the one hand and the lack of support by the social environment on the other. This is my theoretical starting point. However, differences can be large or small and go in different directions, society is changing and 'social characteristics' is a wide concept. As indicated earlier, I will look at differences between spouses with respect to age, level of education, social status, religion, ethnicity and social origin. Taking all this into account, I will need some extensions and additional suppositions and considerations to the theory which I can use in the next chapters in order to derive specific hypotheses.

#### *1.5.2.1 Division of labour and the direction of differences*

The main theory predicting higher divorce rates for mixed marriages was based on the advantages of homogamous marriage. Nonetheless, theories exist which under certain conditions imply that not homogamy but heterogamy is more advantageous for a marriage. For this, I will turn to the

economic theory (Becker 1981; Becker, Landes & Michael 1977) which predicts more stable marriages if the spouses are specialized in the tasks they perform in the household. This means that there is a clear division of labour in which one spouse, traditionally the husband, has a paid job, while the other spouse, in this case the wife, is responsible for housework tasks. This implies that the husband is more successful as his career is running more prosperously. He has to invest in his career, his economic status or, in economic terms, in his *human capital*. More experience and, therefore, an older age, and a higher education will contribute to his success. In the extreme case of this type of division of labour, investment in human capital is not important for the wife. Because she is taking care of the house and the children, she gets less or no opportunity at all to further invest in her human capital by building up experience. In this way, the social status of the wife is less important to begin with and a gap between the job status of her and her husband is likely. This social status heterogamy will only grow, because she is not gaining any more experience, while her husband is. And more indirectly, heterogamy with respect to correlated characteristics, such as level of education and age, will be promoted by this division of labour.

In this line of reasoning, the term heterogamy is used. In the traditional case of division of labour, it is the husband who has the highest social status and level of education and who is the oldest. This leads to looking at directions in which heterogamy goes. From the perspective of each spouse, he or she can marry upward or downward, which is analogous to being upwardly or downwardly mobile. The terms *hypergamy* and *hypogamy*<sup>8</sup> are used for these perspectives of heterogamy.

When talking about the 'traditional' division of labour, the word 'traditional' seems to point at a situation which is originally considered as 'standard', 'normal'. It refers to a value judgement. Certain combinations, like in this case the fact that it is the husband who is older and in a higher position in society, are by some considered as more acceptable than the combination the other way around. This is related to norms and values, and to common practice. For example, marriages in which the wife is older than the husband are less frequently found than marriages in which the husband is the oldest (Mare 1991; Smeenk & Ultee 1997). Furthermore, women themselves prefer a husband who is a bit older, not only for reasons of custom (preferences in the social environment), but also because it is practical and because women reach maturity at a younger age (own preferences) (Vossen 1999). All this can be used for a further elaboration of the notion that heterogamy is related to divorce because of individual preferences, taste and satisfactory communication between spouses and because of what is expected by people in the social environment. The underlying idea is that the more common a match is, the more stable the marriage will be.

#### 1.5.2.2 Macro trends: secularization, individualization, meritocratization

Just above, I mentioned expectations and traditionality and the fact that the word 'traditional' seems to point at a situation which is originally considered as 'standard' or 'normal'. However, the word 'traditional' first and foremost refers to something which came into practice in the past and survived over time. This brings me to the changes which have actually taken place in society. These will have to be taken into account in the research of heterogamy and divorce.

Some of the main changes in society have already been dealt with in the beginning of this chapter, when mentioning this research's societal relevance. As a matter of fact, the increase of

divorce is one of the changes and it is embedded in a greater array of social changes. This greater array of changes include secularization. Figures above illustrated the vast increase in the number of non-church members in the Netherlands over the past decades.

People are less involved with church. Even for people who still consider themselves as church members, religion has become less salient and less important as a moral guideline (Wilson 1967). Thus, along with secularization, there is more individual thinking: secularization goes together with individualization. This individualization entails that a growing number of people no longer consider marriage to be the only way to security in life, because they have become more individualistic. Instead, they look for love, affection and self-fulfilment in a marriage. This implies that a growing number of people do not see marriage as necessarily lasting for life. They will be more willing to break up if a relationship is working out badly or does not yield what they expect from it. Furthermore, individualization reveals itself in opinions about a number of issues which portray general norms and values. Permissiveness is increasing with respect to extramarital cohabitation, staying single, family planning and self chosen childlessness, homosexual relationships and divorce. This can be extended to marriage outside social dividing lines. We can expect people to be less bound to the social groups to which they belong. Social barriers are becoming fainter. This means that marrying outside social boundaries of religious, ethnic and other social categories is becoming more common. People are less shocked by or opposed to such marriages.

Another theory about macro changes which will be used stems from research into intergenerational social mobility and was predominantly used in that field. Despite this, it was promptly applied to mixed marriage as well (Blau & Duncan 1967; Kalmijn 1991a, b). Society has been changing from one in which positions are ascribed by inherited background characteristics towards a more meritocratic one in which own achievement is more decisive. When applied to the study of the occupational structure, this means that someone inherits the status of his or her occupational position to a decreasing degree from his or her father's position and achieves this status to an increasing degree on his or her own merits, such as the level of education and own experience. This can also be applied to marriage markets. The relevance lies in the fact that I am studying several heterogamy characteristics, some of which are more related to parental inheritance, while others can be attributed to own merits. Research has indicated that an individual achievement characteristic like the level of education has gained in importance when choosing a spouse in comparison to characteristics ascribed by origin such as parental social status, religion and ethnicity (Kalmijn 1991a, b; Hendrickx 1994, 1998). When linking heterogamy to the risk of divorce, we can use the theory about ascription and achievement to predict the relative importance and trends as to different types of mixed marriage.

#### 1.5.2.3 Life course developments: growing acceptance, accumulated irritations

Changes can also occur within a marriage. Basically, one of two things can happen with regard to mixed marriage and divorce; either differences are overcome and things work out right or they do not. The question is whether it is possible to generally predict what will happen. I will apply two opposing theories about changing divorce risks over the course of marriage: the *theory of growing acceptance* and the *theory of accumulated irritations* (Trussell, Rodriguez & Vaughan 1992).

The theory of growing acceptance generally predicts a decrease of the risk of divorce over

the course of marriage. Psychologically, this can be supported by stating that the longer a husband and a wife have been together, the more they have grown accustomed to each other's personal characteristics. Otherwise, they would already have divorced. Economical theory supports a decreasing risk of divorce during marriage by stating that the longer a couple has been together, the more investments they have made in the marriage. They have a lot of common property, such as a house, and children. Divorce would only create more problems. The theory of accumulated irritations, however, proposes the opposite expectation for divorce over the course of marriage. The reasoning is that spouses in general know about many of the personality traits of their partners at the moment they marry and they are willing to adapt. As time goes by they may find out that this is not as easy as they thought. They will get more and more fed up with their spouses' irritating behaviour and finally decide to divorce after all.

These theories focus on divorce risks over the course of a marriage. Nevertheless, they are more suitable to be applied to the relationship between mixed marriage and divorce over the course of the marriage. This goes mainly for the theory of growing acceptance. This can be accomplished by taking the theoretical notion into account which predicts that mixed marriages have a higher risk of divorce *because* of differences in taste and opinions between spouses and *because* of a lack of support for the marriage by the respective parents, friends and acquaintances. If this is true, then the influence of heterogamy on divorce will diminish during marriage, because still existing marriages apparently proved that they were able to handle this and that the couples learned to accept each other.

### 1.5.3 Search behaviour

The final general research questions posed in this introductory chapter were about the influence of the intensity of the search for a spouse on the risk of divorce. These questions were actually raised partly because the relationship between mixed marriage and divorce seems to provide a possible explanation for the relationship between the intensity of search behaviour and divorce. Relevant to this respect is the notion earlier in this chapter that social heterogamy can be considered as an outcome of the spouse selection process.

The general expectation is that if someone did not search long or hard enough for a suitable marriage partner, the probability of a 'wrong' choice is higher. This means that he or she ends up with an incompatible spouse (Becker, Landes & Michael 1977). This inferior level of compatibility, in turn, may show up in spousal differences with respect to their personalities and their social characteristics, leading to increased marital instability. Although one may find a spouse with corresponding ideas, opinions, behaviour and expectations but deviating social characteristics, the chances are high that if someone is looking for a spouse with a similar taste and the same preferences, he or she will find a person who also has similar social characteristics. It is exactly these social characteristics about which I have been talking up to this point: age, level of education, social status, religious affiliation, ethnic background and social origin.

There are several aspects to the intensity of the search behaviour for a spouse. Firstly, we can think of maturity. This is directly related to the age at marriage. On average, younger people can be expected to make more impulsive and impetuous choices. Additionally, at a relatively young age, people are still psychologically developing. After a few years of marriage, these people might realize that they have ended up with someone who is completely different from their initial

expectations.

A second aspect of the intensity of the search behaviour is simply the length of time that spouses know each other before they decide to marry. This aspect is related to the previous one, because it deals with knowing whom one marries. One may expect that candidate spouses know each other better after they have observed each other for a longer period of time. This is expected to decrease the chances of an insufficient match. Knowing each other may refer to either the period before forming one household or the period between the start of cohabitation and marriage. The former refers to the period of courtship or dating, whereas the latter refers to the practice of cohabitation before marriage, the occurrence of which has increased tremendously in the past few decades. Both the duration of courtship and cohabitation before marriage can be seen as an extension of the period of searching for a spouse. Cohabitation in this respect can be seen as a test marriage, from which the more stable are expected to survive and eventuate in more stable marriages (Klijzing 1992). Nevertheless, much international research has demonstrated that couples who live together before they marry have higher risks of divorce. This is generally attributed to the fact that premarital cohabitation constitutes a reflection of less adherence to traditional norms and values concerning marriage and the family.

The final aspect of the intensity of spouse selection is considered with a premature decision based on pressure from the social environment: premarital pregnancy. Couples who decide to marry because the wife got pregnant unintentionally, ceased their search for a suitable spouse early. In the case of such a so-called *shotgun marriage* the chances are higher that a premature choice regarding the spouse has been made. This implies that the probability is higher that the spouses will turn out to be less suitable for each other, which increases the risk of divorce.

## 1.6 Data sources

In this study, two different data sets will be used for the analyses in which the hypotheses to be derived from the above theoretical considerations will be tested. One of the data sets stems from official registrations, the other from a sample survey.

### 1.6.1 Marriage and divorce registrations

The first data source stems from records registered by Statistics Netherlands (CBS), which I analysed on site. This information was supplied by every Dutch municipality and it includes every marriage and divorce registered in these municipalities between 1974 and 1994. No records are electronically available from before this period. After this period, data are not gathered in this way anymore, but information of persons is obtained from the municipal basic administration (*Gemeentelijke Basisadministratie, GBA*). This information is not available for external across-time analysis. I have records on all marriages contracted and dissolved in the Netherlands during the period 1974-1994. It is a unique opportunity for me to match and analyse these data that cover the whole research population and that have never before been used for such a purpose.

The municipalities filled in information on registration forms about characteristics at the time of the marriage ceremony. Of the 1,928,463 marriages which were registered in the period

1974-1994 (21 years), information is available about the municipality of registration, the date of marriage, the dates of birth, the previous marital statuses, the church affiliations (until 1991) and the nationalities of both spouses. Within the same period, 1974-1994, 581,040 divorces were registered. However, many of these divorces concern marriages contracted before 1974. These divorce registrations contain information about the municipality in which the couples married, the date of divorce, the date of marriage and the year of birth of both spouses.

Thanks to the information supplied by the divorce files, it is possible to know whether any one of the marriages contracted in the Netherlands ended in divorce before the end of 1994. Nevertheless, as the files do not contain a unique file number, they had to be matched using a combination of characteristics available in both sets of files. The way in which this was accomplished and exactly which information was used will be shown in Chapters 2 and 3.

The use of these data has two advantages. Because this information stems from official registrations, it does not suffer from a possible lack of reliability of retrospective questions. Furthermore, I have real population information instead of a sample and I am not dependent on statistical significance. It is also possible to study relatively small groups. The use of these data has drawbacks as well. The number of characteristics for which the influence of heterogamy can be detected is limited. Spouses can be compared with respect to their ages, religious affiliations, nationalities and their previous marital statuses, but other social characteristics on the basis of which the spouses possibly select each other, such as level of education and social origin, are left out of the picture.

### 1.6.2 Divorce in the Netherlands: SIN 1998

Because of the shortcomings of the registration data, as just mentioned, I also used survey data. These stem from the SIN98 data set (Kalmijn, De Graaf & Uunk 1999). This data set was especially designed for this particular and several other research projects and it contains sufficient information about the two spouses in both intact and divorced relationships.

The interviews were carried out in autumn 1998 and winter 1998/1999. Within a sample of municipalities in the Netherlands, representative with respect to region and degree of urbanization, three sub-samples were taken: one from married people in their first marriages, one from divorced people who were then single, and one from divorced people who remarried. The age limit in all these strata was set from 30 to 75 years. In order to have a sufficient number of divorced and remarried people in the sample, the second and third strata were over-represented. Of the people in the sample, 78.9 percent could be reached. Subsequently, 57.7 percent of these completed the survey, which was administered by interviewers using a paper questionnaire (PAPI, *paper-and-pencil-interviewing*). This brings the response rate to 45.6 percent. Because of the sensitivity of the subject and the over-sample of divorced people, this percentage is certainly not bad. In total, the survey was completed among 2,346 individuals: 551 respondents (23 percent) were in their first marriages and 1,795 (77 percent) had been divorced.

The survey included questions about the respondents' life histories, their (past and/or present) marriages and their working careers among other things. For the research in the present study, we included questions about both spouses' social characteristics, their courtship period, disagreements between spouses and acceptance of the relationship by the social environment. The design was such that extended information about the marital relationship and the spouse became



available for one marriage, that is the present marriage for married people in their first marriage and the past marriage for those who had been divorced. If a person had been divorced more than once, the longest lasting relationship was taken.

The use of this data set makes it possible to extend the study of mixed marriage to other types of social heterogamy which are not available in the official marriage and divorce registrations. These types of heterogamy concern heterogamy with respect to level of education, social origin and social destination. The way in which all this information could be used, will be shown in Chapters 4 and 5. The way in which the information on characteristics with respect to the intensity of spouse selection were used, will be shown in Chapter 6. Analyses on these data can be extended to unmarried unions of cohabitation, which are obviously missing in official marriage registrations.

The data sets used in this study are complementary. The advantages of the one are the shortcomings of the other.

## 1.7 Organization of this book

All the theoretical considerations which I dealt with in section 1.5 will be used in the subsequent chapters to derive hypotheses. These will be tested by using the data sets introduced in section 1.6. This will yield the answers to the research questions posed in section 1.4.

In Chapter 2, the use of the official marriage and divorce records in the study of the relationship between heterogamy and divorce will be introduced. In that chapter, a partial answer can be given to research question 1 by using information on the whole population. The relationship between heterogamy and divorce will be studied for four types of heterogamy, namely with respect to age, religion, nationality and previous marital status.

Chapter 3 will expand upon Chapter 2 by making a distinction in marriage durations and marital cohorts. In other words, Chapter 3 adds dynamics to Chapter 2. For a limited number of types of heterogamy, the results from registration data will give an answer to research questions 3 and 4a.

The other research questions need more detailed information to be answered. For this, I will use the survey data of SIN98. In this way, Chapter 4 will extend on Chapter 2 by adding more characteristics of heterogamy and by adding theoretical explanatory characteristics. The results in Chapter 4 can, therefore, be used to answer research questions 1 and 2.

Chapter 5 dynamically expands upon Chapter 4 just like Chapter 3 dynamically expands upon Chapter 2. Changes in the impact of six types of social heterogamy on divorce will be studied. These changes are concerned with trends over time as well as changes over the course of a marriage. So, Chapter 5 will result in answers to research questions 3 and 4.

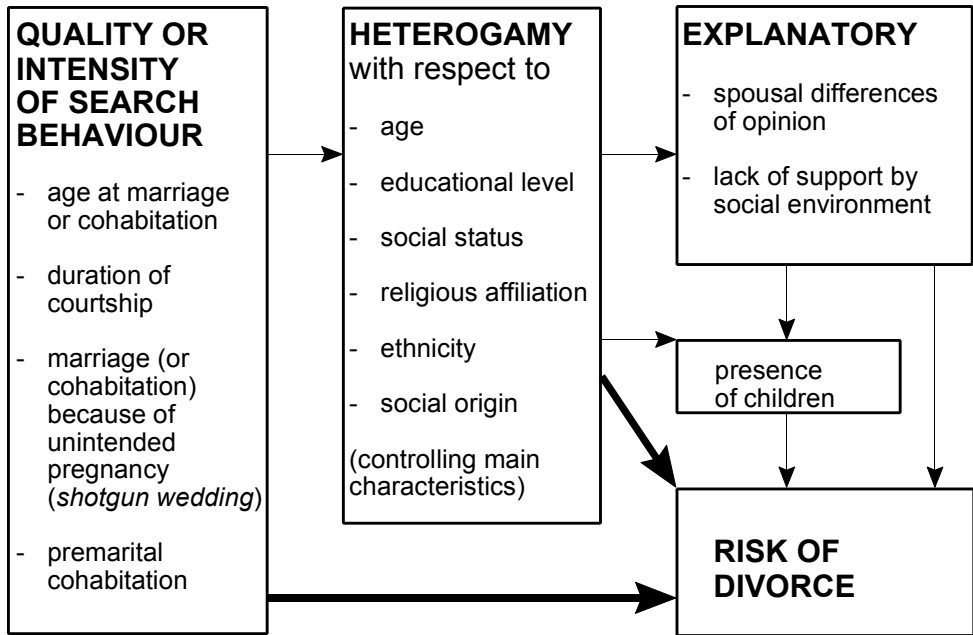
Chapter 6, then, will introduce information about the intensity of search behaviour in spouse selection. In this way, the remaining research questions 5 and 6 can be answered.

The results and answers found in Chapters 2 to 6 will be brought together in Chapter 7. That chapter will contain a synthesis of the whole study and a conclusion to this book.

A complete image of the relationships studied in this research is visualized in a simplified way in Figure 1.2. In this figure, the key characteristics are positioned as well as the relationships between them. The bold arrows indicate the main relationships under investigation: from search

behaviour to the risk of divorce and from heterogamy to the risk of divorce. The other arrows are relationships which are controlled. Dynamics over time and over the course of marriage still need to be added to this picture.

Figure 1.2 The relationships studied in this research



**Notes**

1. Often, the terms ‘endogamy’, ‘exogamy’, ‘in-marriage’ and ‘out-marriage’ are reserved to indicate the breakout of the social status position of origin, of the parents. In that case, it is used for mixed marriage with regard to a characteristic such as parental social class, but not with regard to own social position or age, for instance (cf. Hansen 1995). For reasons of clarity, I will use the terms ‘homogamy’ and ‘heterogamy’ or ‘mixed marriage’ in this book for any type of social difference between spouses. If applicable, the type of difference will be specifically indicated. The equivalents for mixed marriage and assortative marriage are from Greek origin: ὁμός (homos), equal; ἕτερος (heteros), different, other; ἔνδον (endon), inside; ἔξω (exo), outside; γαμέω (gameo), marry. Inventing a Greek-based equivalent for higher divorce risks among mixed marriages as the counterpart of heterogamy would lead to the term *heterapostasy*, from ἕτερος (heteros), different, other; ἀποστάσιον (apostasion), divorcement.

2. Most of the commotion was related to the fact that both Protestants and Catholics participated in the Eucharist, including the previous queen, Princess Juliana, the mother of the present queen.

3. For an overview of sociological main questions, see Ultee, Arts and Flap (1992).

4. At the end of the 1980s, the yearly divorce figure showed a slight decrease to 81 per 10,000. In 1994, the official figure jumped to 102, to conclude the century at a level of 95. The rise in figures until the mid 1980s is particularly important. The rise in the mid 1990s may be at least partly attributed to a different measurement: from Dutch court divorces until 1994 towards registered divorces of couples of whom at least one spouse is registered in a Dutch municipal basic administration since 1994.

5. Except for an increasing acceptance of non-traditional living arrangements, an increase of the occurrence of some of them can be noted. A serious pluralization of living arrangements is not likely to have taken place on the level of society as a whole, since the main shift can be found in an increase of one person households at the expense of the proportion of married couples with children. Only within relatively small subgroups of extra-familiar non-single household living arrangements has some pluralization taken place (see for example Wagner & Franzmann 2000).

6. For an international comparison of legal dissolution, see Castles and Flood (1991).

7. 'Research into divorce' as such is a wide concept. Even cross-cultural comparisons of divorce patterns have been made (Goode 1962, 1993). In this study, as already stated, I am focussing on specific socio-cultural causes of divorce.

8. These terms are derived from the Greek words ὑπέρ, (hyper), for up, above, and ὑπό, (hypo), for down, beneath.



## 2 Heterogamy and divorce within ten years.

### A descriptive analysis of Dutch register data 1974-1994.<sup>1</sup>

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**D**o marriages in which, at the time of marriage, partners do not resemble each other with respect to age, religion, nationality and former marital status, have higher probabilities of divorce than marriages in which partners have the same characteristics? To answer this question, I employed marriage and divorce registration data as collected by Statistics Netherlands (CBS). These data enabled me to assess all new marriages conducted between 1974 and 1984, to see whether they had ended in divorce before 1994. The analysis of this data set shows that several forms of heterogamy affect the divorce risk. Couples in which spouses differ in age (especially if the wife is older than her husband), couples in which husband and wife have different religions, and couples with different nationalities have higher divorce risks than homogamous couples. The more uncommon a combination, the higher the risk of divorce.

#### 2.1 Introduction

In this chapter, I will look at Dutch society at the end of the 20<sup>th</sup> century and determine the extent to which social differences between spouses (heterogamy) at the time of marriage affect the probability that a marriage will end in divorce. I will demonstrate how I used data registered by Statistics Netherlands (CBS) on every marriage taken from the population registers of all Dutch municipalities in the period from 1974 until 1984 and on every divorce registered from 1974 until 1994. By means of these data, I investigated whether a higher degree of differences between spouses (the level of heterogamy) leads to a higher chance of divorce compared to marriages in which husband and wife resemble each other (homogamous marriages). This is the first time that records of these marriage and divorce files were matched. The registration data of Statistics Netherlands give information about four kinds of heterogamy: differences with respect to age, religion, nationality and previous marital status (never been married, divorced or widowhood).

A lot of research on the occurrence of homogamy has been carried out in the Netherlands. Generally, husband and wife appear to resemble each other strongly with respect to level of education, age, social origin and religion (Hendrickx 1994, 1998; Hendrickx, Lammers & Ultee 1991, Hendrickx, Schreuder & Ultee 1994; Hendrickx, Uunk & Smits 1995; De Hoog 1982; Smits 1996, 1999; Uunk 1996; Uunk & Kalmijn 1996). The most prominent explanation for homogamy assumes that behind the choice for a spouse with equal social characteristics, there is a hidden preference for a spouse with a corresponding taste. Life is much more agreeable when one's partner in life has similar ideas about the division of labour<sup>2</sup>, about having and raising children, about the organization of the relationship and about lifestyle. By choosing a spouse with similar characteristics, one creates a common room of discourse and shared interests in life. A second explanation for homogamy refers to the support given to the relationship by the social environment. If a husband and a wife have equal social characteristics, then their respective family members and mutual friends will also bear a closer resemblance to each other. They will

get along with each other and with the married couple better, and therefore give more support to the marriage and the choice of spouse. Next, one may have wishes, but needs the opportunity to have them fulfilled. Therefore, a third explanation for a strong resemblance of marital partners can be found in the opportunity structure. People meet each other in school, at work, when going out or at a friend's place and because of this, come into contact with people who have similar social characteristics relatively often (Kalmijn 1998; Smeenk 1998).

Why, then, do heterogamous marriages exist? There are at least five causes for this, some of which are mirrored to the three reasons above for the existence of homogamy. Firstly, some people may think that social dividing lines are irrelevant when selecting a partner: "Love is (socially) blind". Secondly – and this argument is closely related to the first argument of irrelevance – social dividing lines are not completely synonymous with preferences. It is possible to find a spouse with similar tastes and expectations who does not belong to the same social group. The third possible reason for the existence of heterogamous marriages is that people sometimes do not take enough time to find their match. People who marry young can easily end up in a marriage with a spouse who later turns out to be less compatible than expected. Fourthly, the opportunity structure can play a role when heterogamous marriages come about (Becker, Landes & Michael 1977). This is related to availability. Heterogamous marriages can arise automatically when one is unable to find a spouse with similar social characteristics, but persists in wanting to get married. Anyway, it is not easy to find a marriage partner who is equal in every conceivable respect. Fifthly, it is possible that heterogamy comes about because it is useful in some respect. This applies to the division of labour within the household in particular. According to the economic theories of Becker, a specialized division of labour within the household is favourable for a marriage: one spouse does the housekeeping, the other is the breadwinner. The result is some kind of exchange. This brings about heterogamy with respect to the position on the labour market and the investment in human capital (Becker 1981; Becker, Landes & Michael 1977). This is also important with respect to a difference in age. After all, men, who are mostly the breadwinners when the division of labour is specialized, have a better position if they already have some experience and, therefore, are a bit older. Although the resulting heterogamy may be efficient with respect to the division of labour, it can result in marital conflict as a result of cultural differences.

If it is true that homogamy enhances the possibility of finding a spouse with similar tastes and preferences, and ensures that one will experience more support from the social network, then it can be expected that homogamous marriages will be more stable and long lasting than heterogamous marriages.

However, not much is known on this topic in relation to the Netherlands. There are a few bivariate statistical notes and a study which show that mixed marriages have a higher risk of divorce with respect to ethnicity (Van der Heijdt 1996; Harmsen 1998), church affiliation and age (CBS 1958; Dumon & Kooy 1983). The drawback of these studies is that, though data are available in most instances, the comparison of homogamous and mixed categories is not made in the proper way. I will go into this matter later on. Furthermore, these studies, using official registrations of divorces, do not directly match marriages and divorces but relate the occurrence of divorce of certain categories to the occurrence of marriage within the same categories a specific number of years earlier. Multiple characteristics of spouses on the wedding day are unknown. Therefore, complete multivariate analyses are not possible.

More research has been carried out in the United States and a few other countries. The studies in concern, both bivariate and multivariate, show more or less positive effects of heterogamy on the risk of divorce (e.g. Bumpass & Sweet 1972; Burchinal & Chancellor 1963; Heaton 1984; Jones 1994, 1996; Wagner 1993). These studies use either retrospective life-course data or occasionally panel data. The effects of differences in church affiliation are mostly small. Stronger are the effects of age differences and, not under investigation in this chapter, differences in the level of education (Kalmijn 1991a 1991b; Tzeng 1992; Wagner 1993).

It is not so strange that, for the Netherlands and for most other countries, so little is known about the effects of heterogamy on divorce. To establish the influence of heterogamy on divorce, information is needed about relevant characteristics of both partners in both existing marriages and marriages that have ended in divorce. This makes high demands on the data that are needed and in existing population surveys in the Netherlands, the required information is either insufficient or absent. Sometimes, an alternative research design is used in which one does not look at *de facto* divorces but at other measurements of instability of marriages, such as the perceptive quality of the marriage and the subjectively estimated probability of divorce by the spouses themselves (Kooy 1969, 1984; Booth & White 1980; Booth, Johnson & Edwards 1983; Janssen, Poortman, De Graaf & Kalmijn 1998). Such research has indeed shown that some forms of heterogamy, especially with respect to level of education and social origin, lead to more unstable marriages. However, the research design followed is far from ideal. Even though perceptive instability of a marriage is related to the probability of divorce, it cannot be equated to an actual divorce. After all, marital problems are often overcome and some people prefer being unhappily married to being divorced. Furthermore, a large data set is needed to find enough cases of more unusual combinations of, for instance, ethnicity.

For this chapter, registered data were used to study the influence of heterogamy on divorce. Every year, the Dutch municipalities had provided Statistics Netherlands with registration cards containing information about every marriage and divorce that they had entered into their registers.<sup>3</sup> On the basis of these registration cards, it was possible to follow every marriage contracted in the Netherlands between 1974 and 1994. This allowed me to check every marriage to see whether it ended in divorce for as long as the data were available, that is, until 1994. This means that, for the selection of marriage years 1974-1984, ten years is the minimal duration for which I could follow all these marriages. The municipalities also had to provide Statistics Netherlands with a few characteristics concerning both spouses. Based on this information, I could establish whether the marriages are homogamous or heterogamous with regard to four aspects: age, religion, nationality and previous marital status.

My method has two major advantages. The first one is that this research does not concern a sample but data about all marriages and divorces registered in the Netherlands between 1974 and 1994. In this period, 1,928,463 marriages and 581,040 divorces took place (a large part of the divorces concerning marriages which started before 1974). With these data, marital dissolution of small groups can also be observed. The second advantage is that in this prospective research design, I do not depend on possibly less reliable, retrospective data. My research design has some drawbacks as well. The number of characteristics for which the influence of heterogamy can be detected is limited. Spouses can be compared with respect to their ages, religious affiliations, nationalities and their previous marital statuses, but other social characteristics on the bases of

which the spouses possibly select each other, such as level of education and social origin, are out of the picture. Furthermore, the data solely refer to officially married persons in the Netherlands. Separations of persons living in unmarried cohabitation are not included. This has to be kept in mind, even though it is not a big problem, since most serious cohabitations eventually lead to a marriage in the Netherlands. Of women aged 20-24 who started cohabitation without marriage between 1975 and 1979, within 8 years, 67 percent were married, 22 percent were separated and only 11 percent were still cohabiting without being married. For the women aged 20-24 who started cohabitation between 1980 and 1984, these figures after 8 years are: 63 percent married, 19 percent separated and 18 percent still cohabiting (De Graaf & Steenhof 1999, pp. 26, 28).

In this chapter, I set out to answer the question whether mixed marriages indeed have a higher probability of divorce within ten years, the duration for which I can follow a reasonable selection of marriage years. In the next paragraph, I will theoretically answer this question by presenting hypotheses. After that, I will describe the data from the marriage registers that I used. This will be followed by the analyses. The concluding paragraph will complete this chapter.

## **2.2 The influence of heterogamy on divorce: hypotheses**

I have already noted that homogamy can have two advantages leading to a successful marriage. Spouses who resemble each other in social respect share ideas about how to organize their lives and will probably get on better than less similar spouses. Also, there will be a higher chance that both spouses' family members, friends and acquaintances are better able to get along, which also makes life more pleasurable. These considerations can be made consciously and explicitly when selecting a partner for marriage, but obviously, this is not necessary. Shared preferences and support from one's social network give rise to the expectation that a homogamous marriage will be more stable than a heterogamous one.

To this reasoning, one could object that persons choosing for a heterogamous marriage may have decided, again explicitly or not, that the disadvantages of a heterogamous marriage do not outweigh their love or that they find their preferences to be compatible. This line of reasoning suggests that it is true that people who do not resemble each other have a reduced probability to marry each other, but that the selective group who still does so constitutes stable marriages. Besides, it is probable that people who end up in heterogeneous networks of different social backgrounds because of their heterogamous marriage, will make every effort to get along with people of these different backgrounds. They will adopt a tolerant attitude and avoid disagreements or conflict as a result of social contrasts (Blau & Schwartz 1984; Hondius 1999).

In the beginning of the relationship and during the honeymoon, one might easily be able to forget about differences in preferences and a lack of support by family and friends. Nevertheless, it can be expected that once a heterogamous couple is married, a lack of shared culture and interests will lead to a higher risk of divorce. An additional argument reasons that not only heterogamous couples fit less well because of cultural differences, but that those differences stemming from different backgrounds are the reason that the spouses are less able to gain sufficient information about each other. Another issue is that, even though the marriage partners may be willing to overcome differences and accept the in-law family and respective friends as they are, if those



family and friends are not willing to do so in return, they will not support the marriage. A relatively small crisis during the marriage is less likely to be resolved.

In short, I expect that heterogamous marriages have a higher risk of divorce than homogamous marriages. I call this the *heterogamy hypothesis*.

What do I mean by differences in divorce rates between heterogamous and homogamous marriages? In other words: how should the hypothesis be tested? At first sight, one could think that the average probability of divorce of all homogamous marriages should be compared to the average probability of divorce of all heterogamous marriages. This is not the correct way to proceed, though, because there are quite some differences within the group of homogamous marriages, just as there are within the group of heterogamous marriages. Homogamous marriages between two non-church members have a higher risk of divorce than homogamous marriages between two Re-reformed (*gereformeerden*) and it would be misleading to take these risks together. In the same way it is misleading to combine, for example, heterogamous marriages between a non-church member and a Catholic spouse and heterogamous marriages between a Re-reformed and a Dutch Reformed spouse. To detect whether heterogamous marriages between non-church member husbands and Catholic wives have a higher probability of divorce, their probability of divorce should be compared to the probability of divorce of two homogamous groups only: homogamous non-church member marriages and homogamous Catholic marriages. If the probability of the heterogamous couples is in between, then an adaptation is taking place which does not constitute a heterogamy effect per se. In this way, I can take possible adaptation into account (cf. Jones 1994, 1996).

The above reasoning implies that different categories of the characteristics under research are expected to have different divorce risks. In fact, this reflects the main effects of those characteristics themselves. Let me hypothesize about these effects in short here. I have already expressed the expectation that non-church members will have higher divorce risks than church members. However, we may also expect differences amongst church members. The strictest church members in the Netherlands can be found among Re-reformed groups. Therefore, I would expect the Re-reformed to have the lowest divorce risks. With respect to age, I hypothesize that couples marrying at young age have higher divorce risks than couples marrying at a more mature age, as has been found earlier (Bumpass & Sweet 1972). Mostly, this effect is attributed to a short-duration, low-quality search for a suitable spouse (Becker, Landes & Michael 1977), which will be studied more deeply in Chapter 6. With respect to marital status, I expect that persons who remarry carry a burden of their past marriage in the form of memories and maybe even physical 'remnants', like children. This may cause tension in a subsequent marriage. That is why I predict a higher divorce risk in a second or later marriage. This effect can be expected to be stronger for divorcees than for widows and widowers, since the memories of divorcees will, on average, be more negative than those of widowed people. I have no specific expectations about the main effects of nationality on divorce.

In general, my testing procedure is as follows. I compare the risk of divorce of heterogamous marriages with the risk of two appropriate types of homogamous marriages. Firstly, these are the homogamous marriages in which both partners have the same characteristic as the wife in question and, secondly, these are the homogamous marriages in which both spouses have the same characteristic as the husband in question. This can be clarified by Table

2.1. On the shaded main diagonal, fictitious probabilities of divorce are depicted for homogamous non-church member marriages, homogamous Catholic marriages, homogamous Dutch Reformed marriages and homogamous Re-reformed marriages. The cells outside the main diagonal, A to L, represent heterogamous marriages. To investigate whether a marriage between a non-church member husband and Catholic wife (combination A) has a higher probability of divorce than homogamous marriages, the probability of the heterogamous marriage is compared to the probability of homogamous non-church member marriages and homogamous Catholic marriages, which in this case is 10 percent and 6 percent. If A is between 6 percent and 10 percent, heterogamous marriages apparently adapt to the norms and customs with respect to divorce in the two religious groups. According to the *heterogamy hypothesis*, however, it is expected that A will be larger than both 10 percent and 6 percent, so, that A will, for example, be 12 percent. In the same way, the *heterogamy hypothesis* predicts that the divorce risk of a Catholic/Dutch Reformed marriage will be greater than 6 percent, etcetera.

Table 2.1 Example on fictitious divorce risks by religion of husband and wife

		wife:			
		none	Catholic	Dutch Reformed	Re-reformed
husband:	none	10 %	A	B	C
	Catholic	D	6 %	E	F
	Dutch Reformed	G	H	5 %	I
	Re-reformed	J	K	L	4 %

This general *heterogamy hypothesis* relates to all four types of heterogamy mentioned. I can formulate a supplementary hypothesis about the influence of age heterogamy. Marriages in which the wife is older than her husband occur less frequently than marriages in which the husband is the oldest (Mare 1991; Smeenk & Ultee 1997). Apart from task specialization mentioned above, one of the reasons for this is that marriages in which the wife is older are less easily accepted than marriages in which the husband is older. This refers to traditional norms that the man is the boss. This traditional superiority becomes 'endangered' if the wife is older because her relatively higher age will give her a bigger say. That is why it can be expected that, if the wife is older than her husband, the probability of divorce is higher than in the case of the same difference in age in the other direction. This is called the *asymmetry hypothesis* or *hypergamy hypothesis* with respect to age heterogamy. This hypothesis predicts that marriages which are heterogamous with respect to age are extra inclined towards divorce if the wife is older than her husband. *Asymmetry* here refers to the fact that in a squared table with rows and columns for husbands and wives, the mirror cells do not display the same divorce risk according to this hypothesis. *Hypergamy* refers to someone marrying a spouse in a higher or better position, as *hyper* is the Greek synonym for the Latin *super*. In this chapter, I will use the term *asymmetry hypothesis*. For heterogamy with respect to church affiliation, nationality and previous marital status, the *asymmetry hypothesis* is not obvious and will not be postulated.

## 2.3 Registration data

### 2.3.1 Official marriage and divorce registrations

In order to test the hypotheses, I made use of data which are registered by Statistics Netherlands (CBS). This is information supplied by all Dutch municipalities of every marriage and divorce registered in these municipalities between 1974 and 1994. No records are electronically available before this period. After this period, data were not gathered in this way anymore, but information of persons was taken from the municipal basic administration (*Gemeentelijke Basisadministratie, GBA*). This organization made it impossible to match the information necessary for the present investigation for the period after 1994. For the 1974-1994 period, I had records on every marriage contracted and dissolved in the Netherlands. The municipalities filled in information about characteristics at the time of the marriage ceremony on registration forms. Therefore, this information does not suffer from a possible lack of reliability inherent in retrospective questions. Table 2.2 gives an overview of the number of registered marriages and divorces in all available files and in the files used in this chapter.

Table 2.2 Registered marriages and divorces

	Marriages	Divorces
Registered 1974-1994	1,928,463	581,040
Key not unique	59,851	9,868
Marriage before 1974 (not applicable)		297,169
Contracted abroad (not applicable)		101
Marriage not present in marriage files		46,384
Totally available	1,868,612	227,518
Selecting marriages between 1974-1984 of which both spouses younger than 50 years on the wedding day.	931,198	158,620

Of the 1,928,463 marriages registered in the period 1974-1994 (21 full years), information was available about the municipality of registration, the date of marriage, the municipality in which the partners lived and the one in which they were going to live, the dates of birth, the previous marital statuses, church affiliations (until 1991) and nationalities of both spouses. To be able to analyse the influence of as many of these characteristics as possible on the risk of divorce and to follow all marriages for at least ten years, I decided to employ the data on marriages contracted in the years 1974-1984 (11 full years). These could be tracked in the divorce files until 1994.

In the same period 1974-1994, 581,040 divorces were registered. These registrations contain information about the municipality in which the couples married, the date of divorce, the date of marriage, the year of birth of both spouses, church affiliation of both spouses, the occupation of the husband (for a very restricted period) and the number of children in the

marriage. The occupation of the husband and the number of children at the time of divorce cannot be used to predict which marriages will end in divorce, because this information was not available for couples who did not divorce. It is necessary to compare divorced and non-divorced couples in order to compute divorce risks. The most important information supplied by the divorce files is that it became known of every marriage contracted in the Netherlands, whether or not it had ended in divorce before the end of 1994. The exact date of divorce was also available, so I knew how long the marriage had lasted.

In order to find out whether a couple who married between 1974 and 1984 divorced between the start of their marriage and 1994, I looked for all marriages in the divorce files. Seeing that no direct link is possible, for example based on file identification numbers, I used a combination of characteristics available in both the marriage files and the divorce files. The combination of the municipality of the marriage, the (exact) date of marriage and the year of birth of both spouses yielded an (almost) unique key to make the match of both files. The information about the municipality of marriage had to be used with care, because registers regularly go to other municipalities as a result of the abolition and creation of municipalities. Therefore, I recoded all municipalities to the situation on 1 January 1996. If the full dates of birth of both spouses had been recorded in the divorce files, the key would have been completely unique, but unfortunately, only the years of birth were recorded. Now, there are some marriages and divorces with an equal key. These marriages cannot be used and as a result of that, 3 percent of the marriages registered between 1974 and 1994 were dropped. I assume that this did not affect my results.

I wanted to be able to follow all marriages for ten years. Therefore, I restricted myself to the marriages contracted between 1974 and 1984, which is about half of the marriages observed in all the files together. Next, I had to account for distortion of the results caused by death. The registration data do not show whether a marriage ended because one of the partners deceased. To restrict the risk of falsely assuming that these marriages were still at risk of divorce, I only analysed those marriages in which both spouses were younger than 50 years of age at the beginning of the marriage.<sup>4</sup> By selecting the marital years 1974 to 1984 and the couples who married before the age of 50, having valid values on all relevant variables (there were three couples with missing values), 931,198 marriages remained to be analysed.

A large part of the 581,040 divorces registered in the Netherlands during the 1974-1994 period were also dropped from my analyses. The most important reason for this is that many divorces concerned marriages contracted before 1974. A relatively large number of 46,384 divorces (8 percent of all divorces in the file) which according to registration concerned marriages contracted between 1974 and 1994 could not be traced in the marriage files. Partly, these could be marriages from abroad which happened to end up in these statistics. Besides, one has to realize that data entry errors also crop up in official statistics. The data from the years that I analysed were noted down in the municipal administration, copied on forms by hand, and then sent to Statistics Netherlands to be processed. A third possibility, which seems unlikely because this is against policy, is that parts of certain municipal administrations went to another municipality than expected after those municipalities had been abolished. However, the administration of an abolished municipality always goes to the municipality to which most inhabitants of the abolished municipality are assigned. This is exactly how I recoded the municipalities. It seems unlikely that a marriage and the divorce of the same marriage were assigned to different municipalities in my procedure. However, it is technically impossible to test this.

### *2.3.2 Operationalization*

All characteristics of husband and wife were taken from the marriage registration data and refer to the time of marriage. I divided both the husband's and wife's ages into seven categories: younger than 20, 20 to 25, 25 to 30, 30 to 35, 35 to 40, 40 to 45 and 45 to 50 years. Dividing age into five year intervals allowed me to present accessible cross tabulations of both spouses' age. Of course, categories are based on arbitrary borders. Two people can differ 4 years and be in the same age category whilst others differ a month and belong to different age groups. Nevertheless, on average people in one age group are more homogeneous, whereas age differences increase when category cells in the frequency table are further apart.

Several denominations can be discerned in respect of church affiliation. Seven categories were available throughout the period under investigation: no church affiliation, Roman Catholic, Dutch Reformed, Re-reformed, otherwise Protestant, Jewish, other/unknown. In this way, the three main religious denominations in the Netherlands and some smaller ones were discernable. There was no available information in the period of research about religions like Islam and Hinduism, which have grown strongly in numbers throughout the past few decades. However, they still constitute a small minority. It is obvious that whether or not one is religious has a strong impact on marital stability (Booth, Johnson, Branaman & Sica 1995), but differences between denominations can also be found by distinguishing different denominations. More important for this research is that we can see differences between several homogamous and mixed couples from all these denominations.

I divided the nationality of husband and wife in six categories. Besides people from the Netherlands, I made a category for people from similar neighbouring countries, broadly defined, representing Germany, Belgium, Luxembourg, the United Kingdom and France. The third category constituted people from Southern Europe, defined as Portugal, Spain, Italy, the former Yugoslavia and Greece. These are the European countries that are a bit further away than the neighbouring countries, mainly with a Catholic or Orthodox background, and that supplied an early wave of labour immigrants in the 1960s. Two later groups of labour immigrants, from Turkey and from Morocco, were discerned. These countries have a Muslim background but are quite different from each other. Turkey is a more secular country, whilst Morocco is one of the Arabic countries. The other countries constitute a miscellaneous category.<sup>5</sup>

Finally, the previous marital status of both spouses was divided into three categories: never married before, widowed and divorced. In this way, I could see whether past marriage history and heterogamy in this respect affects the risk of divorce.

A drawback of the Dutch registration data is that church affiliation is not always registered accurately. Many have turned their backs on religion (even before marriage) without reporting this to the municipal registration. The first result of this is that the effects of church membership may be underestimated. Divorce risks of persons registered as church members can be discerned less well from risks of non-church members, because some of the people registered as a church member have in fact become non-church members. Therefore, differences between church members and non-church members could be larger than the data suggest. The 1971 census and subsequent surveys in the 1970s and 1980s indicate that in the period under investigation, about 25 to 30 percent of the population was not a church member (Becker & Vink 1994). This corresponds to the number of non-church members in the marriage files. Two step survey

questions, in which it is firstly asked whether a person counts himself or herself as a church member and, if yes, of which denomination, normally yield higher numbers of secularized persons (ibidem). The registrations have probably become less accurate over time and limiting the use of marriage records until 1984 reduces distortions in the analyses. Furthermore, most marrying couples are of a younger age than the average population and, therefore, may be expected to be more secularized. A second and for my analysis more interesting consequence is that heterogamy effects may sometimes be distorted. On the one hand, the heterogamy effect may be underestimated, because the distinction in the probabilities of divorce between homogamous and mixed marriages become smaller in the data set. On the other hand, heterogamy effects could also be overestimated, for example when looking at divorce risks of heterogamous marriages of two church members from different denominations. This overestimation comes into effect if church leavers who are not registered as such are particularly common amongst the heterogamous couples. This problem is less serious for mixed marriages between church members and non-church members. After all, it is unlikely that the risk of divorce will rise above that of a non-church member because one partner leaves the church.

Another disadvantage of the use of these registration data is that it is unknown whether a marriage has been dissolved abroad. The expectation is that this will not affect the results with respect to heterogamy of age, religion and marital status. I have to be more careful in the case of heterogamy of nationality. Foreigners marrying in the Netherlands will return to their home country relatively often. I do not know to what extent this will influence my results. Obviously, I will underestimate the divorce rates of homogamous foreigners, but I do not know to what extent this will bias the heterogamy effects.

## 2.4 Analyses

### 2.4.1 Regression model

I have investigated the relationship between four types of heterogamy and the risk of a marriage ending in divorce within ten years on the basis of the official registration data. To present the results more clearly, I have refrained from analysing the influence of heterogamy on the exact duration of marriage. Besides reasons of clarity, this has practical reasons: due to the enormous data set and the fact that all analytical work had to be carried out on site at Statistics Netherlands (CBS) because of safety and privacy regulations, it was not possible to do analyses of the exact duration. Instead, I investigated divorce risks within ten years of marriage. This is a reasonable duration which is above the mode and a bit below the average duration at which couples divorce (CBS 1997a). This duration allows me to follow 11 marriage cohort years, 1974-1984.

In the description of the analysis, I will not only look at the *observed divorce risks* after ten years of marriage for every combination of age, church affiliation, nationality and previous marital status of husband and wife, but at the *corrected divorce risks* in particular. These corrected divorce risks are predictions based on a regression model, in which the influence of the four types of heterogamy are analysed simultaneously and in which I also statistically control for the year of marriage (for every year separately), for the degree of urbanization of the municipality in which the marriage took place (based on the size of the population in five categories according to the

municipal division of 1 January 1996) and for the province in which the marriage took place (according to the division in twelve provinces as on 1 January 1996). This correction allows me to determine the net contribution of heterogamy. After all, the characteristics under investigation are correlated. For example, a remarrying widow or widower will be older than a spouse who was never married before and couples of which both spouses are Dutch Reformed will probably also have Dutch nationality. The observed and the corrected divorce risks will therefore differ from each other. I have made use of logistic regression analyses in which the dependent variable is the odds that a marriage has ended in divorce within ten years – which is the probability it has ended versus the probability it has not. The regression equation looks like:

$$\frac{p}{(1-p)} = \beta_0 + \sum_{i=1975}^{1984} [\beta_{year.i} * x_{year.i}] + \sum_{j=1}^{48} [\beta_{age.j} * x_{age.j}] + \sum_{k=1}^{48} [\beta_{religion.k} * x_{religion.k}] + \sum_{l=1}^{35} [\beta_{nationality.l} * x_{nationality.l}] + \sum_{m=1}^8 [\beta_{marital\ status.m} * x_{marital\ status.m}] + \sum_{n=1}^4 [\beta_{urbanization.n} * x_{urbanisation.n}] + \sum_{o=1}^{11} [\beta_{province.o} * x_{province.o}]$$

In this equation,  $p$  stands for the probability of divorce within ten years of marriage,  $\beta$ 's are regression coefficients,  $x$ 's are variables. The content of the variables and their coefficients are indicated: *year* is the marriage year, *age* is the age category combination of both spouses, *religion* the combination of both spouses' religions, *nationality* the combination of both spouses' nationality, *marital status* the combination of both spouses' previous marital status, *urbanization* the degree of urbanization of the municipality where the marriage took place, *province* the province in which that municipality is situated. All these were entered in the logistic regression analysis as sets of dichotomous variables (*dummies*), of which one was omitted in the estimation. Deviation contrasts were used, so that the imaginary average occurring categories formed the reference in the analysis.

With the multivariate regression coefficients, I computed the predicted risk of divorce of every combination. This will be referred to as corrected probability of divorce in all tables to be presented. Since deviation contrasts are used, the reference category to which all corrected probabilities are projected is the average married couple in the Netherlands in the time period covered.

In Tables 3 to 6, both the observed and corrected relationships between the four different forms of heterogamy and the risk of divorce after ten years are presented. Furthermore, the relative and absolute frequencies of all categories are shown. As a result of correlations between the variables in the analysis, the observed and corrected risks of divorce sometimes differ to quite some extent. When discussing the results, I will give particular attention to the corrected risks of divorce computed on the basis of multivariate logistic regression analysis, because they give a better image of the influence of heterogamy on the risk of divorce. In all tables, cells with probabilities of divorce based on less than 100 marriages are left empty. These marriages occur so

infrequently – on average less than 10 times a year – that their divorce percentage offers no relevant information.

#### 2.4.2 Age heterogamy

Table 2.3 goes into the frequencies and effects of age heterogamy. The frequencies show that the largest age group by far is a husband and a wife both between 20 and 25 years of age. Other relatively young homogamous categories are large too, but so are relatively young couples with a little age difference of 5 years on average. In total, a little more than half (52 percent) of the couples can be found in mixed categories.

The probabilities of divorce are given both as observed probabilities, without controlling other characteristics, and as corrected probabilities, in which the other characteristics in the model, as discussed above, are taken into account. The first number in the first panel of Table 2.3, for example, indicates that 23.1 percent of the couples in which both husband and wife are younger than 20 years on the wedding day will divorce within ten years of marriage. However, if these couples would be distributed across categories of year of marriage, religion, nationality, marital status, degree of urbanization and province as the average married couple, then the percentage of this age group which divorces within ten years would be 31.7. This can be seen in the corresponding cell in the second panel of the table containing corrected probabilities. These young couples are, for example, less likely to be remarrying divorcees, which reduces their observed divorce risk.

The numbers in Table 2.3 show the influence of age at marriage itself. This can be seen directly from the corrected probabilities of divorce for the homogamous couples on the main diagonal of the second panel of the table. On this main diagonal, we find the risks of divorce of couples in which husband and wife belong to the same age category. The older the spouses at the time of the marriage, the smaller their probability of divorce appears to be in the first ten years of marriage, corrected for the other characteristics in the analysis. This is as predicted. Marrying at an extremely young age brings about an especially increased probability of divorce. If both spouses are younger than 20 years old, the corrected probability of divorce within ten years is more than 30 percent. The probability of divorce for each age category within age categories of the other spouse displays a strong effect of age. The effect of age at marriage on the probability of divorce is usually explained by the intensity with which one has searched for a spouse (Becker, Landes & Michael 1977; Janssen *et al.* 1998; Manting 1993; South & Spitze 1986; Tzeng & Mare 1995). If the spouses are older when they marry each other, the probability is higher that they have searched longer and better for a suitable partner.

It is interesting to note that there are quite large differences between the observed and the corrected probabilities of divorce in Table 2.3. Higher divorce rates among the young and lower divorce rates among the older are obscured in the observed figures, because they are not controlled for previous marital status. Among older marrying people, there are more divorced and widowed persons who marry for the second or later time, while among younger people, there are relatively more persons marrying for the first time. This contamination of divorce risks in different age groups caused by differences in previous marital status is filtered out in the corrected probabilities of divorce.

What do the figures in Table 2.3 tell us about the *heterogamy hypothesis*? This hypothesis



Table 2.3 Observed and corrected probabilities of divorce within ten years of marriage (percentage) and relative and absolute frequencies, by age of husband and wife on the wedding day, marriages 1974-1984

Observed probabilities of divorce

wife:								
husband:	<20	20-25	25-30	30-35	35-40	40-45	45-50	
<20	23.1	22.1	34.2					
20-25	16.5	9.4	13.0	25.6	38.0	41.6		
25-30	19.0	9.9	10.3	16.3	27.0	38.9	38.0	
30-35	25.4	16.6	13.9	14.9	20.2	26.8	29.7	
35-40	30.5	23.3	18.1	16.9	17.9	20.0	26.5	
40-45	28.4	27.4	20.1	17.7	17.3	17.2	20.4	
45-50		26.2	18.3	16.6	16.0	15.8	15.1	

Corrected probabilities of divorce

wife:								
husband:	<20	20-25	25-30	30-35	35-40	40-45	45-50	
<20	31.7	27.2	27.4					
20-25	22.8	13.6	13.0	15.0	18.4	15.5		
25-30	22.7	12.6	9.9	9.9	12.6	15.9	13.4	
30-35	22.5	13.8	9.7	8.1	8.8	10.8	10.8	
35-40	24.0	14.5	9.3	7.7	7.6	7.8	10.4	
40-45	24.3	15.3	8.9	7.1	6.8	6.8	7.7	
45-50		13.5	7.4	6.2	5.9	6.0	5.7	

Relative (overall) frequencies

wife:									
husband:	<20	20-25	25-30	30-35	35-40	40-45	45-50	total	
<20	1.4	0.6	0.0	0.0	0.0	0.0	0.0	2.0	
20-25	10.6	34.6	2.9	0.3	0.1	0.0	0.0	48.4	
25-30	2.5	19.9	8.7	1.3	0.2	0.1	0.0	32.7	
30-35	0.3	2.8	3.7	1.9	0.5	0.1	0.0	9.4	
35-40	0.1	0.6	1.1	1.1	0.7	0.2	0.1	3.9	
40-45	0.0	0.2	0.4	0.5	0.5	0.4	0.1	2.2	
45-50	0.0	0.1	0.2	0.3	0.3	0.3	0.2	1.4	
total	15.0	58.8	16.9	5.5	2.3	1.1	0.5	100.0	
% homogamous:	47.8								
% mixed:	52.2								

Absolute frequencies

wife:									
husband:	<20	20-25	25-30	30-35	35-40	40-45	45-50	total	
<20	13,040	5,214	325	65	18	6	5	18,673	
20-25	99,012	321,799	26,708	2,577	532	149	62	450,839	
25-30	23,133	185,661	80,804	12,051	2,230	494	163	304,536	
30-35	3,011	26,463	34,289	17,918	4,517	1,140	303	87,641	
35-40	715	6,004	10,433	10,654	6,253	1,914	555	36,528	
40-45	204	1,851	3,655	4,989	5,017	3,223	1,064	20,003	
45-50	94	664	1,566	2,455	2,957	3,064	2,178	12,978	
total	139,209	547,656	157,780	50,709	21,524	9,990	4,330	931,198	

Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations. Empty cells: n < 100. Cells for corrected probabilities of divorce which constitute a heterogamy effect are in bold. Total N = 931,198.

predicts higher divorce risks for mixed couples compared to homogamous couples. More than half (21) of the 36 heterogamous combinations in the table show probabilities between the probability on the main diagonal in the corresponding row and the probability on the main diagonal in the corresponding column. For example, the corrected divorce risk for a marriage between a husband aged between 20 and 25 years at the time of the marriage and a wife who was under 20 (22.8 percent) is between the corrected divorce risk of couples in which both spouses were younger than 20 years on the wedding day (31.7 percent) and the corrected divorce risk of two spouses both between 20 and 25 years old (13.6 percent). In these 21 cases, there is no heterogamy effect. In the other 15 heterogamous combinations, in bold print in the table, the divorce risk is not within the boundaries set by the corresponding cells in the main diagonal. Instead, all of them are higher. If the divorce risks of these 15 combinations are related to those of homogamous couples within the age category of the husband and to those of homogamous couples within the age category of the wife, then heterogamy appears to lead to higher divorce risks.

This means that the age heterogamy effect is found in a considerable number of situations, namely in 42 percent of the heterogamous cells with at least 100 observations. Large age differences in particular, lead to a higher risk of divorce. One may object that this implies that in 58 percent of cells, the *heterogamy hypothesis* is not corroborated. However, if no heterogamy effect were present at all, then all heterogamous categories should have divorce risks between those of homogamous couples in the category of the husband and those of homogamous couples in the category of the wife. And if not, then a few higher risks should be counterbalanced by a few lower risks. This is not the case: 42 percent is higher, 58 percent is in between. Therefore, I can say that *overall* there is a clear age heterogamy effect and it is possible to be more specific by indicating for each combination whether this is the case or not.

The cells indicating a heterogamy effect have a divorce risk within ten years which is on average 2.2 percentage points higher than the maximum divorce risk if no heterogamy effect were present. Because the average divorce rate within ten years in the model is 12.7 percent for the whole population, a 2.2 percentage point increase is reasonably large. The cells in which the heterogamy effects occur, however, refer to relatively rare categories as can be seen from the frequencies, the lower two panels in Table 2.3. We may get an idea of the macro-level implications of the heterogamy effect found here by assigning people to categories on the basis of a completely open or a completely closed society and maintain the predicted divorce rates for all categories. If society were completely closed, persons would only marry a spouse in the same age group. If we assign persons like this and predicted divorce rates would stay the same, the overall divorce rate would be 12.6 percent.<sup>6</sup> Distributing people across the table by chance implies a completely open society in which age does not act as a selection criterion for a spouse at all. This is a model of statistical independence, in social mobility research also referred to as *model of perfect mobility* (Hout 1983). Applying this open society model yields an overall divorce rate of 14.7. This indicates that there is indeed an effect of heterogamy on the macro-level divorce risk. I have to add, of course, that these imaginary percentages only illustrate the effects of heterogamy on macro-level divorce figures and they imply a *ceteris paribus* assumption. This means that if society were really completely open or closed with respect to marriage patterns, it would very likely show different divorce patterns as well and levels of divorce in each cell would be different from now.

The *asymmetry hypothesis* predicts a higher risk of divorce if the wife is older than her husband compared to a marriage in which the husband is older than his wife. Just now, we

observed that 15 heterogamous age combinations have a higher risk of divorce than could be expected if no heterogamy effect were present. A close inspection of these 15 age combinations shows that only three of them appear to refer to combinations in which the husband is older (below the main diagonal), while the other 12 refer to combinations in which the wife is the oldest (above the main diagonal). This can be expected on the basis of the *asymmetry hypothesis*.

We can go deeper and look at divorce risks of marriages which are each other's mirror image in the main diagonal. Comparing the corrected divorce risk of couples in which the wife is between 20 and 25 years old and the husband is younger than 20 on the wedding day (27.2 percent) with the corrected divorce risk of couples in which the ages are the other way around (22.8 percent), shows that the risk of divorce is higher when the wife is the oldest. If this comparison is made for all 16 mirror images present in the table, then the risk of divorce is indeed higher if the wife is older than her husband with no exception. All this corroborates the *asymmetry hypothesis*. Marriages in which the wife is older than her husband are more exceptional and apparently this has a detrimental effect on marital stability.

#### 2.4.3 Religious heterogamy

In Table 2.4, the frequency and the risk of divorce are given by the church affiliations of the husband and the wife. The frequency table shows the relative size of the religious groups. It also shows that most people marry within their own group. The percentage of inmarriage among couples is 67 percent. This still means that about one third of the couples is religiously mixed.

The net, corrected, effect of church affiliation on divorce becomes clear on the main diagonal of the second panel in Table 2.4. Conforming to predictions, homogamous marriages between non-church members have by far the highest risk of divorce: according to the corrected figure (second panel), 15.6 percent get divorced within ten years. Among the religious denominations, we find the highest risk of divorce for the category of 'other religions' (14.1 percent), 'other Protestants' (12.1 percent) and Jews (10.8 percent). The divorce risks are the lowest for the three main church denominations. Among them, the homogamous Catholics have the highest risk of divorce (10.1 percent within ten years), followed by the Dutch Reformed (8.0 percent). The lowest probability on divorce overall can be found among the homogamous Reformed, being 5.4 percent. I expected couples to have a low risk of divorce if they are from denominations with a stern conception of the admissibility of divorce. The fact that the Reformed have such a low divorce risk is in accordance with this expectation. Catholics, however, could be expected to have a lower risk as well. The relatively high level found here is less strange when one considers that Dutch Catholics showed a higher level of permissiveness in relation to alternative norms and values in this period, despite the church's official position (cf. Dumon & Kooy 1983, p. 111; Becker & Vink 1994). I already noted that we are dealing with registered church affiliation, which does not necessarily give an accurate picture of actual religious conviction or involvement with the church. A number of people who are registered as a church member are, in fact, no longer a church member and probably behave more like a non-church member, including when it comes to divorce. Thus, the effect of church affiliation on the risk of divorce will be even higher than these figures suggest.

Is the risk of divorce higher for heterogamous marriages? In 18 out of the 35 heterogamous combinations, the risk of divorce is between that of homogamous couples with the church

Table 2.4 Observed and corrected probabilities of divorce within ten years of marriage (percentage) and relative and absolute frequencies, by registered church affiliation of husband and wife on the wedding day, marriages 1974-1984

## Observed probabilities of divorce

wife:								
husband:	none	Catholic	Dutch Reformed	Re-reformed	other Protestant	Jewish	other	
none	18.6	16.9	13.6	13.2	18.0	32.4	14.1	
Catholic	18.3	9.7	12.0	12.4	18.8	26.3	26.8	
Dutch Ref.	14.5	12.4	6.7	7.3	13.2		17.2	
Re-ref.	14.0	12.0	6.7	4.5	11.7		13.2	
other Prot.	17.7	14.0	11.2	10.0	11.7		17.7	
Jewish	34.4	27.6	23.1			16.9		
other	37.5	30.6	22.7	18.6	22.2		17.0	

## Corrected probabilities of divorce

wife:								
husband:	none	Catholic	Dutch Reformed	Re-reformed	other Protestant	Jewish	other	
none	15.6	14.3	13.1	12.6	13.6	15.7	16.0	
Catholic	15.1	10.1	12.1	12.2	14.1	12.2	16.9	
Dutch Ref.	13.2	12.3	8.0	8.5	12.2		13.1	
Re-ref.	13.0	11.7	7.8	5.4	9.9		10.6	
other Prot.	15.3	11.6	10.9	10.5	12.1		13.0	
Jewish	18.8	15.7	13.1			10.8		
other	19.9	17.3	14.9	13.7	14.1		14.1	

## Relative (overall) frequencies

wife:								
husband:	none	Catholic	Dutch Reformed	Re-reformed	other Protestant	Jewish	other	total
none	17.4	4.6	2.9	1.1	0.2	0.0	0.4	26.6
Catholic	3.8	33.0	3.4	0.9	0.2	0.0	0.4	41.7
Dutch Ref.	2.4	3.6	9.7	1.9	0.1	0.0	0.3	17.9
Re-ref.	0.8	0.9	1.9	5.4	0.1	0.0	0.1	9.2
oth. Prot.	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.7
Jewish	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
other	0.5	0.6	0.3	0.1	0.0	0.0	2.2	3.8
total	25.0	42.9	18.4	9.5	0.8	0.1	3.4	100.0

% homogamous: 67.9

% mixed: 32.1

## Absolute frequencies

wife:								
husband:	none	Catholic	Dutch Reformed	Re-reformed	other Protestant	Jewish	other	total
none	162,221	42,680	27,401	9,756	1,875	204	3,594	247,731
Catholic	34,956	307,713	31,575	8,485	1,949	133	3,905	388,716
Dutch Ref.	22,230	33,071	89,836	17,734	1,310	65	2,401	166,647
Re-ref.	7,327	8,527	17,791	50,531	472	27	961	85,636
oth. Prot.	1,285	1,774	1,286	468	1,081	3	170	6,067
Jewish	337	196	130	60	12	278	23	1,036
other	4,742	5,661	2,904	1,260	257	17	20,524	35,365
total	233,098	399,622	170,923	88,294	6,956	727	31,578	931,198

Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations. Empty cells:  $n < 100$ . Cells for corrected probabilities of divorce which constitute a heterogamy effect are in bold. Total N = 931,198.

affiliation of the wife and that of homogamous couples with the church affiliation of the husband. In the other 17 combinations, heterogamous marriages have a higher divorce risk. These include all but one of the possible mixed combinations between members of the three main confessional groups in the Netherlands (Catholics, Dutch Reformed and Re-reformed). Apparently, marriages suffer when spouses do not share the same religious orientation.

It is also interesting to observe whether the church affiliation of the wife is more or less important than the affiliation of the husband. The idea behind this is that religious affairs within a marriage or a family are predominantly the field of the wife. Her attitude, therefore, can be expected to be more decisive for the religious attitude within the household than the attitude of the husband (Argyle & Beit-Hallahmi 1975; Felling, Peters & Schreuder 1991).<sup>7</sup> The corrected probability for a Catholic wife with a non-church member husband to get divorced within ten years is 14.3 percent. For homogamous non-church members, the probability is 15.6 percent and for homogamous Catholics 10.1 percent. In this case, the probability is closest to the religious group of the husband. Looking at all 35 heterogamous combinations in Table 2.4, we find 18 combinations in which the norms within the husband's and 17 combinations in which the norms within the wife's religious group appear to be more decisive. Therefore, the norms with respect to divorce within the religious affiliation of the wife are not generally decisive.

Something else catches my eyes when I take a closer look at the influence of religious heterogamy on divorce. The divorce risks for marriages between a church member and a non-church member are, in general, closer to the divorce risk of homogamous non-church member marriages than to the divorce risk of homogamous marriages in the group of church members concerned. There is only one exception to this, namely other Protestant wives with non-church member husbands. The fact that the divorce risks of mixed marriages between a church member and a non-church member are closer to the divorce risks of non-church members is partly caused by the fact that the divorce risk for mixed couples is often higher than the risk for homogamous couples, and among the homogamous, non-church members have the highest divorce risk. Nevertheless, this finding can also indicate that church members who marry non-church members attach less value to the norms with respect to divorce within their religion. As noted before, we have to take into account that the church member/non-church member mixed marriages are relatively often marriages between two people who are, in fact, two non-church members because the person registered as a church member has, in fact, left his or her faith. Of course, this is also in accordance with the observation that church members who marry non-church members attach less value to their religion.

To summarize effects with respect to religious heterogamy on divorce, I state that almost half (49 percent) of the extra-diagonal cells constitute a heterogamy effect which raises the divorce risk within ten years with an average of 2.0 percentage points compared to the maximum possible divorce risk if no heterogamy effect were present. As the average modelled risk amounts to 12.7 percent, this effect should not be underestimated. However, many cells in which the heterogamy effects occur are relatively small in size, as can be seen in the lower two panels of Table 2.4, and the net contribution of religious heterogamy to the overall divorce rate on the macro level is smaller. As before, I can illustrate this by computing the risks of divorce in a completely open and in a completely closed society, based on the corrected divorce risks displayed in Table 2.4. If everyone only married if he or she could engage in a marriage with a spouse in the same religious group, the average risk of divorce within ten years would be 10.8 percent. In a model of perfect

mobility, the average risk of divorce would be 11.1 percent. Due to relatively small occurrence of mixed groups, the clearly present micro level effect of religious heterogamy on divorce is rather minuscule on the macro level.

#### 2.4.4 Heterogamy of nationality

The relative frequencies in Table 2.5 show that 94 percent of the couples is homogamous and 6 percent is mixed with respect to nationality. This is mainly due to the large size of the category of couples in which both spouses have the Dutch nationality. Therefore, inmarriage is large with respect to nationality and heterogamy is relatively rare.

The first two panels of Table 2.5 show the observed and corrected probabilities of divorce after ten years of marriage by the nationalities of husband and wife at the time of marriage. Once more, my conclusions are based on the corrected probabilities in the second panel. On the main diagonal, we can read the risks of divorce for homogamous couples, which indicate the influences of nationality itself. The divorce risk of homogamous couples between two spouse who have Dutch nationality is somewhere in the middle (9.0 percent). Marriages between two spouses from neighbouring countries of the Netherlands, from Southern Europe and between spouses from Turkey have a lower risk of divorce. Homogamous marriages among Moroccans and homogamous marriages among other nationalities show higher risks of divorce.<sup>8</sup> Unfortunately, it is impossible to make firm statements about the influence of the spouses' nationalities on the probability of divorce, because marriages involving foreigners are relatively often dissolved abroad, especially if the couple has returned to their country of origin in the meantime.

With respect to the nationalities of both spouses, even stronger indications can be found for the existence of heterogamy effects than with respect to age and religion. In total, Table 2.5 contains the probabilities of 13 heterogamous combinations which occur at least 100 times between 1974 and 1984. Of these, 11 end up higher, often much higher, than the maximum of both accompanying homogamous probabilities. The *heterogamy hypothesis* is strongly supported here. There are a few real extreme cases, like the corrected probability of 41.7 percent within ten years for marriages between a Moroccan woman and a Dutch husband. The probability of the combination the other way around is also not inconsiderable at 29.7 percent.

Another striking point is that the risk of divorce is higher for marriages in which the husband has Dutch nationality and the wife does not, than for marriages between wives with Dutch nationality and husbands with non-Dutch nationality. Dutch/Turkish marriages are the only exception; here it is the other way around. Part of the high divorce rates of mixed marriages between people with Dutch nationality and people with another nationality may have to do with fictitious marriages which are contracted with the intention of arranging legal residence documents. After three years of temporary, conditional residence permits because of a marriage, a foreigner can obtain unconditional residence documents or apply for Dutch nationality. So, it is likely that fictitious marriages will have a relatively high divorce risk after three years. This would lead to an overestimation of the effect of ethnic heterogamy on the risk of divorce.

In my data, however, there are indications that the proportion of arrangements on these grounds is not very large. Figure 2.1 depicts the uncontrolled survival rates of marriages by a selection of nationalities of husband and wife, where the nationality of the husband is indicated

Table 2.5 Observed and corrected probabilities of divorce within ten years of marriage (percentage) and relative and absolute frequencies, by nationality of husband and wife on the wedding day, marriages 1974-1984<sup>a</sup>

Observed probabilities of divorce

wife:							
husband:	Netherlands	neighbour	S. Europe	Turkey	Morocco	other	
Netherlands	11.4	22.3	28.1	39.2	63.6	35.0	
neighbour	15.8	7.6				11.4	
S. Europe	24.3		9.3			26.0	
Turkey	56.0			0.7			
Morocco	52.2				1.6		
other	32.6	14.0				15.5	

Corrected probabilities of divorce

wife:							
husband:	Netherlands	neighbour	S. Europe	Turkey	Morocco	other	
Netherlands	9.0	<b>13.7</b>	<b>18.0</b>	<b>19.4</b>	<b>41.7</b>	<b>25.1</b>	
neighbour	<b>9.8</b>	4.0				6.1	
S. Europe	<b>15.6</b>		7.2			<b>18.6</b>	
Turkey	<b>29.3</b>			3.4			
Morocco	<b>29.7</b>				15.6		
other	<b>19.0</b>	6.1				10.2	

Relative (overall) frequencies

wife:								
husband:	Neth.	neighbour	S. Europe	Turkey	Morocco	other	total	
Netherlands	92.7	0.9	0.3	0.0	0.0	1.6	95.5	
neighbour	1.1	0.2	0.0	0.0	0.0	0.1	1.3	
S. Europe	0.5	0.0	0.1	0.0	0.0	0.0	0.6	
Turkey	0.2	0.0	0.0	0.3	0.0	0.0	0.4	
Morocco	0.2	0.0	0.0	0.0	0.1	0.0	0.3	
other	1.4	0.1	0.0	0.0	0.0	0.4	1.8	
	96.0	1.2	0.4	0.3	0.2	2.0	100.0	
% homogamous:	93.7							
% mixed:	6.3							

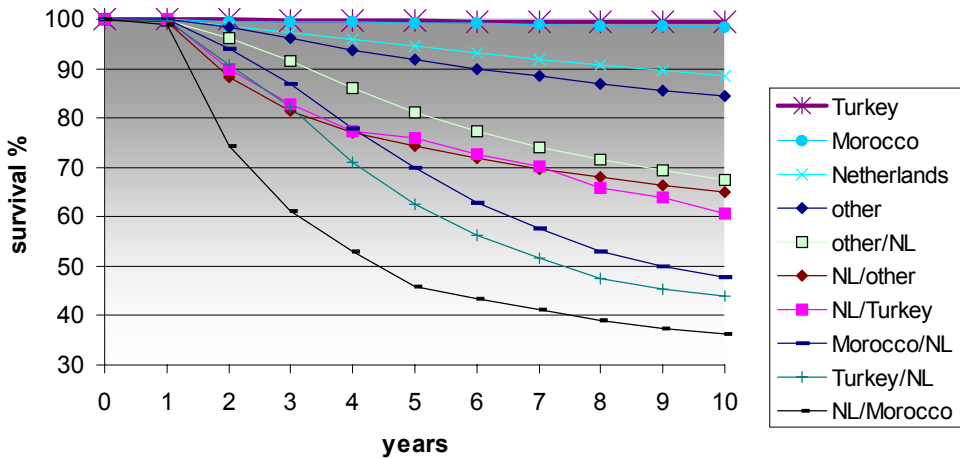
Absolute frequencies

wife:								
husband:	Neth.	neighbour	S. Europe	Turkey	Morocco	other	total	
Netherlands	862,995	8,572	2,712	158	275	14,791	889,503	
neighbour	9,742	1,570	39	0	3	421	11,775	
S. Europe	4,708	63	1,047	1	4	123	5,946	
Turkey	1,385	19	20	2,288	3	21	3,736	
Morocco	1,706	26	34	2	1,258	40	3,066	
other	13,143	628	93	13	39	3,256	17,172	
	893,679	10,878	3,945	2,462	1,582	18,652	931,198	

<sup>a</sup> Neighbour stands for Belgium, Luxembourg, Germany, United Kingdom and France; S. Europe for Portugal, Spain, Italy, former Yugoslavia and Greece.

Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations. Empty cells: n < 100. Cells for corrected probabilities of divorce which constitute a heterogamy effect are in bold. Total N = 931,198.

Figure 2.1 Fictitious marriages? The survival of marriages by the nationality of husband and wife



Note: only combinations mentioned are depicted: neighbouring and Southern European countries are not shown. Only homogamous combinations and mixed combinations between a person with the Dutch and a non-Dutch nationality are shown.

Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations.

first. Survival curves are shown for homogamous couples with Dutch, Turkish and Moroccan nationality, as well as couples in the categories of ‘other’ nationalities. The categories of ‘neighbouring countries’ and ‘Southern European countries’ are omitted here. Furthermore, survival curves are shown for combinations of either a husband or a wife with Dutch nationality married to a spouse from Turkey, Morocco or the category of ‘other’ countries. The figure shows that in some cases the divorce rate increases after the first year of marriage, especially in the case of a Dutch husband and a Moroccan wife. This is caused by the fact that there are hardly any divorces in the first year. Around the third year, however, there are hardly any increases or accelerations in the rate of divorce. I may conclude that the number of divorces caused by fictitious marriages to obtain legal residence documents is probably very small. Therefore, the effect of heterogamy of nationality on divorce cannot be attributed to fictitious marriages.

In sum, the percentage of cells outside the main diagonal which constitute a heterogamy effect is very high with respect to nationality, at 85 percent. The strength of the heterogamy effects that are present is also very strong with respect to nationality, with an average divorce risk within ten years for mixed categories of 11.3 percentage points above the divorce risks of relevant homogamous categories. This is very high compared to the average predicted risk in the model of 12.7 percent. All mixed categories occur relatively infrequently, though. This is shown in the lower two panels of Table 2.5. Again, I will demonstrate the macro effect of this type of heterogamy on divorce within ten years of marriage by comparing the divorce risks as they would have been in the case of a completely closed society and in the case of a completely open society. If persons would only marry an available spouse with the same nationality, a completely closed society, the



risk of divorce within ten years would be 9.0 percent. In the model of perfect mobility, in which spouses of different nationalities are assigned to each other by chance, the model predicts an overall divorce rate within ten years of 9.9 percent. This implies that, on the macro level, some effect is also noticeable of mixed marriage with regard to nationality on divorce.

Table 2.6 Observed and corrected probabilities of divorce within ten years of marriage (percentage) and relative and absolute frequencies, by previous marital status of husband and wife, marriages 1974-1984

Observed probabilities of divorce

wife:				
husband:	never married before	widow	divorced	
never married before	10.6	12.3		25.7
widower	11.0	12.4		21.9
divorced	23.5	23.8		27.7

Corrected probabilities of divorce

wife:				
husband:	never married before	widow	divorced	
never married before	5.4	8.9		14.2
widower	8.4	14.7		19.7
divorced	12.3	18.2		20.5

Relative (overall) frequencies

wife:					
husband:	never married before	widow	divorced		total
never married before	86.4	0.3	3.6		90.3
widower	0.4	0.1	0.3		0.7
divorced	4.8	0.1	4.2		9.1
total	91.6	0.5	8.0		100.0
% homogamous:	90.7				
% mixed:	9.3				

Absolute frequencies

wife:					
husband:	never married before	widow	divorced		total
never married before	804,779	2,485	33,395		840,659
widower	3,335	572	2,334		6,241
divorced	44,386	1,126	38,786		84,298
total	852,500	4,183	74,515		931,198

Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations. Total N = 931,198.

#### 2.4.5 Marital status heterogamy

Table 2.6 contains the frequencies and the observed and the corrected probabilities of divorce by previous marital status of both spouses. I made a distinction between persons who were never married before, widowed persons and divorced persons. The percentage of mixed couples with respect to previous marital status is not very large, namely about 9 percent. Most people marry someone with the same marital status. As a result of a strong correlation between the age at

marriage and previous marital status, large differences can be found between the observed and the corrected probabilities of divorce, as I previously observed when discussing age at marriage.

As expected, the percentages on the main diagonal show a strong effect of previous marital status itself. Marriages between men and women who were both not married before have the lowest predicted probability of divorce of 5.4 percent. Marriages between a widow and a widower have a higher probability of divorce within ten years (14.7 percent) and marriages between two divorced persons have the highest probability of divorce by far (20.5 percent). There are at least two reasons why people who had a divorce have the highest probability to divorce again. Firstly, there is a selection effect. People who have already gone through one divorce, may be more accepting of the idea of divorce whenever problems arise within the marriage. Secondly, the second or later marriage of divorced persons may undergo problems as a result of their past. The ex-spouse (and children) may be the cause of tension in the next marriage. Also, widowed persons may have more difficulty with the attachment to a new spouse because of the memory of their deceased spouse. Because of this, their probability of divorce is also higher than that of people getting married for the first time.

The corrected percentages in the second panel of Table 2.6 immediately make clear that the *heterogamy hypothesis* is not applicable here. For all combinations of couples who are heterogamous with respect to their previous marital status, the probability of divorce is somewhere between the probability of homogamous couples with the previous marital status of the husband and the probability of homogamous couples with the previous marital status of the wife.

#### 2.4.6 Expected occurrence and heterogamy effects

From the point of view of the mean percentage of divorce, the contribution of heterogamy with respect to age, religion and nationality to the rise in divorce risks in the Netherlands is not unimportant. However, I already noted earlier that particularly categories which do not occur frequently appear to have higher divorce risks. I need to be more modest when it comes to providing an overall explanation of the risk of divorce by heterogamy on the macro level.

Because of the higher divorce risks in smaller categories, the question arises to what extent unusual combinations have a higher risk of divorce. Whether a category is unusual could better be indicated by the statistical unexpectedness of occurrence of a certain combination of husband's and wife's characteristics than by its size. The association between this expectedness on the one hand and the risk of divorce on the other hand would be an indication for a possible explanation of the relationship between heterogamy and divorce. Unexpectedness of a combination does not simply mean being smaller, but being smaller relative to expectation. In Table 2.4, for instance, we can read that 17.9 percent of the marrying men are Dutch Reformed and 42.9 percent of the marrying women are Catholic. If the distribution of husbands over wives were at random and independent of religious affiliation, then we would expect 17.9 percent times 42.9 percent equals 7.7 percent of couples in the category with a Dutch Reformed husband and a Catholic wife. In fact, there are only 3.6 percent of the couples in this category. Thus, this category is under-represented with a factor  $(3.6 / 7.7) = 0.47$ .

For age, religion, nationality and previous marital status, I computed the absolute expected frequency of every combination of husbands and wives, based on the marginal frequencies. These

expected frequencies indicate how often each combination would appear if there were statistical independence and people would marry each other at random, independent of their respective characteristics. I divided the observed by the expected frequencies to obtain a measurement indicating relatively high or low occurrence compared to statistical independence. Next, I correlated this measurement in each category with the accompanying probabilities of divorce. The measurement of unexpectedness is centred around 1: if a category occurs as often as in case of statistical independence, the value of the measurement is 1; if a category occurs less often than expected, the values range from 0 to 1; if a category occurs more often than expected, the values range from 1 to infinity. Therefore, the correlations were computed on the natural logarithm of the unexpectedness values, which is metrically centred around 0. The results are shown in Table 2.7.

*Table 2.7 Correlations between the relative occurrence of categories of husband and wife and the risk of divorce in those categories for age, church affiliation, nationality and previous marital status.*

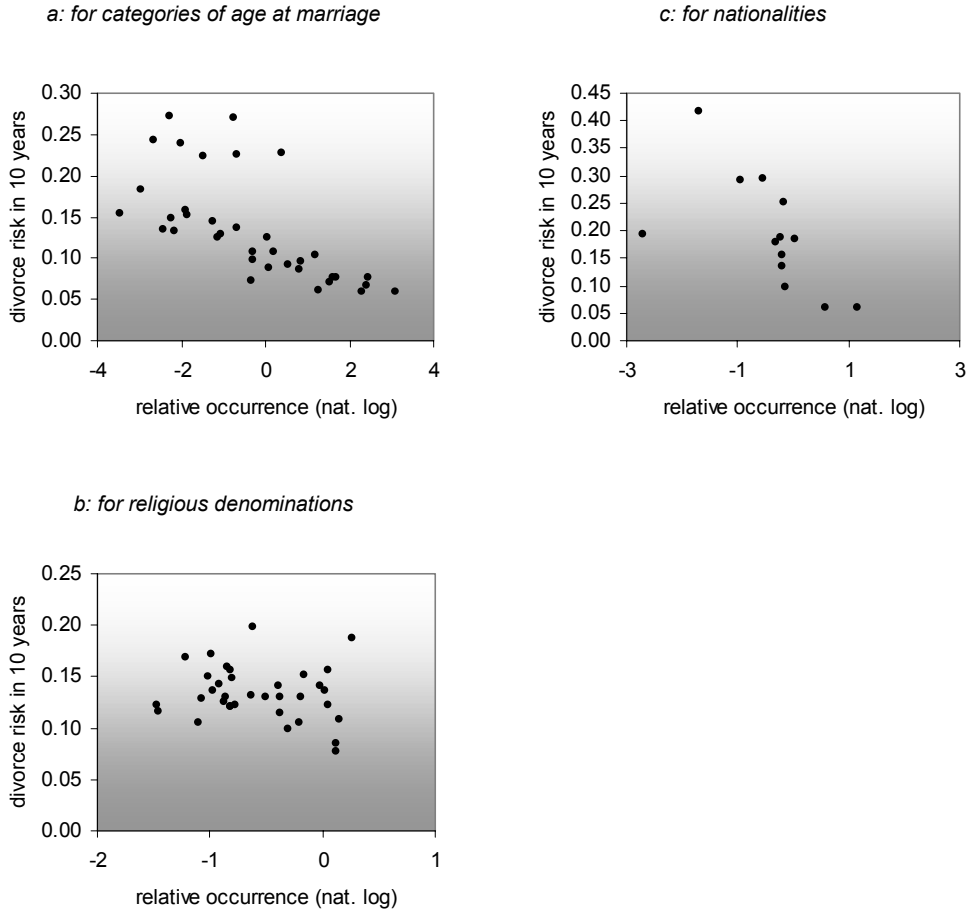
	age	church	nationality	prev. marital status
all cells	-0.56	-0.11	-0.22	0.61
cells n > 100 only	-0.58	-0.28	-0.59	0.61
without main diagonal	-0.61	-0.04	0.01	0.85
without main diagonal and n > 100	-0.68	-0.15	-0.63	0.85

Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations.

It becomes clear from the figures in Table 2.7, that there is indeed a strong negative relationship between the expectedness of the occurrence of the categories and the risk of divorce. Combinations of categories of husbands and wives which appear more often than can be expected on the basis of the number of marriages which are contracted with husbands and wives in these respective categories have a lower risk of divorce. If certain marriages are less common, the divorce risk rises. This applies to categories of age, religion and nationality, but not at all for combinations of previous marital status – the characteristic for which I did not find any heterogamy effects on divorce. This relationship between the divorce risk and the frequency relative to expectation is the highest for age combinations and the lowest for religious combinations. After selecting the cells with an occurrence of at least 100 marriages for more reliable results, like in all analyses in this chapter, the correlations become much stronger.

This chapter is all about effects of heterogamy on divorce. Therefore, let us have a look at the correlation between the expectedness and the divorce risk for the heterogamous combinations. This can be done by leaving out the main diagonal. For heterogamous combinations separately, only a strong negative correlation is found for age combinations. If I select cells with a frequency of at least 100 again without the main diagonal, the correlations are all clearly present again. The relationship between unexpectedness and the divorce risks for categories of age at marriage, religious denominations and nationalities is also graphically depicted in Figure 2.2.

Figure 2.2 Scatter plot of the relationship between a category's occurrence relative to expectation and the divorce risk in ten years for heterogamous combinations occurring at least 100 times



Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations.

I may conclude that combinations which occur more frequently than expected have a lower risk of divorce than combinations which occur less frequently than expected. This also goes for the heterogamous combinations separately. Certain mixed combinations of husband's and wife's categories occur less often in society than expected if there was statistical independence. Those relatively rare categories have higher divorce risks.

## **2.5 Conclusions**

In the course of this chapter, I have demonstrated, on the basis of large-scale data analyses, that there is a strong relationship between heterogamy and divorce in the Netherlands. To do this, I used registration data on all marriages (1974-1984) and divorces (1974-1994) in the Netherlands, which had never been matched and analysed in this way until this study. Effects on the probability of divorce were found for three out of four of the types of heterogamy under research. Heterogamy with respect to age, church affiliation and nationality appear to have a positive influence on the risk of divorce. I suspect that the explanation for these findings are to be found in cultural differences and diverging preferences and taste. Spouses who do not share a common background run a higher risk of seeing their relationship break down than spouses who resemble each other. With respect to age, religion and nationality, relatively less common combinations show relatively higher divorce risks. This is a first indication that less accepted combinations of husband's and wife's characteristics are less supported by the social environment.

As a by-product supplied by my analyses of the influence of heterogamy on divorce, I mapped out the influence of the characteristics themselves. As in previous research, I found that couples marrying very young have an extraordinarily high risk of divorce. Second or later marriages, especially after divorce, also have an increased probability of divorce compared to first marriages. I could also discern the influence of religious values and norms concerning divorce: non-church members have a relatively high divorce risk and also between denominations, differences exist. Something similar can be found with respect to nationality. Prudence is required, though, due to problems of comparability. Marriages of two foreigners may have been dissolved abroad. Divorces abroad are not automatically registered in the Netherlands. According to Dutch statistics, these marriages are still intact.

Finally, I want to stress the importance of longitudinal data for further research into the influence of heterogamy on divorce. This research can only be carried out if marriages can be followed from the beginning in order to compare marriages which end in divorce and marriages which do not. This implies that for research into other aspects of heterogamy than studied in this chapter, such as educational and social origin heterogamy, other longitudinal data sources have to be found, for instance, from retrospective life course research. An additional demand on the data is that the characteristics in question are known for both spouses in both existing and divorced relationships. Also, it is only possible to investigate to what extent the unfavourable impact of heterogamy on divorce is either compensated or strengthened during marriage with the use of longitudinal data. After all, marital partners can grow towards each other or grow further apart, something which has not come up in previous research. From Chapter 4 onwards, new data will be presented containing information about several social characteristics of both spouses during the course of their marriage.

## Notes

1. This chapter is an adapted version of an article published in Dutch in *Bevolking en Gezin*, 28 (1), pages 35-57. Co-authors of that article were Paul M. de Graaf and Matthijs Kalmijn (Janssen, De Graaf & Kalmijn 1999). Early versions of this chapter were presented at the NSV Marktdag Sociologie, Utrecht, the Netherlands, 29 May 1997; at the 14th ISA World Congress of Sociology, Montréal, Québec, Canada, 26 July-1 August 1998.
2. The division of labour as such is an economic factor, whereas opinions about them could be considered as a cultural factor. These factors can also interact (Kalmijn, De Graaf & Poortman 2001).
3. Since 1994, these data are gathered in a different way, namely by taking information of persons from the municipal registrations (*Gemeentelijke Basisadministratie, GBA*) every year.
4. A solution would be to correct my figures using death rates at the macro level. This implies that death risks of both spouses would have to be taken into account given their ages in every year. Furthermore, combined probabilities of divorce and death should be taken into account. Even if this were possible, I expect that such a complicated procedure will hardly yield any profit compared to choosing my age selection. Death on the micro level cannot be matched with my data.
5. Unfortunately, it is not possible with these data to discern persons originating from Surinam or Aruba and the Netherlands Antilles. Surinam became independent at the end of 1975, Aruba and the Netherlands Antilles are still part of the Kingdom of the Netherlands. These people, therefore, have Dutch nationality. Unfortunately, I do not know the nationality or the country of birth of the parents either, which may be a better indicator because of the possible acquisition of the Dutch nationality.
6. In this case, we did not assign superfluous persons, leaving them unmarried. We could also assign them by chance. This would make the difference between the predicted divorce rates somewhat smaller, but not very much, since 77 percent can be assigned, based on the marginal frequencies. For church denominations even 98 percent and for nationality and marital status 99 percent can be assigned in this way.
7. Here, we are dealing with male or female dominance on a characteristic attributed to the couple as a whole: the risk of divorce. Research has been carried out on male and female dominance on a personal characteristic of both husband and wife separately. Results show, for example, that the husband's class position may be equal or even dominating the wife's political and class orientation, but never the other way around (Van Berkel 1997).
8. The great difference between the observed and the corrected probabilities of divorce of homogamous Turkish and homogamous Moroccan marriages probably stems from the fact that these mainly concern marriages between two partners who marry for the first time. This factor lowers divorce risks. This is statistically corrected in the second panel.

# 3 Heterogamy and divorce within five, ten and fifteen years in two marriage cohorts.

## A dynamic analysis of Dutch register data 1974-1994.

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The previous chapter indicated that heterogamy with respect to age, religion and nationality leads to a higher risk of divorce. Levels of divorce vary over the course of a marriage and several changes have taken place in society in recent decades with respect to divorce, individualization and secularization. My data show that divorce between the 1970s and the first half of the 1980s has increased, particularly in the first years of marriage. I have reassessed the findings of heterogamy effects and made the analyses more dynamic. The research questions are whether the effect of heterogamy on the risk of divorce changes during marriages and over cohorts. Again, I made use of marriage and divorce registration data as collected by Statistics Netherlands (CBS). My data show that heterogamy effects decline over the course of the marriage only for nationality differences, which indicates a growing acceptance of spouses during marriage. When shifting from the 1970s to the 1980s, effects of heterogamy on divorce only decreased for a few categories of religious mixed marriage in their first five years. I attribute this to societal changes like individualization, secularization and a growing meritocracy. On the whole, however, heterogamy effects are quite stable, both throughout the course of the marriages and over the researched period of time in the 1970s and 1980s.

### 3.1 Introduction

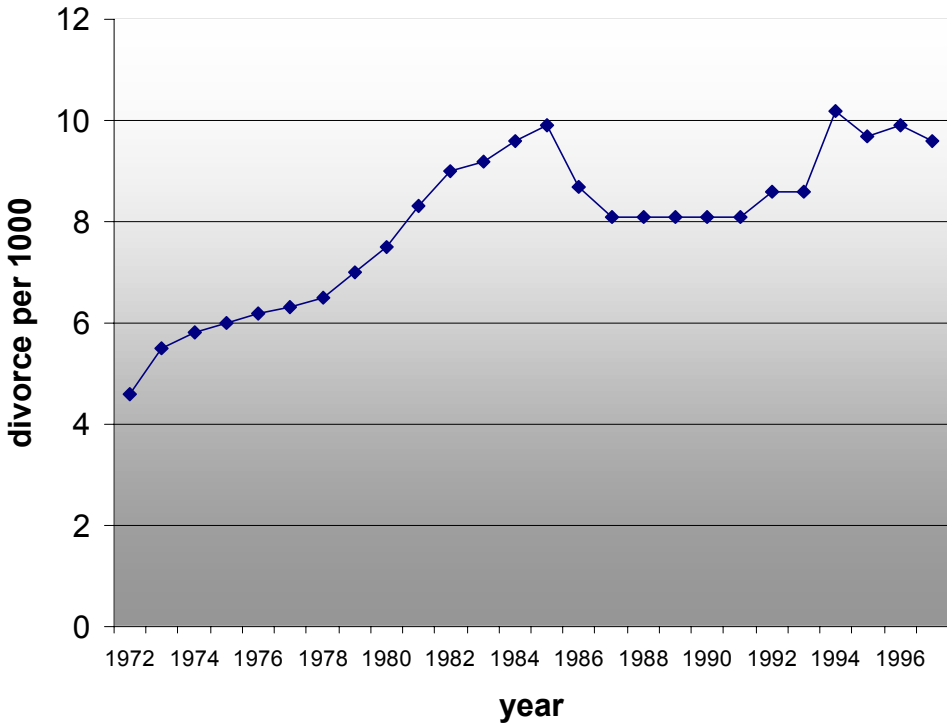
In the previous chapter, I analysed data collected by Statistics Netherlands (CBS) concerning all new marriages which took place in the Netherlands from 1974 to 1984. I could follow these marriages until 1994. In those analyses, I could assess the effect of marital heterogamy with respect to age, religion, nationality and previous marital status. The first three of these forms of heterogamy indeed appeared to have a negative effect on marital stability.

As I followed the marriages which started between 1974 and 1984 until 1994, I was able to follow every marriage for at least ten years, some for even longer. For practical reasons, I investigated the effects of heterogamy on the risk of divorce within ten years. The question then arises whether effects of heterogamy do not change over the course of the marriage. Marriages can be ended by divorce in the first few years, but also later during the marriage. It would be interesting to see whether heterogamy has the same effect throughout marriage or whether the effects change when the marriage lasts longer. Therefore, the first research question in this chapter is whether the effects of heterogamy on divorce are stable throughout marriage or whether they increase or decrease over the course of the marriage.

The period in which the analysed marriages took place was a time when several social changes occurred which are either directly related to my research topic or important for social trends in society. Divorce rates rose gradually in the period under investigation. The yearly number of divorces per 1000 married men<sup>1</sup> slowly rose from 5.8 in 1974, to 7.5 in 1980 and 9.9 in 1985, which

is an increase of about 70 percent in 11 years time. It then decreased slightly to 8.1 percent between 1987 and 1991, before rising again to 10.2 percent in 1994 (CBS 1975-1999). This can be seen in Figure 3.1.

Figure 3.1 Divorce rate per year per 1000 married men (until 1977: per 1000 married couples)



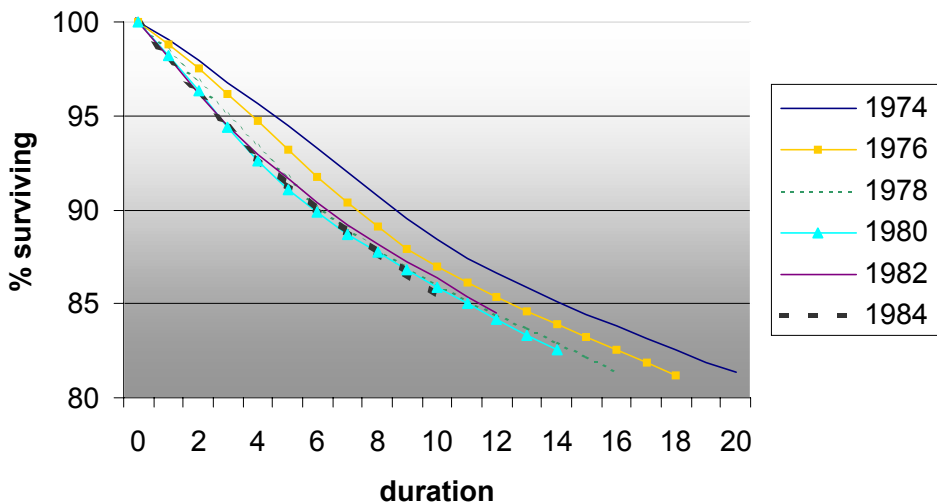
Source: Statistics Netherlands (CBS) (1975-1999).

The increase in divorce rates is also visible when following the marriages over their course, as was done in the previous chapter and will be done again in this chapter. To illustrate this, the marital survival rate over the course of marriage is broken down by marriage cohort – or more specifically, marriage year – in Figure 3.2. This is a graphical presentation of the survival of every marriage that was conducted in the Netherlands between 1974 and 1984 between spouses both younger than 50 years of age at the time of marriage. For reasons of clarity, only marriage cohorts from even years are depicted. Dissolutions as a result of death or divorce abroad are not in my data. Therefore, the percentage of divorces will be slightly higher in reality. On the other hand, the percentages of survival in my graph will be slightly higher than in figures for the whole population, as a result of the selection of marriages between spouses below 50 years of age at marriage. We may expect relatively more remarriages amongst people getting married at a later



age (CBS 1998, p. 35), and second and later marriages have a higher risk of divorce. Figure 3.2 shows that younger marriage cohorts divorce faster than older cohorts. An increase in divorce frequency is especially prominent in the cohorts between 1974 and 1978. After that, only unsystematic fluctuations are present. After ten years, 11.6 percent of the marriage cohort 1974 got divorced and 14.5 percent of the marriage cohort 1984. The average percentage of divorce after ten years across the 11 cohorts is 13.5 percent when counting each cohort equally. Taking all marriages of these cohorts together – or: taking the number of marriages in each cohort into account – leads to an average risk of divorce of 12.5 percent in the first ten years of marriage.

Figure 3.2 *Surviving marriages (not dissolved by divorce) between spouses aged below 50 on the wedding day by marital duration and year of marriage, 1974-1984 (even years)*



Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations.

The rise in divorce rates can be seen in the light of a general trend towards more permissive norms and values. People are more accepting of alternative forms of cohabitation and are more permissive towards divorce (SCP 1994). These trends match the trends towards more individualization and secularization. The clearest indicator is the percentage of church members. Census data show that in 1971, 24 percent of the population was not a member of any church. Subsequent estimations of trends based on surveys show that in 1975, about 26 percent of the adult population was not a member of any church. This was 29 percent in 1980, 31 percent in 1985 and 38 percent in 1990 (Becker & Vink 1994).<sup>2</sup>

Also, the legislation pertaining to divorce has changed a few times in Dutch history. The first Civil Law of the Netherlands after Napoleon in 1838 only allowed divorce on serious grounds like adultery, long term abandonment or serious criminal punishment. No fault divorce based on mutual consent was not allowed. A verdict of the Netherlands High Court in 1883 sustained as

valid proof of a guilty plea or non-appearance of the defending spouse in case of an accusation of adultery. This led to a practice of mutual consent divorce under the guise of a fictitious adultery 'committed' by one of the spouses, also known as 'the big lie'. This went on until the law was changed in 1971. The new (current) legislation permits divorce as long as both spouses agree upon a 'durable disruption' of the marriage, provided that the custody of the children and the division of the property has been arranged. This change in law had a sizeable impact as it gave rise to a large increase in divorce figures in 1972 and 1973. However, after that, the yearly rise in divorce rates was no larger than before (Van Poppel & De Beer 1991). Therefore, legal changes did not cause any change in trends in the 1974-1994 period investigated here.

Within the economy, there was a recession in the 1980s, particularly in the first half of the decade. This can be illustrated by unemployment figures. During the mid and late 1970s, the percentage of the labour force registered as unemployed was stable around 4 percent. It then rose from 4.6 percent in 1980 to 14.0 percent in 1984. After that, the figures slowly declined and have stabilized at between 6 and 8.5 percent since the end of the 1980s (CBS 1975-1999). Economic problems are known to affect happiness and marital stability in a negative way. Tensions are increased by recessions and this may make divorce risks rise.

Summarizing the above, important and significant cultural and economic changes took place in society during the 1970s and 1980s. I would expect that this social change could have an impact on divorce levels, but I do not know to what extent it had an effect on the effects of mixed marriage on the risk of divorce. Even though this period is relatively short, it is, therefore, constructive to look into trends with respect to heterogamy effects on divorce. The second research question reads to what extent the influence of heterogamy on divorce has changed over time, more specifically over marriage cohorts in the 1974-1984 period.

Note that I speak of relatively short periods and cohorts and I do not distinguish theoretically between period and cohort. Changes of cohorts can also be considered as changes over the course of time throughout this chapter. Due to the structure of the data, it is more feasible to analyse different cohorts, as I will demonstrate later. Therefore, 'cohort' will be used mostly in this chapter when changes are referred to which can be attributed both to changes over cohort and changes over time.

In the next paragraph, I will deduct hypotheses about changes over the course of marriage and over cohorts. To describe differences during marriage and between cohorts, I again employed the official data kept by Statistics Netherlands (CBS) on all marriages registered in all Dutch municipalities in the 1974 to 1984 period and on all divorces registered from 1974 until 1994. These data will be described in the third paragraph. Using these data, I could investigate whether marriages in which spouses differ from each other have a higher risk of ending in divorce than marriages in which husband and wife resemble each other. In the analyses, I compared the effects of heterogamy in the first, the second and third five years of marriage and in the marriage years in the middle and late seventies and in the beginning of the eighties. In this way, I could find out to what extent the role played by these three forms of heterogamy has changed during a marriage and over time. Thus, I investigated duration and trend effects. These analyses will be described in Chapter 4. I will conclude by summarizing the main findings and their meaning and with a discussion of the implications for future research.

### **3.2 Theory and hypotheses**

As mentioned above, findings from Chapter 2 showed several positive effects of the types of heterogamy used in this chapter on the risk of divorce. Differences in age appeared to lead to a higher risk of divorce, especially if the wife is older than her husband. Differences in church denomination also increase the divorce risk, especially between members of the Catholic church on the one hand and members from the Dutch Reformed or Re-reformed church on the other. Marriages between a man or a woman with Dutch nationality and someone with another nationality show higher divorce risks in comparison to homogamous marriages with respect to nationality. The analyses described in this chapter examine duration effects and trend effects of heterogamy with respect to age, church denomination and nationality on the risk of divorce. In this paragraph, I will deduct hypotheses about the expected changes in the impact of these types of heterogamy over the course of marriage and about differences between cohorts.

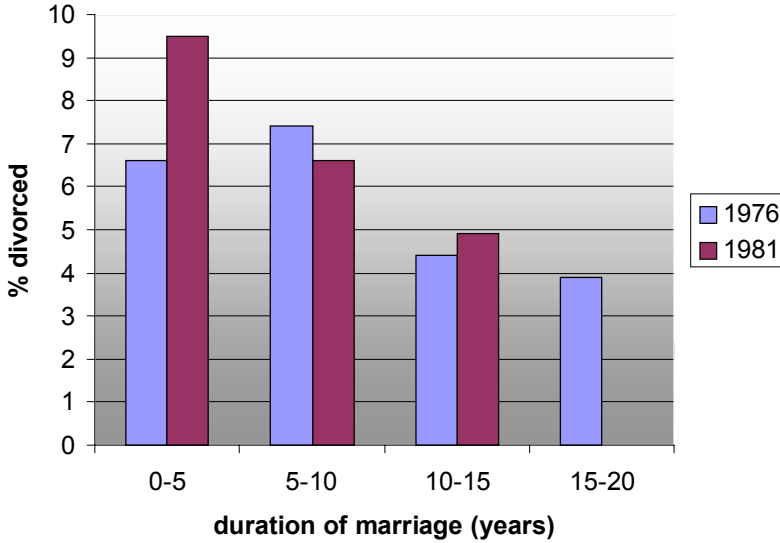
#### *3.2.1 Hypotheses on duration effects*

Of all the marriages contracted in 1976, 6.6 percent had divorced after five years, 14.0 percent after ten years, 18.4 percent after fifteen years and 22.3 percent after twenty years. Of all the marriages started in 1981, 9.5 percent had divorced after five years, 16.1 percent after ten years and 21.0 percent after fifteen years (CBS 1997a). This means that in the 1976 marriage cohort, there is a slight initial increase in divorce risks over the marriage course followed by a clear decrease, whereas in the 1981 cohort there is a clear decrease as well, all throughout the marriage course. This is shown in Figure 3.3.

We can gain even more insight into trends over time and changes throughout the marriage course by combining them as was done in Figure 3.4, using the marriage and divorce records from my analyses concerning all marriages between spouses aged under 50 on the wedding day. In this graph, the ‘mortality’ in the sense of divorce is displayed per year of marriage, broken down by marriage cohort. For reasons of clarity, only even marriage years are displayed. Several things can be observed from this figure. In general, we can see that the risk of divorce is high in the first stage of a marriage and even increases a little in the first few years. After that, the risk of divorce drops gradually over the course of marriage. This pattern, however, became clearer in the later cohorts in the 1980s, but was much less pronounced in the earlier ones in the 1970s. The risk of divorce in the first years of marriage is very different between marriage cohorts. After about five years of marriage, however, the differences are smaller and after about ten years of marriage, the risk of divorce per marriage year is about equal for the cohorts 1974-1984. From this, we can conclude that the increase in the risk of divorce over marriage cohorts – see Figure 3.2 – comes about by an increase in the number of divorces in the first five years of marriage.

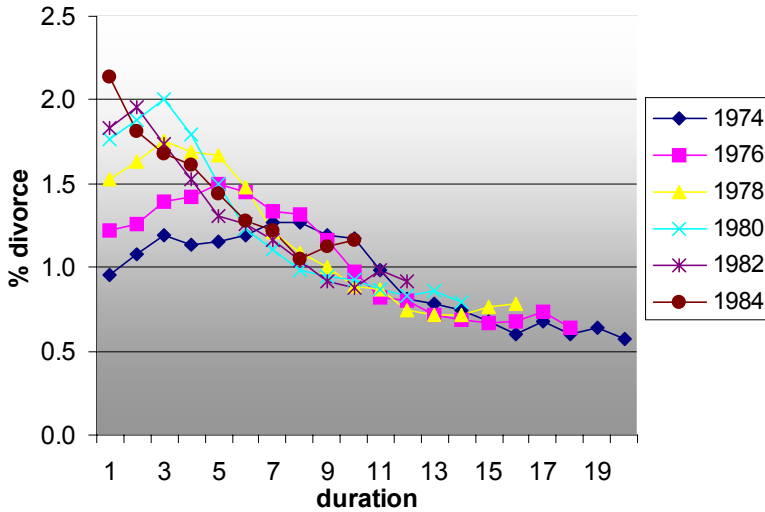
The reason for looking at duration effects of heterogamy on divorce now is the supposition that the influence of several forms of heterogamy on the risk of divorce will diminish when the relationship lasts longer. The thought behind this is that couples who are already together for a longer period of time have proven that they can survive crises. With respect to this idea, the *theory of growing acceptance*, which assumes that the risk of divorce diminishes throughout a marriage has been formulated (Manting 1993, 1994; Trussell, Rodriguez & Vaughan 1992). I will go one step

Figure 3.3 Divorce rates over the marriage course for the 1976 and the 1981 cohort



Source: Statistics Netherlands (CBS) (1997a).

Figure 3.4 Mortality (by divorce) of marriages between spouses aged below 50 on the wedding day by marital duration and year of marriage, 1974-1984 (even years)



Source: Marriage and divorce files, Statistics Netherlands (CBS), own calculations.

further and apply this theory not only to the extent of divorce, but to the effects of heterogamy on divorce, in particular. Hereby, I have to bear in mind the theoretical starting-point (from the previous chapter) which assumes that the influence of heterogamy on the divorce risk mainly stems from getting along less well with each other and from a lack of support by parents and others in the social environment. If heterogamy increases the risk of divorce for these reasons, then I would expect the effect to diminish as the marriage progresses, because enduring marriages have apparently proven that they were able to cope and that they indeed learned to accept each other. Therefore, according to the *growing acceptance hypothesis*, I would expect the positive effect of heterogamy on the risk of divorce to decline throughout a marriage.

An alternative hypothesis is derived from the *theory of accumulated irritations* (Manting 1993, 1994; Trussell, Rodriguez & Vaughan 1992) which predicts the opposite for the risk of divorce during marriage, as spouses will get fed up with each other's bad habits when time goes by. This could also be extended to the influence of heterogamy on divorce. It seems rather illogical, though, to expect that the impact of the incompatibility of a couple's heterogamous characteristics will keep on growing. I can unite and integrate this *theory of accumulated irritations* with the previous *theory of growing acceptance* by assuming that marital instability - and also the influence of heterogamy on it - will rise in the first few years. After all, the spouses still have to get accustomed to each other and they will get to know each other better than before and from angles which were ignored before they were married. After this period, the spouses become attuned to each other. As a result of this, differences will become less threatening for the stability of the marriage. People learn, they forgive and forget, and this is when the 'growing acceptance' starts to work. This is my *inverse-U-shaped heterogamy effect hypothesis*, which is a competitor to the *growing acceptance hypothesis*.

The initial increase in divorce risks during marriage is either absent or it can only be found to a limited extent, as presented at the beginning of this subsection. I found that the risk of divorce decreases over the course of marriage in accordance with the *theory of growing acceptance*. Possibly an initial growth can be found in the effects of heterogamy on the risk of divorce.

### 3.2.2 Hypotheses on differences between cohorts

The rising divorce rates mentioned in the introduction of this chapter bring me to the point of changes over time. Divorce risks have risen over time. With respect to mixed marriages this could be expected from the fact that, for example, religiously mixed marriages have become more common (Hendrickx 1994). Bearing the previous chapter's observations in mind, we must remember that the categories with the largest divorce rates are relatively small in size, which results in small macro-level effects of heterogamy on the size of the contingency of divorcees.

Even though I relate an increase in the number of mixed marriages to a higher divorce rate, this increase can, paradoxically, lead to a theoretical expectation of a decreasing influence of heterogamy on divorce. Individualization and secularization have marked a shift in the norms and values concerning religion, marriage, the family and divorce towards increasing permissiveness (SCP 1994). A growing number of people no longer consider marriage as the only way to security. Since becoming more individualistic, many people have become more interested in love, affection and the possibility of self-fulfilment. All this implies, firstly, that a growing number of people find that marriage is not necessarily for life and are more willing to break up a relationship which

works out badly or does not yield what they expect from it (e.g. Janssen *et al.* 1998).

Since individualization and secularization make people more individualistic, these changes also imply that we can expect people to be less tied to the social groups that they belong to. Those social barriers are becoming fainter. This means that marrying outside social boundaries of religious, ethnic and other social categories is becoming more common. People are becoming less shocked by or opposed to such marriages. In the previous chapter, I demonstrated that mixed categories which occur less often than can be expected based on marginal frequencies have higher divorce risks, while categories which occur more frequently than can be expected have lower divorce risks. The increased occurrence of mixed marriages can be seen as a sign of more openness in society. So, on the one hand, people depend to a lesser degree upon the restrictions of their social environment. On the other hand, to the extent that they do still depend on them, certain mixed categories have become more accepted than before, resulting in less tight restrictions.

Furthermore, religion has become less salient and less important as a moral guideline (Wilson 1967). Therefore, marrying outside religious boundaries has become more common (McCutcheon 1988; Hendrickx 1994) and can be expected to become less threatening for the stability of a marriage. If seen within the light of an increasingly open society, I can extend the prediction of a decreasing effect of religious heterogamy on divorce to the other types of heterogamy under investigation in this chapter: nationality and age.

Another theory leads me to expect the influence of heterogamy on divorce to decrease over time. Society has been changing from one in which positions are ascribed by inherited background characteristics towards a more meritocratic one in which own achievement is more decisive. Although the main emphasis of research in this field has been on the role of parental resources on the achievement of one's occupation, mixed marriages have already been considered in this light since Blau and Duncan's (1967) monograph on social mobility in the United States. Central in this respect is the notion that positions which one can achieve in life have become increasingly less dependent on characteristics ascribed by one's social background and increasingly more dependent on one's own merits. With respect to choosing a spouse, Kalmijn (1991a, b) proposed the hypothesis that the classic sociological distinction between ascription and achievement as opposing ways to social status is also applicable to marriage markets. Research has indicated that an individual achievement characteristic like the level of education has gained in importance when choosing a spouse in comparison to characteristics ascribed by origin such as parental social status, religion and ethnicity (Kalmijn 1991a, b; Hendrickx 1994, 1998). This notion can, therefore, be applied to heterogamy and divorce as well. Age has nothing much to do with ascription or own merits, but the other two characteristics on which I investigate the influence of heterogamy on divorce do: nationality and religion are mostly inherited from family background. One might argue that people can choose their own religion and to some extent, like when applying for naturalization, for their nationality. However, most of the time, these characteristics are taken from the parents – which is ascription – and if it is not, then it cannot be considered an achievement on 'merits' anyway. So, in this chapter, I am mainly studying characteristics of ascription. Therefore, looking at heterogamy and divorce from this view of ascription and meritocratic achievement leads to the same prediction, namely a decrease in the effect of heterogamy with respect to the characteristics investigated here on divorce.

In sum, I hold that an expected growing support for mixed marriages and a growing meritocracy in achievement will lead to the expectation that mixed marriages will gain more

support and will be considered more normal than was previously the case. Therefore, I expect a trend towards a decreasing influence of heterogamy on the risk of divorce in my research period. This is the *decreasing heterogamy effect hypothesis*. I will show my investigation on this for the limited time span in my data set by comparing marriage cohorts.

### **3.3 Data and operationalization**

#### *3.3.1 Registration data and method*

In order to test the hypotheses, I used data registered by Statistics Netherlands (CBS) supplied by the Dutch municipalities on the marriages and divorces which they had registered. This method allowed me to access data on every marriage contracted and dissolved by divorce in the Netherlands. The marriages that I analysed started between 1974 and 1984. For these marriages, I could find out whether they ended in divorce or not before 1994 by looking them up in the divorce records using some key characteristics. The municipalities filled in some characteristics on the registration forms at the time of the wedding ceremony. Therefore, this research is not dependent on the reliability of retrospective questions. As in the previous chapter, I selected marriages between spouses below 50 years of age on the wedding day. Furthermore, I selected marriages of which the municipality was known because marriages with unknown municipalities only appear in one of the cohorts. This accounts for the minor change in the total number of cases in my analyses, which will be carried out per cohort.

As can be read from Table 3.1, I had 923,485 marriages to be analysed. In order to compare changes over time, I distinguished two cohorts: the first consisting of the marriage years in the seventies (1974 to 1979), the second of the marriage years in the eighties (1980 to 1984). The former cohort consists of 531,015 marriages, the latter of 392,470. For these cohorts, I computed logistic regression models for the divorce risk in the first five years of marriage. Within these cohorts, 29,859 and 28,881 marriages, respectively, ended in divorce in the first five years. If one leaves these marriages out, 501,156 and 363,589 are left in the respective cohorts. The remaining marriages were analysed for another five years: the second five years of marriage. In this period, 34,402 marriages in the older and 23,127 marriages in the younger cohort ended in divorce. The remaining marriages after ten years in the older cohort, 466,754 in total, could be followed for another five years. Of these, another 21,909 appeared to divorce before the 15<sup>th</sup> anniversary. In this way, I discerned two cohorts (1974-1979 and 1980-1984) and three marital durations (first, second and third five years of marriage). I reiterate that the division into two cohorts may also be seen as a division into two periods. The analysis, however, was an analysis of cohorts.

Techniques of analysis which use duration in the estimation of the parameters, like Cox regression analysis or other types of event history analysis, are laborious and not feasible on this large data set because all analyses were done on site at Statistics Netherlands. The use of logistic regression analysis to compare three durations and two cohorts was the most suitable way of analysis. The estimated parameters from the logistic regression analyses could be used to compute expected divorce risks for all categories of independent variables.

Table 3.1 Registered marriages and divorces in two cohorts

	Marriages	Divorces
Registered 1974-1994	1,928,463	581,040
Key not unique	59,851	9,868
Marriage before 1974 (not applicable)		297,169
Contracted abroad (not applicable)		101
Marriage not present in marriage files		46,384
Totally available	1,868,612	227,518
Both spouses younger than 50 years at time of marriage performed between 1974-1984	931,198	158,620
After deselection of unknown municipality/abroad: 923,485 marriages to be split into 2 cohorts:	cohort 1974-1979	cohort 1980-1984
at the start of marriage	531,015	392,470
divorcing in first five years of marriage	-/ 29,859	-/ 28,881
remaining after five years	501,156	363,589
divorcing in second five years of marriage	-/ 34,402	-/ 23,127
remaining after 10 years	466,754	340,462
divorcing in third five years of marriage	-/ 21,909	
remaining after fifteen years	444,845	

### 3.3.2 Operationalization

The dependent variable in the analyses was the divorce risk. This was analysed for three durations of marriage. In this way, I could see whether the effects of heterogamy on divorce grew or declined or first grew and then declined during marriage, as discussed in the theoretical part above. Besides, I distinguished two cohorts in order to test whether being mixed has a declining positive effect on the divorce risk over cohorts. As mentioned earlier, I analysed the influence of three forms of heterogamy on divorce: heterogamy with respect to age, church denomination and nationality. I used measurements similar to those used in the previous chapter, but on the basis of the conclusions there, I simplified measurements wherever possible.

For age at marriage, the mean age of husband and wife was taken. For the age difference, the age at marriage of the wife was subtracted from that of the husband. A negative difference indicates the number of years that the wife is older. A positive difference indicates the number of years that the husband is older. A value of 2 on the scale of age difference, for instance, indicates that the husband is 2 years older than his wife, whereas a value of -3.5 denotes a wife who is 3.5 years older than her husband. A quadratic term was computed, too: the square of this age difference. Adding the squared term made it possible in the analysis to model the divorce risk to



rise in both directions: when the husband is older or when the wife is older. In this way, less parameters were needed than in the previous chapter where categories of combinations of husband's and wife's age were distinguished. Besides, the combination of a linear and quadratic term allowed me to find the 'optimal age difference' at which the risk of divorce is the lowest.

For church denomination, seven categories have been registered: no church affiliation, Roman Catholic, Dutch Reformed, Re-reformed (*gereformeerden*), other Christian, Jewish, other/unknown. In the analyses, the divorce risks of several combinations of the church denominations of husband and wife was analysed. To do this, I produced a variable with combinations of the husband's and the wife's church affiliations. To prevent categories being too small and to produce sensible comparisons, I distinguished homogamous combinations of non-church members, Catholics, Dutch Reformed, Re-reformed, other Protestants and others; next, all possible mixed combinations of each spouse being in any category of non-church members, Catholics, Dutch Reformed or Re-reformed and, finally, one category for all other mixed combinations. Because of the large number of categories and cases, mirrored combinations, like a non-church member husband with a Catholic wife and a non-church member wife with a Catholic husband, were taken together into the same category. It is plausible to do this with respect to religion, since the analyses in the previous chapter displayed no systematic direction of divorce rates for these mirrored combinations. In this way, I limited the number of parameters.

New in these analyses, compared to the previous chapter, is the addition of a categorical variable indicating whether a marriage ceremony in church<sup>3</sup> has taken place or not. This is the indicator available in these files that can be controlled to see to what extent the official registration is still correct and to see whether people who are registered as church members still feel attached to their church or not. In this way, I could control the fact that marriages which are supposedly mixed are, in fact, not so very mixed if the spouses are not really involved with their church affiliation. It can be assumed that couples who do not marry in church are less religious than couples who do. Thus, I could find purer effects of religious differences between spouses, both for spouses with different denominations and for marriages between a church member and a non-church member.<sup>4</sup> I could control the variations in church involvement by taking the interactions between the performance of a church ceremony and church denomination into account.

Six categories of nationality were distinguished, being those of the Netherlands, neighbouring countries (broadly defined as Germany, Belgium, Luxembourg, United Kingdom and France), Southern Europe (Portugal, Spain, Italy, Yugoslavia, Greece), Turkey, Morocco and other countries.<sup>5</sup> In the analyses, I looked separately at every homogamous combination and at every combination of a Dutch spouse and any possible category of a foreign spouse. Other mixed combinations of two foreigners with a different nationality appear too infrequently in the data and have been placed together in one miscellaneous category. Previous analyses showed that the influence of nationality on the divorce risk is not symmetrical. It does make a difference whether the husband or the wife has Dutch nationality, since I found a higher divorce risk among the former in the previous chapter. Therefore, I decided, with respect to nationality, in contrast to church affiliation, to make a distinction between mirrored categories: a Dutch husband with a Turkish wife was in a different category than a Turkish husband with a Dutch wife. Still, I used as few categories as possible in this way.

A drawback of using registration data is that it is unknown how many marriages are dissolved abroad. I expect that this will not influence the results with respect to heterogamy of

age and religion, but more caution is necessary when it comes to heterogamy of nationality. Foreigners married in the Netherlands often return to their country of origin. It is unknown to what extent this will influence my results.

As categorical control variables I took into the analyses: the province where the marriage started, the degree of urbanization of the municipality where the marriage took place in five categories, the year of marriage categorically and the marital status of both spouses before marriage, discerning never married, widowed and divorced. In this way, I could take the influence of geographical and historical differences and previous marriage history of the spouses on the divorce rate into account.

### 3.4 Analyses and results

#### 3.4.1 Frequency of heterogamy

Before going into the analyses, I would like to show how much heterogamy actually exists. This is shown in Appendices 3.1 to 3.3. These appendices indicate which percentage of the couples is in each of the categories (of age at marriage, church denomination and nationality, respectively) as distinguished in the logistic regression analyses. There are panels for each of the durations investigated – the first five years, the second five years and the third five years of marriage – for each cohort – 1974-1979 and 1980-1984. Only panels for the first and second five years are available for the younger cohort, as this cohort could only be followed for ten years. Furthermore, there is a sixth panel for the situation at the beginning of the marriage – which is equal to the situation for the first five years of marriage – for both cohorts together, 1974-1984.

With respect to the occurrence of age heterogamy in Appendix 3.1, the total percentage of people marrying in different age groups shows a slight increase over time: in the second cohort, there are more mixed couples. In the first five years of marriage, this increase over time is from 51.6 to 52.4 percent, in the second five years from 51.1 to 51.5 percent. Progressing down the length of the marriage, it can be noted that the percentage of mixed couples among the remaining ones after five and ten years, kept on decreasing. This clearly demonstrates that mixed couples have a higher divorce rate than homogamous couples. Also clearly visible in these tables is that age heterogamy occurs mainly over small distances of adjacent categories, mostly in the direction of an older husband. Very large age differences are rare. In total, a little more than half of the couples consisted of husbands and wives in different categories.

Changes over cohorts in the occurrence of religiously mixed couples do not occur between the 1974-1979 and 1980-1984 period, as can be read from Appendix 3.2. The percentages remained about the same. The level of inmarriage is high: at least two thirds of the couples belong to the same group. Going down over the marriage course, we can see a slight decrease in the relative number of mixed couples. This is related to the higher divorce risk of mixed couples.

Appendix 3.3 shows the frequencies for categories of nationality. Similar to the findings for age heterogamy in Appendix 3.1, heterogamy with respect to nationality increases over historical time (from 5.3 to 7.0 percent and from 4.8 to 5.7 percent in the first and second five years of marriage, respectively) and decreases over the marriage course (in the older cohort from 5.3 via 4.8 to 4.4 percent and in the younger cohort from 7.0 to 5.7 percent). Levels of inmarriage are

extremely high. Of course, this is due to the fact that most marriages registered in the Netherlands consist of two persons with Dutch nationality.

Although these figures are illustrative, they cannot show how strong the effects of heterogamy on divorce are. For this, we need to compare homogamous and heterogamous couples in the correct manner, as will be demonstrated in the next subsection.

### 3.4.2 Testing the hypotheses: logistic regression models

I estimated the parameters of a logistic regression model for all durations and cohorts distinguished. In this model, I regressed the probability of divorce on the following variables, the operationalization of which is described in section 3.3 above:

- the mean age at marriage of both spouses;
- the age difference;
- the age difference squared;
- the categorization of both spouses' church affiliations at the start of the marriage;
- a dichotomous variable indicating whether a church ceremony took place;
- interaction terms of the latter two;
- the categorization of both spouses' nationalities at the start of the marriage;
- the previous marital status of both spouses;
- the year in which the marriage took place;
- the province in which the marriage took place;
- the degree of urbanization of the municipality in which the marriage took place.

Processing the adjustments compared to the previous chapter with respect to age, religion and nationality and adding a church wedding ceremony and interaction terms, leads to the following logistic regression equation:

$$\frac{P}{(1-p)} = \beta_0 + \sum_i [\beta_{year.i} * x_{year.i}] + [\beta_{mean\ age} * x_{mean\ age}] +$$

$$[\beta_{agedif} * x_{agedif}] + [\beta_{(agedif^2)} * x_{(agedif^2)}] + \sum_{j=1}^{13} [\beta_{religion.j} * x_{religion.j}] +$$

$$[\beta_{church\ ceremony} * x_{church\ ceremony}] + \sum_{j=1}^{13} [\beta_{religion * church\ ceremony.j} * x_{religion.j * church\ ceremony}] +$$

$$\sum_{k=1}^{17} [\beta_{nationality.k} * x_{nationality.k}] + \sum_{l=1}^3 [\beta_{marital\ status\ man.l} * x_{marital\ status\ man.l}] + \sum_{m=1}^3 [\beta_{marital\ status\ woman.m} * x_{marital\ status\ woman.m}] +$$

$$\sum_{n=1}^4 [\beta_{urbanization.n} * x_{urbanisation.n}] + \sum_{o=1}^{11} [\beta_{province.o} * x_{province.o}]$$

In this equation,  $p$  stands for the probability of divorce within a certain time span in marriage (in this chapter: specific periods of five years in a marriage),  $\beta$ 's are regression coefficients,  $x$ 's are variables. The content of the variables and their coefficients are indicated: *year* is the marriage year, *mean age* is the average age of both spouses, *religion* is the combination of both spouses'

religions, *church ceremony* is the dichotomous variable indicating whether or not the couple also married in church, *nationality* is the combination of both spouses' nationalities, *marital status husband* and *idem wife* is the previous marital status (never married, widowhood or divorced), *urbanization* is the degree of urbanization of the municipality where the marriage took place and *province* is the province in which that municipality is situated. With respect to categorical variables for which I used dichotomous dummies, deviation contrasts were used, so that the average effect for all cases formed the reference in the analysis.

Parameters of this model were estimated for five samples: for the oldest distinguished cohort 1974-1979, I estimated the model parameters of divorce in the first, second and third five years of marriage; for the cohort 1980-1984, I estimated the model parameters of divorce in the first and second five years of marriage. For the model parameters in the second five years, I used the marriages which survived the first five years and analysed whether they divorced before their tenth anniversary. For the model parameters in the third five years, I used the marriages which survived the first ten years and looked whether they divorced before their fifteenth anniversary.

Next, I computed the expected divorce risks for combinations of church affiliation of both spouses and of nationalities of both spouses based on these logistic regression analyses. In the expected probabilities, the average age at marriage is set at 25 years. Since age at marriage has a negative effect on the risk of divorce, a lower age results in higher probabilities of divorce, whilst a higher age results in lower probabilities of divorce. For age heterogamy, I also computed expected divorce risks for couples with varying marriage ages. In the computations of divorce risks, the controlling categorical variables were set to the overall mean by using a deviation contrast in the logistic regression analysis.

When depicting and evaluating the corrected divorce risks computed from the logistic regression analysis, special attention should be given to the way in which they have to be evaluated. In which way can we compare divorce risks and see whether there is an effect of heterogamy or not? At first sight, it may seem reasonable to compare homogamous and heterogamous couples in general, but this is quite senseless. In the previous chapter, I demonstrated that a marriage only 'suffers' from a heterogamy effect if divorce risks are higher *than could be expected on the basis of the characteristics of the spouses*. For example, if we want to know whether the divorce risk of a mixed marriage between a non-church member husband and a Catholic wife shows a heterogamy effect, it is no use comparing their divorce risk with the one for Protestants. Instead, this divorce risk should be compared to the divorce risk in the category of the husband, in this case non-church members, and the risk in the category of the wife, in this case Catholics. I will do this analogously for all mixed categories of age, religion and nationality.

Tables of all predicted divorce risks will be presented per characteristic in the subsections below. For age, this will be done by presenting computed probabilities for the marriage ages of 18, 23, 28, 33, 38, 43 and 48. For purposes of illustration, I also present the observed probabilities of divorce in Appendices 3.4, 3.5 and 3.6 for age, church affiliation and nationality, respectively. I use the same categories as in the corrected tables of church affiliation and nationality in the subsections below. In the table for observed probabilities of age categories, I distinguish age categories below 20, 20-25, 25-30, 30-35, 35-40, 40-45 and 45-50 years old. The tables in Appendices 3.4 to 3.6 are not corrected for other characteristics. To test the hypotheses, however, I will refer to Tables 3.2 to 3.5 as given below in the subsections. Since they are corrected for all other characteristics in the analyses, they give the net influence of heterogamy on divorce risks.

*Heterogamy and divorce within five, ten and fifteen years in two marriage cohorts: register data*

**Table 3.2** Corrected probabilities (percentages) of divorce by age and age difference of husband and wife in three periods of marriage and two marital cohorts

<i>a: first five years, cohort 1974-1979</i>									<i>d: first five years, cohort 1980-1984</i>								
wife	18	23	28	33	38	43	48		wife	18	23	28	33	38	43	48	
husb.	18	19.4	17.9	18.2	<b>20.3</b>	<b>24.9</b>	<b>32.6</b>	<b>44.4</b>	husb.	18	<b>28.9</b>	27.5	28.9	<b>33.4</b>	<b>41.6</b>	<b>53.7</b>	<b>68.5</b>
	23	17.0	<b>14.1</b>	13.0	13.2	<b>14.9</b>	<b>18.5</b>	<b>24.9</b>		23	25.5	<b>21.7</b>	20.5	21.7	<b>25.4</b>	<b>32.6</b>	<b>44.1</b>
	28	16.5	12.3	<b>10.1</b>	9.3	9.4	<b>10.7</b>	<b>13.4</b>		28	24.8	18.9	<b>15.9</b>	14.9	15.8	<b>18.8</b>	<b>24.8</b>
	33	17.6	11.9	8.8	<b>7.2</b>	6.5	6.6	<b>7.6</b>		33	26.9	18.3	13.7	<b>11.4</b>	10.7	11.3	<b>13.6</b>
	38	<b>20.7</b>	12.8	8.5	6.2	<b>5.0</b>	4.6	4.6		38	<b>31.9</b>	20.0	13.3	9.7	<b>8.0</b>	7.5	8.0
	43	<b>26.5</b>	<b>15.2</b>	9.1	6.0	4.3	<b>3.5</b>	3.2		43	<b>40.8</b>	<b>24.2</b>	14.5	9.4	6.8	<b>5.6</b>	5.2
	48	<b>35.9</b>	<b>19.8</b>	<b>10.9</b>	6.4	4.2	3.0	<b>2.4</b>		48	<b>53.8</b>	<b>31.9</b>	<b>17.8</b>	10.4	6.6	4.7	<b>3.9</b>
effect of mean age at marriage								-0.0758	effect of mean age at marriage								-0.0771
effect of (age husband minus age wife)								-0.0059	effect of (age husband minus age wife)								-0.0104
effect of (age husband minus age wife) <sup>2</sup>								0.0024	effect of (age husband minus age wife) <sup>2</sup>								0.0028
<i>b: second five years, cohort 1974-1979</i>									<i>e: second five years, cohort 1980-1984</i>								
wife	18	23	28	33	38	43	48		wife	18	23	28	33	38	43	48	
husb.	18	<b>24.8</b>	21.7	20.8	21.8	<b>25.0</b>	<b>30.8</b>	<b>40.0</b>	husb.	18	<b>24.2</b>	21.9	22.1	<b>24.8</b>	<b>30.7</b>	<b>40.5</b>	<b>54.7</b>
	23	22.1	<b>17.6</b>	15.2	14.5	15.3	<b>17.7</b>	<b>22.3</b>		23	21.7	<b>17.5</b>	15.7	15.9	<b>18.0</b>	<b>22.7</b>	<b>31.2</b>
	28	21.5	15.5	<b>12.1</b>	10.4	9.9	10.5	<b>12.2</b>		28	21.7	15.5	<b>12.3</b>	11.0	11.1	<b>12.7</b>	<b>16.3</b>
	33	22.8	15.0	10.6	<b>8.2</b>	7.0	6.6	7.0		33	24.1	15.5	10.9	<b>8.5</b>	7.6	7.7	<b>8.8</b>
	38	<b>26.4</b>	16.0	10.2	7.1	<b>5.4</b>	4.6	4.4		38	<b>29.6</b>	17.4	10.9	7.5	<b>5.8</b>	5.2	5.2
	43	<b>32.8</b>	<b>18.8</b>	11.0	6.9	4.7	<b>3.6</b>	3.0		43	<b>39.0</b>	<b>21.8</b>	12.3	7.5	5.1	<b>4.0</b>	3.5
	48	<b>42.8</b>	<b>24.0</b>	<b>13.0</b>	7.4	4.6	3.1	<b>2.4</b>		48	<b>52.8</b>	<b>29.8</b>	<b>15.6</b>	8.5	5.1	3.5	<b>2.7</b>
effect of mean age at marriage								-0.0872	effect of mean age at marriage								-0.0818
effect of (age husband minus age wife)								0.0019	effect of (age husband minus age wife)								-0.0013
effect of (age husband minus age wife) <sup>2</sup>								0.0023	effect of (age husband minus age wife) <sup>2</sup>								0.0028
<i>c: third five years, cohort 1974-1979</i>																	
wife	18	23	28	33	38	43	48										
husb.	18	11.0	9.8	9.6	10.5	<b>12.6</b>	<b>16.7</b>	<b>23.8</b>									
	23	9.7	<b>7.7</b>	6.8	6.7	7.4	<b>8.9</b>	<b>12.0</b>									
	28	9.5	6.8	<b>5.4</b>	4.7	4.7	5.1	<b>6.2</b>									
	33	10.3	6.6	4.7	<b>3.7</b>	3.3	3.2	3.5									
	38	<b>12.3</b>	7.2	4.6	3.2	<b>2.5</b>	2.2	2.2									
	43	<b>16.2</b>	<b>8.7</b>	5.0	3.2	2.2	<b>1.7</b>	1.5									
	48	<b>23.0</b>	<b>11.6</b>	<b>6.1</b>	3.5	2.2	1.5	<b>1.2</b>									
effect of mean age at marriage								-0.0776									
effect of (age husband minus age wife)								-0.0007									
effect of (age husband minus age wife) <sup>2</sup>								0.0023									

Note: effects of mean age, age difference and age difference squared are included in the model. Multivariate model. Bold effects constitute heterogamy effects.

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589.

### 3.4.3 Age differences

In Table 3.2, I present the divorce risks for husbands and wives of different ages with a five-year interval. The age at marriage itself has a clear impact on the risk of divorce. Throughout marriage and in both cohorts, the effect in the logistic regression model equals around -0.08. This implies that marrying young brings about a higher risk of divorce than marrying at a more mature age. We can also see this in the risks shown in Table 3.2. In order to see the effect of age and not the effect of age heterogamy, I look at divorce risks of homogamous couples in the main diagonal. In all panels of Table 3.2, a decline in divorce risk is depicted as the spouses are older on their wedding day.

Furthermore, I found effects of heterogamy. Except for the second five years of marriage in the 1974-1979 cohort, the effect of age differences is slightly negative. The effect of the quadratic term is positive. This implies that the relationship has a U-shape and that the 'optimal' age difference with the lowest divorce rate is that of a slightly older husband. In Table 3.2, going further off the diagonal, the divorce risks rise. This especially applies to extreme age differences. Close to the diagonal, divorce risks generally show an initial drop. This can be ascribed to the main effect of mean age at marriage. For moving away from the diagonal implies that the age of one of the spouses is increasing. These findings are similar to those in the previous chapter.

The effects allow me to compute the predicted age difference with the lowest divorce rate. For the older and the younger cohort, for the first five years of marriage, this 'optimal' age difference is reached if the husband is 1.23 and 1.86 years older, respectively. For the second five years of marriage, this 'optimal' age difference is close to 0: if the wife is older by 0.41 years and if the husband older by 0.23 years, respectively. For the third five years of marriage in the older cohort, the age difference with the lowest risk of divorce is even closer to 0: it can be found for a husband just 0.15 years older. These differences come about by changes in the linear parameter.

The effects of the quadratic term, nevertheless, remain present to roughly the same extent across cohorts and over the marriage course. Apparently, the age heterogamy effects on divorce are robust over cohorts and over the marriage course: the divorce risks keep going up to about the same extent with increasing age differences in either direction.

### 3.4.4 Religious differences

To evaluate the effects of religious heterogamy, I will look at the expected divorce risks computed from the logistic regression model. These corrected probabilities can be found in Table 3.3. The mean age at marriage in these models is set to 25 years.

#### 3.4.4.1 Religious differences: pattern in the first five years in the 1974-1979 cohort

Panel A in Table 3.3 shows the divorce risks within five years for several combinations of church affiliation for couples married between 1974 and 1979. The main diagonal shows the divorce risks of homogamous couples. Below the diagonal, the probabilities of mixed categories can be found. For the mixed couples involving the smaller categories of 'other Protestants' and 'other religions', one overall probability is given at the bottom part of the panel.

It is clear that among the homogamous couples on the main diagonal, non-church

members have the highest corrected divorce risk of 16.9 percent. This is followed by the 'other Protestant' and 'other' categories, 12.4 and 13.9 percent respectively. Of all distinguished homogamous categories, the church members of the three main religious denominations in the Netherlands, Catholics, Dutch Reformed and Re-reformed, show the lowest divorce rate in that order, with the homogamous Re-reformed showing the lowest divorce rate of all categories. These findings corroborate findings of the previous chapter.

*Table 3.3 Corrected probabilities (percentages) of divorce by church denomination of husband and wife in three periods of marriage and two marital cohorts, mean age at marriage set to 25*

*a: first five years, cohort 1974-1979*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	16.9					
Cath.	14.9	12.1				
D.R.	13.9	<b>12.7</b>	8.4			
Reref.	14.1	<b>12.8</b>	<b>9.6</b>	6.9		
oth. Prot.					12.4	
other						13.9
oth. het.	<b>16.4</b>					

*d: first five years, cohort 1980-1984*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	21.3					
Cath.	21.6	22.0				
D.R.	19.2	19.5	14.3			
Reref.	18.4	18.9	<b>16.4</b>	12.5		
oth. Prot.					19.5	
other						24.9
oth. het.	<b>24.3</b>					

*b: second five years, cohort 1974-1979*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	17.0					
Cath.	16.5	17.3				
D.R.	14.4	15.2	10.9			
Reref.	15.2	16.0	<b>13.1</b>	11.6		
oth. Prot.					15.8	
other						18.0
oth. het.	<b>17.9</b>					

*e: second five years, cohort 1980-1984*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	17.2					
Cath.	16.8	15.7				
D.R.	14.8	14.8	10.9			
Reref.	15.3	<b>17.7</b>	<b>12.2</b>	11.8		
oth. Prot.					15.9	
other						18.7
oth. het.	<b>18.5</b>					

*c: third five years, cohort 1974-1979*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	7.5					
Cath.	7.4	7.1				
D.R.	6.6	6.9	5.2			
Reref.	7.3	<b>7.8</b>	<b>5.7</b>	5.1		
oth. Prot.					5.0	
other						8.0
oth. het.	<b>8.6</b>					

Note: 'none' stands for no church affiliation; 'Cath.' for Catholics; 'D.R.' for Dutch Reformed; 'Reref.' for Re-reformed; 'oth. Pr.' for other Protestant/Christian; 'other' for all other church affiliations; 'oth. het.' for all other mixed combinations in the table (the darkest empty cells together). Mirrored cells taken together. Multivariate models. Bold effects constitute heterogamy effects.

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589.

To establish the effect of heterogamy on divorce, I compared the mixed couples with the homogamous couples in the category of the husband and the category of the wife. For example, a marriage between a non-church member and a Catholic, has a modelled divorce probability of 14.9 percent in the first five years of marriage. Comparing this to the percentage of homogamous non-church members, 16.9, and that of Catholics, 12.1, it is clear that the number is in between and therefore does not constitute a heterogamy effect. This apparently goes for all probabilities of mixed marriages in which non-church members are involved. This can be expected to be an effect of church leaving, because these marriages will, to a large extent, consist of persons registered as members of a certain religious denomination marrying a non-church member. There is probably more chance that they will not have a particularly strong attachment to their original affiliation, that this attachment will weaken or that they will even abandon their faith and leave the church altogether.

However, heterogamy effects are found for all distinguished categories of mixed marriages between two church members of different denominations. When Catholics, Dutch Reformed or Re-reformed intermarry, the divorce rate of the arising couple in the first five years of marriage is higher than that of the homogamous couples in each denomination involved. The 12.7 percent of Catholic/Dutch Reformed mixed marriages, for instance, are higher than the percentages of both homogamous Catholics, 12.1, and homogamous Dutch Reformed couples, 8.4 percent. Note that even though statistical significance was found, formally I cannot speak of significance of differences here, since I analyse population data.

#### 3.4.4.2 Religious differences: trends over cohorts

The pattern described in the previous section refers to the first five years of marriages with spouses at an average age of 25 years in the 1974-1979 cohort. If we compare the older cohort with the younger, which married in the 1980-1984 period, then two things become clear. Firstly, all estimated divorce risks are higher than their counterparts for the older cohort. This clearly shows the rise in divorce rates over marriage cohorts in the period under investigation. Marriages performed in the eighties divorce more often than marriages performed in the seventies and this goes for all combinations of religious affiliation of husbands and wives. Secondly, the pattern of the effects is different. Catholic marriages in the younger cohort appear to break up much more in their first five years than in the older cohort. This brings about a rise in the divorce rate which lets the Catholics overtake the non-church members. Homogamous Catholics divorce more than mixed married Catholics, resulting in the disappearance of heterogamy effects for mixed marriages between Catholics and others. Only Dutch Reformed and Re-reformed intermarriage leads to a higher divorce risk in this cohort. A post hoc statement about this could be that secularization is an important factor and these results indicate the secularization of Catholics in the beginning of the eighties (Becker & Vink 1994). Anyway, the changing pattern means that religious heterogamy is losing its effect on the risk of divorce in the first five years across cohorts.

This diminishing effect, however, cannot be found for the second five years of marriage. In the 1974-1979 cohort, as will be described later, only one heterogamy effect is found – for marriages between Dutch Reformed and Re-reformed – while in the 1980-1984 cohort, there is also a heterogamy effect of Catholic/Re-reformed marriages. This shows that heterogamy effects on divorce risks do not all diminish over time, depending on the duration of the marriage.



#### 3.4.4.3 Religious differences: changing influence over the course of marriage

I will now address the changing influence of religious differences on divorce over the course of marriage. This was already touched upon in the previous section when I discussed trends over cohorts. I compared the predicted divorce rates for the first five years of marriage in the cohort 1974-1979 with those in the second five years in the same cohort.

Firstly, all rates in the second five years are higher than their counterparts in the first five years. This means that in all combinations of religious denominations of the spouses, more marriages divorce between their fifth and their tenth anniversary than between the start of the marriage and their fifth anniversary.

Secondly, the pattern is different across the course of marriage. With respect to homogamous marriages, the highest divorce risk is found among the non-church members. But in the 1974-1979 cohort, the Catholics overtake that role in the second five years. Besides, in both cohorts, the Re-reformed catch up with the Dutch Reformed.

Next, I looked at the patterns of heterogamy effects over the course of marriage. Only one heterogamy effect is found in the second five years, namely for Dutch Reformed/Re-reformed mixed marriages. There is even one opposite effect in the older cohort for the second five years of marriage, showing that mixed marriages are more stable than homogamous ones: none church members with Catholics show a relatively low predicted divorce rate of 16.5 percent compared to 17.0 and 17.3 for homogamous non-church members and homogamous Catholics, respectively. These patterns show a decreasing impact of heterogamy on divorce over the marriage course in the 1974-1979 marriage cohort. After the tenth anniversary, though, this trend turns around a bit. In the third five years of marriage, two heterogamy effects can be found: for Catholics with Re-reformed and for Dutch Reformed with Re-reformed.

Just as the trend over cohorts depends on the duration of the marriage, so do the changes over the marriage course depend on the cohort. In the 1980-1984 cohort, there was only one positive effect of heterogamy on divorce in the first five years of marriage. In the second five years of marriage, there are two: Re-reformed with either Catholics or Dutch Reformed.

With respect to the impact of religious heterogamy on divorce, I may conclude that changing patterns across marriage cohorts and over the marriage course can be described, but that the direction is ambiguous. The finding in the older cohort that a few heterogamy effects first disappear after five years and then come back again after ten years is completely contrary to the *inverse U-shape hypothesis*.

#### 3.4.4.4 Marriage ceremony in church

In the logistic regression model, the presence or absence of a church ceremony is controlled, as well as interactions between this dichotomous variable and church denomination. The findings above refer to the average in the model. Because of differences in church involvement, it is interesting to see what happens if I compute all predicted divorce rates in the model for couples who had a marriage ceremony in church. An important reason to do so is to ascertain that we are looking at the core church members who are involved with their religion. Then, I can rest more assured that the registered denomination really stands for a church membership. After all, I am using official registrations of church membership.

The predictions of the risk of divorce for marriages with a church ceremony are displayed in Table 3.4. It is to be expected that people who are more involved in church will marry in church and will display lower divorce rates. The table indeed displays lower divorce rates. Equally obviously, non-church members' divorce rates will diminish less in these tables than church members' divorce rates, since marriage in church has not much meaning and importance to non-church members.

Table 3.4 Corrected probabilities (percentages) of divorce by church denomination of husband and wife in three periods of marriage and two marital cohorts, mean age at marriage set to 25 and church ceremony set to yes

a: first five years, cohort 1974-1979

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	15.9					
Cath.	12.2	8.4				
D.R.	12.6	<b>9.8</b>	6.4			
Reref.	13.0	<b>10.4</b>	<b>7.2</b>	4.7		
oth. Prot.					12.9	
other						12.1
oth. het.	13.6					

d: first five years, cohort 1980-1984

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	20.9					
Cath.	18.9	13.5				
D.R.	17.0	<b>14.3</b>	9.7			
Reref.	16.4	13.4	9.4	7.2		
oth. Prot.					22.9	
other						22.0
oth. het.	18.3					

b: second five years, cohort 1974-1979

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	19.3					
Cath.	15.8	11.0				
D.R.	14.6	<b>13.3</b>	8.4			
Reref.	14.7	<b>14.6</b>	<b>9.6</b>	7.7		
oth. Prot.					14.6	
other						14.7
oth. het.	16.3					

e: second five years, cohort 1980-1984

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	17.9					
Cath.	15.3	10.9				
D.R.	15.0	<b>13.4</b>	8.6			
Reref.	14.2	<b>12.1</b>	<b>9.0</b>	7.1		
oth. Prot.					10.5	
other						18.0
oth. het.	16.2					

c: third five years, cohort 1974-1979

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	9.0					
Cath.	7.0	4.9				
D.R.	6.6	<b>6.1</b>	4.0			
Reref.	7.0	<b>6.4</b>	<b>4.7</b>	3.7		
oth. Prot.					6.8	
other						7.0
oth. het.	7.1					

Note: 'none' stands for no church affiliation; 'Cath.' for Catholics; 'D.R.' for Dutch Reformed; 'Reref.' for Re-reformed; 'oth. Pr.' for other Protestant/Christian; 'other' for all other church affiliations; 'oth. het.' for all other mixed combinations in the table (the darkest empty cells together). Mirrored cells taken together. Multivariate models. Bold effects constitute heterogamy effects.

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589.

Table 3.4, for people marrying in church, displays lower divorce risks than Table 3.3, the average model. There are only a few exceptions to this statement. For some combinations, marrying in church diminishes the divorce risk only in the beginning of the marriage. In general, though, people marrying in church, which is an indicator for church involvement, have divorce risks which are much lower (as displayed in Table 3.4) than the average model (as displayed in model 3.3) in all distinguished stages and cohorts of marriage.<sup>6</sup>

As to the divorce risks of homogamous couples, we can clearly see that the non-church members – and also the mixed group of ‘other Protestants’ and ‘others’ – always have the highest divorce risks in Table 3.4. Catholics have a lower divorce risk, Dutch Reformed even lower and Re-reformed the lowest in all the panels of this table. This collaborates with the above findings and those from the previous chapter in a nice way, namely by zooming into church members who can be expected to be involved with their church, since they marry in church. The fact that for homogamous non-church members the church ceremony is also set to ‘yes’ does not undermine the findings. If we replace the upper left cells for homogamous non-church members in all the panels in Table 3.4 by the values of the corresponding cells in Table 3.3, the average model, then the finding still clearly holds.

Looking at the pattern of heterogamy effects on divorce, I find for all but one panel that mixed marriages between two church members have a higher divorce risk than the homogamous couples in both the category of the husband and the category of the wife. These clear heterogamy effects are absent for mixed marriages between a church member and a non-church member in these models, like in the average models above. The only exception is panel D for the first five years of marriage in the 1980-1984 cohort. There, only Catholic/Dutch Reformed marriages show a heterogamy effect. Generally, I can say that, controlling for having a marriage ceremony in church, in all but one cohort/marriage stage, all categories of religiously mixed marriage between two members of the three main denominations in the Netherlands have a higher risk of divorce than expected upon the divorce risks in the homogamous categories from which both spouses stem.

From the results depicted in Table 3.4 compared to those depicted in Table 3.3, I can conclude that religious heterogamy effects are more stable and robust when I use a church wedding as an indicator of church involvement. This means that the unclear trends of religious heterogamy effects on divorce over cohorts and changes of these effects over the course of the marriage are not of much significance. The only clear changes found now are a decreasing heterogamy effect on divorce over marriage cohorts in the first five years of marriage of Catholics or Dutch Reformed people married to Re-reformed people.

This also indicates that the sometimes unclear changes in heterogamy effects over cohorts and over marriage duration as found in Table 3.3 can largely be ascribed directly to secularization. The reasoning behind this is that mixed couples are more prone to losing their religion over the course of the marriage. There has also been a process of secularization over time. In this way, some people who are religiously mixed in the data are, in fact, no longer mixed. Therefore, higher divorce rates of initially mixed couples can be expected to diminish over time and over the marriage course. This can be considered as an artefact of secularization. Controlling a church ceremony filters out some of the diminishing effects of the people who are most prone to losing their religion and therefore not being mixed anymore if they were before. What is left is, perhaps, a more realistic image of the changes of the influence of mixed marriage on the risk of divorce. These changes are rather small.

### 3.4.5 Differences in nationality

Similar tables for corrected divorce risks as for categories of church denominations can be found for categories of nationality of both spouses in Table 3.5. Because sometimes differences were found for mirrored categories in the previous chapter, a distinction is made between a Dutch husband with a non-Dutch wife and a non-Dutch husband with a Dutch wife. Because of small numbers in the categories, I only looked at homogamous couples in all categories and mixed couples involving one Dutch spouse and one foreign spouse. All other heterogamous couples are grouped together in one category. It should be emphasized that with these analyses, I cannot draw firm conclusions with respect to ethnically mixed marriages, since nationality does not tell me about the origin of persons and their parents, their ethnic heritage etc. Next, people from the Netherlands Antilles and, until 1975, Surinam will be registered as Dutch. Furthermore, marriages in which foreigners are involved have a higher chance of being dissolved abroad in the country of origin of the spouses, especially with respect to homogamous foreign marriages, due to re-migration. Therefore, I present these figures with some prudence.

#### 3.4.5.1 Differences in nationality: pattern in the first five years in the 1974-1979 cohort

The first panel in Table 3.5 displays the corrected divorce risks for categories of spousal nationality for the first five years of marriage for the 1974-1979 cohort. Again, the age at marriage is controlled and fixed at 25 years for both spouses. With respect to homogamous couples, the panel shows that people with other than Dutch nationality have a lower risk of divorce in the Netherlands, especially Turks and people from neighbouring countries. They may, however, divorce more often in their country of origin.

With respect to mixed marriages, panel A shows that all mixed marriages between a Dutch and a non-Dutch person have higher divorce risks than can be expected from the divorce risk of homogamous Dutch and homogamous people of the other nationality in question. Although divorce abroad may play a role in over-estimating heterogamy effects, it is very likely that substantive heterogamy effects are present because of the huge divorce risks of heterogamous couples. See, for example, the expected divorce risk of 42.6 percent in the first five years for a couple aged 25 on average of which the wife comes from Morocco and the husband from the Netherlands. Looking at mirrored probabilities, I find that in most instances, the divorce risk within five years is higher when the wife is non-Dutch and the husband is Dutch. For Turkish/Dutch mixed marriages, though, this relationship is the other way around.

I do not know whether those differences are in this direction because couples are more likely to live in the husband's country and in that case I cannot see if they got divorced. This does not seem very likely, however, because the divorced Dutch women would probably return to the Netherlands and have the divorce registered there.

#### 3.4.5.2 Differences in nationality: trends over cohorts, changes over the marriage course

In the second cohorts and later in the course of marriage, we can see that among homogamous marriages, it is no longer the Dutch marriages which have the highest expected divorce risk. Homogamous marriages of other nationalities show increasing divorce rates compared to the

Dutch, especially the Moroccans, Southern Europeans and the category of others. Furthermore, a few mixed categories lose their heterogamy effect later in marriage for the older 1974-1979 cohort, especially Moroccan/Dutch mixed marriages. Most heterogamy effects remain overwhelming over cohorts and during the marriage course, though.

*Table 3.5 Corrected probabilities (percentages) of divorce by nationality of husband and wife in three periods of marriage and two marital cohorts, mean age at marriage set to 25*

*a: first five years, cohort 1974-1979*

wife \ husb.	NL	ngnbr.	S-Eur.	Turkey	Moroc.	other
NL	10.0	13.2	20.7	20.8	42.6	23.5
ngnbr.	10.6	4.4				
S-Eur.	18.8		6.8			
Turkey	34.7			0.2		
Moroc.	30.5				9.0	
other	20.6					9.6
oth. het.	9.3					

*d: first five years, cohort 1980-1984*

wife \ husb.	NL	ngnbr.	S-Eur.	Turkey	Moroc.	other
NL	12.1	19.4	28.0	24.1	56.2	42.4
ngnbr.	14.8	5.2				
S-Eur.	18.8		13.2			
Turkey	33.8			6.2		
Moroc.	29.8				16.2	
other	25.0					15.2
oth. het.	10.4					

*b: second five years, cohort 1974-1979*

wife \ husb.	NL	ngnbr.	S-Eur.	Turkey	Moroc.	other
NL	11.8	15.9	16.0	28.2	15.2	19.6
ngnbr.	11.7	3.5				
S-Eur.	17.5		10.6			
Turkey	32.5			7.9		
Moroc.	28.6				22.6	
other	19.5					11.5
oth. het.	11.4					

*e: second five years, cohort 1980-1984*

wife \ husb.	NL	ngnbr.	S-Eur.	Turkey	Moroc.	other
NL	10.4	15.2	18.9	16.4	23.1	18.6
ngnbr.	12.4	7.2				
S-Eur.	19.7		10.4			
Turkey	28.5			3.4		
Moroc.	39.1				17.4	
other	22.9					12.2
oth. het.	11.6					

*c: third five years, cohort 1974-1979*

wife \ husb.	NL	ngnbr.	S-Eur.	Turkey	Moroc.	other
NL	7.3	7.8	9.5	12.5	4.1	9.7
ngnbr.	6.7	4.0				
S-Eur.	10.5		6.7			
Turkey	12.1			0.2		
Moroc.	14.6				17.0	
other	9.6					6.4
oth. het.	4.4					

Note: 'NL' stands for Netherlands; 'ngnbr' for Belgium, Luxembourg, Germany, United Kingdom and France; 'S-Eur.' for Portugal, Spain, Italy, former Yugoslavia and Greece; 'Moroc.' for Morocco; 'other' for all other countries; 'oth. het.' for all other mixed combinations in the table (the empty cells together). Multivariate models. Bold effects constitute heterogamy effects.

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589.

An interesting change is found with respect to mirrored effects. For the second five years of marriage in both cohorts, I found that, with the sole exception of marriages between Dutch nationals and persons from neighbouring countries, the divorce risk becomes higher if the husband is non-Dutch and the wife is Dutch than the other way around. In the third five years, this is mixed.

#### 3.4.6 Social acceptance as an explanation

The explanation for the effect of heterogamy on divorce has to be found in the colliding expectations of couples who have less characteristics in common and in the lack of support by the differing spouses' social environment. No indicators are available in the registration data that would allow me to test this explanation. However, as a first step, I can find out to what extent the occurrence of the categories in society is related to the divorce risk. The reasoning behind this is that combinations which occur more frequently will be more common and, therefore, more accepted by the social environment.

I can do this by relating the predicted divorce risks in all categories to the *relative* occurrence of those categories. To do this in a proper way, I computed the expected frequencies in case of statistical independence of all categories of age, religion and nationality based on the marginal frequencies in the tables. This was not so easy, since both religion and nationality are not in squared tables in the logistic regression analyses. I just spread the miscellaneous categories out over the categories to which they refer. Next, I computed the relative occurrence of all categories by dividing the actually observed frequencies by the expected frequencies. Finally, I computed the correlation coefficient for the natural logarithm of this division with the predicted divorce risks in my model. I did this for all cohorts and marriage durations as in the logistic regression analysis. Obviously, because I had to spread out some categories, the results of this have to be interpreted with some prudence with respect to religion and nationality. With respect to age, though, the results are more secure.

The correlation coefficients are given in Table 3.6. In panels A, B and C on the left, the correlations are based on all cells. In panels D, E and F on the right, the correlations are computed without the homogamous main diagonal cells and cells with a frequency lower than 100.

With respect to age, a very clear correlation in the expected direction was found. The more a category with a certain age of the husband and a certain age of the wife relatively occurs, the lower the risk of divorce. For all cohorts and durations, the correlation coefficients in panel A are about -0.80, with the lowest being -0.76 for the second five years in the youngest marriage cohort. Selection of the heterogamous cells with an occurrence of at least 100 gives equal or slightly stronger results.

With respect to religion, the results are similar, but less pronounced. In panel B based on all cells, the correlation is negative in the first and third five years of marriage in the oldest cohort, as expected, -0.21 and -0.39; in the second five years of the youngest cohort this is only -0.02. The other two coefficients are slightly positive, ranging from 0.01 to 0.03. After selecting the mixed categories – all categories occurring at least 100 times – the correlation coefficients are all clearly in the expected direction, ranging from -0.13 to -0.54.

Finally, nationality shows medium and large negative correlations when computed over all cells, ranging from -0.09 to -0.54. This is mainly based on the homogamous categories, though,

because without those cells and when looking at cells with a frequency of at least 100, all correlations switch to large positive ones ranging from 0.41 to 0.65.

For all forms of heterogamy, but less clearly with respect to nationality, therefore, there are clues that acceptance of a certain combination of spousal characteristics is an explanation for the level of divorce.

*Table 3.6 Correlations between the relative occurrence of categories of husband and wife and the risk of divorce in those categories*

*a: age of husband and wife*

cohort:	1974-1979	1980-1984
duration:		
first five years	-0.81	-0.80
second five years	-0.78	-0.76
third five years	-0.77	

*b: religion of husband and wife*

cohort:	1974-1979	1980-1984
duration:		
first five years	-0.21	0.01
second five years	0.03	-0.02
third five years	-0.39	

*c: nationality of husband and wife*

cohort:	1974-1979	1980-1984
duration:		
first five years	-0.54	-0.39
second five years	-0.29	-0.43
third five years	-0.09	

*d: age, no main diagonal, cells n > 100 only*

cohort:	1974-1979	1980-1984
duration:		
first five years	-0.85	-0.86
second five years	-0.78	-0.78
third five years	-0.79	

*e: religion, no main diagonal, cells n > 100 only*

cohort:	1974-1979	1980-1984
duration:		
first five years	-0.21	-0.13
second five years	-0.27	-0.54
third five years	-0.34	

*f: nationality, no main diagonal, cells n > 100 only*

cohort:	1974-1979	1980-1984
duration:		
first five years	0.50	0.42
second five years	0.44	0.41
third five years	0.65	

Note: categories and cases used are the same as in Tables 3.2 to 3.5.

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations.

### 3.5 Conclusions and discussion

In this chapter, I investigated to what extent effects of heterogamy on divorce change during marriage and over time. To investigate this, I compared the first, second and third five years of marriage and I compared two marriage cohorts, 1974-1979 and 1980-1984. In the analyses, I used

registered data on all marriages that started in the Netherlands between 1974 and 1984 between two spouses younger than 50 years on the wedding day. I could follow them through time to see whether they ended in divorce between the start of the marriage and 1994.

I found that marriages do better if the spouses were not too young at the time of marriage and if they are not too different in age. The most favourable age difference for surviving the first five – and for the younger cohort even the first ten – years of marriage is a slightly older husband. This is in accordance with previous findings. New findings in this chapter show that the most advantageous age difference shifts during marriage towards a more equal age. In all of the researched marriage durations and cohorts, a more mature age at the time of marriage strengthens the marriage, whereas greater age differences, given the ‘optimal’ age mentioned above, weaken marital stability. This age heterogamy effect does not change over the marriage course or over cohort.

Church members of one of the three main Christian denominational groups in the Netherlands divorce less often than non-church members. Differences can also be found between denominations. Among the three main denominations in the Netherlands, Catholics have the highest and Re-reformed (*gereformeerden*) the lowest divorce rates. In the later cohort and in the second five years of marriage, Catholics show higher divorce risks, even overtaking the non-church members. It can be assumed that this is a consequence of different degrees of secularization within different denominations. Different denominations have different moments of secularization: The Dutch Reformed Church suffered from secularization mainly just before the period studied here, whereas the Roman Catholic church did mainly in this period (Becker & Vink 1994). Therefore, I also looked at probabilities of divorce for marriages conducted in church. This is considered as an indicator for church involvement. As can be expected, the overtaking of the highest divorce rate by Catholics is indeed not present in the predicted divorce risks for people marrying in church.

The lower divorce risk for couples marrying in church compared to the risk for the ones not marrying in church is also found for mixed church member marriages. It can be expected that these couples are more accepted by their environment, including local representatives of the church, because they are following at least some traditional rites, compared to others in the same mixed combination.

Homogamous marriages have more chance to survive than mixed marriages with respect to religious affiliation. This goes for marriages consisting of two church members from different denominations. However, this effect could not be found for marriages consisting of a church member and a non-church member. This has to do with secularization. Church members marrying non-church members can be expected to become more secularized after marriage, even if there was a church ceremony, compared to church members intermarrying with other church members. This means that the church member/non-church member marriages can be expected to be less heterogamous in daily life. Of course, this cannot be tested with these data. To examine this, I would need information about if and at which point, people leave church during their marriage.

In my later cohort and later in marriage, some heterogamy effects – especially the ones in which Catholics are involved – disappear. However, the heterogamy effects remain clearer if the predicted divorce rates are computed for marriages with a church ceremony. Therefore, it can be expected that the diminishing heterogamy effects, again, have to do with different degrees of secularization. The changes do not constitute a decrease of the impact of heterogamy per se,



except for Catholic/Re-reformed and Dutch Reformed/Re-reformed couples.

Heterogamy with respect to nationality – a Dutch person married to a non-Dutch person – has a positive effect on divorce. In the older cohort, this seems to become a little bit weaker during marriage, but it is still very strong.

To summarize, I can say that, on the one hand, my multivariate results showed effects corroborating previous findings. Heterogamy generally increases the divorce risk. On the other hand, I could establish the trends through time and changes over the course of marriage. The findings indicated that the effects of heterogamy regarding nationality on divorce slightly, but not consistently, decline over the marriage course. This corroborates hypotheses derived from the *theory of growing acceptance* to a very limited extent and refutes the *theory of accumulated irritations* and the combination of the two theories that I made, predicting an increase followed by a decrease of the effect over the course of marriage. Generally, however, all of the theories lack much support, since effects of heterogamy on divorce are rather stable over the course of marriage. Besides, the predicted decline of heterogamy effects over cohorts was only reliably found for a few categories of religious heterogamy in the first five years of marriage. To the extent that such a decline is present, I attribute it to changes over time within society, like an increase of meritocracy, individualization and secularization.

I had a great opportunity to study official records of all marriages in the Netherlands. However, to gain more insight into the effects of heterogamy on divorce and of the changes of these effects, I would need data with more information. Specifically, I would like to have more characteristics of spouses and better measurements of ethnic origin than official nationality. Information on heterogamy with respect to level of education, social origin and social status would be of great interest. I also need more information about changing characteristics during marriage, for example with respect to church affiliation. Another useful extension of data sources is information about colliding preferences of spouses and support for the marriage by the social environment. With all the extensions of information just mentioned, I can more adequately investigate effects and changes and trends of effects of heterogamy on divorce during marriage. Furthermore, I will be able to test more hypotheses related to the explanation of the relationship between heterogamy and divorce. In this and the previous chapter, a first clue was found for an explanation: categories of spousal age and nationality which occur more frequently, have lower divorce risks than less common combinations. From the next chapter onwards, I will use newly gathered survey data.

## Notes

1. Due to, for example, mixed marriages divorced abroad, the number of divorces per 1000 married men and per 1000 married women is not exactly equal. For purposes of availability of official figures, I use the number of divorces per 1000 married men here. Published figures pertaining to the period before 1978, however, are based on the number of married couples.

2. Survey questions in two steps – first asking: “Do you consider yourself a church member,” then, if yes: “Which church are you a member of?” – yield higher percentages of non-church members but also a trend towards secularization. The percentage of non-church members then runs from 42 in 1975 to 50 in 1980, 52 in

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1985 and 57 in 1991 (Becker & Vink 1994).

3. In the Netherlands, all marriages are initially civil and registered by a registrar, normally an official of the municipality. In order to create control and equality, it is prohibited to have a church marriage performance before civilly registering the marriage. This official registration being done, everyone is free to celebrate or register the marriage in any religious place. Therefore, a church ceremony in the Netherlands is a simple but quite good indicator of church involvement available in these official records.

4. With respect to the registration data, I have to make a marginal note that the registered church denomination does not always have to be accurate. Many have turned their backs on religion without informing the municipal administration. Because of this, I may firstly underestimate the effects of being a church member. After all, the divorce risks of persons registered as church members can less well be discerned from those of non-church members, because a part of the persons registered as a church member have in fact left the church. Secondly, the effects of heterogamy can be distorted. On the one hand, the effect of heterogamy may be somewhat underestimated because the distinction between the divorce risk of the homogamous and of the heterogamous becomes smaller in the data set, especially with respect to marriages between a church member and a non-church member. On the other hand, the effects of heterogamy may also be somewhat overestimated, especially when looking at divorce risks of heterogamous marriages in which both spouses are affiliated but within different denominations. This will be the case if there are relatively many heterogamous people among church leavers who are still registered as church members.

5. Unfortunately, with these data it is not possible to distinguish people from Surinam or Aruba and the Netherlands Antilles. In 1974, Surinam was not yet independent, Aruba and the Netherlands Antilles are still a part of the Kingdom of the Netherlands. Regrettably, I do not know the nationality or the country of birth of the parents either, which may be a better indicator because of possible naturalizations and the acquisition of Dutch nationality.

6. The following are the few exceptions. In panels A, C and D, the somewhat mixed and unclear group of 'other Protestants' show somewhat higher divorce risks in Table 3.4. Furthermore, compared to the average model, marriages between non-church members and Dutch Reformed, when married in church, show a higher divorce risk in the second five years, but these differences are relatively small (14.6 versus 14.4 in the oldest and 15.0 versus 14.8 in the youngest marriage cohort). This also goes for homogamous non-church member marriages in the second and third five years of marriage (19.3 versus 17.0, 9.0 versus 7.5 and 17.9 versus 17.2 in panels B, C and E, respectively). In the first five years, however, the expected divorce probabilities are clearly lower, also for these non-church member couples, if they had a marriage ceremony in church.

*Heterogamy and divorce within five, ten and fifteen years in two marriage cohorts: register data*

**Appendix 3.1 Relative frequencies (percentages) of all discerned categories of couples with respect to age at marriage**

**a: first five years, cohort 1974-1979**

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.	<20	1.8	0.7	0.0	0.0	0.0	0.0
	20-25	12.9	36.2	2.9	0.2	0.1	0.0
	25-30	2.9	19.0	7.7	1.1	0.2	0.0
	30-35	0.3	2.5	2.9	1.5	0.4	0.1
	35-40	0.1	0.6	0.9	0.9	0.5	0.2
	40-45	0.0	0.2	0.3	0.5	0.5	0.3
	45-50	0.0	0.1	0.2	0.2	0.3	0.3
% homogamous:	48.2						
% mixed:	51.6						

**d: first five years, cohort 1980-1984**

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.	<20	0.8	0.4	0.0	0.0	0.0	0.0
	20-25	7.4	32.7	2.8	0.3	0.1	0.0
	25-30	1.8	21.3	10.0	1.5	0.3	0.1
	30-35	0.3	3.2	4.7	2.5	0.6	0.1
	35-40	0.1	0.7	1.4	1.5	0.9	0.3
	40-45	0.0	0.2	0.4	0.6	0.7	0.4
	45-50	0.0	0.1	0.2	0.3	0.4	0.4
% homogamous:	47.6						
% mixed:	52.4						

**b: second five years, cohort 1974-1979**

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.	<20	1.6	0.6	0.0	0.0	0.0	0.0
	20-25	12.7	36.9	2.9	0.2	0.0	0.0
	25-30	2.8	19.3	7.8	1.1	0.2	0.0
	30-35	0.3	2.5	2.9	1.5	0.4	0.1
	35-40	0.1	0.5	0.9	0.9	0.5	0.2
	40-45	0.0	0.2	0.3	0.4	0.4	0.3
	45-50	0.0	0.1	0.2	0.2	0.3	0.3
% homogamous:	48.8						
% mixed:	51.1						

**e: second five years, cohort 1980-1984**

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.	<20	0.7	0.3	0.0	0.0	0.0	0.0
	20-25	7.1	33.4	2.8	0.3	0.0	0.0
	25-30	1.7	21.8	10.2	1.5	0.3	0.0
	30-35	0.2	3.1	4.6	2.5	0.6	0.1
	35-40	0.1	0.7	1.3	1.4	0.9	0.2
	40-45	0.0	0.2	0.4	0.6	0.6	0.4
	45-50	0.0	0.1	0.2	0.3	0.4	0.4
% homogamous:	48.3						
% mixed:	51.5						

**c: third five years, cohort 1974-1979**

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.	<20	1.5	0.6	0.0	0.0	0.0	0.0
	20-25	12.3	37.5	2.9	0.2	0.0	0.0
	25-30	2.7	19.6	7.9	1.1	0.2	0.0
	30-35	0.3	2.4	2.9	1.4	0.3	0.1
	35-40	0.1	0.5	0.8	0.8	0.5	0.2
	40-45	0.0	0.1	0.3	0.4	0.4	0.3
	45-50	0.0	0.1	0.1	0.2	0.3	0.3
% homogamous:	49.3						
% mixed:	50.3						

**f: beginning of marriage, both cohorts 1974-1984**

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.	<20	1.3	0.5	0.0	0.0	0.0	0.0
	20-25	10.6	34.7	2.9	0.3	0.1	0.0
	25-30	2.5	19.6	8.7	1.3	0.2	0.1
	30-35	0.3	2.8	3.7	1.9	0.5	0.1
	35-40	0.1	0.6	1.1	1.1	0.7	0.2
	40-45	0.0	0.2	0.4	0.5	0.5	0.3
	45-50	0.0	0.1	0.2	0.3	0.3	0.3
% homogamous:	47.8						
% mixed:	52.0						

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589; both cohorts 1974-1984: N = 923,485.

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Appendix 3.2 Relative frequencies (percentages) of all discerned categories of couples with respect to church denomination

a: first five years, cohort 1974-1979

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	16.4					
Cath.	8.2	34.1				
D.R.	5.6	7.2	10.1			
Reref.	1.8	1.8	3.9	5.5		
oth. Prot.					0.1	
other						1.5
oth. het.	3.8					
% homogamous:		67.7				
% mixed:		32.3				

d: first five years, cohort 1980-1984

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	19.0					
Cath.	8.5	32.0				
D.R.	5.1	6.8	9.2			
Reref.	1.9	1.9	3.8	5.5		
oth. Prot.					0.1	
other						2.2
oth. het.	4.2					
% homogamous:		68.0				
% mixed:		32.2				

b: second five years, cohort 1974-1979

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	15.8					
Cath.	8.0	34.7				
D.R.	5.5	7.2	10.4			
Reref.	1.8	1.8	4.0	5.7		
oth. Prot.					0.1	
other						1.4
oth. het.	3.5					
% homogamous:		68.1				
% mixed:		31.8				

e: second five years, cohort 1980-1984

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	18.3					
Cath.	8.2	32.7				
D.R.	5.1	6.8	9.6			
Reref.	1.9	1.9	3.9	5.8		
oth. Prot.					0.1	
other						2.0
oth. het.	3.8					
% homogamous:		68.5				
% mixed:		31.6				

c: third five years, cohort 1974-1979

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	15.2					
Cath.	7.7	35.2				
D.R.	5.4	7.1	10.8			
Reref.	1.7	1.8	4.1	6.0		
oth. Prot.					0.1	
other						1.4
oth. het.	3.4					
% homogamous:		68.7				
% mixed:		31.2				

f: beginning of marriage, both cohorts 1974-1984

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	17.5					
Cath.	8.3	33.2				
D.R.	5.4	7.0	9.7			
Reref.	1.8	1.8	3.8	5.5		
oth. Prot.					0.1	
other						1.8
oth. het.	4.0					
% homogamous:		67.8				
% mixed:		32.1				

Note: 'none' stands for no church affiliation; 'Cath.' for Catholics; 'D.R.' for Dutch Reformed; 'Reref.' for Re-reformed; 'oth. Pr.' for other Protestant/Christian; 'other' for all other church affiliations; 'oth. het.' for all other mixed combinations in the table (the darkest empty cells together). Percentages in light cells are mirrored (including mirroring cells).

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589; both cohorts 1974-1984: N = 923,485.

Appendix 3.3 Relative frequencies (percentages) of all discerned categories of couples with respect to nationality

a: first five years, cohort 1974-1979

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	94.1	0.8	0.3	0.0	0.0	1.0
ngnbr	1.1	0.1				
S-Eur.	0.5		0.1			
Turkey	0.1			0.0		
Moroc.	0.2				0.0	
other	1.2					0.3
oth. het.	0.1					
% homogamous:		94.6				
% mixed:		5.3				

d: first five years, cohort 1980-1984

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	92.4	1.0	0.3	0.0	0.1	1.9
ngnbr	1.0	0.2				
S-Eur.	0.5		0.1			
Turkey	0.2			0.0		
Moroc.	0.2				0.0	
other	1.6					0.4
oth. het.	0.2					
% homogamous:		93.1				
% mixed:		7.0				

b: second five years, cohort 1974-1979

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	94.7	0.8	0.2	0.0	0.0	0.9
ngnbr	1.0	0.1				
S-Eur.	0.5		0.1			
Turkey	0.1			0.0		
Moroc.	0.1				0.0	
other	1.1					0.3
oth. het.	0.1					
% homogamous:		95.2				
% mixed:		4.8				

e: second five years, cohort 1980-1984

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	93.6	0.9	0.3	0.0	0.0	1.3
ngnbr	1.0	0.2				
S-Eur.	0.4		0.1			
Turkey	0.1			0.0		
Moroc.	0.2				0.0	
other	1.3					0.3
oth. het.	0.2					
% homogamous:		94.2				
% mixed:		5.7				

c: third five years, cohort 1974-1979

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	95.0	0.7	0.2	0.0	0.0	0.8
ngnbr	1.0	0.2				
S-Eur.	0.5		0.1			
Turkey	0.0			0.0		
Moroc.	0.1				0.0	
other	1.0					0.3
oth. het.	0.1					
% homogamous:		95.6				
% mixed:		4.4				

f: beginning of marriage, both cohorts 1974-1979

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	93.4	0.9	0.3	0.0	0.0	1.4
ngnbr	1.0	0.2				
S-Eur.	0.5		0.1			
Turkey	0.1			0.0		
Moroc.	0.2				0.0	
other	1.4					0.3
oth. het.	0.2					
% homogamous:		94.0				
% mixed:		6.0				

Note: 'NL' stands for Netherlands; 'ngnbr' for Belgium, Luxembourg, Germany, United Kingdom and France; 'S-Eur.' for Portugal, Spain, Italy, former Yugoslavia and Greece; 'Moroc.' for Morocco; 'other' for all other countries; 'oth. het.' for all other mixed combinations in the table (the empty cells together).

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589; both cohorts 1974-1984: N = 923,485.

Chapter 3

Appendix 3.4 Observed probabilities (percentages) of divorce by age and age difference of husband and wife in three periods of marriage and two marital cohorts

a: first five years, cohort 1974-1979

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.							
<20	11.1	10.5	18.8	16.7	30.0	25.0	50.0
20-25	7.3	3.9	5.7	13.2	21.1	27.5	26.7
25-30	8.3	4.4	4.6	7.3	14.3	23.6	20.5
30-35	13.0	7.8	6.9	7.6	10.2	13.6	15.6
35-40	17.1	11.5	9.2	8.5	9.4	11.2	13.3
40-45	14.0	11.5	9.4	7.6	9.2	8.6	13.1
45-50	21.2	11.0	7.6	7.4	9.7	8.6	8.9

d: first five years, cohort 1980-1984

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.							
<20	16.6	15.4	28.5	36.4	28.6	50.0	50.0
20-25	10.7	5.2	8.5	18.0	28.3	34.3	46.9
25-30	12.6	5.5	5.7	9.8	19.0	33.2	34.2
30-35	18.6	10.2	7.7	8.8	11.4	19.5	19.9
35-40	26.7	15.2	10.4	10.5	10.9	14.0	22.0
40-45	16.9	19.5	13.5	11.8	11.1	12.5	14.2
45-50	26.5	19.0	12.2	11.3	9.5	10.3	11.1

b: second five years, cohort 1974-1979

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.							
<20	13.2	12.0	17.9	20.0	0.0	0.0	0.0
20-25	9.2	5.4	6.5	13.4	16.1	13.8	4.6
25-30	10.7	5.5	5.7	9.1	12.6	15.7	16.7
30-35	13.6	8.9	8.1	8.1	10.6	13.7	13.5
35-40	15.8	12.7	10.3	8.9	10.1	8.0	9.5
40-45	19.6	17.0	10.4	9.8	9.0	7.6	9.0
45-50	9.8	13.6	10.1	7.9	7.8	6.6	5.9

e: second five years, cohort 1980-1984

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.							
<20	14.0	13.3	19.3	28.6	20.0	0.0	100.0
20-25	9.3	5.1	7.0	11.4	22.9	20.5	17.7
25-30	10.8	5.2	5.3	8.2	12.9	14.8	16.0
30-35	13.3	8.3	6.6	7.0	10.9	11.3	15.5
35-40	16.4	11.7	8.7	7.8	7.5	9.1	11.7
40-45	25.9	14.1	10.2	8.4	7.4	7.4	6.9
45-50	20.0	19.6	10.4	9.1	6.8	7.6	5.8

c: third five years, cohort 1974-1979

wife	<20	20-25	25-30	30-35	35-40	40-45	45-50
husb.							
<20	8.2	8.9	5.7	15.0	0.0	33.3	0.0
20-25	6.2	3.9	4.8	9.2	6.6	8.0	14.3
25-30	6.8	3.9	4.1	6.1	6.4	6.0	10.9
30-35	9.6	6.0	5.0	5.5	7.3	7.1	2.9
35-40	12.0	7.5	7.2	5.6	5.5	2.9	4.5
40-45	9.5	10.4	7.1	5.6	4.3	3.9	4.2
45-50	5.4	7.9	6.8	4.4	3.9	3.4	2.6

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589; both cohorts 1974-1984: N = 923,485.

*Heterogamy and divorce within five, ten and fifteen years in two marriage cohorts: register data*

*Appendix 3.5 Observed probabilities (percentages) of divorce by church denomination of husband and wife in three periods of marriage and two marital cohorts, mean age at marriage set to 25*

*a: first five years, cohort 1974-1979*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	8.9					
Cath.	8.5	4.1				
D.R.	6.5	5.7	2.9			
Reref.	6.3	5.5	3.0	1.7		
oth. Prot.					4.8	
other						8.5
oth. het.	12.0					

*d: first five years, cohort 1980-1984*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	10.8					
Cath.	10.4	5.5				
D.R.	7.8	6.4	3.4			
Reref.	7.1	5.9	3.3	2.0		
oth. Prot.					8.1	
other						15.6
oth. het.	16.8					

*b: second five years, cohort 1974-1979*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	10.4					
Cath.	9.7	5.5				
D.R.	7.9	7.1	3.9			
Reref.	7.9	7.5	4.3	3.0		
oth. Prot.					6.5	
other						10.0
oth. het.	11.6					

*e: second five years, cohort 1980-1984*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	9.2					
Cath.	8.6	5.1				
D.R.	6.9	6.0	3.4			
Reref.	6.8	6.3	3.5	2.5		
oth. Prot.					5.5	
other						11.0
oth. het.	12.5					

*c: third five years, cohort 1974-1979*

	none	Cath.	D.R.	Reref.	oth. Pr.	other
none	6.7					
Cath.	6.4	4.0				
D.R.	5.5	5.0	3.0			
Reref.	5.8	5.3	3.3	2.4		
oth. Prot.					4.3	
other						6.4
oth. het.	7.2					

Note: 'none' stands for no church affiliation; 'Cath.' for Catholics; 'D.R.' for Dutch Reformed; 'Reref.' for Re-reformed; 'oth. Pr.' for other Protestant/Christian; 'other' for all other church affiliations; 'oth. het.' for all other mixed combinations in the table (the darkest empty cells together). Mirrored cells taken together.

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589; both cohorts 1974-1984: N = 923,485.

Chapter 3

Appendix 3.6 Observed probabilities (percentages) of divorce by nationality of husband and wife in three periods of marriage and two marital cohorts, mean age at marriage set to 25

a: first five years, cohort 1974-1979

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	5.1	10.3	16.3	25.5	49.0	19.1
ngnbr	6.9	3.8				
S-Eur.	13.0		3.8			
Turkey	40.2			0.0		
Moroc.	30.9				12.5	
other	16.8					6.7
oth. het.	8.6					

d: first five years, cohort 1980-1984

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	6.1	15.0	22.4	27.5	61.4	36.8
ngnbr	10.3	4.3				
S-Eur.	13.8		9.4			
Turkey	38.7			6.3		
Moroc.	30.8				22.2	
other	22.0					12.5
oth. het.	10.3					

b: second five years, cohort 1974-1979

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	6.5	12.3	12.4	31.6	19.2	15.1
ngnbr	7.9	3.2				
S-Eur.	12.1		6.4			
Turkey	33.7			8.3		
Moroc.	26.8				28.6	
other	15.3					8.4
oth. het.	10.2					

e: second five years, cohort 1980-1984

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	5.8	12.0	15.0	18.2	26.9	15.1
ngnbr	9.0	6.3				
S-Eur.	14.6		7.5			
Turkey	31.3			3.7		
Moroc.	38.7				23.8	
other	19.7					10.0
oth. het.	11.3					

c: third five years, cohort 1974-1979

	wife NL	ngnbr	S-Eur.	Turkey	Moroc.	other
husb.						
NL	4.6	6.6	8.1	15.4	4.8	8.0
ngnbr	5.0	3.8				
S-Eur.	7.9		4.5			
Turkey	14.2			0.0		
Moroc.	15.5				20.0	
other	8.1					5.3
oth. het.	4.3					

Note: 'NL' stands for Netherlands; 'ngnbr' for Belgium, Luxembourg, Germany, United Kingdom and France; 'S-Eur.' for Portugal, Spain, Italy, former Yugoslavia and Greece; 'Moroc.' for Morocco; 'other' for all other countries; 'oth. het.' for all other mixed combinations in the table (the empty cells together).

Source: CBS (Statistics Netherlands) Marriage and Divorce Files 1974-1994, own calculations. Cohort 1974-1979: first five years, N = 531,015; second five years, N = 501,156; third five years, N = 466,754; cohort 1980-1984: first five years, N = 392,470; second five years, N = 363,589; both cohorts 1974-1984: N = 923,485.



## 4 Does heterogamy increase the risk of divorce and, if so, why?

### A descriptive and explanatory analysis of SIN98.<sup>1</sup>

*Are marriages in which partners do not resemble each other with respect to age, level of education, occupational status, religion, ethnic background and social origin more likely to end in divorce than marriages in which partners have similar characteristics? And if so, how can this relationship between heterogamy and divorce be explained? To answer these questions, I employed a recent data set, SIN98, based on a survey among almost 2,400 married, divorced and remarried people in the Netherlands. The impact of the social characteristics mentioned is investigated both separately and simultaneously. I tested the main heterogamy hypothesis, which states that, in general, mixed marriages have a greater chance of ending in divorce, and, for heterogamy with respect to age, level of education and social status, the asymmetry or hypergamy hypothesis, which predicts that this effect is stronger if the wife is in a better position than her husband. For a number of forms of heterogamy, these effects are found even for inherited characteristics such as church denomination and socioeconomic origin. Next, I tested the explanatory hypotheses to see whether or not disapproval by the social environment and differences of opinion between spouses form the basis of the positive effects of heterogamy on divorce. Social disapproval and differences of opinion do have strong effects on divorce and they have some explanatory power as to why the effects of heterogamy are present.*

#### 4.1 Introduction

Of all marriages contracted in the Netherlands in 1976, 6.6 percent ended in divorce after five years, 14.0 percent after ten years, 18.4 percent after fifteen years and 22.3 percent after twenty years. Of the marriages begun in 1981, 9.5 percent ended in divorce after five years, 16.1 after ten and 21.0 percent after fifteen years (CBS 1997a). The strong increase in divorce risks is generally explained by social changes like the increased economic independence of women and changing norms and values (e.g. Janssen, Poortman, De Graaf & Kalmijn 1998).

The topic of marriage patterns, and heterogamy and divorce is important to research into the openness of society. If society becomes more open, different groups within society may be expected to come closer to each other, with more mixed, or heterogamous, marriages as a result. In this way, mixed marriages form an important indicator for the openness of society.<sup>2</sup> For that reason, research has been carried out to assess the level of homogamy. In the Netherlands, generally, husband and wife bear a fairly strong resemblance to each other, that is to say, they are fairly homogamous, with respect to level of education, age, social background and religion (Hendrickx 1994, 1998; Hendrickx, Lammers & Ultee 1991; Hendrickx, Schreuder & Ultee 1994; Hendrickx, Uunk & Smits 1995; De Hoog 1982; Smits 1996; Smits, Ultee & Lammers 1999; Uunk 1996).

Rising divorce rates make it possible to extend the research into mixed marriage to divorce patterns in order to see whether or not mixed marriages have higher divorce risks. Marriages can

be mixed with respect to several social characteristics. In this chapter, I will investigate homogamy with respect to age, level of education, social status of the spouses, religion, ethnic background and social origin. More types of heterogamy will be studied in this chapter than in the preceding ones. Another extension here is that I will elaborate on theories by deriving explanations of the effects of heterogamy on divorce. The explaining factors are related to disagreements between spouses and disapproval by the social environment. We can no longer use the registration data used earlier for the extensions in this chapter because they are limited in the number of variables. Instead, data from a new survey, SIN98, will be used because it contains the necessary information.

#### 4.1.1 Previous research

So far, research on the impact of social heterogamy on the probability of divorce in the Netherlands has scarcely been investigated. There are some bivariate studies which show that marriages have a higher probability of divorce if they are mixed with respect to ethnicity (Van der Heijdt 1996; Harmsen 1998), church denomination and age (CBS 1958; Dumon & Kooy 1983).

In the United States and a few other countries, more research has been conducted. Those studies take at most a few heterogamy characteristics into account simultaneously. This results in the finding of some positive effects of heterogamy on divorce rates. If spouses differ in age, the risk of divorce increases (Bumpass & Sweet 1972). Also marriages in which spouses have different levels of education have a higher risk of divorce (Bumpass & Sweet 1972; Tzeng 1992; Wagner 1993), even though it is not always present when controlled for heterogamy with respect to job characteristics (Tzeng & Mare 1995). Ethnically mixed marriages are worse off than ethnically homogamous marriages (Jones 1994, 1996; Roloff 1998), even though an American research shows that racially mixed marriages do not have to be less stable than racially homogamous ones, depending on age at marriage and marriage number (Cuningham 1990). The reciprocal relationship between religion in general and marital quality is weak (Booth, Johnson, Branaman & Sica 1995). Still, being mixed with respect to religion also leads to less satisfaction and higher levels of divorce in comparison to religiously homogamous couples, even though the effects in American literature are sometimes limited (Burchinal & Chancellor 1963; Bumpass & Sweet 1972; Heaton 1984; Huber & Spitze 1980; Lehrer & Chiswick 1993). In fact, the question whether Catholic/Protestant mixed marriages have higher divorce risks has interested American researchers for a long time. The presence of such an effect of mixed marriage has already been shown since at least the 1930s and 1940s (Bell 1938, Weeks 1943, Landis 1949), be it mostly for selective samples of schoolchildren from certain regions or students following marriage lectures who were questioned about their parents' marriages. Kalmijn (1991a, b) shows that intermarriage between Protestants and Catholics has increased dramatically since the 1920s, while intermarriages between different educational groups has decreased. This seems to indicate an increase in the strength of educational boundaries and a decrease in the strength of religious boundaries. Nevertheless, Bumpass and Sweet (1972) find that, with respect to divorce risks, effects of educational differences are small compared to heterogamy effects of age and religion. Heterogamy with respect to social class, social class of origin and level of education is found to have little effect on divorce risk in Norway, but this was not compared to other types of heterogamy (Hansen 1995). However, job status heterogamy is also found to have a positive effect

on divorce (Philliber & Hiller 1983), contrary to heterogamy with respect to income (Tzeng & Mare 1995). Sometimes effects of heterogamy go in a specific direction, namely of a higher divorce risk in the case of a better situated wife. Divorce risks increase if a wife has a higher level of education than her husband (Wagner 1993) or if the traditional division of labour is broken and the wife is working more than the husband (Tzeng 1992; Tzeng & Mare 1995).

In the previous chapter, I analysed official registration data of marriage and divorce in a multivariate way and the effect of heterogamy was determined with respect to age, religion and nationality. The results indicated that, in the Netherlands, marriages of couples who are mixed with respect to age, religion and nationality have a higher chance of ending in divorce than homogamous marriages. Marriages between people with Dutch nationality and people from the Mediterranean countries which supplied the Netherlands with migrant workers, have especially high risks of divorce. With respect to the effects of religious heterogamy, the higher divorce risk for mixed marriages between the three Christian denominations is the most important. Age has especially large effects if age differences are large and if the wife is older than her husband. In the previous chapter, all of the marriages contracted between 1974 and 1984 were analysed to determine whether they ended in divorce between the start of the marriage and 1994. Being able to follow about a million marriages obviously has advantages with respect to statistical power. The drawback of using official records is that only a few characteristics of the married couple are available. Levels of education, social statuses and social origins are not recorded in official marriage records. Furthermore, the data available in these official registrations do not offer information to explain the relationship between heterogamy and divorce.

A test of effects of heterogamy on divorce requires data containing information about respondents and partners both in existing marriages and in marriages which have ended in divorce. Since no such data sets containing enough characteristics were available for the Netherlands to do such analyses on the causes of divorce, divorce was approximated by marital instability as subjectively experienced or estimated by the marriage partners themselves (Kooy 1969, 1984; Janssen *et al.* 1998; in the US: Booth, Johnson & Edwards 1983). Findings from these studies indicated that instability was increased by heterogamy in some instances, mainly when the wife is older or when spouses have different social origins.

#### *4.1.2 This chapter*

The research question in this chapter is twofold. Firstly, I pose the question whether mixed marriages have a higher risk of divorce than homogamous marriages when taking many forms of heterogamy into account simultaneously. Answering this question by researching many types of heterogamy simultaneously will fill a gap, because systematic research in this way has not been carried out before. The second part of the question is how heterogamy effects on divorce can be explained by differences of opinion or disagreements between spouses on the one hand and lack of support and disapproval by the social environment on the other hand. For this explanation, I will look at the theoretical disadvantages of heterogamy for the marriage. In this way, I can test theories as to why heterogamy effects on divorce exist. Empirical explanatory answers for the relationship between heterogamy and divorce have not as yet been given. Hence, this is another extension of previous research.

I will investigate the impact of several forms of heterogamy on divorce by using the

recently conducted survey Divorce in the Netherlands (*Scheiding in Nederland 1998*, SIN98). This data set fills a lack by providing information on several social characteristics of both spouses during their marriage. In this way, my analyses on register data in Chapters 2 and 3 can be extended. So, in the previous chapters, I used huge, or shall I say, complete population data, while from this chapter onwards, the data stem from sample surveys which are much richer in content.

In the next paragraph, I will go into the theoretical background and hypotheses. Next, the data and operationalization will be described. I will explain the method of analysis before revealing the results. I will end this chapter by concluding on the results and a short discussion of their implications.

## 4.2 Theory and hypotheses

### 4.2.1 Homogamy and heterogamy

Heterogamy occurs less frequently than homogamy. Spouses tend to be similar with respect to social characteristics such as age, religion, ethnicity, level of education and social background (CBS 1997b; De Hoog 1982; DiMaggio & Mohr 1985; Hendrickx 1994, 1998; Hendrickx, Lammers & Ultee 1991; Hendrickx, Schreuder & Ultee 1994; Hendrickx, Uunk & Smits 1995; Kalmijn 1991a, b, 1994; Mare 1991; Smeenk 1998; Smits 1996, Smits, Ultee & Lammers 1999; Vossen 1999; Uunk 1996). There are at least three sets of reasons for the existence of homogamy (Kalmijn 1991b, 1998). The most prominent explanation for the existence of homogamy assumes that choosing a spouse who has similar social characteristics stems from choosing a spouse with similar taste and expectations with whom one can communicate well. Life is easier if partners agree on the organization of the relationship, life style, division of labour and the upbringing of the children. With respect to status homogamy, two alternatives can be discerned as to why people's preferences lead to homogamy (Kalmijn 1994). On the one hand, the reasoning is as simple as the argument just made: people simply look for spouses who are as similar in status as possible (Kerckhoff & Davis 1962; DiMaggio & More 1985). By choosing a spouse with similar characteristics, one creates a common room of discourse and shared interests in life. On the other hand, it can be argued that people prefer to marry someone of as high a status as possible (Elder 1969; Mare 1991). This leads to the same marriage pattern. High-status candidates will get the first proposals. High-status proposers will be accepted first, which implies that the least attractive will be left for each other.

A second explanation for homogamy concerns the support given to the relationship by the social environment. If husband and wife have equal characteristics, there will be more resemblances between their respective friends and relatives. This means that people within the social networks of both spouses are better able to get along with each other, which leads to more support for the marriage.

A third explanation for a strong resemblance between marriage partners has nothing to do with preferences, but can be found in opportunity. Potential marriage partners often meet in school, at work, when going out or at a friend's place. That is why they will relatively often meet people who share their social characteristics (Kalmijn 1998; Smeenk 1998).

If homogamy is so advantageous for the quality of the relationship, the question arises why mixed

marriages exist at all. At least five reasons for the existence of heterogamy can be given. Firstly, some people may find certain dividing lines irrelevant when selecting a marriage partner. They argue that love is (socially) blind. The second reason is closely related to the first. Even though chances of finding a spouse with similar preferences and a similar taste are higher if that person has the same social characteristics, social equality is not always necessary: it is not impossible to find a spouse with similar preferences among people with different social characteristics. Thirdly, people do not always take the time to select a spouse with similar characteristics, for example by marrying young. As a result, the probability may be higher that they end up with a spouse who apparently does not fit that well. Fourthly, the opportunity structure plays a role (Becker, Landes & Michael 1977; Stier & Shavit 1994). When no similar spouse is available, a heterogamous marriage may occur. Anyway, it is hard to find a spouse who is equal in all respects. Fifthly, it is possible that certain types of heterogamy are useful. This is the case when it comes to division of labour according to Becker's (1981; Becker, Landes & Michael 1977) theories. These theories claim that stability within marriage is greater if tasks within the household are divided: one spouse is responsible for the housekeeping, the other makes a living by working outside the home, resulting in some kind of exchange. This entails heterogamy with respect to labour force position and human capital investment. The breadwinner with a payed job, in case of division of labour usually the man, will be investing in his career and in his economic status. This is also of importance as to age differences. Men, in most instances the money earners in situations of task specialization, have a better position when they have more experience on the labour market, which implies that they are a bit older. This offers an explanation for the well-established finding that men tend to be somewhat older than their wives (Mare 1991; Smeenk & Ultee 1997).

#### *4.2.2 Heterogamy and divorce*

The first question in this chapter is whether different forms of heterogamy bring about a decrease in marital stability. To answer this question, I can simply turn to two of the advantages of homogamy mentioned before. Spouses with similar social characteristics share ideas about the organization of life and will probably get along with each other better than spouses who are less alike. Also, the odds will be that the families, friends and acquaintances of both spouses will be more alike and that they will be able to get along much better with each other and with both spouses. This implies that they will give greater support to the marriage, also in bad times, and that the step towards divorce will be less easily taken than in mixed marriages. The way in which I describe it here suggests that these considerations are always made consciously and deliberately, but of course that does not need to be the case.

One counter hypothesis against the reasoning that mixed marriages are less stable may be that heterogamous couples have thought through all the aforementioned disadvantages and still come to the conclusion that their love is much stronger than those disadvantages. This reasoning implies that, even though mixed marriages are less likely, those that do come about are a special selection of stable marriages. Furthermore, people who get involved in mixed networks may make every effort necessary to get along with those different people in the mixed networks. They will be more tolerant and will avoid conflict and disagreements as a result of social differences with, for example, the in-laws (Blau & Schwartz 1984; Hondius 1999). People might be able to get over different preferences and lack of support by the social environment in the beginning of a

relationship or during the honeymoon period, nevertheless, the expectation here is that after marriage, the lack of a common social background will bring about a higher divorce risk. Problems due to heterogamy may also arise after child birth, when spouses discuss how to raise their children (Booth & White 1980). Furthermore, even though the marriage partners may be willing to overcome differences and accept the in-laws and respective friends as they are, the family and friends may not be willing to do so in return. This is beyond the control of the marriage partners and will result in a lack of support for the marriage.

The above reasoning implies that mixed marriages are more unstable than homogamous marriages. The question is, however, whether this is true to the same extent for all types of heterogamy under investigation in this chapter. To obtain a more differentiating view, I will make a distinction between characteristics ascribed by inherited background and characteristics achieved on one's own merits. These concepts were introduced by Blau and Duncan (1967) in their study of the American occupational structure. Kalmijn (1991a, b) applied these concepts to marriage markets.

Religion, ethnicity and social status of origin can be considered as ascribed characteristics. Of course, one might argue that people can choose their own religion. Nevertheless, religious affiliation is usually inherited from one's parents – which is ascription – and if it is not, then it can still not be considered an achievement on one's own 'merits'. Level of education and social status can be considered as achieved on one's own merits. It is hard to consider age as either ascription or achievement on one's own merits because age is not inherited and everyone gets older as time goes by through no effort of their own.

The distinction between ascription and achievement on one's own merits can be applied to the question whether heterogamy leads to more unstable marriages. According to Becker (1981), division of labour and task specialization is useful and stabilizes marriage. If one spouse keeps house and the other has a paid job, this implies that the former does not invest in an occupational career, while the latter does. This will favour heterogamy not only with respect to social status, but also with respect to the other meritocratic characteristic under consideration, level of education, and age to some extent. This is expected because a career requires a certain level of education and being a bit older also enhances success in a career because of the level of experience. Following Becker's expectations, the resulting heterogamy with respect to the meritocratic characteristic of social class is associated with marital stability and is not considered to be harmful. This may also be the case for the associated characteristics of the level of education and age to some extent. Of course, this may differ for whether it is the husband or the wife who is making a career. I will go into asymmetric expectations below.

The above may be summarized by the expectation that mixed couples have a higher probability of divorce than homogamous ones. I call this the *heterogamy hypothesis*. I expect this hypothesis to be fully applicable for heterogamy with respect to the ascribed characteristics of religion, ethnic background and social origin. For heterogamy with respect to spouses' own social status, however, I expect this effect on divorce to be reduced to zero or even to be turned around to a negative one, because of the expected positive effects of a traditional division of labour. I call this the *specialization hypothesis*.

When it comes to the characteristics of age and the level of education, it is unclear what to expect. These characteristics are not only associated with the division of labour. Age has also a

maturity component. Education is also associated with culture (e.g. DiMaggio & More 1985). In sum, I expect a weak heterogamy effect for age differences and educational heterogamy.

Even with respect to social class of the spouses themselves, I can make a distinction between different components. Bourdieu (1979) makes a distinction between economic and cultural dimensions of occupations. These can have different implications for the marriage market (Kalmijn 1994). I would like to apply this to the matter at hand. I have already demonstrated that economic differences between spouses are related to a traditional division of labour, which is considered to be supportive for the marriage. This led us to the *specialization hypothesis*. Cultural differences, however, are not associated with the advantages of specialization. They are considered to be rather detrimental to communication and mutual understanding between spouses. Therefore, for the cultural dimension of occupations, the *heterogamy hypothesis* will still be present to a limited extent.

A supplementary hypothesis can be formulated with respect to some forms of heterogamy. The first instance is heterogamy with respect to age. Marriages in which the wife is older than the husband are less frequently found than marriages in which the husband is older (Mare 1991; Smeenk & Ultee 1997). One possible reason for this is task specialization, which is considered to be positively related to marital stability. Besides, when marriages in which the husband is older are the standard, it might be generally less accepted when the wife is older than the husband. Furthermore, women themselves prefer a husband who is a bit older, not only for reasons of custom (social environment), but also for practical and maturity reasons (Vossen 1999), which has to do with preferences, taste and satisfactory communication between spouses. Therefore, I expect the probability of divorce to be greater when the wife is the older spouse, controlling for absolute age differences.

A similar reasoning with specialization and with occurrence and acceptance can be made for differences in level of education and social status. A wife with a higher education or a higher social status than her husband is marrying downward. For marrying upward and downward, the terms *hypergamy* and *hypogamy* are in use. Because it is less accepted if the wife has a higher educational or social status position than the other way around, this will give rise to a higher probability of divorce. This is the *asymmetry* or *hypergamy hypothesis* with respect to heterogamy of age, level of education and social status. As to heterogamy with respect to religion, social origin and ethnic background, I do not find reasons to formulate such an *asymmetry hypothesis*.

#### *4.2.3 Explaining heterogamy effects on divorce*

To answer the second research question for an explanation of the effects of heterogamy on divorce, I will once more look into the theoretical advantages of homogamy. In the above theory, it is emphasized that heterogamy will lead to a higher divorce risk because marriage partners, on average, are less able to get on with each other because of differing preferences or expectations. Furthermore, it has been asserted that mixed social environments will be less willing to accept the marriage. This will lead to less support for the marriage and the inclination to support a divorce when the marriage is going through difficult times. In other words, I expect that heterogamy leads to conflict and lack of support, and that these, in turn, have a negative effect on marital stability.<sup>3</sup> Therefore, my *explanatory conflict hypothesis* with respect to divorce reads that differences of

opinion within the marriage explain the effects of heterogamy on divorce. My *explanatory support hypothesis* with respect to divorce reads that disapproval by the social environment explains the effects of heterogamy on divorce.

These hypotheses can be made more specific. In order to do this, I refer to the distinction made above between characteristics which are ascribed by inherited background and characteristics which are achieved on one's own merits (Blau & Duncan 1967; Kalmijn 1991a, b). I considered religion, ethnicity and social origin as ascribed characteristics and level of education and own social status as being achieved on one's own merits. Age is neither, but is more associated with characteristics achieved on one's own merits.

Social support or disapproval for the marriage stems from the social environment, whilst differences of opinion between the spouses stem from their own efforts. I can use this to specify the *explanatory conflict* and *support hypotheses*. As they are related to the social environment, I can expect the effect of heterogamy with respect to religion, ethnicity and social origin on divorce to be explained mainly by social disapproval for the marriage. Conversely, since they are related to achievement, I can expect the effect of heterogamy with respect to the level of education and social class on divorce to be explained mainly by differences of opinion between the spouses. In addition, we have to bear in mind that education, social status and age are the main determinants of a whole range of lifestyle preferences (Ganzeboom 1988). These explanatory hypotheses will be called the *ascription explanation hypothesis* and the *achievement explanation hypothesis*, respectively. Note that these hypotheses are specifications of the *explanatory conflict* and *support hypotheses*.

With respect to characteristics relating to one's own achievement, however, I have to make an exception for the additional effects which are expected from the direction of the differences. I predicted earlier that there would be an asymmetry effect signifying that couples in which the wife is older, has a higher level of education or a higher job status compared to the husband will have a higher divorce risk because those combinations are less accepted by the social environment. Since I am talking about acceptance, I expect the *ascription explanation hypothesis* also to be valid for asymmetric effects. This does not mean that the *achievement explanation hypothesis* will not work here. I already noted above that age differences, for example, also stem from own preferences. In sum, I expect that asymmetry effects will be explained both by lack of support from the environment and by differences of opinion between spouses.

### 4.3 Data and operationalization

#### 4.3.1 Organization of the data set

For the analyses in this chapter, I used the SIN98 data set (Kalmijn, De Graaf & Uunk 1999). This data set was especially designed for my analyses and it contains sufficient information about the two spouses in both intact and divorced relationships. The survey was conducted in autumn 1998, winter 1998/1999. Within a sample of municipalities in the Netherlands, representative with respect to region and degree of urbanization, three sub-samples were taken: one from married people in their first marriages, one from divorced people who were then single and one from divorced people who remarried, all aged between 30 and 75 years old. In order to have sufficient divorced and remarried people in the sample, the second and third strata were over-represented.<sup>4</sup>



Out of all the people in the sample, 78.9 percent could be reached, of whom 57.7 percent completed the survey, which was administered by interviewers using a paper questionnaire. This brought the response rate to 45.6 percent. This percentage is certainly not disappointing, considering the sensitivity of the subject and the over-sampling of divorced people. One way in which this response rate was accomplished was by not stressing the fact that the interview was about “divorce”, but instead saying it was about “life course and relationships of Dutch people”. In total, the survey was completed among 2,346 individuals: 1,795 respondents (77 percent) had been divorced and 551 (23 percent) were in their first marriages.

Respondents were questioned about their life history, their (past and/or present) marriage and their working careers, amongst other things. The design was such that extended information about the marital relationship and the spouse is available for one marriage, being the present marriage for married people in their first marriage and the past marriage for divorcees, whether remarried or not. If a person had got divorced more than once, the longest lasting relationship was taken. By following both surviving marriages and marriages that ended in divorce, I could simultaneously investigate the effects of different forms of heterogamy on the probability that a marriage did not survive due to divorce. I followed marriages over the marriage course, comparing marriages that end in divorce and still existing marriages.

#### *4.3.2 Operationalization*

In this chapter, I will focus on forms of heterogamy at the beginning of the marriage. The question as to what extent heterogamy develops in the course of marriage is kept for the next chapter. The main reason for looking at characteristics at the beginning of the marriage is that one of the research questions examines the explanation of the relationship between heterogamy and divorce. The explanatory variables that I will introduce were only available at one time in the marriage. Lack of support for the marriage choice was asked for around the time of marriage and differences of opinion between spouses were asked for the time after about five years of marriage (or before that if the marriage did not last that long). It was, therefore, not useful to use dynamic variables in these analyses.

Firstly, I describe the variables for age and the characteristics associated with achievement on one's own merits. The average age at marriage of both spouses was taken into account in the analyses. Age was computed in years. On average, couples are about 24 years old when they marry or start living together, as can be seen in Table 4.1. Age heterogamy was computed by taking the absolute difference between the husband's and the wife's age. To control for the direction, a dummy was added indicating whether the wife is older (at least one year) than her husband (value 1) or not (value 0). Table 4.1 shows that, on average, couples differ almost 3½ years and in 34 percent of the cases, the wife is older. Alternatively, I also constructed a variable which equals 0 if there is no difference in age, negative if the wife is older and positive if the husband is older. The value -3.5, for example, on this variable indicates a couple in which the wife is 3 years and 6 months older than the husband. The square of this is added in order to let divorce risks go up to either side like a U-curve: when the wife is older or when the husband is older. This second construction makes it possible to ascertain at which age difference marital stability is optimal. I would expect that this optimal situation will occur when the husband is somewhat older than his wife.

Table 4.1 Description of variables used in the analyses

variable	valid N	min	max	mean	standard deviation	weighted mean	standard deviation
divorced*	2261	0.00	1.00	0.763	0.426	0.193	0.395
year of cohabitation or marriage	2261	43.00	97.00	72.849	10.337	74.047	11.246
average age at marriage	2261	15.00	62.50	23.975	4.023	24.677	4.389
absolute age difference	2261	0.00	26.75	3.457	3.240	3.461	3.176
wife older (at least by 1 year)*	2261	0.00	1.00	0.341	0.474	0.380	0.485
mean education (years)	2261	6.00	18.00	12.675	2.675	12.569	2.651
absolute educational difference (years)	2261	0.00	12.00	2.566	2.437	2.526	2.371
wife higher education*	2261	0.00	1.00	0.244	0.429	0.211	0.408
mean economic occupational status	2261	-1.81	2.43	-0.321	0.599	-0.312	0.598
absolute economic status difference	2261	0.00	3.98	0.788	0.719	0.795	0.742
wife higher economic status*	2261	0.00	1.00	0.292	0.455	0.283	0.451
mean cultural occupational status	2261	-1.40	2.57	-0.235	0.697	-0.220	0.707
absolute cultural status difference	2261	0.00	3.46	0.683	0.640	0.695	0.660
wife higher cultural status*	2261	0.00	1.00	0.504	0.500	0.549	0.498
church: none*	2261	0.00	1.00	0.353	0.478	0.287	0.453
church: none/Catholic*	2261	0.00	1.00	0.105	0.307	0.072	0.259
church: none/Protestant*	2261	0.00	1.00	0.073	0.260	0.066	0.248
church: Catholic*	2261	0.00	1.00	0.262	0.440	0.325	0.469
church: Catholic/Protestant*	2261	0.00	1.00	0.029	0.167	0.022	0.146
church: Protestant*	2261	0.00	1.00	0.098	0.298	0.147	0.355
church: other homogamous*	2261	0.00	1.00	0.027	0.162	0.051	0.219
church: other mixed*	2261	0.00	1.00	0.052	0.223	0.030	0.171
ethnicity: Dutch*	2261	0.00	1.00	0.748	0.435	0.770	0.421
ethnicity: foreign*	2261	0.00	1.00	0.050	0.219	0.061	0.240
ethnicity: Dutch/foreign*	2261	0.00	1.00	0.188	0.390	0.158	0.365
ethnicity: mixed foreign*	2261	0.00	1.00	0.015	0.120	0.011	0.105
mean economic status origin	2261	-1.40	2.43	0.009	0.656	-0.002	0.650
absolute economic origin difference	2261	0.00	3.61	0.842	0.786	0.792	0.755
wife higher economic origin*	2261	0.00	1.00	0.468	0.499	0.463	0.499
mean cultural status origin	2261	-1.40	2.57	-0.378	0.638	-0.414	0.649
absolute cultural origin difference	2261	0.00	3.87	0.743	0.738	0.728	0.746
wife higher cultural origin*	2261	0.00	1.00	0.467	0.499	0.480	0.500
number of kids in marriage	2261	0.00	11.00	1.671	1.362	2.012	1.376
lack of support environment (z score)	2254	-0.74	4.59	0.002	1.001	-0.297	0.763
differences of opinion 5 years (z score)	2248	-1.28	3.89	-0.001	0.998	-0.424	0.779

Source: Divorce in the Netherlands (SIN98).

Note: \* indicates a dichotomous variable. A first selection before analysis is made for sufficient information as mentioned in the text, maximum N=2,261. Valid N listwise: 2,241. Because weight factor is based on full N (2,346), effective N differs slightly in weighted columns.

I had information on the highest completed level of education for both spouses, which I recoded into the number of years needed to complete that level. The mean level was computed for the couple. On average, this mean level lies between 12 and 13 years, as can be read from Table 4.1. Heterogamy was measured by a variable indicating the absolute difference between the number of years of education of the husband and of the wife. In order to investigate the *asymmetry* or

*hypergamy hypothesis*, a dichotomous variable was constructed to indicate whether the wife has a higher level of education than the husband (1) or not (0). The mean absolute educational difference between husband and wife amounts to about 2½ years, with 24 percent of the wives being more highly educated than their husbands. Analogous to age differences, an alternative measurement of the difference in the level of education was computed, being negative if the wife is more highly educated than her husband, and the square of this difference.

Occupational status can be measured in several ways. There is a cultural and an economic component in occupational status (De Graaf & Kalmijn 1995). In the theory, I claimed that stability of homogamous marriages can come from joint expectations and preferences of spouses. This can be associated with the cultural dimension. The stability caused by the division of labour, however, is more associated with the economic dimension. For this reason, I used a two dimensional scale which takes cultural and economic dimensions of occupational status into account.

Both dimensions of occupational status were measured using the scales developed by De Graaf and Kalmijn (1995) derived from the occupational codes. For both spouses, I used the occupation at the time of marriage or cohabitation or, if unavailable, the latest before that or the one closest in time. An occupational history of the spouse who answered the questionnaire was available. For reasons of reliability, the occupations of the (ex-)partner were only inquired after at specific points in the relationship which included the commencement of cohabitation or marriage. Heterogamy for both the economic and the cultural scale was measured by taking the absolute difference of husband's and wife's social status. Dichotomous variables were also constructed to indicate if the economic or cultural status of the wife is higher than the husband's (1) or not (0). As can be seen in Table 4.1, the mean economic status of husband and wife ranges from -1.81 to 2.43 and the mean absolute difference is 0.79, with the wife having a higher position in 29 percent of the cases. The mean cultural status of husband and wife ranges from -1.40 to 2.57 and the mean absolute difference is 0.68, with a higher position of the wife in about half of the cases. An alternative difference scale with negative values for a higher status wife, and the square of that, were also computed.

I would now like to turn to the operationalization of characteristics of inherited ascription. With respect to religion, I distinguished non-church members, Catholics, Protestants – defined as Dutch Reformed and Re-reformed (*gereformeerden*) taken together – and other denominations. This distinction was made because those churches have different levels of orthodoxy. Although differences within these churches exist, in the Netherlands, people who consider themselves as Catholics are, on average, less strict and orthodox than people who count themselves among the Dutch Reformed, whilst the Re-reformed are the most orthodox of the main three Christian denominations. Historically and internationally, this may seem somewhat odd because of the position taken by the official Roman Catholic Church. This is, however, the result of different levels and timings of secularization among the denominations in the Netherlands (Dumon & Kooy 1983: 111; Becker & Vink 1994). I also distinguished a category of 'other denominations', including miscellaneous denominations which appear too infrequently in the data set, like those of other Protestants, Jews and Muslims. Religious affiliation was derived for the moment at which the spouses started living together. If this was not available, but religious affiliation was known at another time, then this was taken. A categorization is made of the denomination of husband and wife which distinguishes these eight categories:

- both non-church members (homogamous), 35 percent of the couples in the analysis.
- mixed non-church member/Catholic, 11 percent.
- mixed non-church member/Protestant, 7 percent.
- both Catholics (homogamous), 26 percent.
- mixed Catholic/Protestant, 3 percent.
- both Protestants (homogamous), 10 percent.
- other, but same denomination (homogamous), 3 percent.
- other mixed, 5 percent.

Ethnic differences were operationalized using the country of birth of the parents of both spouses. Within the questionnaire it is possible to discern people born in The Netherlands, Indonesia (including Ambon/Moluccas), Turkey, Morocco, Suriname, Netherlands Antilles (including Aruba), Southern Europe, Eastern Europe, Western Europe and other countries. Unfortunately, due to infrequent occurrence, it was not possible to discern combinations of these. Therefore, only four categories could be distinguished: homogamous Dutch couples (75 percent of the couples in the file, see Table 4.1), homogamous foreign couples (5 percent), mixed Dutch/foreign couples (19 percent) and mixed foreign couples (2 percent). A spouse with parents from the same country who is married to someone with parents from different countries will also come into contact with several cultural backgrounds. Therefore, such a marriage is considered ethnically mixed.

To measure social origin and heterogamy with respect to social origin, I looked at the occupational status of the fathers of both spouses. I decided to construct exactly analogous variables for fathers' occupational statuses as I did for the spouses' own occupational statuses. I made the same distinction between cultural and economic status and derived heterogamy variables in the same way as described above for spousal status differences. As can be read from Table 4.1, the mean of husband and wife on the economic origin scale ranges from -1.40 to 2.43, with an average difference between husband and wife of 0.84. In 47 percent of the cases, the wife stems from a higher economic status of origin. The spousal mean on the cultural scale of origin ranges from -1.40 to 2.57, with an average spousal difference of 0.74. Again, in 47 percent of the cases, the wife stems from a higher cultural status of origin.

I postulated two explanations of heterogamy effects: lack of support by the social environment and lack of mutual preferences of the spouses. For both explanatory factors, I constructed a scale. However, it was difficult to convert the explanations into direct questions for the questionnaire. The fact that the questions had to be asked retrospectively did not make this task any easier. To enhance reliability, the wording in the questionnaire stressed the fact that we were inquiring about the situation in the beginning of the marriage or cohabitation. The scale for lack of social support is an additive scale of 8 items indicating whether or not relatives, friends, people in the neighbourhood and representatives from church ever made negative remarks about the marriage or the choice of that specific spouse around the time the marriage was contracted. These questions were only posed to the primary respondent in the survey. The items yielded different degrees of positive answers, ranging from 2.3 percent who experienced negative remarks from someone of the church about the spouse to 35.1 percent who experienced such remarks from relatives. Overall, there is a reasonable amount of dispersion in the answers. This can be seen in panel A of the Table 4.2, in which a description of the items is given. Cronbach's alpha for the

constructed scale is 0.70, which is very reasonable for this number of items. I computed the number of positive answers on the eight items and allowed some missing values. Scale values were computed on at least four valid answers. In this way, only 7 missing values on the scale occur.

*Table 4.2*      *Frequencies of indicators of lack of support from the social environment and of differences of opinion between spouses*

*a: indicators of lack of support from the social environment: around the time of marriage (or cohabitation), have there been negative remarks...*

characteristic	valid N	% yes	% no
about the marriage by relatives	2338	27.5	72.5
about the marriage by friends	2333	9.9	90.1
about the marriage by people in the neighbourhood	2329	6.2	93.8
about the marriage by a clergyman/priest/someone of the church	2332	4.7	95.3
about the spouse by relatives	2342	35.1	64.9
about the spouse by friends	2337	16.8	83.2
about the spouse by people in the neighbourhood	2334	8.8	91.2
about the spouse by a clergyman/priest/someone of the church	2328	2.3	97.7

*b: indicators of differences of opinion: after about 5 years of marriage (or before if marriage did not last 5 years), did you have differences of opinion with your spouse about...*

characteristic	valid N	% hardly/never	% sometimes	% often
religion, philosophy of life, politics	2329	71.5	21.8	6.7
taste on furnishing, television, clothing	2329	57.9	32.8	9.3
leisure activities of spouse	2325	61.8	23.3	14.8
personal habits of spouse	2327	39.5	38.2	22.3
division of household tasks	2329	55.9	30.5	13.6
having children	2325	81.1	12.9	5.9
raising the children	2316	68.7	21.8	9.4
too much work by spouse	2324	75.7	15.3	9.0
expenditures of spouse	2325	63.9	20.1	16.0
drinking habits or drug use of spouse	2328	77.8	9.4	12.8
sexuality	2332	62.5	25.8	11.7
adultery of spouse	2329	81.9	8.7	9.4

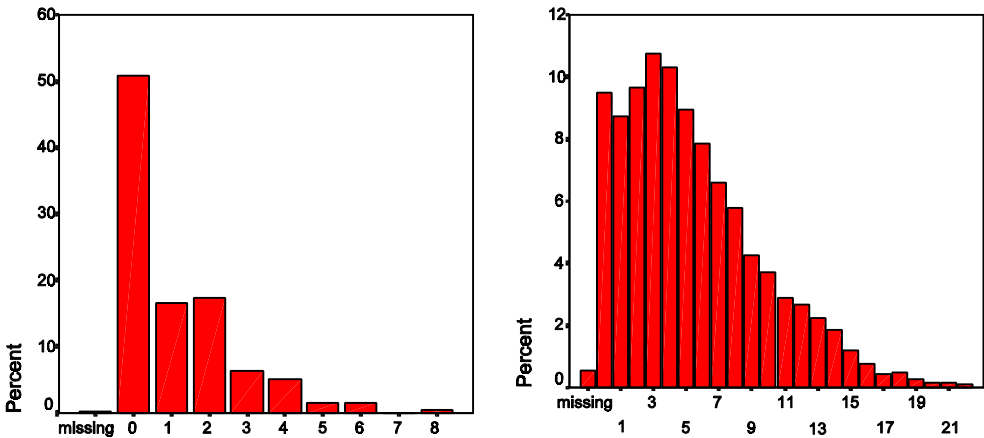
Source: Divorce in the Netherlands (SIN98). Valid N based on file before selections. No weight applied. Not applicable is recoded to negative answer.

The scale for conflict between spouses is an additive scale of 12 items about whether or not there have sometimes or often been differences of opinion between the spouses about religion, politics, lifestyle, division of labour, children, sexual behaviour and money. The indicators refer to the period after about five years of marriage, or earlier if the marriage (has) lasted shorter than five years. A description of the items is given in panel B of Table 4.2, in which it becomes clear there is enough dispersion in the pattern of answers. The percentage of having differences of opinion sometimes or often ranges from 18.1 percent with respect to adultery of the spouse to 60.5 percent with respect to personal habits of the spouse. Cronbach's alpha for this scale is 0.76. I took the average value on the items, in which 0 means never or hardly ever differences of opinion, 1 sometimes, and 2 often. I allowed some missing values and scale values are computed on at least six valid answers. Only 13 respondents have a missing value on this scale. This coincides with the number of missing values if the scale were computed on seven valid answers.

Figure 4.1 Distribution of the sum of scores on the items used for the scales for lack of support from the environment and differences of opinion between spouses

a: lack of support from the environment

b: differences of opinion between spouses



Source: Divorce in the Netherlands (SIN98).

Note: No weight applied. Scores on panel A can range from 0 to 8, on panel B from 0 to 24. If half or less of the items have a missing value, the score is based on the valid answers, multiplied accordingly and rounded to the nearest integer value in these graphs.

Both scales have quite some dispersion. This is illustrated by Figure 4.1 in which the distributions of the sums of both scales are visualized by histograms. Respondents may give a distorted image of their past marriage. Especially if the divorce was particularly nasty or if the respondent has not been able to cope with it, we can expect the respondent to give a more negative account of the relationship and of the social support and disagreements. We tried to minimize this kind of distortion by explicitly stressing the fact that we are asking questions about the *beginning* of the relationship. Questions about negative remarks from the social environment refer to the moment

that a couple started the formation of one household; questions about differences of opinion refer to the time about five years after that. The possibility of overestimating the differences between married and divorced people regarding rejection and disagreements cannot completely be ruled out. If there really is such an overestimation, it would lead to an overestimation of the effects of the scale of a lack of social support and the scale of disagreements between spouses on the risk of divorce. However, the Pearson correlation between both scales is 0.36. If divorcees gave a systematically negative image of their past marriage, this correlation would probably be considerably higher.

Finally, both scales were standardized to z-values with a mean of 0 and a standard deviation of 1.

#### *4.3.3 Description of the data*

To keep as many observations as possible, I substituted the mean value for the social status and status difference scales of a spouse if the status value in question was known for the other spouse. The other couples and couples with missing values on the heterogamy characteristics or on the marriage and divorce dates or with very unlikely young ages at marriage, as well as 4 homosexual couples were removed. I had 2,261 cases (96.4% of 2,346) left for analysis. When using the scales for lack of support from the environment and differences of opinion between spouses, the number of cases was 2,241.

Because the stratified sample contained an over-representation of divorced persons and because of other, smaller selectivity in response, a weight factor is computed to present better descriptive statistics. The applied weight factor restores the proportion of characteristics in the population aged 30 to 75 years, from which the sample was taken. In the first place, the weight corrects the proportion of persons who are in their first marriages, of persons who are divorced and alone now, and of persons who got divorced and remarried. Furthermore, the division of region, degree of urbanization, sex and age group corresponds to the division for the population aged between 30 and 75 years after applying the weight factor.

In Table 4.1, which contains descriptive statistics of the variables used in the analyses for the 2,261 cases, columns are added to show means and standard deviations after applying the weight as well. The correction of the ratio between persons in their first marriage and divorcees can be seen in the decrease of the percentage of first relationships which ended in divorce in my selection from 76.3 percent to 19.3 percent, which corresponds to the actual figure in the Dutch population of persons aged between 30 and 75.

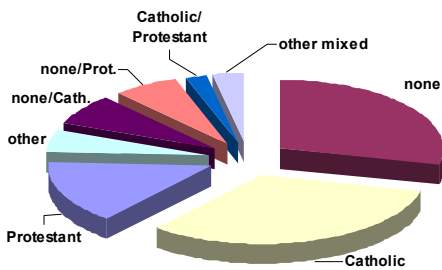
Table 4.1 shows that most means of characteristics do change somewhat, whereas others hardly change. When weighted and observed means diverge, these differences are obviously related to divorce. Characteristics which promote divorce will be less present after applying the weight factor. I can see that in my sample, there are less homogamous church members than in the population. After applying the weight factor, homogamous church members occur more often, whereas the proportions of non-church members, mixed church members and also ethnically mixed couples decrease. This suggests that heterogamy effects are indeed present. Some other differences between spouses diminish on average after applying the weight, such as the absolute difference of economic origin and the wife having a higher level of education. The average number of children rises from 1.67 to about 2, as can be expected. This variable is shown here, because the

presence of children below 13 years of age at each specific year of the marriage was controlled in some models. The lack of support from the environment and differences of opinion between spouses decreases after weighing the percentage of divorce down to actual proportions. We have to bear in mind that this table does not control for right censoring.

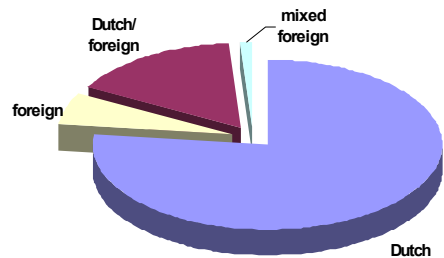
After applying the weight factor, the mean of the average age of both spouses is 24.7 years, with the husband being 3 years and 5 and a half months older than his wife. In 38 percent of the cases, the wife is at least a year older. On average, the spouses have a bit more than 12.5 years of education and a mean difference of 2.5 years within couples. In 21 percent of the cases, the wife went to school longer than the husband. There are some differences in occupational status. The economic status of the wife is higher in 28 percent of the cases; the cultural status of the wife is higher in a small majority of cases, namely 55 percent. With respect to church affiliation, 19 percent of the couples are mixed. The largest three groups are the homogamous Catholics (32.5 percent), non-church members (28.7 percent) and Protestants (14.7 percent). The division of religion is graphically depicted in panel A of Figure 4.2. With the definition above, 83.1 percent of the couples are ethnically homogamous: 77.0 percent Dutch and 6.1 percent foreign couples. The remaining 16.9 percent are ethnically mixed. For the larger part, these couples consist of a spouse of Dutch origin and a spouse of foreign origin. This is illustrated graphically in panel B of Figure 4.2. When it comes to the differences in status of origin, the husband has the highest position in just over half the couples.

Figure 4.2 Distribution of church affiliation and ethnicity

a: church affiliation



b: ethnicity



homogamous: 81.0%  
mixed: 19.0%

homogamous: 83.1%  
mixed: 16.9%

Source: Divorce in the Netherlands (SIN98). Weighted figures (see Table 4.1).

#### 4.4 Method

In the analysis, I estimated effects on the risk of a couple getting divorced. For this purpose, I employed a discrete time event history analysis (Allison 1984; Yamaguchi 1991). In this way, I can



regress the relative probability of getting divorced in a specific year versus not getting divorced in that year to my independent variables. The necessary person-period, or better couple-period file, was created by deriving a record for every year starting from the year that the couple started to live together (married or not) until the divorce or until the time of the interview if no divorce had taken place by then. In every year in the file, the couple is at risk of getting a divorce. After divorce, no subsequent years are in the file for that couple, since that specific couple is no longer at risk. In the analyses, 37,399 records based on 2,261 couples were available to us, in the explanatory models, we have 37,134 records based on 2,241 couples.

To estimate the models on the couple-year file, I needed a dichotomous variable indicating whether or not a relationship ended in divorce in a specific year. Estimated effects in a logistic regression are effects on the *logit*, which is the logarithm of the odds  $p / (1-p)$ , in which  $p$  is the probability of divorce in year  $t$ , given that the marriage still survived in the year  $t-1$ . In all of the regressions, I included a linear and a quadratic term for the duration since the start of the relationship, as well as a linear and a quadratic term for the year of the record minus 1943, the oldest year in the file. As indicated before, the analyses in this chapter are about heterogamy at the start of marriage and, except for duration and year, there were no time-dependent variables in the analyses. The only exception to this is the presence of children below 13 years of age. After all, measuring the presence of children at the beginning of the marriage makes no sense and, in fact, taking the presence of children on a time-dependent basis is the only valid way to proceed.<sup>5</sup>

The over-sampling of divorced and remarried people has an influence on the intercept in those models, because there are more divorced people in the sample. For the other parameters, though, the stratification of the sample has no influence, because divorced and none-divorced relationships are compared. So, the analyses will be carried out without applying a weight factor.

Firstly, I estimated separate baseline models to determine the baseline effects of each of the six types of heterogamy. In these models, I only controlled for duration, duration squared, year (minus 1943, the earliest year) and year (with the same subtraction) squared (all dynamically over the marriage course) and for the concerned base characteristics of husband and wife. These are limited multi-variate analyses. They are intended to show the effects of heterogamy – either as an absolute or as a dichotomous difference – without controlling for the other types of heterogamy.

For each of these separate baseline models, the main effects of the base characteristics had to be controlled. In this way, I could be sure that the effects are indeed effects of heterogamy and not side effects of the main effects or bottom and ceiling effects. For example, if the average age or level of education of a couple is extremely high or extremely low, less heterogamy is possible than when the average age or level of education is somewhere in the middle. Therefore, in the model of age heterogamy, the mean age of both spouses at the start of cohabitation or marriage was taken into account. Likewise, in the models of education, occupational status and father's occupational status, the effect of the mean level of husband and wife was controlled for. Besides, these models included a dichotomy whether the wife is older or has a better position than the husband in order to test the *asymmetry hypothesis*. This hypothesis predicts an extra effect of the wife being older, being better educated or having a higher social status than the husband. For this reason, the dichotomy has value 1 if the wife is older by at least one year, is more highly educated, has a higher social status or has a higher social status of origin. The dichotomy has value 0 if the difference is in the other direction or if there is no difference at all. No asymmetry effect was

predicted for social status of origin.

The assessment of the heterogamy effects of a categorical characteristic like denomination forms a special case. To obtain the right effect of religious heterogamy, I needed to compare the divorce risk of mixed categories with the homogamous categories in the denominations of both the husband and the wife. Therefore, I needed to compare a non-church member/Catholic mixed marriage to marriages between two non-church members and marriages between two Catholics (as already explained in Chapter 2). To gain full insight in the divorce risk of all mixed combinations, parameters of models with several reference categories were computed using an indicator contrast. This resulted in two significance levels for each mixed combination: one compared to homogamous marriages in the category of the husband, one compared to homogamous marriages in the category of the wife.<sup>6</sup> The risk of divorce of a mixed combination needs to be significantly higher than that of both categories that it is compared to in order to constitute a heterogamy effect. This is because the heterogamy effect predicts that the risk of divorce for mixed categories is higher than the risk of homogamous categories, i.e. of the categories of both husband and wife. If only one of both comparisons yields a significantly higher divorce risk for a mixed combination, then the risk may be considered to be between the risk of husband's and wife's categories, which is not a heterogamy effect.

Some forms of heterogamy may be correlated, as those characteristics themselves are correlated, or some characteristics imply or exclude one another. For example, people who have a higher level of education because they went to school for a longer period of time, will generally marry at a later age (Smeenk 1998). If these people also meet each other more often in school, I may expect age at marriage and homogamy with respect to age on the one hand to be correlated with educational homogamy on the other hand. Similar reasoning may be true for social origin, religion and age. In order to gain insight in the real impact of different forms of heterogamy on divorce, I simultaneously investigated effects of these different forms of heterogamy.

Therefore, I continued testing the hypotheses by full multivariate models. In these models, the main effects and the heterogamy effects of all sources of heterogamy in this chapter were taken into the model: age, level of education, occupational status of the spouses, church denomination, ethnic background and social origin (i.e., social status of the fathers). Furthermore, duration and year of each record, as well as their squares, were taken into the analysis as was done in the previous separate models. Thus, I could find the net effects of the different types of heterogamy. This model is called the multivariate baseline model.

Parameters for an extended model, in which the presence of children under the age of 13 is added, were also computed. In this way, I could control for a characteristic which generally delays divorce (Waite & Lillard 1991). If the effects of heterogamy are also present in this model, this is an indication that heterogamy has an effect on the risk of divorce for couples with children as well.

I also tested the hypothesis that heterogamy leads to a higher divorce risk *because* of differences of opinion between husband and wife and because of disapproval and lack of support by the social environment. Several explanatory models, therefore, extended on the previous ones by adding indicators for lack of support of the marriage by the social environment and differences of opinion between the spouses within the relationship.

The general model, then, can be represented by the following equation:

$$\frac{P}{(1-p)} = \beta_0 + [\beta_1 * (year - 1943)] + [\beta_2 * (year - 1943)^2] + [\beta_3 * duration] + [\beta_4 * duration^2] +$$

$$[\beta_5 * mean\ age] + [\beta_6 * abs.\ age\ diff.] + [\beta_7 * wife\ older] +$$

$$[\beta_8 * mean\ educ.] + [\beta_9 * abs.\ educ.\ diff.] + [\beta_{10} * wife\ higher\ educ.] +$$

$$[\beta_{11} * mean\ econ.\ status] + [\beta_{12} * abs.\ econ.\ status\ dif.] + [\beta_{13} * wife\ higher\ econ.\ status] +$$

$$[\beta_{14} * mean\ cult.\ status] + [\beta_{15} * abs.\ cult.\ status\ dif.] + [\beta_{16} * wife\ higher\ cult.\ status] +$$

$$\sum_{i=1}^8 [\beta_{17.i} * religious\ cat.\ i] + \sum_{j=1}^4 [\beta_{18.j} * ethnic\ cat.\ j] +$$

$$[\beta_{19} * mean\ econ.\ origin] + [\beta_{20} * abs.\ econ.\ origin\ dif.] + [\beta_{21} * wife\ higher\ econ.\ origin] +$$

$$[\beta_{22} * mean\ cult.\ origin] + [\beta_{23} * abs.\ cult.\ origin\ dif.] + [\beta_{24} * wife\ higher\ cult.\ origin] +$$

$$[\beta_{25} * presence\ children] + [\beta_{26} * social\ support] + [\beta_{27} * diff.\ of\ opinion]$$

In the equation above, the logit of divorce in a certain year is a function of a constant and 27 sets of variables with parameters  $\beta$ . Variables are as described above. Most of them are metric, among which a few dichotomous. Religion and ethnicity, however, consist of respectively 8 and 4 categories of combinations of husband and wife. Each category has its own  $\beta$ -parameter. In all of the models, a constant and the effects of year and duration and their squares were included. Other parameters that belong together were grouped in the separate models. All of them taken together, except those on the bottom line of the equation, formed the first full multivariate model. The variables on the bottom line were entered afterwards: the presence of children in the extended model and social support and differences of opinion in the explanatory models.

I also looked at the effects of heterogamy characteristics on both explanatory variables. After all, if these characteristics are to explain the relationship between heterogamy and divorce, then heterogamy has to have an effect on the lack of support from the social environment and on the differences of opinion between spouses, or else I cannot speak of an explanation. Unfortunately, it is not possible to make a full path model with logistic regression models. It suffices to establish the relationship between heterogamy on the one hand and lack of support and differences of opinion on the other hand. Because lack of support and differences of opinion were measured by standardized scales which do not change over the course of marriage, I used OLS regression of those scales on heterogamy characteristics and some control variables on the original cross-sectional data file. I should find positive effects of heterogamy on the lack of support and differences of opinion.<sup>7</sup>

## 4.5 Results: effects of heterogamy

### 4.5.1 Separate models for heterogamy effects on divorce

The results of the analyses in separate baseline models are shown in Table 4.3a as models 1. Many heterogamy effects prove to be significant. I will now discuss the effects.

Table 4.3a *Event history analysis: divorce risk regressed on heterogamy and other characteristics*

model variables	1 (separate baseline)		2 (multivariate baseline)		3 (extended)	
	b	s.e.	b	s.e.	b	s.e.
duration at t	(several)		0.114 ***	0.010	0.138 ***	0.011
duration at t squared	(several)		-0.003 ***	0.000	-0.004 ***	0.000
year-1943	(several)		0.138 ***	0.022	0.123 ***	0.022
year-1943 squared	(several)		-0.001 ***	0.000	-0.001 **	0.000
average age at marriage	-0.040 ***	0.008	-0.039 ***	0.008	-0.043 ***	0.008
absolute age difference	0.040 ***	0.009	0.037 ***	0.009	0.039 ***	0.009
wife older (at least by 1 year)	-0.086 ns	0.053	-0.041 ns	0.056	-0.047 ns	0.056
mean education (years)	0.012 ns	0.010	-0.003 ns	0.014	-0.005 ns	0.014
absolute educ. difference	0.006 ns	0.011	0.013 ns	0.011	0.014 ns	0.011
wife higher education	0.187 **	0.061	0.162 *	0.066	0.159 *	0.066
mean economic occupational status	0.097 ns	0.070	0.063 ns	0.072	0.051 ns	0.072
absolute economic status difference	-0.008 ns	0.043	0.002 ns	0.044	0.007 ns	0.044
wife higher economic status	0.149 *	0.064	0.088 ns	0.066	0.085 ns	0.066
mean cultural occupational status	-0.085 ns	0.062	-0.065 ns	0.073	-0.048 ns	0.073
absolute cultural status difference	-0.067 ns	0.049	-0.058 ns	0.051	-0.059 ns	0.051
wife higher cultural status	-0.172 **	0.057	-0.155 **	0.059	-0.144 *	0.059
church: none	0.182 ***	0.051	0.221 ***	0.055	0.199 ***	0.055
church: none/Catholic	0.399 ***	0.073	0.434 ***	0.077	0.410 ***	0.077
church: none/Protestant	0.085 ns	0.086	0.122 ns	0.090	0.117 ns	0.090
church: Catholic	-0.348 ***	0.058	-0.256 ***	0.062	-0.270 ***	0.062
church: Cath./Protestant	0.119 ns	0.127	0.093 ns	0.130	0.096 ns	0.130
church: Protestant	-0.516 ***	0.085	-0.412 ***	0.089	-0.397 ***	0.089
church: other homogamous	-0.543 ***	0.159	-0.756 ***	0.181	-0.694 ***	0.181
church: other mixed	0.623 ***	0.096	0.554 ***	0.104	0.539 ***	0.104
ethnicity: Dutch	-0.234 ***	0.063	-0.200 **	0.074	-0.199 **	0.074
ethnicity: foreign	-0.081 ns	0.100	0.045 ns	0.113	0.038 ns	0.113
ethnicity: Dutch/foreign	0.025 ns	0.071	-0.059 ns	0.078	-0.052 ns	0.078
ethnicity: mixed foreign	0.291 ~	0.152	0.213 ns	0.164	0.213 ns	0.164
mean economic status origin	-0.209 **	0.067	-0.156 *	0.068	-0.154 *	0.069
absolute economic origin difference	0.141 ***	0.042	0.135 **	0.042	0.141 ***	0.043
wife higher economic origin	0.011 ns	0.059	0.018 ns	0.060	0.019 ns	0.060
mean cultural status origin	0.262 ***	0.070	0.211 **	0.076	0.203 **	0.076
absolute cultural origin difference	-0.078 ~	0.046	-0.073 ns	0.048	-0.068 ns	0.048
wife higher cultural origin	-0.056 ns	0.059	-0.051 ns	0.060	-0.051 ns	0.060
presence of child(ren) under 13	-0.389 ***	0.056			-0.364 ***	0.057
lack of support from environment (z)	0.204 ***	0.026				
differences of opinion couple (z)	0.323 ***	0.026				
constant	(several)		-6.348 ***	0.520	-5.808 ***	0.519

Source: Divorce in the Netherlands (SIN98). N=37,399 records based on 2261 couples.

Note: ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . Church and ethnicity: deviation to overall model contrast.

Table 4.3b Event history analysis: divorce risk regressed on heterogamy – continued from Table 4.3a

model	3 (extended)		4 (explanation: support)		5 (explanation: opinion)		6 (explanation: both)	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
duration at t	0.138 ***	0.011	0.143 ***	0.011	0.152 ***	0.011	0.154 ***	0.011
duration at t squared	-0.004 ***	0.000	-0.004 ***	0.000	-0.004 ***	0.000	-0.005 ***	0.000
year-1943	0.123 ***	0.022	0.121 ***	0.022	0.096 ***	0.022	0.100 ***	0.022
year-1943 squared	-0.001 **	0.000	-0.001 **	0.000	-0.001 *	0.000	-0.001 *	0.000
average age at marriage	-0.043 ***	0.008	-0.036 ***	0.008	-0.034 ***	0.008	-0.031 ***	0.008
absolute age difference	0.039 ***	0.009	0.027 **	0.009	0.033 ***	0.009	0.026 **	0.009
wife older (at least by 1 year)	-0.047 ns	0.056	0.014 ns	0.057	0.062 ns	0.057	0.088 ns	0.057
mean education (years)	-0.005 ns	0.014	-0.015 ns	0.014	-0.006 ns	0.014	-0.011 ns	0.014
absolute educ. difference	0.014 ns	0.011	0.013 ns	0.011	0.009 ns	0.011	0.009 ns	0.011
wife higher education	0.159 *	0.066	0.093 ns	0.066	0.049 ns	0.067	0.025 ns	0.067
mean economic occ. status	0.051 ns	0.072	0.041 ns	0.072	0.066 ns	0.071	0.058 ns	0.072
abs. econ. status difference	0.007 ns	0.044	0.004 ns	0.044	-0.012 ns	0.044	-0.014 ns	0.044
wife higher economic status	0.085 ns	0.066	0.078 ns	0.066	0.089 ns	0.066	0.078 ns	0.066
mean cultural occ. status	-0.048 ns	0.073	-0.012 ns	0.074	-0.055 ns	0.074	-0.031 ns	0.074
abs. cultural status difference	-0.059 ns	0.051	-0.067 ns	0.051	-0.038 ns	0.051	-0.043 ns	0.051
wife higher cultural status	-0.144 *	0.059	-0.148 *	0.059	-0.169 **	0.059	-0.167 **	0.059
church: none	0.199 ***	0.055	0.207 ***	0.055	0.209 ***	0.055	0.219 ***	0.055
church: none/Catholic	0.410 ***	0.077	0.368 ***	0.077	0.376 ***	0.077	0.352 ***	0.078
church: none/Protestant	0.117 ns	0.090	0.119 ns	0.090	0.115 ns	0.089	0.112 ns	0.090
church: Catholic	-0.270 ***	0.062	-0.260 ***	0.062	-0.260 ***	0.062	-0.252 ***	0.062
church: Cath./Protestant	0.096 ns	0.130	0.033 ns	0.131	0.032 ns	0.130	-0.010 ns	0.131
church: Protestant	-0.397 ***	0.089	-0.353 ***	0.089	-0.349 ***	0.089	-0.327 ***	0.089
church: other homogamous	-0.694 ***	0.181	-0.621 ***	0.182	-0.619 ***	0.181	-0.581 **	0.181
church: other mixed	0.539 ***	0.104	0.507 ***	0.104	0.496 ***	0.104	0.488 ***	0.104
ethnicity: Dutch	-0.199 **	0.074	-0.165 *	0.074	-0.166 *	0.074	-0.149 *	0.074
ethnicity: foreign	0.038 ns	0.113	0.109 ns	0.114	0.056 ns	0.112	0.107 ns	0.113
ethnicity: Dutch/foreign	-0.052 ns	0.078	-0.072 ns	0.078	-0.073 ns	0.079	-0.082 ns	0.078
ethnicity: mixed foreign	0.213 ns	0.164	0.129 ns	0.164	0.184 ns	0.165	0.124 ns	0.164
mean economic status origin	-0.154 *	0.069	-0.124 ~	0.069	-0.143 *	0.069	-0.124 ~	0.069
abs. econ. origin difference	0.141 ***	0.043	0.123 **	0.043	0.125 **	0.043	0.119 **	0.043
wife higher economic origin	0.019 ns	0.060	0.016 ns	0.061	0.054 ns	0.060	0.043 ns	0.061
mean cultural status origin	0.203 **	0.076	0.186 *	0.076	0.195 *	0.076	0.179 *	0.076
abs. cultural origin difference	-0.068 ns	0.048	-0.063 ns	0.048	-0.080 ~	0.048	-0.076 ns	0.048
wife higher cultural origin	-0.051 ns	0.060	-0.040 ns	0.061	-0.074 ns	0.060	-0.064 ns	0.061
presence of child(ren) under 13	-0.364 ***	0.057	-0.362 ***	0.057	-0.406 ***	0.057	-0.396 ***	0.058
lack of support environment (z)			0.265 ***	0.025			0.168 ***	0.027
differences of opinion couple (z)					0.372 ***	0.026	0.325 ***	0.027
constant	-5.808 ***	0.519	-5.852 ***	0.516	-5.521 ***	0.510	-5.663 ***	0.511

Source: Divorce in the Netherlands (SIN98). N=37,399 records based on 2,261 couples, in explanatory models: 37,134 records based on 2,241 couples.

Note: see note Table 4.3a.

I will begin by looking at the effects of characteristics of achievement through people's own merits and age. The younger the partners are when they start living together, married or not, the higher the risk of divorce. Converting the parameter in the table to odds effects by computing the inverse natural logarithm yields the value 0.96. This indicates that a one year increase of the average age of husband and wife decreases the odds of divorce by about 4 percent. Note that this refers to the odds, in any year during the marriage, of divorcing in that year. I can compute this for a greater difference in age by multiplying the effect and then take the inverse natural logarithm. So, the odds of divorce for a couple aged 28 years at the time of marriage are 0.96 times the odds for a 27-year-old couple and only 0.67 times the odds for an 18-year-old couple.

The greater the age difference between husband and wife, the higher the divorce risk. The increase of the odds is 4 percent for a one year difference. For a couple in which spouses differ 17 years and 3 months in age, the odds of divorce are double the odds for spouses of the same age. This multiplication of the odds ratio is visualized in panel A of Appendix 4.1, in which all significant effects of model 1 are shown. This is a clear heterogamy effect, which is symmetric. It does not matter much which one of the two spouses is the oldest, since the asymmetry effect is not significant. This is also supported by a curvilinear model with the average age of the spouses, the age difference with a negative value when the wife is older (instead of the absolute age difference), and that age difference squared. Alternative models are displayed in panel A of Table 4.4. In the curvilinear model, the linear parameter for the age difference is not significantly different from zero and the quadratic parameter is positive, which, in a quadratic function, indicates that the age difference with the lowest divorce rate is zero and that divorce rates go up if age differences become larger in either direction. These findings are in accordance with the *heterogamy hypothesis*, but they do not support the *asymmetry hypothesis* which expects that the wife being older is worse for the survival chances of a marriage. However, if I model age differences as a log ratio, also shown in panel A of Table 4.4, then the model parameters show significant linear and quadratic effects. The lowest divorce rate is found if the husband is 14 percent older than the wife. This point of the lowest divorce risk can be computed by taking the negative of the linear parameter divided by twice the quadratic parameter. This gives a natural logarithm of the age ratio. This corresponds to an age ratio of 1.14, meaning the husband is 14 percent older at marriage.

Mean education does not have a significant effect. Neither does the absolute educational difference, which contradicts the *heterogamy hypothesis*. Still, effects of educational heterogamy can be found, but fully on account of the direction of the difference: in accordance with the *asymmetry hypothesis*, divorce risks are higher if the wife is more highly educated than the husband. In that case, the odds of divorce are multiplied by 1.21. This is visualized in panel B of Appendix 4.1. Modelling this with a curvilinear model, as displayed in panel B of Table 4.4, shows both the 'normal' heterogamy effect and the asymmetry effect. A U-shape relationship is shown with divorce risks going up if differences in the level of education become larger. The point of the lowest divorce risk is found when the husband has 3.4 more years of education.<sup>8</sup> The fact that this optimum goes in this direction is in accordance with the above finding that the divorce risk rises if the wife has a higher level of education than her husband.

Occupational status is measured by economic and cultural status. Mean economic status itself does not have any effect. Nor do the absolute differences between husband and wife in this respect. This is in accordance with the *specialization hypothesis* based on Becker (1981), which

predicts that the advantages of task specialization reduce the heterogamy effect or even turn it around. There are effects of heterogamy in the asymmetric way: if the wife has a better economic

Table 4.4 Alternative separate models

a: age

model variables	linear + direction		parabolic		age ratios	
	b	s.e.	b	s.e.	b	s.e.
average age at marriage	-0.040***	0.008	-0.041***	0.008	-0.039***	0.007
absolute age difference	0.040***	0.009				
wife older (at least by 1 year)	-0.086ns	0.053				
age difference (husband-wife)			0.007ns	0.006		
age difference squared			0.003***	0.001		
age ratio (husband/wife) natural log					-0.949***	0.223
age ratio squared					3.686***	0.591
constant	-6.431***	0.467	-6.345***	0.469	-6.346***	0.469

b: level of education

model variables	linear + direction		parabolic	
	b	s.e.	b	s.e.
mean education (years)	0.012ns	0.010	0.014ns	0.010
absolute educational difference	0.006ns	0.011		
wife higher education	0.187**	0.061		
educational difference (husband-wife)			-0.025***	0.007
educational difference squared			0.004**	0.001
constant	-7.528***	0.441	-7.527***	0.440

c: economic and cultural status

model variables	linear + direction		parabolic	
	b	s.e.	b	s.e.
mean economic occupational status	0.097ns	0.070	0.088ns	0.071
absolute economic status difference	-0.008ns	0.043		
wife higher economic status	0.149*	0.064		
economic occ. status difference (husband-wife)			-0.067~	0.039
economic occ. status difference squared			0.016ns	0.018
mean cultural occupational status	-0.085ns	0.062	-0.069ns	0.062
absolute cultural status difference	-0.067ns	0.049		
wife higher cultural status	-0.172**	0.057		
cultural occ. status difference (husband-wife)			0.020ns	0.037
cultural occupational status difference squared			-0.026ns	0.021
constant	-7.241***	0.432	-7.291***	0.430

Table 4.4 Alternative separate models, continued

d: economic and cultural status of origin

model variables	linear + direction		parabolic	
	b	s.e.	b	s.e.
mean economic status origin	-0.209**	0.067	-0.234***	0.069
absolute economic origin difference	0.141***	0.042		
wife higher economic origin	0.011ns	0.059		
economic origin difference (husband-wife)			-0.005ns	0.029
economic origin difference squared			0.052***	0.014
mean cultural status origin	0.262***	0.070	0.307***	0.071
absolute cultural origin difference	-0.078~	0.046		
wife higher cultural origin	-0.056ns	0.059		
cultural origin difference (husband-wife)			0.028ns	0.033
cultural origin difference squared			-0.042*	0.017
constant	-7.291***	0.432	-7.271***	0.431

Source: Divorce in the Netherlands (SIN98). N=37,399 records based on 2,261 couples.

Note: Duration at t, duration at t squared, year-1943, year-1943 squared are also taken into the models. The linear + direction models are equivalent to models 1 in Table 4.3a. The separate models for church and ethnicity can be found in Table 4.3a as well.

ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ .

position than her husband, then the odds of divorce are relatively large, namely 16 percent larger. A graphical representation is available in panel C of Appendix 4.1. This effect is in accordance with the *asymmetry hypothesis*. A quadratic model, as displayed in panel C of Table 4.4, confirms these findings, be it that the asymmetry has a significance level of between 5 and 10 percent.

Cultural status and differences in absolute cultural status do not have a significant effect either. I expected that there would be some heterogamy effect with respect to cultural status, but this was refuted: the *specialization hypothesis* also goes for differences in cultural status, instead of the *heterogamy hypothesis*. Again, I found an asymmetry effect, but its direction is contrary to expectation. If the wife has a higher cultural status than her husband, the odds of divorce are 16 percent lower. See also panel D in Appendix 4.1. A merely post-hoc explanation for this counterintuitive finding could be found in sex specificity. Economic and cultural effects may be seen as counterbalancing as a result of typical male or female jobs or work patterns. We take into account that many typically female jobs, like secretaries, nurses and teachers, have a higher cultural status than many typically male jobs in, for example, the building and transportation sector. It is possible that marriages in which husband and wife have gender specific jobs comply with the specialization model and, therefore, have greater marital stability. We have not explicitly tested this supposition. Anyway, the negative asymmetry effect cannot be found in the quadratic version as shown in panel C of Table 4.4. When a single dimension status scale was used, like a scale of occupational prestige (Ultee & Sixma 1984), no effect was found either (not displayed).

Next, I looked at the influence of characteristics of ascription. The effects of church denomination



of both spouses as shown in Table 4.3 were computed for dichotomous dummies with a contrast to the overall model, the so-called deviation contrast. From the logic of that contrast, it follows that the parameter value of each dummy is the negative sum of the parameters of all the other dummies. Therefore, it is possible to show parameters for all of the categories without leaving out a reference category.<sup>9</sup> Looking at the effects of church denomination, we can, firstly, see that the risk of divorce is lower for church members than for non-church members, because the effects of all homogamous church member categories (Catholics, Protestants and others) are significantly lower than the effect of non-church members. All denominations have significant negative deviation effects, whereas the parameter for non-church members is significantly positive. Protestants and the category of other homogamous couples have the lowest divorce risk, while the Catholics are in between. This is as can be expected in the Netherlands in this period (Dumon & Kooy 1983: 111; Becker & Vink 1994; also see Chapter 2).

Table 4.5 Effects and significance levels of religious heterogamy on the risk of divorce

model	1 (separate baseline)			2 (multivariate baseline)			3 (extended)		
categories	first category	last category		first category	last category		first category	last category	
none/Catholic	0.2169 (0.0094)	0.7461 (0.0000)	**	0.2123 (0.0129)	0.6894 (0.0000)	*	0.2110 (0.0135)	0.6795 (0.0000)	*
none/Protestant	-0.0970 (np)	0.6011 (0.0000)	np	-0.0990 (np)	0.5346 (0.0000)	np	-0.0819 (np)	0.5136 (0.0001)	np
Catholic/ Protestant	0.4662 (0.0019)	0.6351 (0.0001)	**	0.3491 (0.0225)	0.5055 (0.0028)	*	0.3658 (0.0170)	0.4928 (0.0036)	*
other mixed (see note)	1.1658 (0.0000)	0.4411 (0.0001)	***	1.3103 (0.0000)	0.3327 (0.0064)	**	1.2328 (0.0000)	0.3399 (0.0055)	**

model	4 (explanation: support)			5 (explanation: opinions)			6 (explanation: both)		
categories	first category	last category		first category	last category		first category	last category	
none/Catholic	0.1604 (0.0612)	0.6273 (0.0000)	~	0.1672 (0.0521)	0.6359 (0.0000)	~	0.1329 (0.1238)	0.6032 (0.0000)	ns
none/Protestant	-0.0883 (np)	0.4717 (0.0002)	np	-0.0937 (np)	0.4639 (0.0003)	np	-0.1066 (np)	0.4395 (0.0007)	np
Catholic/ Protestant	0.2924 (0.0574)	0.3856 (0.0235)	~	0.2914 (0.0576)	0.3804 (0.0250)	~	0.2416 (0.1184)	0.3173 (0.0638)	ns
other mixed (see note)	1.1275 (0.0000)	0.2995 (0.0147)	*	1.1155 (0.0000)	0.2874 (0.0184)	*	1.0687 (0.0000)	0.2690 (0.0279)	*

Source: Divorce in the Netherlands (SIN98).

Note: given are indicator contrast effects (significance levels between parentheses) of the category in question compared to both homogamous categories of husband and wife (e.g. none/Catholic: none and Catholic); for 'other mixed', highest and lowest effects are given, because four comparisons are possible. Symbols are given for the highest level of significance (least significant effect): ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . np: heterogamy effect not present (divorce risk is not higher than both reference categories). Significance of the presence of a heterogamy effect depends on the highest significance level. Model numbers refer to the models in Table 4.3. N as in Table 4.3.

Differences in church denomination of the spouses lead to a higher divorce risk, as expected. As discussed above, the parameters for religiously mixed couples must be compared to the parameter of homogamous couples in the category of the husband and to the parameter of homogamous couples in the category of the wife. The effects of both comparisons of each mixed combination and the accompanying significance levels are given in Table 4.5. We can speak of a heterogamy effect only if both these comparisons yield statistical significance.

The effects and significance levels for model 1 in Table 4.5 show that, except for the combination of non-church members with Protestants, all other combinations show significant heterogamy effects. This means that couples consisting of a non-church member and a Catholic, of a Catholic and a Protestant, and unspecified mixed marriages have a higher risk of divorce than can be expected from the divorce risks within the categories of husband and wife if no heterogamy effect were present.

This indicates that the parameter of 0.399 for non-church member/Catholic mixed marriages in model 1 of Table 4.3a is significantly higher than both the parameter of 0.182 for homogamous non-church member marriages and the parameter of -0.348 of homogamous Catholic marriages. Converting these parameters to odds ratios, this amounts to 49 percent higher odds of divorce for non-church member/Catholic mixed marriages compared to the average marriage, whereas the odds of divorce for homogamous non-church members are 'only' 20 percent higher than the average marriage, and the odds of divorce for homogamous Catholics are even 29 percent lower than for the average marriage. I can also convert the parameters in Table 4.5 into odds ratios to see that the odds of divorce for non-church member/Catholic marriages are 24 percent higher than the odds for homogamous non-church members – because  $\exp(0.2169) = 1.24$  – and even 111 percent higher than homogamous Catholics – because  $\exp(0.7461) = 2.11$ .

In the same way, the odds of divorce for mixed marriages consisting of a Catholic and a Protestant are not, at 13 percent, significantly higher than for the average marriage. But this is significantly higher than the odds for homogamous Catholics and the odds for homogamous Protestants, which are 29 and 40 percent lower than for the average marriage, respectively. We can quantify the difference again by computing the exponents of the effects in Table 4.5. Catholic/Protestant mixed marriages appear to have divorce odds that are 59 percent above those of homogamous Catholics and 89 percent above those of homogamous Protestants.

The category of other, unspecified mixed marriages has the highest odds of all categories: 86 percent higher than the average marriage, constituting a significant heterogamy effect. Only non-church member/Protestant mixed marriages do not show a heterogamy effect. Even though their odds of divorce are 82 percent higher than the odds of divorce for homogamous Protestants, their odds of divorce are not significantly different from non-church members.

To visualize the results for the main groups, the odds of divorce of non-church members, Catholics, Protestant and their combinations are graphically depicted in panel E of Appendix 4.1. The odds ratios in this panel are standardized in such a way that value 1 represents the average married couple. This means that, for instance, 1.25 implies a 25 percent higher odds of divorce than the average marriage. Non-church member marriages are shown twice, so that all mixed categories are next to the homogamous categories of husband and wife. The graph clearly shows the presence of the heterogamy effect for non-church member/Catholic and Catholic/Protestant marriages and the absence of the effect for non-church member/Protestant marriages.

Unfortunately, due to small numbers in the sample, I could not discern many categories of

ethnicity. Again, deviation contrasts were used. Model 1 in Table 4.3a shows that homogamous couples with a Dutch ethnic background have significantly lower divorce risks than average. Mixed couples consisting of two foreigners have higher divorce risks than average, if we are satisfied with a 10 percent significance level. This suggests some heterogamy effect, because mixed ethnic foreigners have higher divorce risks than homogamous ethnic foreigners. It is obvious, though, that Dutch/foreign mixed marriages, who have significantly higher divorce risks than homogamous ethnic Dutch couples, do not significantly differ from homogamous ethnic foreign couples. Only if this were the case could we speak of a heterogamy effect. I could not make the proper comparisons within smaller categories due to small numbers. If I were able to make those comparisons, it may well be possible that I would find certain mixed combinations of ethnic Dutch and ethnic foreigners with a higher divorce risk than both the ethnic group of the husband and the ethnic group of the wife (Van der Heijdt 1996; see Chapter 2 in the present study for an approach using nationality).

Status of the fathers has an influence. If husband and wife, on the average, are from economically better situated families, the divorce risk decreases. If they are from culturally higher situated families, the divorce risk rises. This is a clear instance of differences between the economic and cultural dimensions of status. The cultural elite, apparently, has more modern, tolerant and individualistic norms, leading to an easy step towards divorce, whereas the economic elite is more traditional and conservative in cultural matters, including marriage and divorce. This is in line with Bourdieu's (1979) concept of the difference between cultural and economic status.

Being mixed with respect to social origin also affects divorce risks with respect to the economic dimension. Regardless of the direction of the difference, spouses have a higher chance to end their marriage in divorce if the gap between the economic status of their fathers becomes larger. A one point increase on the scale ranging from -1.40 to 2.43 (see Table 4.1) multiplies the odds of divorce by 1.15. Graphically, this is shown in panel F of Appendix 4.1. This effect can also be seen from the positive quadratic term in the quadratic model in panel D of Table 4.4. Cultural differences of origin have a negative effect on divorce risk. Apparently, couples originating from different cultural backgrounds have more stable marriages than couples with the same cultural background. An increase by one point on the scale ranging from -1.40 to 2.57 (see Table 4.1) decreases the odds of divorce by 7.5 percent. This downward line for the odds of divorce is visible in panel G of Appendix 4.1. In the linear model 1 of Table 4.3a and in panel D of Table 4.4, this is significant at a 10 percent level, whereas the significance level in the quadratic model is 5 percent. As with own social status, these different directions of the heterogamy effect for the economic and the cultural dimension may be ascribed to complementarity of both dimensions. When a single dimension status scale was used, like the Ultee-Sixma scale of occupational prestige, then no effect was found (not displayed).

#### *4.5.2 Multivariate models of heterogamy effects on divorce*

I continued my analyses by simultaneously estimating parameters of the models with a linear and a directional term. This means that I combined the parameters as given in model 1 in Table 4.3a (and in the left-side models in Table 4.4). These models are closest to the hypotheses that go into absolute differences and asymmetric differences. The parameters of the multivariate baseline model are shown in Table 4.3a as model 2. In this model, all types of heterogamy were entered in

the analysis. The extended model 3 adds the presence of children under 13 years as a control variable. This is quite standard, because the presence of children reduces the risk of divorce and marriages ending in divorce may not last long enough to produce children. Only multivariate baseline and extended models with absolute differences plus a directional variable are shown.

Taking all forms of heterogamy and possibly the presence of young children into account changed the parameters somewhat, but not dramatically. The parameter for absolute age differences is about the same size in models 2 and 3 as it was in model 1. The negative effect of the wife being older than the husband, is still absent.

The effect that couples of whom the wife has the highest level of education have a higher risk of ending in divorce becomes only a bit smaller in models 2 and 3, and it still has a 5 percent significance level.

In the separate model, I found a significant asymmetry effect of economic status differences indicating a higher divorce risk for couples with an economically better situated wife. In the multivariate baseline model, where other characteristics like educational heterogamy are controlled, this effect is no longer significant. The negative effect of a higher culturally positioned wife is still present.

As to church denomination, effects go down only to a limited degree. We can still see that church members have lower divorce rates than non-church members. Also the heterogamy effects are still clearly present, as can be read from the effects and significance levels in models 2 and 3 in Table 4.5.

The effects of ethnicity become a bit smaller in models 2 and 3 in Table 4.3a. The effect that mixed couples with two foreign ethnicities have higher divorce risks than average, becomes insignificant. The effect of homogamous Dutch couples having a lower divorce risk remains present, still giving some unclear indication of a heterogamy effect.

Heterogamy with respect to social origin still has a positive effect on divorce risk in multivariate baseline model 2 and extended model 3 when it comes to the economic dimension. If husbands and wives come from different economic settings, the risk of divorce rises. The slight effect which lowers the divorce risk if spouses are from different cultural origin is no longer significant at a 10 percent level. The fact that children from economically better situated fathers, on average, divorce less is still present, be it a bit weaker. The fact that children from culturally better situated fathers divorce more on average, can still be found in the controlled baseline and extended models as well.

The control variables duration and year of record have also clearly significant linear and quadratic effects in models 2 and 3. The functions of both duration and year display a reverse U-shape. Divorce is slowly rising over the course of marriage until about 15 to 20 years after marriage, after which the risk of divorce slowly goes down again. Similarly, over the course of time, divorce risks go up, but this rise comes to a standstill at the end of the period under investigation. As can be expected, couples appear to delay divorce if children under the age of 13 are present, as can be seen in model 3. After converting this effect to odds ratio effects, the risk of divorce appears to be 31 percent lower when the couple has one or more children. Above, it became clear that, compared to model 2, the effects of heterogamy on divorce are persistent in model 3 in which the presence of children is controlled. This is an indication that heterogamy has an effect on divorce among couples with and without children. I will deal with this more thoroughly in the following subsection.

#### 4.5.3 *The presence of children*

Not presented by model 3 or any other model here is the answer to the question whether the presence of children brings about a higher effect of heterogamy on divorce as was suggested in the theory section. Such a question implies the idea that heterogamy leads to divorce only or especially when other causes give rise to problems or disputes, like the presence of children. Methodologically, this implies the addition of interaction terms of the presence of children with each heterogamy variable in model 3.

I accomplished this, but there is hardly any proof for the idea that the presence of a child increases heterogamy effects. The interaction effect of the presence of a child and an economically higher status wife, significant on a 10 percent level, is negative instead of positive. The effect of the wife being in a culturally higher job status is positive, but this only diminishes the unexpected negative main effect. Homogamous marriages in the category of 'other' denominations divorce even less than they already do. This means that their difference with relatively small category of 'other' mixed marriages becomes larger. This hardly considerable fact is the only instance in which the effect of heterogamy becomes really larger when children are present. The final interaction effect which reaches statistical significance is that of the presence of children with both spouses being ethnically foreign, but homogamous. The interaction effect is positive, which may only imply that heterogamy effects, if present, decrease when the couple has children. All of the other interaction parameters do not even come close to statistical significance. I may conclude that the presence of children does not strengthen heterogamy effects, except maybe for mixed marriages between spouses who are neither non-church members, Catholics nor Protestants.<sup>10</sup>

Another question which arises is whether heterogamous couples postpone childbirth or refrain from having a child. Since the effects in model 3 do not differ much from model 2, I suspect there is no such influence of heterogamy on having a child. To gain full insight into this, I estimated an event history model regressing first childbirth on all variables in model 2. The result is presented in Table 4.6.

There are not many significant effects in Table 4.6. No form of heterogamy has any effect on childbirth. Even the significant effects of church affiliation, when compared to the appropriate reference category (not presented) like above, do not constitute heterogamy effects. The significant effects of church affiliation only indicate that church members have a higher probability of having their first child at any moment after marriage than non-church members. This can be seen best by comparing the odds of having a child for all homogamous categories to the average marriage. These odds can be computed from the parameters in the model. Among non-church members, the odds of first childbirth are 18 percent *lower* than for the average couple. Homogamous Catholics have an average score. Among Protestants, the odds of a child being born are 35 percent *higher* in the event history analysis. Miscellaneous categories score even 51 percent above average.

The other significant effects in Table 4.6 indicate that the probability of the first child to be born increases from the start of the marriage until 5 years after marriage (which can be computed by taking minus the linear effect divided by twice the quadratic effect of duration). Then the probability decreases again. Across historical time, the probability decreases. This indicates that, across the years, people have been increasingly postponing the birth of their first child. The higher

Table 4.6 Event history analysis: getting first child regressed on heterogamy and other characteristics

variables	b	s.e.
duration at t	0.310 ***	0.026
duration at t squared	-0.031 ***	0.003
year-1943	-0.046 ***	0.012
year-1943 squared	0.000 ns	0.000
average age at marriage	-0.004 ns	0.008
absolute age difference	0.003 ns	0.010
wife older (at least by 1 year)	-0.005 ns	0.061
mean education (years)	-0.054 ***	0.015
absolute educational difference	-0.006 ns	0.012
wife higher education	0.041 ns	0.072
mean economic occupational status	-0.077 ns	0.078
absolute economic status difference	0.051 ns	0.047
wife higher economic status	-0.064 ns	0.070
mean cultural occupational status	0.057 ns	0.079
absolute cultural status difference	0.057 ns	0.054
wife higher cultural status	0.147 *	0.063
church: none	-0.194 ***	0.059
church: none/Catholic	-0.288 ***	0.088
church: none/Protestant	0.008 ns	0.096
church: Catholic	-0.004 ns	0.063
church: Catholic/Protestant	-0.051 ns	0.145
church: Protestant	0.301 ***	0.086
church: other homogamous	0.412 *	0.171
church: other mixed	-0.184 ns	0.121
ethnicity: Dutch	-0.019 ns	0.087
ethnicity: foreign	0.240 ~	0.123
ethnicity: Dutch/foreign	0.122 ns	0.093
ethnicity: mixed foreign	-0.343 ~	0.208
mean economic status origin	-0.021 ns	0.075
absolute economic origin difference	0.029 ns	0.047
wife higher economic origin	-0.075 ns	0.064
mean cultural status origin	-0.064 ns	0.084
absolute cultural origin difference	-0.025 ns	0.053
wife higher cultural origin	-0.014 ns	0.064
constant	-0.044 ns	0.337

Source: Divorce in the Netherlands (SIN98).

Note: ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . N=17,592 records. Church and ethnicity: deviation to overall model contrast.

the average level of education of the spouses, the longer they postpone the birth of their first child. Finally, if the wife has a higher cultural status than her husband, the probability of childbirth is increased. I do not have a clear explanation for the latter effect, but it might be that these people deviate strongly from the traditional division of labour or that they are more likely to use day care facilities for their children.

#### **4.6 Results: explaining heterogamy effects**

The next step in the analysis is to explain the relationship between heterogamy and divorce by lack of support for the marriage by the social environment and differences of opinion between the spouses. Before looking at those models, however, I address the question whether the heterogamy characteristics have a positive effect on the extent of lack of support and of differences of opinion. For, if lack of support and differences of opinion are to form an interpretation of the relationship between heterogamy and divorce, then heterogamy has to have an effect on the lack of support from the social environment and the differences of opinion between spouses. As indicated in the method section, I used OLS regression for this.

##### *4.6.1 Effects of heterogamy on the explanatory variables*

The results of the OLS regression models for lack of support by the social environment and differences of opinion between the spouses are presented in Table 4.7. I found significant effects indeed. Couples who marry young experience less support from their social environment and more differences of opinion between themselves. Apparently, parents and the social network have their doubts when a couple decided to marry young. Also, the partners themselves are, on average, less mature and they may not know each other well enough, resulting in more disagreements. The effects show that couples who differ in age are less supported by their environments and experience more discord between each other, as could be expected. The wife being older softens this effect, contrary to what could be expected, but because of the positive effects of the absolute age differences, lack of support and differences of opinion are still possible explanations of the relationship between age heterogamy and divorce.

Educational differences and the wife having a higher education leads to more lack of support from the social environment and – with respect to the effect of a more highly educated wife – to more differences of opinion between the spouses. Both lack of support and differences of opinion can be considered possible explanations for the relationship between the asymmetric heterogamy effect which I found concerning the level of education on the divorce risk.

Heterogamy with respect to social status, both economically and culturally, does not have any significant effects on lack of support for the marriage or differences of opinion between the spouses. This means that there can be no explanation of the effect of status heterogamy on divorce by lack of support from the social environment or by discord between the spouses.

Without describing the relationship in great detail, it can be seen that religious heterogamy also promotes lack of support for the marriage by the social environment. A significant negative effect on lack of support can be found for homogamous Protestant couples, as well as significant positive effects for several mixed combinations. This does not go for mixed non-

Table 4.7 OLS regression on the cross-sectional data of lack of support from the environment and differences of opinion between spouses on the predictors in the event history model

model variables	lack of support		differences of opinion	
	b	s.e.	b	s.e.
year of marriage-1943	-0.060*	0.023	0.050*	0.023
year of marriage squared	0.000**	0.000	-0.000ns	0.000
average age at marriage	-0.026***	0.006	-0.020***	0.006
absolute age difference	0.035***	0.007	0.018*	0.007
wife older (at least by 1 year)	-0.204***	0.046	-0.300***	0.045
mean education (years)	0.017ns	0.011	-0.008ns	0.011
absolute educational difference	0.021*	0.009	0.008ns	0.009
wife higher education	0.155**	0.054	0.306***	0.053
mean economic occ. status	-0.013ns	0.057	-0.004ns	0.057
abs. economic status difference	-0.000ns	0.036	0.024ns	0.035
wife higher economic status	0.059ns	0.053	0.007ns	0.052
mean cultural occupational status	-0.065ns	0.059	0.011ns	0.058
absolute cultural status difference	0.050ns	0.041	-0.032ns	0.041
wife higher cultural status	0.008ns	0.048	0.023ns	0.047
church: none	reference		reference	
church: none/Catholic	0.166*	0.073	0.101ns	0.031
church: none/Protestant	0.104ns	0.085	0.069ns	0.083
church: Catholic	-0.053ns	0.054	-0.067ns	0.053
church: Catholic/Protestant	0.257*	0.128	0.123ns	0.125
church: Protestant	-0.194*	0.076	-0.124~	0.075
church: other homogamous	-0.235ns	0.150	-0.303*	0.149
church: other mixed	0.130ns	0.103	0.141ns	0.102
ethnicity: Dutch	reference		reference	
ethnicity: foreign	-0.159ns	0.110	0.073ns	0.110
ethnicity: Dutch/foreign	0.141**	0.055	0.064ns	0.054
ethnicity: mixed foreign	0.026ns	0.180	0.016ns	0.182
mean economic status origin	-0.084ns	0.055	-0.020ns	0.054
abs. economic origin difference	0.020ns	0.034	0.067*	0.034
wife higher economic origin	0.021ns	0.049	-0.031ns	0.049
mean cultural status origin	0.041ns	0.062	0.044ns	0.061
absolute cultural origin difference	0.036ns	0.040	-0.014ns	0.039
wife higher cultural origin	-0.020ns	0.050	-0.005ns	0.049
constant	2.196*	0.875	-1.771*	0.866
R <sup>2</sup> (adjusted R <sup>2</sup> )	0.061	(0.048)	0.084	(0.072)
N	2254		2248	

Source: Divorce in the Netherlands (SIN98).

Note: ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . Church, ethnicity: indicator contr.



church member/Protestant marriages, but, as discussed above, this combination did not show heterogamy effects to be explained, anyway. With respect to differences of opinion between husband and wife, I can throw doubt on effects of religious heterogamy: there are hardly any significant effects. Therefore, lack of support is a possible explanation for the relationship between religious heterogamy and divorce, whereas differences of opinion are not.

For ethnic differences, I did not find significant effects on differences of opinion, but I did on lack of support by the social environment. Dutch/foreign mixed marriages are significantly more disapproved of by their environment than homogamous Dutch and foreign couples. So, lack of support is a possible explanation for the relationship between ethnic heterogamy and divorce.

With respect to heterogamy of social origin, there is only one significant effect, namely of economic status of origin on differences of opinion. So only spousal differences of opinion may be an explanation for the relationship between heterogamy with respect to economic status of origin and the risk of divorce.

In these models, the marriage cohort was also controlled by including the year of the marriage and its square. Lack of support from the environment decreases, but this decrease slows down. This can be seen from the fact that the relationship between the year of marriage and lack of support describes a U-shaped relationship, in which the minimum will not be reached during the period under investigation.<sup>11</sup> Apparently, social environments in the Netherlands are becoming more accepting and supportive towards marriages in general, controlling for all forms of heterogamy. The quadratic parameter is not significant for the statistical relationship between year of marriage and differences of opinion. The linear term is positive. This indicates that, controlling for all forms of heterogamy, differences of opinion are increasing over time between marriage partners in the Netherlands.

#### *4.6.2 Heterogamy effects explained?*

Now, I can turn to the logistic regression models 4 to 6 in order to see to what extent heterogamy effects on the divorce risk are explained by lack of support for the marriage by the social environment and by differences of opinion between the marriage partners. The parameters of explanatory models 4 to 6 are shown in Table 4.3b. The parameters of model 3 are repeated from Table 4.3a in order facilitate comparison. In model 4, lack of support from the social environment was added as an explanatory variable; in model 5, differences of opinion between the spouses were added; in model 6, both explanatory variables were added together. We can see that both lack of support from the social environment of the choice of the marriage partner and differences of opinion between the spouses increase divorce risks considerably. The effect of differences of opinion is about twice as large as the effect of lack of support.

Having a higher divorce risk after marrying young is likely to arise partly from having more differences of opinion within the marriage or experiencing more lack of support from the environment. The effect decreases somewhat, especially if both explanatory variables are added to the model. I set out, though, to explain heterogamy effects. The effect of age heterogamy decreases when adding the explanatory variables. When comparing models 3, 4, 5 and 6, it becomes clear that lack of support, in particular, is partially responsible for the relationship between age differences and the risk of divorce. A way of presenting the level of explanation is by indicating the percentage of the relationship which is explained. In the extended model, the effect

of absolute age difference is 0.039. In model 4, adding lack of support by the environment, this is reduced to 0.027, a reduction of 31 percent. The reduction by adding differences of opinion is 15 percent and the total reduction by adding both is 33 percent. These percentages of explained relationships are printed in Table 4.8. This table also shows the effects as found in the extended model in Table 4.3 and indicates which hypotheses are corroborated.

The asymmetry effect of educational differences is explained by both lack of support from the environment and differences of opinion within the married couple. The extended model 3 shows that couples in which the wife has a higher education than her husband have a higher divorce risk. This effect is no longer significant after controlling for either lack of support or differences of opinion or both. Also the percentages of the relationship explained, shown in Table 4.8, indicate that both lack of support and differences of opinion diminish this asymmetry effect by 42 percent and 69 percent, respectively, and by 84 percent in total.

The unexpected negative effect of couples in which the wife has the highest cultural job status cannot be explained by lack of support and differences of opinion: after controlling, the effects are at least as large as before and status differences do not have an effect on either lack of support or differences of opinion, as indicated above. The positive asymmetry effect of economic heterogamy on the divorce risk in model 1 was already explained by controlling the other types of heterogamy in model 2.

The effects on divorce found for being religiously mixed are reduced by differences of opinion and lack of support for the marriage to a large extent. This can be seen in Table 4.5. In model 4 and 5, the heterogamy effects of having a mixed non-church member/Catholic marriage or a Catholic/Protestant marriage are no longer significant at a five percent level after controlling for differences of opinion within the marriage or lack of support for the marriage by the social environment, respectively. Controlling both in model 6 even makes the significance level rise above 10 percent.<sup>12</sup> Only the diverse category of otherwise mixed couples remain with a significantly higher divorce risk than any homogamous category. Both lack of support from the environment and spousal discords seem to be highly responsible for the fact that non-church member/Catholic marriages and Catholic/Protestant marriages have higher divorce risks. Both explanatory variables reduce the effect to an almost equal degree. This can also be concluded by looking at the explained percentages in Table 4.8. These are computed as follows. I computed the minimal percentage by which the probability of divorce for a mixed category (compared to average) exceeds the probability of divorce in both the category of the husband and the category of the wife (compared to average). Next, I computed how much of this percentage was explained by adding the explanatory variables. The exceeding divorce risk for non-church members married to Catholics decreases by 25 percent when lack of support by the environment is controlled, by 22 percent when differences of opinion are controlled and by 38 percent when both are controlled, as can be seen in Table 4.8. The heterogamy effect of Catholic/Protestant mixed marriages decreases to about the same extent, namely by 22, 22 and 37 percent, respectively. The reduction of the heterogamy effect of other mixed marriages is 13 percent by lack of support, 17 percent by differences of opinion and 22 percent by both simultaneously. However, with respect to religious heterogamy, I can only speak of an explanation of the heterogamy effect by lack of support. Before, I demonstrated that religious heterogamy has no effect on differences of opinion (Table 4.7).

The only significant effect among the discerned ethnic categories, the negative effect of homogamous Dutch couples on divorce risk, is reduced by lack of support and differences of

Table 4.8 Presence of heterogamy and asymmetry effects and percentages of relationship explained

model	predictions	3 (extended)	4 (support)	5 (opinion)	6 (both)
variables	hypothesis: direction	effect, hypothesis corroborated	% explained	% explained	% explained
absolute age difference	heterogamy: +, specialization: 0	+ heterogamy	31	15	33
wife older (at least by 1 year)	asymmetry: +	0 (none)			
absolute educ. difference	heterogamy: +, specialization: 0	0 specialization			
wife higher education	asymmetry: +	+ asymmetry	42	69	84
absolute economic status difference	specialization: 0	0 specialization			
wife higher economic status	asymmetry: +	0 (none)			
absolute cultural status difference	heterogamy: +, specialization: 0	0 specialization			
wife higher cultural status	asymmetry: +	- (none)			
church: none/Catholic	heterogamy: +	+ heterogamy	25	22*	38
church: none/Protestant	heterogamy: +	0 (none)			
church: Cath./Protestant	heterogamy: +	+ heterogamy	22	22*	37
church: other mixed	heterogamy: +	+ heterogamy	13	17*	22
absolute economic origin difference	heterogamy: +	+ heterogamy	13*	11	16
wife higher economic origin	(no asymmetry: 0)	0 no asymmetry			
absolute cultural origin difference	heterogamy: +	0 (none)			
wife higher cultural origin	(no asymmetry: 0)	0 no asymmetry			

Source: Divorce in the Netherlands (SIN98).

Note: Third column indicates which hypothesis is corroborated; (none) indicates that none is corroborated. Reduction marked with an \* does not constitute an explanation because the type of heterogamy in question does not have an effect on the explanatory variable in question. N=37,399 records based on 2,261 couples, in explanatory models: 37,134 records based on 2,241 couples. Explained percentages for heterogamous categories of church affiliation are computed as follows. The minimal increase in probability of divorce compared to the relevant reference category of homogamous marriages (as explained in the method section) is computed. The ratio of this increase for the explanatory models compared to this increase in model 3 is given as percentage of the relationship that is explained.

opinion to about the same extent, but remains significant. This does not clearly constitute an example of explanation of heterogamy by lack of support or differences of opinion, but it is an indication of a possible explanation. Since there were no significant effects of ethnic heterogamy on differences of opinion, the explanation would be on account of lack of support for the marriage by the social environment. It is not possible, though, to make the correct comparisons to compute the percentage of the relationship explained.

The positive effect of heterogamy with respect to economic origin, as well as the mean cultural status of both fathers, does diminish very slightly if lack of support from the environment or differences of opinion between husbands and wives are controlled. Since absolute economic origin differences only have a significant effect on differences of opinion, as indicated above, there may only be a little explanation of the absolute economic origin difference effect by differences of opinion, but this is negligible. Expressed as percentage of the relationship explained, this amounts to 11 percent explanation by differences of opinion.

Apparently, lack of support from the social environment for the choice of the spouse and differences of opinion between the spouses do form a partial and sometimes substantial explanation for the higher divorce risks for mixed marriage couples. This does not apply to the asymmetry effect of economic status differences of the spouses, since that effect was caused by other forms of heterogamy, like being mixed with respect to level of education. For ethnicity there are only indications of heterogamy effects and explanations because I do not have enough cases to make the proper comparisons. In sum, this means that the *explanatory conflict hypothesis* and the *explanatory support hypothesis* are supported in several instances but not overall.

I tried to specify these explanatory hypotheses with the *ascription explanation hypothesis* and the *achievement explanation hypothesis*. This is supported to a limited degree. Based on these hypotheses, I expected lack of support – and not differences of opinion – to be responsible for a part of the effects of religious and ethnic heterogamy and absolute economic and cultural status origin differences. In fact, religious heterogamy effects were reduced by both explanatory variables to about the same extent but were only really explained partly by lack of support, since religious heterogamy affects lack of support, but does not affect differences of opinion (Table 4.7). The little explanation of absolute economic origin difference can only go through differences of opinion, since this type of heterogamy does not have an effect on lack of support by the environment (Table 4.7).

Furthermore, I expected differences of opinion – and not lack of support – to be responsible for a part of the effects of absolute educational differences and own economic and cultural social status heterogamy; but those effects were absent, in accordance with the *specialization hypothesis*.

Finally, asymmetry effects – the wife being older or in a better educational or social status position than her husband – were expected to be explained by both lack of support and differences of opinion. This is correct, but there is only one asymmetry effect to be explained, being that of a wife with a higher education than her husband. This effect is explained almost completely by both lack of support and differences of opinion, and by both to a high degree. So, this distinction between ascription and achievement on one's own merits can be made when it comes to explaining heterogamy effects, but not very clearly.

We have to bear in mind that real path models are hard to establish when using logistic regression. With dichotomous dependent variables, like divorce risk, we are dependent on logistic

models. Testing explanatory models by adding variables is difficult in logistic models and such tests are more conservative than desired, because effects decline less easily when controlling other variables (Long 1997).

#### **4.7 Conclusion and discussion**

In this chapter, I tested hypotheses about the effects of heterogamy at the beginning of the marriage on divorce and the explanation of the effects. First, this adds to research on heterogamy in the Netherlands. Does the fact that people prefer to marry someone who is socially alike imply that people who choose not to do so have less stable marriages? Secondly, by doing this research, I have filled a lack of multivariate testing of heterogamy effects on divorce worldwide. And thirdly, I have supplemented previous research by assessing the explanation of the effects.

The first question of this chapter was whether heterogamy leads to divorce. I hypothesized that the answer would be yes when it comes to heterogamy with respect to ascription characteristics of religious denomination, ethnic background and social origin (that is: the social status of the fathers of the spouses) and also to some degree with respect to age and level of education. This was tested by applying event history models to the SIN98 data file. These effects are indeed present when there is no mutual control for different forms of heterogamy. For educational differences, it is only present if the wife is better educated than her husband. The effects of ethnic heterogamy are only provisional, because I could not make every comparison due to a lack of sufficient different mixed and homogamous categories for several ethnicities. Chapter 2 provided us with strong, though also provisional, indications that differences in nationality go together with higher divorce risks.

In extended multivariate models, taking all of the forms of heterogamy into account, we could see whether the effects of all of the forms of heterogamy discerned are persistent. Although the strength of some effects decreased somewhat, most effects which were present remained clearly present. Overall, I can say that many heterogamy effects were found: mixed couples generally have a higher divorce risk than homogamous couples. This confirms findings in Chapter 2, where heterogamy with respect to age, religion and nationality was positively associated with the risk of divorce.

Becker's (1981) theory predicts stability in the case of task specialization if the husband earns the money and the wife takes care of the housework. This brings about economic status differences between husband and wife. In my *specialization hypothesis* based on Becker, therefore, I predicted the absence of the heterogamy effect or even a negative effect of status heterogamy on divorce. The fact that the effect is indeed absent confirms the expectations.

An extra hypothesis, based on advantages of task specialization and acceptance by the social environment, was formulated to answer the first question. It predicted that there would be an asymmetry effect for heterogamy of age, level of education and social status. This prediction implies that divorce risks are increased by a wife who is older, has a higher education or a higher social status compared to her husband. I did not find this asymmetric effect for age, but I did find it for educational differences and own economic occupational status. The economic status asymmetry effect disappears when other forms of heterogamy are controlled for. Note that in

Chapter 2, that were indications that an asymmetric effect for age was present. The absence of this effect here cannot only be attributed to the use of different data and the different time span, but also to different control variables and the fact that in Chapter 2, we were limited to an analysis of the risk of divorce after specific periods of time in marriage.

An additional finding from my analyses showed that heterogamy does not influence childbirth. The probability of having the first child and the timing of that event are not affected by any of the types of heterogamy under investigation in this chapter, except maybe for religiously mixed couples in which at least one of the spouses is neither a non-church member, nor a Catholic, nor a Protestant.

The second question was to be answered by the *explanatory conflict* and *support hypotheses*. This question asked for an explanation of heterogamy effects and the hypotheses stated that heterogamy leads to a raise of the divorce risk because the spouses have more differences of opinion and their relationship is less approved of by their social environment. Several forms of heterogamy in my analyses indeed appeared to have effects on differences of opinion and even more on lack of support for the choice of the marriage spouse by the social environment. The effects of differences of opinion and lack of support on divorce are also clearly present. The answer to the explanatory question is that some explanation is indeed given by differences of opinion and social disapproval. When taking them into account, the effects of age heterogamy, most of religious heterogamy, maybe ethnic heterogamy and the effect of a wife being more highly educated than her husband lose significance or become smaller. The effect of differences in economic social origin on divorce is related to differences of opinion and lack of support only to a limited extent and not always causally. The effect of the spouses' own economic status heterogamy was already explained by other forms of heterogamy.

The distinction between ascription and achievement on one's own merits can be made when it comes to explaining heterogamy effects, but not very clearly. This means that the explanation, if present, of characteristics related to ascription is more often accounted for by a lack of support by the social environment, whilst the explanation, where present, of characteristics related to achievement on one's own merits, is more often accounted for by differences of opinion between spouses. This was predicted by the *ascription explanation hypothesis* and the *achievement explanation hypothesis*.

Something caught my eye when making the distinction between ascription and achievement. Even though a wife being better educated than her husband has a positive effect on the divorce risk, it is striking that inherited characteristics of ascription, such as religion, have such large effects on the risk of divorce. Also, status and differences in status play a more important role with respect to the divorce risk when measured from parental characteristics than when measured from the characteristics of the spouses themselves. Apparently, characteristics of ascription are still important when it comes to the stability of a marriage.

I may conclude that certain forms of heterogamy do indeed lead to a higher divorce risk and that this is partly caused by the fact that the spouses disagree on certain subjects, on the one hand, and by lack of emotional support from family, friends and others, on the other hand. Future research may look for other explanations for the relationship between heterogamy and divorce or may try to find extended measurements.

Besides this, cohort or period comparisons can be made to detect trends in the importance of different forms of heterogamy as to the probability of getting divorced. This is also important in order to find trends with respect to the relative importance of characteristics of ascription compared to characteristics of achievement. I found a strong relative importance of inherited characteristics. Trends may shed more light on this issue.

Furthermore, in a next step, analyses should be even more dynamic than the ones in this study. Status differences and church denomination have been measured at one point in time, but they can change during marriage. Marriage partners can grow towards each other or they can grow apart. This will yield a more complete image of the effects of heterogamy on divorce. Especially with respect to testing Becker's theory, it is important to have measurements across the marriage course, since differences in status due to differences in investment in human capital as a result of the division of labour come about to a large extent during marriage. So, if marriages are followed through time, as in my present analyses, changes of the characteristics should be taken into account. Also, changes in the effects over the course of marriage and over time were not investigated in this chapter. These more dynamic analyses will be conducted in the next chapter.

## **Notes**

1. A shortened and adapted version of this chapter was published in Dutch in *Mens & Maatschappij*, 75 (4), pages 298-319. Co-author of that article was Paul M. de Graaf (Janssen & De Graaf 2000). Several earlier versions of this paper were presented at the 4th ESA Conference of Sociology 'Will Europe Work?' Amsterdam, The Netherlands, 18-21 August 1999; at the Annual Conference of the British Sociological Association, York, United Kingdom, 17-20 April 2000; at the Sociaal-Wetenschappelijke Studiedagen, Amsterdam, the Netherlands, 3 May 2000; at the Conference at the 50th anniversary of RC28, ISA Research Committee on Social Stratification, Libourne, France, 11-14 May 2000.
2. If a certain group is very isolated, but becomes more integrated, then this process of integration and the resulting emancipation can be considered as growing openness towards this group. See for example the Jewish population in Europe before the second world war (Ultee & Luijkx 1996, 1998).
3. We will not go into the process of how conflict leads to a higher risk of divorce. The risk of divorce is raised if the ratio of positive versus negative affect between spouses goes too far in the direction of negative affect (Gottman 1994). It is sufficient here to note that more conflict implies more negative affect and less positive affect which leads to higher divorce risks.
4. De facto, I also looked at relationships of people cohabiting without being married which also occur in the sample by chance in any of the three sub-samples mentioned. Note that persons who cohabit for the first time are missing. In the municipalities they are in the marital status category of the never married and, therefore, were not sampled.
5. Of course, taking childbirth at any time during marriage as a time constant variable is also incorrect, since marriage duration affects childbirth during marriage (e.g. Yamaguchi 1991: 26).
6. The combination of 'other' mixed couples has to be compared to all homogamous combinations and, therefore, has four comparisons and significance levels. For in this category one of the spouses may be a member of any discerned denomination.

## Chapter 4

7. The presence of children was not included in that analysis, since using it makes no sense in a non-time-dependent model: it is unknown whether divorce is influenced by the children or whether the couple had children because they did not divorce.

8. This was computed on one more digit than given in Table 4.4.

9. In practice, using SPSS, one reference category has to be assigned to let the algorithm run. To obtain the correct parameter value and standard deviation of the omitted category, the model can be recomputed with another reference category.

10. Apart from a theoretical motive to investigate these interaction effects of heterogamy and the presence of children, there is also relevance to the study of changes over the course of marriage. The presence of children indicate a certain stage in marriage. Hence, the interaction effects of heterogamy and the presence of children on the risk of divorce will be studied more dynamically in the next chapter on trends and changes over the course of marriage.

11. Computing the year with minimal lack of support on as many digits as possible amounts to the year  $1943 + 70 = 2013$ .

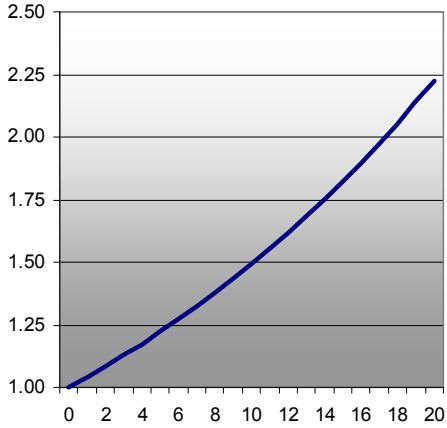
12. Significance levels are used here instead of effect sizes, because so many different comparisons of categories have to be made to establish the size of the religious heterogamy effect. Obviously, significance levels depend on the sizes of both the effects and the standard errors. The rise of the significance levels here can be attributed fully to changes in effects. As can be seen in Table 4.3b, the standard errors are completely stable across models.



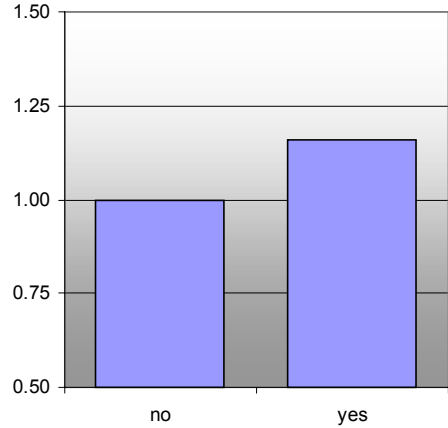
Does heterogamy increase the risk of divorce and why?

Appendix 4.1 Graphical representation of the significant heterogamy and asymmetry effects in model 1 in Table 4.3a: multiplications of odds ratios (y-axis) against heterogamy characteristics (x-axis) - part 1: achievement

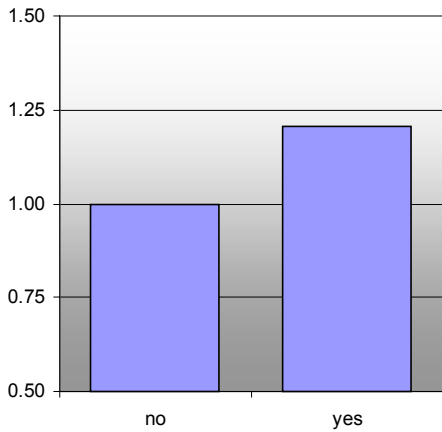
a: absolute age difference (y=1 if age difference=0)



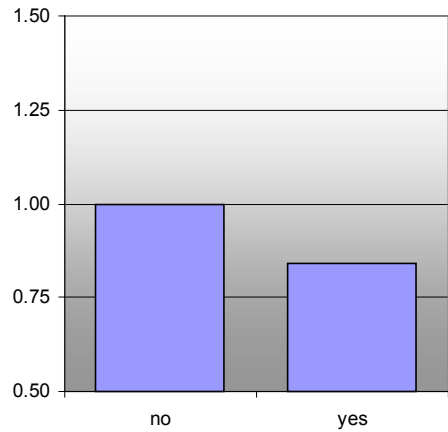
c: wife higher economic status (y=1 if no)



b: wife higher educated (y=1 if no)



d: wife higher cultural status (y=1 if no)

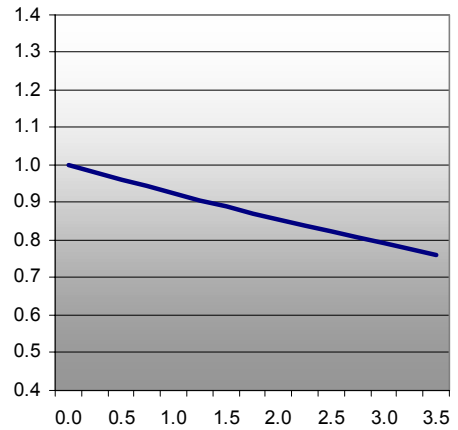
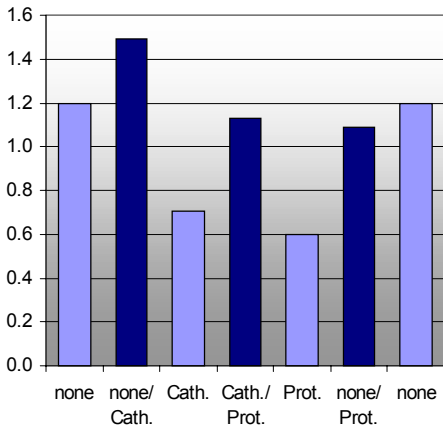


Chapter 4

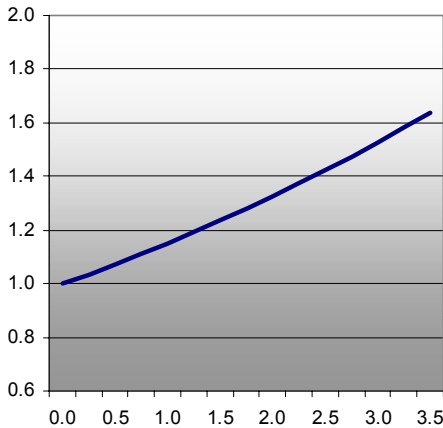
Appendix 4.1 Continued: Graphical representation of the significant heterogamy and asymmetry effects in model 1 in Table 4.3a: multiplications of odds ratios (y-axis) against heterogamy characteristics (x-axis) - part 2: ascription

e: church denomination (heterogamous categories depicted amidst the homogamous categories of husband and wife; y=1 denotes the average marriage)

g: absolute cultural origin difference (y=1 if difference=0)



f: absolute economic origin difference (y=1 if difference=0)



# 5 Changing effects of heterogamy on the risk of divorce?

## A dynamic analysis of SIN98 over the life course and over cohorts.<sup>1</sup>

*In this chapter, I have furthered the analyses in the previous chapter by using more dynamics and by looking into trends and changes, both over the course of marriage and over historical time. The same data set was applied, namely SIN98, a survey among married, divorced and remarried persons in the Netherlands. Over the course of marriage, status differences appear to increase slightly, whilst religious heterogamy clearly occurs less often. Over historical time in the second half of the 20<sup>th</sup> century, economic status differences between spouses have declined, whilst differences in educational level and cultural status have seen periods of rise and fall, and inherited characteristics like religion and ethnicity show rising levels of heterogamy. Despite these trends, the effects of heterogamy which I found in the previous chapter hardly change over the course of marriage or over historical time. There is, however, one clear directional effect of religious changes during marriage: if initially homogamous couples grow apart with respect to religion, their divorce risk rises.*

### 5.1 Introduction and research questions

In the previous chapter, I showed the influence of 6 types of heterogamy on the risk of divorce. Positive effects of heterogamy on divorce were found for age differences, a wife being better educated than her husband, church affiliation and economic status differences of parental origin. Some of the effects were explained in part by lack of support from the social environment and conflict between spouses.

In the previous chapter, all marriage years and durations were taken together. Even though time and duration were controlled in the models, those models assumed that heterogamy was constant across the marriage and that the effects of heterogamy were constant over time and over the course of marriage. In Chapter 3, I already stressed the fact that effects of heterogamy on divorce over the course of marriage is not necessarily constant. Secondly, I emphasized that during the period under investigation, changes have taken place in society which may have altered the effect of heterogamy on divorce across time. Therefore, the discrete time event history models of the previous chapter have now been extended. I will continue to examine heterogamy with respect to age, level of education, social status of the spouses (both economically and culturally), church affiliation, ethnicity and social origin. Social origin is defined as the social status of the fathers (both economically and culturally). In this chapter, I will set out to determine trends in time and changes over the course of marriage.

I have derived the following research questions from the above. Firstly, there is a question about changes over the course of marriage which contains three sub-questions. The second question concerns trends over time.

*1a. Are heterogamy effects on divorce different if heterogamy is measured dynamically over the course of marriage?*

1b. Does adaptation, in the sense of growing towards each other, lead to a decreasing divorce risk and alienation, in the sense of growing apart, to an increasing divorce risk?

1c. Do heterogamy effects increase or decrease during marriage?

2. Can any trends be discerned over the course of time with respect to the effects of heterogamy on divorce?

In the next section, the theoretical framework of Chapter 3 will be extended to cover the several forms of heterogamy now under investigation. This constitutes a provisional answer to the research questions. These answers will then be empirically tested by extending upon the analyses of Chapter 4 using data of SIN98. After that, I will discuss the results in the concluding section.

## 5.2 Theory and possible answers

In this section, I will develop hypotheses on changes during marriage in the influence of heterogamy on divorce and hypotheses on trends over time with respect to the effects of heterogamy on divorce.

### 5.2.1 Changes over the course of marriage

In Chapter 3, I derived some hypotheses about the effects of heterogamy on divorce from the theory of *growing acceptance* and that of *accumulated irritations* (Manting 1993, 1994; Trussell, Rodriguez & Vaughan 1992). These theories were originally formulated with respect to general patterns of divorce risk over the course of marriage. I reasoned that they are logically even more suitable for my research problem of the effect of heterogamy on divorce. In Chapter 4, I predicted and demonstrated that the effects of heterogamy on divorce partly come about by the fact that mixed couples cannot get along very well. They have different preferences and expectations in life. Besides, the social environment of parents, friends and others will be less accepting, and hence, less supportive of the marriage of a mixed couple.

Surviving marriages, even the heterogamous ones, have proved that they can handle their situation. Thus, the *hypothesis of growing acceptance* predicts that the positive effects of heterogamy on divorce will decline during marriage. The *hypothesis of accumulated irritations*, however, predicts that spouses will get more and more fed up with their differences, resulting in an increase of the effects of heterogamy on divorce over the course of marriage. An additional hypothesis predicts an *inverse U-shape* pattern in which the effects of heterogamy on divorce first increase and then decline.

Findings in Chapter 3 are in accordance with a pattern of growing acceptance, involving declining effects, to a small extent. The pattern was not very clear. We have to bear in mind that in Chapter 3, the analysis was limited to age and two inherited characteristics of ascription, namely religion and nationality. Besides, the life course perspective was limited and it was not possible to do full marriage course analyses due to practical limitations. Now I can build on this by following couples over their whole course of marriage with information on six types of heterogamy using the SIN98 data set.

Besides these methodological advances, I will also elaborate on Chapter 3 in a theoretical way. For this, I will return to the distinction between inherited characteristics of ascription and meritocratic characteristics of achievement used in the previous chapters. The *hypothesis of growing acceptance* will be used as a starting point. We can expect both that the spouses themselves will become more accepting of each other and that the social environment will become more accepting of the marriage. However, even though they do not always succeed, it is reasonable to expect that the couples themselves will put more effort into accepting each other than their social environment will – after all, it is their marriage.

From this, I can predict that the effect of heterogamy regarding characteristics of ascription – church affiliation, ethnicity and social origin – on divorce will decrease to a limited extent over the course of marriage. Apart from heterogamy effects of absolute differences, I also discerned asymmetry effects in the previous chapter. These are effects of the direction in which the difference goes, namely whether the risk of divorce is raised by a wife who is older, more highly educated or in a better status position than her husband. Asymmetry effects are more connected to acceptance, as discussed in Chapter 4. Therefore, the same expectation of a slight decrease of the effect over the course of marriage can be made for asymmetry effects. I call all this *the ascription and asymmetry part of the growing acceptance hypothesis over the marriage course*.

Characteristics of achievement are more connected to the spouses themselves than to their social environment. That is why I expect an even more pronounced decrease over the course of marriage of the effects of heterogamy concerning level of education, spousal social status and age on the risk of divorce. This is the *achievement part of the growing acceptance hypothesis over the marriage course*.

Changes over the course of marriage do not need to be linear with regard to marriage duration in years. Marriages will go through different stages of the family cycle. The presence of children in the family can be seen as a clear distinguishing period in this cycle. As I had already found in the previous chapter, the presence of children under 13 years of age lowers the risk of divorce. The presence of children, therefore, can also be expected to dim the effects of differences between the spouses.<sup>2</sup> Hence, the above hypotheses concerning changes over the course of marriage can also be formulated in terms of changes over the family cycle: effects of heterogamy can be expected to decrease during the stage in which children are present in a marriage.

For a correct test of all these hypotheses, I took changes of heterogamy into account for so far as they were available in the data. This means that I could also make predictions about changing heterogamy within marriages and the probability of divorce. I will test the *growing together-growing apart hypothesis* which postulates that married couples who adapt to each other by growing towards each other have lower divorce risks, whereas couples who become alienated from one another by growing apart have higher divorce risks.

### 5.2.2 Changes over historical time

In Chapter 3, two types of changes were referred to with respect to changes in society over time. The first type of change concerns the trend towards individualization and secularization and the accompanying shift in norms and values (SCP 1994). The second type of change, which is related to the first, is one towards a society in which positions are less often acquired by characteristics ascribed by social origin and increasingly by characteristics achieved on one's own merits (Blau &

Duncan 1967). The latter change has been taken to account for rising or stable levels of educational homogamy alongside declining levels of homogamy regarding social origin (Forsé & Chauvel 1995, Uunk 1996). I will now apply it to the influence of heterogamy on divorce risks.

Both of the changes mentioned – individualization and secularization, and meritocratization – would lead one to predict the same for changes in the effects of heterogamy on the risk of divorce over time. The changes suggest that characteristics of social origin, characteristics inherited from the parents, have become less important, whereas personal characteristics of the spouses themselves which are not directly inherited from the parents have become more important. I will use the same distinction between ascription and achievement as already made in the previous chapters. Thus, I predict that the effect of differences between husband and wife regarding characteristics of ascription, namely religion, ethnicity and social origin, on the risk of divorce is decreasing and the effect of differences between husband and wife regarding age and characteristics of achievement, namely level of education and spousal social status, on the risk of divorce is increasing. These are *the ascription part* and *the achievement part of the trend hypothesis*.

### 5.3 Data and description of changes

#### 5.3.1 Data set

I used the same data for this chapter as in Chapter 4. In this way, I extended the analyses by including changes over the course of marriage and changes over historical time. Information about SIN98 (Kalmijn, De Graaf & Uunk 1999) as used here can be found in the previous chapter.

The operationalization of heterogamy in Chapter 4 was extended with dynamic variables for the analyses discussed in this chapter. This means that for characteristics of heterogamy for which I knew changes over the course of marriage, I included variables indicating the level of this type of heterogamy in each year during marriage instead of on the wedding day. The variables for which I could do this are: the age ratio, social status and religion.<sup>3</sup> Ethnicity and social origin cannot change, since they are measured as being the ethnic origin of the parents and social status of the fathers of the spouses and were asked about in general without specific point in time. The level of education can change, but it does not often do so during marriage. In this case, I have the problem that changes are only known for one spouse. Level of education, ethnicity and social origin, therefore, remained static in the analyses.

By using dynamic information on whether the husband and the wife are working during marriage, I was able to test hypotheses derived from Becker with regard to the division of labour more directly. Static information as used in the previous static chapter is not suitable for this direct test, because in many couples both spouses work until marriage, but this does not necessarily stay that way during marriage. Many wives, especially those married before the 1970s, stopped working when they got married. The dynamic information whether no, one or two spouses are working in a payed job (and which one) was used alongside and instead of status information. Dynamic information on labour histories, including social status histories, is restricted in the sense that full information is only available for the primary respondent. For the spouse, I only have information at the moment of marriage or cohabitation and after five years. I used the former as a proxy for the labour force situation in the first five years and the latter as a

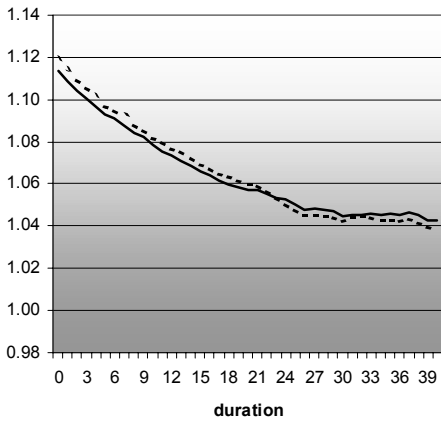
proxy for the time from five years after marriage until the end of the observation.

5.3.2 Description of changes over the course of marriage

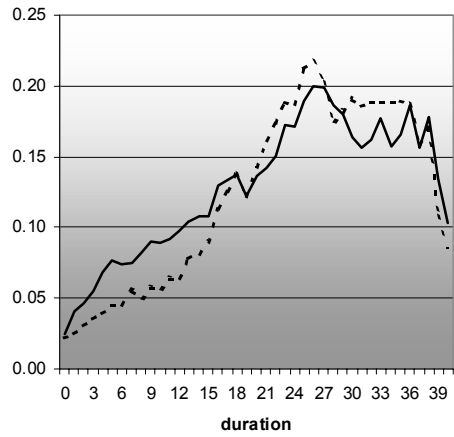
Since I now have dynamic information for some aspects of heterogamy, I can answer the question: what does the distribution of those types look like across the course of marriage? I have displayed

Figure 5.1 Changes in the level of heterogamy over the course of marriage, unweighted (solid lines) and weighted (dashed lines)

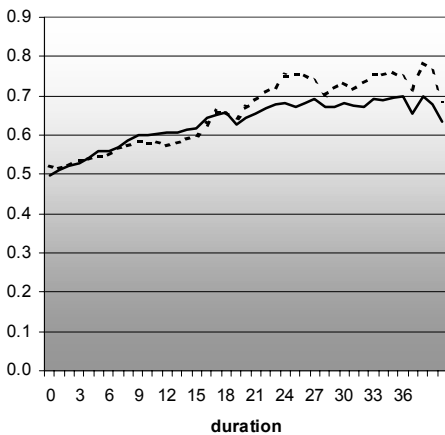
a: age ratio



c: cultural status difference



b: economic status difference



d: proportion heterogamy church affiliation

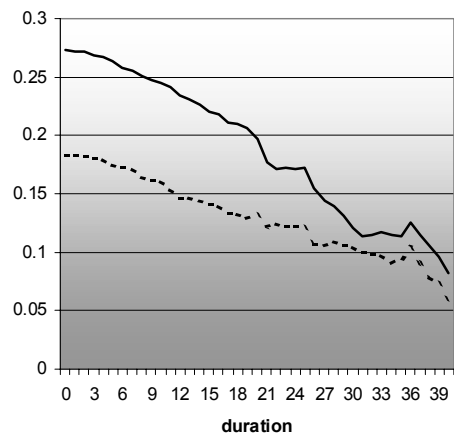
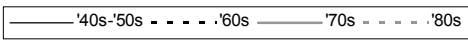
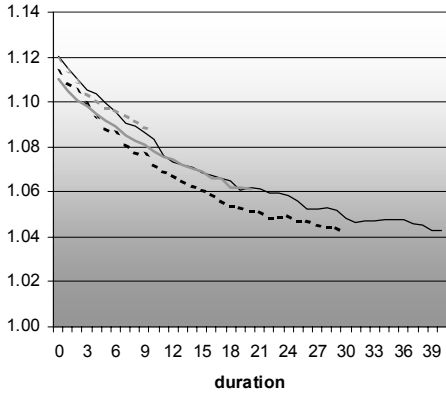
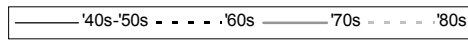
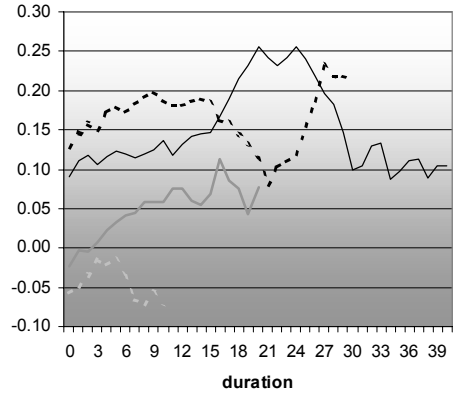


Figure 5.2 Changes in the level of heterogamy over the course of marriage broken down by marriage cohort, unweighted

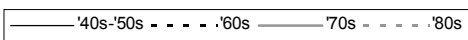
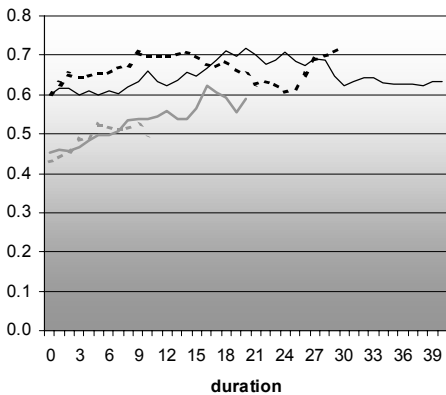
a: age ratio



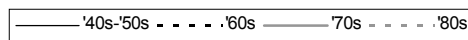
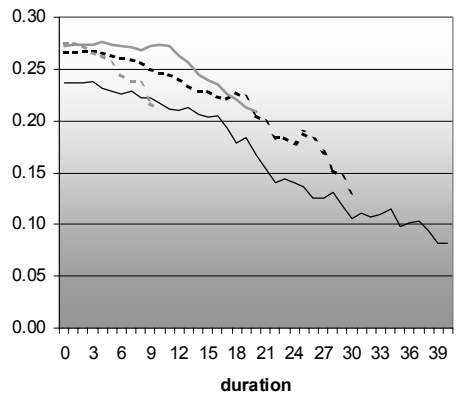
c: cultural status difference



b: economic status difference



d: proportion heterogamy church affiliation



the level of heterogamy over the course of marriage with respect to age, economic and cultural status and church affiliation for all marriages in the file together. The distinction between economic and cultural status was made in the previous chapter for theoretical reasons.

In Figure 5.1, the solid lines display unweighted levels of heterogamy, whereas the dashed lines represent numbers on which the same weight factor is applied as in the previous chapter. This weight factor restores the proportion of characteristics in the population aged between 30 and 75 years old, from which the sample was taken. In the first place, the weight corrects the



proportions of persons who are in their first marriages, of persons who are divorced and now without a partner, and of persons who are divorced and remarried. Furthermore, the division of region, degree of urbanization, sex and age group corresponds to the division for the population between 30 and 75 years of age after applying the weight factor. The comparison of the solid and dashed lines in Figure 5.1 shows that some differences in the level of heterogamy, like a lower proportion of church heterogamy, occur after applying the weight factor. Altogether, the differences are not systematic and the general pattern is quite similar before and after applying the weight factor.

I also have to take into account the fact that I have relatively longer observations for older marriages, which are composed of older people. In other words, I can correct for marriage cohort to get a better image. That is why Figure 5.2 displays the changes in the level of heterogamy over the course of marriage for marriage cohorts in the 1940s and 1950s, the 1960s, the 1970s and the 1980s separately. For each marriage cohort, levels of heterogamy are given for durations for which I can follow all marriages in that specific cohort. In Figure 5.2, only non-weighted figures are displayed for reasons of clarity. Except for cultural status difference, the graphs look quite similar after controlling cohort.

Figures 5.1 and 5.2 are to be considered as mainly descriptive for first marriages of the 1998 population of 30 to 75 year old married, divorced and remarried persons. They clearly show how the levels of heterogamy in all marriages develop on average over the course of marriage. It is to be kept in mind that several factors play a role in the changes displayed in the figures. Both adaptation and alienation of spouses as well as drop out as a result of different divorce risks affect the patterns in Figures 5.1 and 5.2. To establish the effect of changes in heterogamy, I refer to the analyses which will follow later in this chapter.

The changes of the age ratio are displayed in panel A of Figure 5.1. Age ratio is used here, because it can change over the course of marriage, whereas absolute age differences stay the same. The use of the age ratio assumes that equal absolute differences are more important for divorce risks at lower ages, because those difference are then proportionally larger. Panel A shows that the age ratio drops over the course of marriage. This is natural, since the absolute age differences between spouses remain the same over the course of marriage, but they constitute a relatively smaller difference if age increases. For example, a 20 year old wife is only 80 percent as old as her husband aged 25. When the wife turns 45, the husband will reach the age of 50. Then, the wife's age is 90 percent of the age of her husband. Panel A in Figure 5.1 shows that, at the start of the marriage, the husband is about 12 percent older than his wife, on average. This level slowly drops. Controlling for cohort in Figure 5.2 leads to the same results per cohort.

Social status differences generally increase during marriage. Panels B and C show the level of status heterogamy on the economic and the cultural scale, respectively. The patterns are similar for unweighted and weighted data. During the first 25 years of a marriage, status differences go up. This is more clear for cultural differences than for economic differences, because cultural status differences between husband and wife are smaller to begin with, on average. This is due to the fact that there are relatively more couples in which the wife has a higher cultural status than there are couples in which the wife has a higher economic status compared to her husband, as we have seen in Table 4.1 in the previous chapter. After 25 years, the economic status heterogamy stays at a constant level, whereas cultural status heterogamy drops somewhat.

After controlling for cohort in Figure 5.2, the results with respect to economic status

heterogamy are quite similar with the exception of the 1960s. Marriages solemnized in the 1960s display a slight initial rise in the level of economic status differences between husband and wife. This is reversed already after about 15 years of marriage. After about 25 years, the level of heterogamy rises again. The results for cultural status differences are quite different after controlling for cohort in Figure 5.2. The rise in heterogamy followed by a decline occurred at different points in the marriage course for the several cohorts. For the 1960s, the decline is followed by a second wave of increase of differences in the third decade of the marriage. The short observation period of the 1980s displays little negative differences, which implies that, on average, marriages in the 1980s are composed of couples in which the wives have a slightly higher cultural status than their husbands.

The proportion of mixed couples with respect to church heterogamy drops over the course of marriage. Panel D in Figure 5.1 shows that the percentage of religiously mixed couples drops from about 27 at the beginning of the marriage to about 8 after 40 years. This drop goes from 18 to 6 percent for the weighted figures. The changes over the course of marriage look the same for the marriage cohorts separately, as can be seen in Figure 5.2.

Closer inspection teaches us that the proportion of couples who are homogamous church members is increasing, while the proportions of non-church members and mixed couples are decreasing over the course of marriage. This can be seen in Appendices 5.1 and 5.2 for unweighted and weighted data, respectively. Of course, these changes are related both to a change in the composition, which is related to different divorce risks for types of homogamous and heterogamous couples, and to the fact that I have relatively longer observations for older marriages, which are composed of more church members and less non-church members. What the exact effect of changing heterogamy is on divorce can only be answered with multivariate event history analysis. This applies to all types of heterogamy here.

### 5.3.3 Description of changes over time

To illustrate changes over time, I will look at how heterogamy changes over historical time. Since heterogamy changes over the course of marriage, as shown above, it is necessary to look at cohort differences at one specific duration. Hence, I selected the level of heterogamy at the start of the marriage. In this way, changes over time and changes over the course of marriage do not become confused. In fact, this comes down to displaying heterogamy at the start of marriage for different marriage cohorts. The panels in Figure 5.3 display the levels of heterogamy between 1950 and 1995. Because of small numbers in the data file, I left out the marriage cohorts 1943-1949 and 1996-1998 in these depictions. Furthermore, I present the levels of differences between husbands and wives as a moving average of 5 years: the cohort in question itself and the four preceding cohorts.

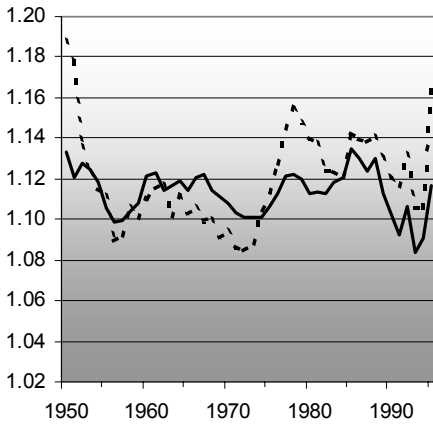
In panels A to D of Figure 5.3, the trend is shown for age and the meritocratic characteristics of achievement. We can see that the age ratio shows fluctuations without any clear systematic pattern, even though the weighted figure suggests that the age ratio went down in the beginning and mid 1950s, stayed low for a while and rose again in the 1970s.

The trend of educational differences is roughly the opposite. At first the differences increased until about 1960 (unweighted) or 1970 (weighted). After that, a decrease in educational differences can be seen, with a break in the trend in the 1980s. The decrease of educational

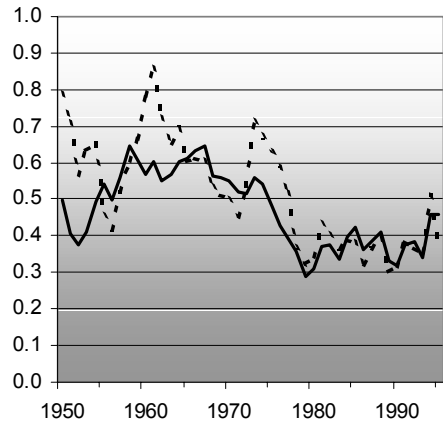
differences may firstly be attributed to the rising importance of choosing a spouse with a similar level of education. Secondly, the initial rise of differences followed by a decline may be attributed to initial increasing and subsequent decreasing differences between male and female levels of education in society caused by the fact that educational expansion took place earlier for men than for women (cf. Smeenk 1998).

Figure 5.3 Changes in the level of heterogamy over time (marriage years), unweighted (solid lines) and weighted (dashed lines), five year moving averages

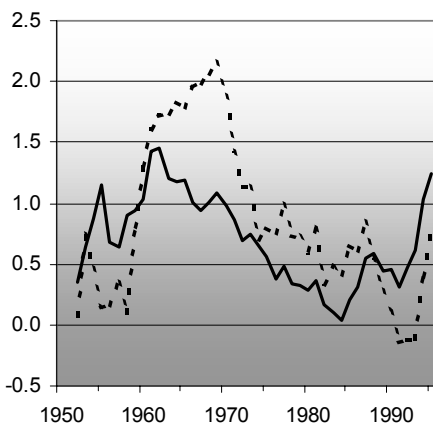
a: age ratio



c: economic status difference



b: number of years more education of husband



d: cultural status differences

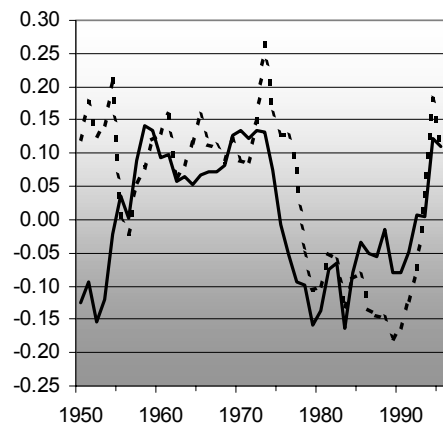
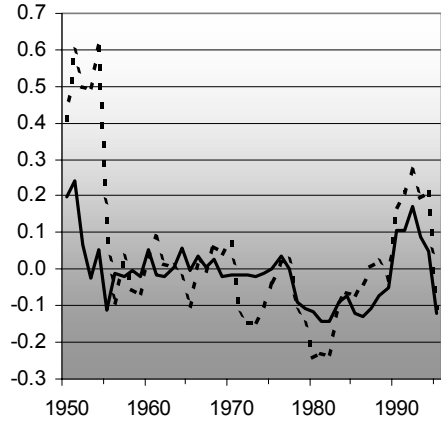
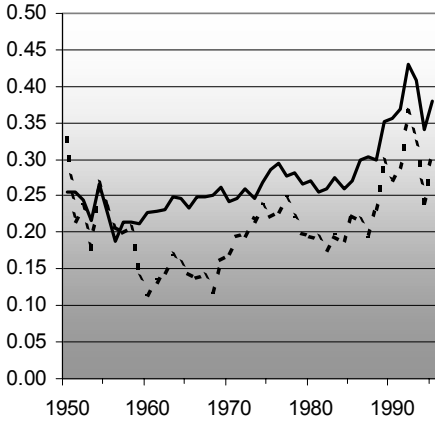


Figure 5.3 Changes in the level of heterogamy over time (marriage years), continued

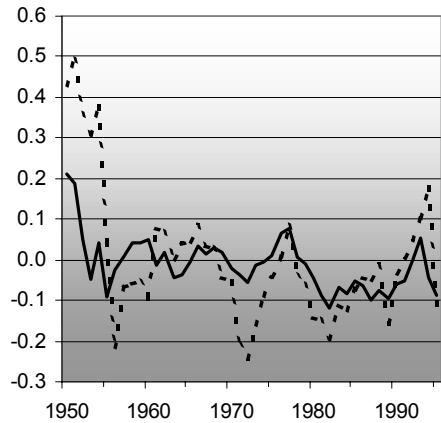
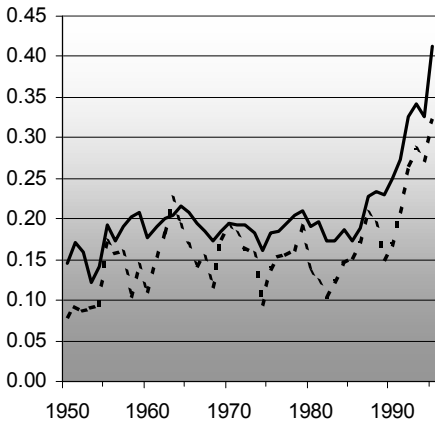
e: proportion heterogamy church affiliation

g: economic origin differences



f: proportion heterogamy ethnicity

h: cultural origin differences



A similar trend can be found for the economic dimension of social status, another meritocratic characteristic. Panel C in Figure 5.2 shows that differences between husband and wife decreased particularly in the 1970s. The downward movement of cultural status differences in the 1970s, however, is one in which a higher average cultural status of husbands was replaced by a higher cultural status of wives: the figure goes from positive to negative, as can be seen in Panel D of Figure 5.3. This is preceded and followed by an opposite trend in the 1950s and the 1990s.

Next, we take a look at the inherited characteristics of ascription in panels E to H of Figure 5.3. If characteristics like religion and ethnicity become less important as a selection criterion,

then I would expect an increase in mixed marriage (cf. Hendrickx 1994). Indeed, according to this expectation, the differences between husband and wife with respect to church affiliation and ethnicity have increased. The proportion of couples who are religiously mixed at the start of marriage increased from somewhere between 0.2 and 0.3 in the 1950s to scores above 0.35 or 0.4 around 1990, depending on whether the weight factor is applied or not. The increase in the percentage of ethnically mixed marriages is even a little larger and more recent: this trend only started in the mid 1980s.

The trends on unweighted and weighted data with respect to the sizes of all discerned categories can be seen in Appendices 5.3 and 5.4 for church affiliation and in Appendices 5.5 and 5.6 for ethnicity. With respect to church affiliation, we can see an increase in the size of mixed groups and a decrease in the size of homogamous groups across marriage cohorts. In the 1990s, however, the group of non-church members again became smaller, whereas the group of 'other mixed marriages' increased in number. This coincides with the increase in ethnically mixed marriages between persons with Dutch and non-Dutch roots, as indicated by the appendices.<sup>4</sup>

The trend of social origin, displayed in panels G and H of Figure 5.3, is less clear. Both the economic and the cultural dimension of differences regarding social origin show ups and downs without any recognizable pattern.

## **5.4 Method and results**

In this section, I will demonstrate the models and the parameters of the analyses in order to test the hypotheses. The research questions to be answered by the analyses are the questions about changing effects of heterogamy on divorce during marriage (research question 1) and the question about changing effects over historical time (research question 2).

### *5.4.1 Models to answer the questions*

The research question concerning changes over the course of marriage contains three sub-questions. The first one is whether dynamic observations give a better, or at least a different, image of the impact of heterogamy on divorce. To answer it, I estimated parameters of a model in which characteristics of spouses can change during marriage. I had information on different points in time for age ratio, social status and religion. By using this information, I extended on the discrete time event history analysis models in Chapter 4. The resulting model is this chapter's model 1. The equation of the regression is similar as the one given in Chapter 4; the difference is that some variables were measured continuously.

Another extension which could be made to the models in Chapter 4 is the addition of the direction of changes for these characteristics. For example, heterogamy can increase or decrease and a better position of the wife compared to her husband can come about or disappear. The model in which this was incorporated is called model 2. The equation pertaining to this model extends on the equation shown in the previous chapter by adding some variables indicating the direction of change, namely for a growing or decreasing level of heterogamy with respect to status and religion. With this model, I will answer the second sub-question in research question 1 for social status and religion. This sub-question is about the effect of growing closer (adaptation) or

growing apart (alienation), on divorce.

The third sub-question can be answered for all types of heterogamy under research, whether measured (quasi) continuously or at one moment in time. This question is concerned with whether heterogamy effects increase or decline over the course of marriage. The test of this implies that the logistic regression event history models are extended with interaction terms between the duration of marriage and types of heterogamy. This was done in model 3. Besides, I tried out an alternative model in which the phase of marriage or the family cycle was taken into account rather than simply the duration of the marriage. This means that the interaction terms between duration and heterogamy were replaced by interaction terms of the presence of children under 13 years of age and heterogamy. This is model 4. Again, the regression equation extends on the one in Chapter 4. The extension in this model 4 is the addition of interaction terms between duration and heterogamy.

The second research question is concerned with changes over time. To test the hypotheses on this, I added interaction terms of historical time – which is: the year of each record in the file – and the six types of heterogamy. In this way, we can see whether and in which direction the effects of the several types of heterogamy changed over historical time. This is model 5. The addition to the regression equation of Chapter 4 is similar to the one in model 4, but with interaction terms between historical time (instead of duration) and heterogamy characteristics.

#### 5.4.2 Extending to a time varying model

As mentioned above, I firstly extended on the previous chapter by making variables time varying. In the models in Chapter 4, only duration, year and the presence of children were time varying. In this chapter's analyses, social status heterogamy, both economically and culturally, and heterogamy concerning church affiliation were measured as time varying. Besides, age differences were time varying by replacing the age differences by age ratios between husband and wife. These extensions and changes were made on model 3 in Table 4.3 in the previous chapter. The new model is presented as this chapter's model 1 in Table 5.1.

The parameters of model 1 in Table 5.1 are quite similar to those of model 3 in Table 4.3. Age differences, however, have been replaced by age ratio and age ratio squared, at time  $t$ . The quadratic parameter is positive, which indicates a parabolic relationship with a minimum. So, divorce risks rise if age differences between husband and wife go up in either direction of the minimal divorce risk. Since the linear parameter is negative, couples with a slightly older husband have the lowest divorce risk. The 'optimal' age ratio with the lowest risk of divorce is found by subtracting 1 from the exponent of minus the linear parameter divided by twice the quadratic parameter. This yields a husband who is 8 percent older than his wife. Taking the age ratio at the beginning of marriage and not controlling for other types of heterogamy, this optimal situation is found for a husband who is 14 percent older than his wife, as was found in the previous chapter.

As mentioned before, I cannot use education and educational differences between spouses as time varying variables. That is why they are entered into the model as measured at the beginning of the marriage, as in model 3 of Table 4.3. It cannot be any surprise that the results are similar here: absolute educational differences do not affect the risk of divorce, but the risk of divorce increases when the wife has attained a higher level of education than her husband.

Table 5.1 Event history analysis: divorce risk regressed on several types of heterogamy and other characteristics at marriage or at time *t* and effects of changes during marriage

model variables	model 1		model 2 main effects		model 2 directional	
	b	s.e.	b	s.e.	b	s.e.
duration at t	0.177***	0.013	0.137***	0.011		
duration at t squared	-0.004***	0.000	-0.004***	0.000		
year-1943	0.117***	0.022	0.114***	0.022		
year-1943 squared	-0.001**	0.000	-0.001**	0.000		
average age#	-0.037***	0.008	-0.042***	0.008		
age ratio (natural logarithm)#	-0.729**	0.280	-0.624**	0.225		
age ratio squared#	4.581***	0.923	3.228***	0.615		
mean education (years)	-0.006ns	0.014	-0.005ns	0.014		
absolute educ. difference	0.011ns	0.011	0.012ns	0.011		
wife higher education	0.177**	0.064	0.181**	0.064		
mean economic occ. status#	-0.027ns	0.069	0.061ns	0.072		
abs. econ. status difference#	0.022ns	0.041	0.007ns	0.047	0.011ns	0.049
wife higher economic status#	0.088ns	0.066	0.111ns	0.075	0.035ns	0.079
mean cultural occ. status#	-0.025ns	0.071	-0.051ns	0.073		
abs. cultural status difference#	-0.082~	0.049	-0.086ns	0.055	-0.078ns	0.062
wife higher cultural status#	-0.160**	0.059	-0.193**	0.066	-0.085ns	0.074
church: none#	0.238***	0.054	0.179**	0.055	0.449†***	0.083
church: none/Catholic#	0.516***	0.076	0.494***	0.078		
church: none/Protestant#	0.248**	0.087	0.235**	0.091		
church: Catholic#	-0.317***	0.066	-0.305***	0.063		
church: Cath./Protestant#	0.040ns	0.156	0.133ns	0.130		
church: Protestant#	-0.672***	0.111	-0.480***	0.091		
church: other homogamous#	-0.529**	0.169	-0.859***	0.183		
church: other mixed#	0.475***	0.094	0.602***	0.105		
ethnicity: Dutch	-0.197**	0.071	-0.180*	0.073		
ethnicity: foreign	-0.016ns	0.109	0.058ns	0.111		
ethnicity: Dutch/foreign	-0.010ns	0.077	-0.025ns	0.077		
ethnicity: mixed foreign	0.223ns	0.158	0.147ns	0.161		
mean economic status origin	-0.136*	0.068	-0.147*	0.069		
abs. economic origin difference	0.138**	0.042	0.140***	0.042		
wife higher economic origin	0.024ns	0.060	0.028ns	0.060		
mean cultural status origin	0.199**	0.076	0.176*	0.077		
abs. cultural origin difference	-0.075ns	0.048	-0.065ns	0.048		
wife higher cultural origin	-0.054ns	0.060	-0.043ns	0.060		
presence of child(ren) under 13	-0.364***	0.057	-0.355***	0.057		
constant	-5.850***	0.509	-5.597***	0.512		

Source: Divorce in the Netherlands (SIN98). N=37,399 records based on 2,261 couples.

Note: # indicates variable measured at time *t* in model 1, while in model 2 (except for ageing), the first column contains effects of characteristics at the time of marriage, the second one effects of the direction of changes during marriage (positive: towards heterogamy; negative: towards homogamy). † denotes that figure is the effect of religiously growing towards each other (-1) or growing apart in the direction of more heterogamy (+1). See Table 5.3 for more variants. ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . Church, ethnicity: deviation contrast.

In the previous chapter, I concluded that differences in economic status between spouses have no direct effect on divorce. Using the present model, I could check whether a more dynamic measurement would change my previous conclusions. However, it does not: the effects of economic occupational status and economic occupational status differences do not become significant when information on jobs of husbands and wives during marriage is used. Dynamics cannot explain the unexpected findings with respect to cultural status differences either. The wife having a higher cultural status still negatively affects the risk of divorce. Even the negative parameter for absolute cultural status differences appears to have a questionable 10 percent significance in this model.

It was hypothesized in this chapter and in the previous one that economic status differences would not be very damaging to marital stability. According to Becker's theory, the traditional division of labour, which can be expected to bring about status differences between husband and wife due to their differing levels of investment in human capital, is expected to be a stabilizing component. This, of course, is a very indirect derivation from Becker's theory. It would be better to directly examine whether husband and wife are participating in the work force. In the previous chapter, this was difficult to accomplish because in many couples both husband and wife participated in the labour force until the year of marriage. Using this information in our data set would not tell us anything about whether they continued to do so or not. In this chapter's analyses, however, when using dynamics, I could use information about labour force participation during marriage.

Using dynamic information on labour force participation of both spouses instead of or in addition to economic and cultural status scales hardly alters the other parameters. Labour force participation itself shows interesting results. I added this information to model 1 in Table 5.1. The traditional situation in which the husband is the sole breadwinner is taken as a reference category. If both spouses are out of the labour force for any reason, then the risk of divorce is not significantly different (effect of -0.079, standard error 0.083). If, at any time during marriage, the wife is working instead or if both spouses are working, the risk of divorce is significantly higher at that moment. The effects are 0.193 (standard error 0.086) and 0.228 (standard error 0.061), respectively. The latter two effects are close together. They appear not to differ significantly from each other, which I tested in a model with both spouses working as a reference category. This shows that when the wife is working, either as a sole breadwinner or in a double income situation, the risk of divorce is higher. In terms of Becker we can say that when a couple deviates from the traditional division of labour, then the risk of divorce is higher.

The effects of religious heterogamy have to be interpreted in the same way as in the previous chapter. The correct comparisons are presented in Table 5.2. There, I list the effects and significance levels of religious heterogamy computed by using models with different indicator contrasts. This table is similar to Table 4.5 in the previous chapter. The results of model 3 in Table 4.5 are repeated in Table 5.2.

As explained in the previous chapters, an effect has to be larger than both references to constitute a heterogamy effect. Therefore, the presence and strength of the heterogamy effect is indicated by the smallest effect with the highest significance level. With the highest significance level, I mean the highest figure, or in other words, the least significant effect. For non-church members married to Catholics, for example, the relevant effect is 0.2110 (which is in comparison to non-church members) with a significance level of 0.0135 in the previous chapter's model. For



the new model, the effect is 0.2779 with a significance level of 0.0008. Comparing the new and the old estimates, we can see that for non-church member/Catholic mixed marriages, the effect is somewhat larger when time varying information on church heterogamy is used. For non-church member/Protestant mixed marriages, the effect remains insignificant. For Catholic/Protestant and miscellaneous mixed marriages, the effects decrease slightly or are almost constant when heterogamy is measured on the basis of time varying information instead of information at the beginning of the marriage. Overall, the image is not really different from the previous chapter. When the effect increases, I would advocate the use of religion as a time varying variable in order to obtain a better measurement. A decrease of the effect means that the measurement at the beginning of the marriage is better and that adaptation during marriage in most instances may be halfhearted or a practical solution, leading to disagreements in the end. It is obvious that I cannot test this post-hoc statement with my data.

Table 5.2 Effects and significance levels of religious heterogamy on the risk of divorce

model	one moment: Table 4.5, model 3		time varying: Table 5.1, model 1		
	first category	last category	first category	last category	
none/Catholic	0.2110 (0.0135)	0.6795 (0.0000)	*	0.2779 (0.0008)	0.8330 (0.0000) ***
none/Protestant	-0.0819 (np)	0.5136 (0.0001)	np	0.0096 (0.9199)	0.9202 (0.0000) ns
Catholic/Protestant	0.3658 (0.0170)	0.4928 (0.0036)	*	0.3571 (0.0521)	0.7125 (0.0007) ~
other mixed (see note)	1.2328 (0.0000)	0.3399 (0.0055)	**	1.1477 (0.0000)	0.2371 (0.0291) *

Source: Divorce in the Netherlands (SIN98). N=37,399 records based on 2,261 couples.

Note: given are indicator contrast effects (significance levels between parentheses) of the category in question compared to both homogamous categories of husband and wife (e.g. none/Catholic: none and Catholic); for 'other mixed', highest and lowest effects are given, because four comparisons are possible. Symbols are given for the highest level of significance (least significant effect): ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . np: heterogamy effect not present (divorce risk is not higher than both reference categories). Significance of the presence of a heterogamy effect depends on the highest significance level.

The remaining variables in model 1 of Table 5.1 are measured at the beginning of marriage only, as in model 3 of Table 4.3 in the previous chapter. It will be no surprise that their effects are similar. With respect to ethnicity, the only significant effect is the lower divorce risk for homogamous Dutch ethnic couples. As already found in the previous chapter, persons with parents in an economically better position divorce less than persons with parents in an economically worse situation, while cultural status of origin is positively related to the risk of divorce. Economic origin differences between husband and wife enlarge the risk of divorce. Cultural origin differences do not have a significant effect.

The final effect, of the presence of children up to 12 years old, is negative. Equal to the finding in the previous chapter, divorce risks are lower if the couple has one or more children.

We have now seen that differences between time varying and time constant models are not very large with respect to effects of heterogamy on divorce. I will continue and test the hypotheses which answer the second and third part of the research question concerning changes over the course of marriage.

#### 5.4.3 Growing closer or growing apart

We have already seen in Figures 5.1 and 5.2 that on average, heterogamy with respect to church affiliation, a characteristic of ascription, decreases over the course of marriage. Economic and cultural status differences, meritocratic characteristics, increase during a considerable period of marriage. Of course, individual couples can go in any direction. The question now is whether couples who grow closer and couples who grow apart have different risks of divorce. This is one of the specific research questions in this chapter. I tackled this by using another parametrization. Instead of using time varying variables, I used the situation at the beginning of marriage and added variables indicating whether differences between spouses increase or decrease during marriage. The expectation is that increasing differences lead to more divorce and decreasing differences to less divorce. For the age ratio, the trend over the course of marriage is very obvious: a certain absolute age difference – which is constant over the course of marriage – will always decrease over the course of marriage, because ages increase and the same difference will be a smaller proportion of the age of the couple. Therefore, this way of parametrization was only used for the other characteristics on which I had more time points of measurement: own social status, both economically and culturally, and church affiliation.

The model with parameters for spouses growing closer and growing apart is given as model 2 in Table 5.1. The first column referring to model 2 contains the main effects, the column on the right gives the directional effects of growing closer or growing apart. For variables without directional effects or without significant directional effects, the main effects are similar to those in model 3 of Table 4.3 in the previous chapter and those in model 1 of Table 5.1 in this chapter.

Changes in the social status distance between the spouses during marriage appear not to matter at all: whether economic or cultural status differences between husbands and wives grow or diminish does not have a significant effect on the risk of getting a divorce. The same goes for the asymmetry effects: whether the wife attains a higher status than her husband during marriage or the other way around does not have a significant effect on the divorce risk.

The only significant directional effect in the model is found for church affiliation. It matters whether spouses adapt to each other or not with respect to religion. Controlling for the situation at the beginning of the marriage, the parameter has a positive effect. No changes during marriage are indicated by 0, growing closer – that is: towards homogamy – by minus 1 and growing apart – that is: towards heterogamy – by plus 1. Thus, the positive directional effect found here indicates that couples who become heterogamous during marriage increase their risk of divorce, whereas couples who adapt diminish their risk of divorce.

The question arises whether this effect is mainly caused by couples growing apart or couples growing towards each other. That is why I decided to use two parameters. The reference category, again, is no change during marriage. One parameter indicates a change towards each other, to homogamy, another parameter indicates a change away from each other, to heterogamy. This model is indicated as model b in Table 5.3. Now, it becomes obvious that growing together

does not matter much, since the risk of divorce is not significantly lower when spouses grow towards each other during marriage. The divorce risk is raised clearly and significantly, though, if one of the spouses turns away from the other one after homogamy, letting heterogamy arise.

Table 5.3 *Event history analysis: effects of different measurements of changes in religious heterogamy during marriage*

model	model 2 directional	
operationalization of changes in religious heterogamy	b	s.e.
a: one parameter (1: towards heterogamy; -1: towards homogamy; 0: unchanged, reference), see Table 5.1	0.449***	0.083
b: two parameters: reference: no change		
b: towards homogamy	-0.167ns	0.117
b: towards heterogamy	0.681***	0.106
c: four parameters: reference: no change		
c: towards homogamy, non-church members	-0.106ns	0.127
c: towards homogamy, church members	-0.409ns	0.252
c: towards heterogamy, changer leaves church	0.672***	0.127
c: towards heterogamy, changer becomes/stays church member	0.693***	0.180

Source: Divorce in the Netherlands (SIN98). N=37,399 records based on 2,261 couples.

Note: Model a is presented in Table 5.1; models b and c are alternative measurements. The same variables as in model 2 in Table 5.1 are taken into the models. ns  $p > 0.10$ ;  $\sim 0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ .

I even went somewhat deeper into this to investigate whether it matters in which direction spouses move towards each other or away from each other. This is shown in model c in Table 5.3, containing 4 parameters. Again, the non-changers are the reference category. For the couples who were initially heterogamous, but adapted towards homogamy, I made a distinction between church members changing to non-church members and non-church members changing to church members. This, however, does not make any difference: both categories display a non-significant effect. In a similar way, I distinguished two categories among couples who were initially homogamous, but who grew apart during marriage. In the first category, the person who changes away from his or her spouse leaves church, while the spouse does not. In the other category, the changing spouse becomes a church member or changes denominations. Both categories show a clear positive effect of about the same size on the risk of divorce.

These findings indicate that couples who are initially homogamous with respect to denomination, but who become heterogamous during marriage display higher risks of divorce than others.

5.4.4 Changes of heterogamy effects during marriage

Up till now, I have addressed the effects of changes in the level of heterogamy during marriage on the risk of divorce. Now, I will turn to changes of the heterogamy effects themselves over the course of marriage. This means that I will go into the research question whether effects of heterogamy on divorce increase or diminish during marriage. Hypotheses derived from the *theory of growing acceptance* predict a decrease. In order to investigate this, I needed to extend on model 1 in Table 5.1 by adding interaction effects of heterogamy with the duration of marriage. The resulting model is model 3 presented in Table 5.4. When looking at the interaction effects of model 3, the absence of significance is very striking. There are only two interaction effects which are significant at a 5 percent significance level and two other ones significant at a 10 percent level.

The two effects which are significant at a 5 percent level are ethnic effects: both the effect on the risk of divorce for ethnically homogamous Dutch and ethnically heterogamous Dutch/non Dutch couples increase over the course of marriage. Since these effects are equally large in the same direction, this does not imply any increase or decrease of the heterogamy effect over the course of marriage. After all, for a change in the effect of heterogamy, the heterogamous and the homogamous have to diverge. In this case, however, both a homogamous and a heterogamous group go in the same direction.

One of the interaction effects with duration which is significant at a 10 percent level is the quadratic natural logarithm of the age ratio. It is positive and about doubling the effect at duration 0 after 10 years of marriage. This means that the rise in divorce risk caused by a deviation from the 'optimal' age ratio increases over the course of marriage. In other words, the same age ratio leads to a greater likelihood of divorce whenever the marriage lasts longer. This is not much of a surprise, since a couple's age ratio decreases naturally over the course of marriage. The same age ratio represents a larger absolute age difference at an older age. If the absolute age difference is included in the model, then the effect appears to be not at all significant.<sup>5</sup>

The little interaction effect of duration with homogamous non-church members implies that the heterogamy effects of non-church members married to Catholics and miscellaneous mixed marriages increases slightly. The interaction effect, however, is very small and only significant at a 10 percent level.

Altogether, this analysis shows hardly any changes during marriage of the effect of the several types of heterogamy on the risk of divorce. There are no findings here which even slightly go in the direction of the *growing acceptance hypothesis* predicting a decrease of heterogamy effects over the course of marriage. In an attempt to trim the models, interaction effects of heterogamy with the duration of the marriage were entered characteristic by characteristic. This yielded comparable results.

Of course, the relationship does not need to be linear, but it is not feasible to interpret any other interaction models than linear ones. However, it would be worthwhile to see whether a more constructive and meaningful measurement than duration gives the same results. As already mentioned in the theory section, an important characteristic would be the phase in which a marriage is. The most straightforward way is to model interactions of the several types of heterogamy with the presence of children under 13 years of age in the marriage. This is done in model 4, presented in Table 5.4.

Table 5.4 Event history analysis: changes over the course of marriage of the effects of several types of heterogamy on the risk of divorce

model	model 3: interaction with duration				model 4: interaction with presence children			
	main effects		interaction effects		main effects		interaction effects	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
duration at t	0.154 ***	0.017			0.177 ***	0.014		
duration at t squared	-0.004 ***	0.000			-0.004 ***	0.000		
year-1943	0.116 ***	0.022			0.122 ***	0.022		
year-1943 squared	-0.001 **	0.000			-0.001 **	0.000		
average age at t	-0.040 ***	0.008			-0.036 ***	0.008		
age ratio (natural logarithm) at t	-0.916 *	0.431	0.004 ns	0.042	-0.634 ~	0.372	-0.410 ns	0.582
age ratio squared at t	3.028 *	1.341	0.314 ~	0.170	3.242 **	1.237	3.276 ~	1.734
mean education (years)	-0.006 ns	0.014			-0.009 ns	0.014		
absolute educ. difference	0.011 ns	0.021	0.000 ns	0.001	0.006 ns	0.016	0.012 ns	0.022
wife higher education	0.062 ns	0.115	0.009 ns	0.008	0.113 ns	0.092	0.112 ns	0.127
mean economic occ. status at t	-0.036 ns	0.069			-0.033 ns	0.069		
abs. econ. status difference at t	-0.024 ns	0.075	0.004 ns	0.005	0.023 ns	0.057	-0.011 ns	0.078
wife higher economic status at t	-0.021 ns	0.121	0.009 ns	0.008	0.228 *	0.093	-0.273 *	0.132
mean cultural occ. status at t	-0.013 ns	0.071			-0.021 ns	0.071		
abs. cult. status difference at t	-0.113 ns	0.088	0.003 ns	0.006	-0.089 ns	0.067	0.026 ns	0.090
wife higher cultural status at t	-0.093 ns	0.109	-0.005 ns	0.007	-0.303 ***	0.084	0.276 *	0.117
church at t: none	0.377 ***	0.102	-0.012 ~	0.007	0.071 ns	0.079	0.300 **	0.108
church at t: none/Catholic	0.538 ***	0.137	-0.001 ns	0.010	0.465 ***	0.108	0.082 ns	0.152
church at t: none/Protestant	0.084 ns	0.173	0.011 ns	0.011	0.163 ns	0.132	0.158 ns	0.176
church at t: Catholic	-0.227 ~	0.128	-0.007 ns	0.008	-0.348 ***	0.091	0.019 ns	0.131
church at t: Cath./Protestant	-0.300 ns	0.321	0.028 ns	0.022	-0.077 ns	0.234	0.207 ns	0.314
church at t: Protestant	-0.600 **	0.228	-0.007 ns	0.013	-0.648 ***	0.156	-0.061 ns	0.223
church at t: other homogamous	-0.384 ns	0.306	-0.010 ns	0.022	0.003 ns	0.253	-0.882 **	0.339
church at t: other mixed	0.513 **	0.167	-0.003 ns	0.012	0.371 **	0.134	0.177 ns	0.187
ethnicity: Dutch	-0.397 ***	0.117	0.021 *	0.009	-0.124 ns	0.100	-0.121 ns	0.143
ethnicity: foreign	0.218 ns	0.182	-0.023 ns	0.015	-0.138 ns	0.165	0.249 ns	0.221
ethnicity: Dutch/foreign	-0.219 ~	0.126	0.021 *	0.010	0.060 ns	0.108	-0.096 ns	0.154
ethnicity: mixed foreign	0.398 ns	0.244	-0.019 ns	0.020	0.203 ns	0.217	-0.033 ns	0.319
mean economic status origin	-0.138 *	0.069			-0.134 *	0.069		
abs. economic origin difference	0.141 ~	0.074	-0.000 ns	0.005	0.153 *	0.060	-0.031 ns	0.078
wife higher economic origin	0.013 ns	0.110	0.001 ns	0.007	0.027 ns	0.084	0.016 ns	0.120
mean cultural status origin	0.198 **	0.076			0.203 **	0.076		
abs. cultural origin difference	-0.135 ~	0.080	0.006 ns	0.005	-0.033 ns	0.064	-0.089 ns	0.082
wife higher cultural origin	0.061 ns	0.110	-0.009 ns	0.007	-0.021 ns	0.084	-0.088 ns	0.120
presence of child(ren) under 13	-0.376 ***	0.057			-0.447 *	0.189		
constant	-5.496 ***	0.532			-5.893 ***	0.516		

Source: Divorce in the Netherlands (SIN98). N=37,399 records based on 2,261 couples.

Note: ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . Church, ethn.: deviation contrast.

The increase in the age heterogamy effect over the course of marriage is also found once children are present. Again, this is only significant at a 10 percent level. As before, in the case of duration, if the absolute age difference is taken into the model, the effect is not significant.<sup>6</sup>

One interesting finding concerns wives with higher economic statuses than their husbands. In the previous chapter, I found that couples in which the woman has a higher economic status than her husband have a higher divorce risk, but this effect was explained by the other types of heterogamy. In the present interaction model, the effect becomes visible again. It appears to be the case that at times when there are no children in the marriage, couples with a higher status wife do indeed have a higher risk of divorce. Once there are children in the family, this effect disappears. This may be caused by a high degree of household care by married women with children. Still, this finding is a bit of a surprise, since we could expect women with a better position to be more vociferous in demanding an equal division of labour, something which could give rise to marital tension. This finding, however, seems to suggest that these women either resign themselves to caring tasks or manage to deal with this situation and bringing about a peaceful agreement between husband and wife.

The inexplicable negative effect of a wife having a higher cultural social status than her husband (-0.303) appears to be especially present if there are no children below the age of 13 in the household. When there are children, then this effect is reduced considerably, as can be seen from the positive interaction effect of 0.276, which is significant at a 5 percent level.

The significant positive interaction effect of non-church members and the presence of children under 13 implies that once children are present, the homogamous category of non-church members and mixed non-church member/Catholic marriages grow closer. This implies that for that type of religiously mixed marriages, the heterogamy effect is diminished by the presence of children. For the category of 'other mixed marriages', this would indicate the same, but the significant negative interaction effect of 'other homogamous marriages' indicates an increase in the heterogamy effect for 'other mixed marriage' once children are present.

These findings indicate that once the marriage reaches the state in which young children are present, a few heterogamy effects decrease. However, most effects do not. Thus, I can state that, controlling for the level of divorce during marriage, the effects of heterogamy remain present to a large degree during different stages of marriage.

#### *5.4.5 Changes of heterogamy effects over time*

Finally in this section, I will address the second research question concerning changes over historical time. Have effects of heterogamy on divorce stayed constant in history or have they increased or decreased? Are changes different for different types of heterogamy? The answer to these questions can be given by extending on model 1 in Table 5.1 by adding interaction terms of heterogamy with time, or: the calendar year in each record of the couple-year file. The parameters of the resulting model are shown as model 5 in Table 5.5.

There is only one significant trend effect, a decreasing divorce risk of homogamous couples of non-Dutch ethnicity. This means that homogamous couples decrease their risk on divorce over time, also in comparison to heterogamous couples. Even though we cannot make the correct comparisons of heterogamous and homogamous couples of the same origin, this is an indication that the effect of ethnic mixed marriage on the risk of divorce increases over time. Otherwise,

Table 5.5 Event history analysis: changes over historical time of the effects of several types of heterogamy on the risk of divorce

model	model 5: interaction with year			
	main effects		interaction effects	
	b	s.e.	b	s.e.
duration at t	0.177***	0.014		
duration at t squared	-0.004***	0.000		
year-1943	0.128***	0.025		
year-1943 squared	-0.001**	0.000		
average age at t	-0.035***	0.008		
age ratio (natural logarithm) at t	0.974ns	1.513	-0.039ns	0.035
age ratio squared at t	3.665ns	3.622	0.010ns	0.087
mean education (years)	-0.006ns	0.014		
absolute educ. difference	-0.012ns	0.055	0.001ns	0.001
wife higher education	0.041ns	0.321	0.003ns	0.008
mean economic occ. status at t	-0.024ns	0.069		
abs. econ. status difference at t	-0.156ns	0.202	0.004ns	0.005
wife higher economic status at t	0.143ns	0.335	-0.001ns	0.008
mean cultural occ. status at t	-0.029ns	0.071		
abs. cult. status difference at t	-0.049ns	0.237	-0.001ns	0.006
wife higher cultural status at t	0.180ns	0.289	-0.008ns	0.007
church at t: none	0.544~	0.283	-0.007ns	0.007
church at t: none/Catholic	0.569ns	0.397	-0.001ns	0.009
church at t: none/Protestant	-0.012ns	0.460	0.006ns	0.011
church at t: Catholic	-0.245ns	0.344	-0.002ns	0.008
church at t: Cath./Protestant	-1.123ns	0.999	0.027ns	0.022
church at t: Protestant	-0.295ns	0.555	-0.009ns	0.013
church at t: other homogamous	0.033ns	0.806	-0.011ns	0.019
church at t: other mixed	0.530ns	0.448	-0.002ns	0.011
ethnicity: Dutch	-0.230ns	0.371	0.001ns	0.009
ethnicity: foreign	1.454**	0.522	-0.035**	0.012
ethnicity: Dutch/foreign	-0.405ns	0.400	0.010ns	0.009
ethnicity: mixed foreign	-0.819ns	0.872	0.024ns	0.020
mean economic status origin	-0.132~	0.068		
abs. economic origin difference	0.336~	0.189	-0.005ns	0.005
wife higher economic origin	-0.086ns	0.306	0.003ns	0.007
mean cultural status origin	0.193*	0.076		
abs. cultural origin difference	-0.280ns	0.216	0.005ns	0.005
wife higher cultural origin	0.299ns	0.305	-0.009ns	0.007
presence of child(ren) under 13	-0.363***	0.057		
constant	-6.279***	0.717		

Source: Divorce in the Netherlands (SIN98). N=37,399 records based on 2,261 couples.

Note: ns  $p > 0.10$ ; ~  $0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . Church, ethn.: deviation contrast.

there are no indications of trends in the strength of heterogamy effects on the risk of divorce during the second half of the 20<sup>th</sup> century. The analysis was repeated, replacing the interaction of heterogamy with year by the interaction of heterogamy with the divorce rates in a year, as a proxy of developments in society. This yields comparable results (parameters not shown). In an attempt to trim the models, interaction effects of heterogamy with year were entered characteristic by characteristic. This also gives comparable results.

It may be possible that the shape of the trend is other than linear. To test this, I decided to directly compare two periods in time by cutting the file in two. I used a similar model as model 5 in Table 5.5, but with a dichotomous instead of a linear interaction. Marriage years between 1943 and 1969 were compared to those between 1970 and 1998. The parameters of this model are not shown here. There were no significant changes between those periods except for a decreasing divorce risk for non-church member/Catholic mixed marriages. The effect suggests that the heterogamy effect of this specific group was reduced after 1970. However, the effect is only significant at a 10 percent level.

I even went one step further and decided to compare more remote periods, namely 1943-1959 versus 1986-1998, in a similar way. Parameters are not shown here. Again, changes are limited, but the one effect found to be significant at a 5 percent level is an interesting one. Until now, I have found that spouses of different economic origin have a higher risk of divorce, but it does not matter which one of the spouses has the highest economic social origin. The significant main effect (1.660) and interaction effect (-1.583) in this model, however, indicate that this was different in the 1940s and 1950s. In those days, the marriages in which the wives originated from higher status families and the husbands did not, had an especially high risk of divorce.

These results lead to the conclusion that most effects of several types of heterogamy on the risk of divorce, as already found in the previous chapter, have been there since the beginning of the period under investigation, namely the mid 20<sup>th</sup> century, and have remained about equally strong throughout the remainder of that century. Changes in the effects were very minor or absent.

## 5.5 Conclusions and discussion

In this chapter, I set out to answer questions about trends and changes both over the course of marriage and over historical time. More specifically, the questions were concerned with changing effects or effects of changing levels of heterogamy on divorce across the course of marriage (question 1) and across historical time (question 2). These questions were answered by logistic regression models in a discrete time event history analysis. Changes appeared to be very limited.

There were three sub-questions concerning changes over the course of marriage (research question 1). The first one was whether using dynamic information on heterogamy yields different results than those gained when using static information. Dynamic information was available for spousal differences concerning age ratio, economic and cultural social status and church affiliation. Patterns were quite similar to findings in the previous chapter. Apparently, the moment of measurement does not really matter. The level of heterogamy at the beginning of the marriage suffices to predict the influence of mixed marriage on the risk of divorce.

Nevertheless, I went deeper into the effects of heterogamy on specific times during



marriage by answering the second sub-question about changes over the course of marriage. This sub-question is concerned with the effects of change itself during marriage. It was only possible to answer this sub-question for heterogamy with respect to economic and cultural status and religious denomination of the spouses. The *growing together-growing apart hypothesis* formulated to answer this sub-question predicted that spouses who adapt to each other will lower their risk of divorce, whereas spouses who grow apart and become alienated from each other during marriage will increase their risk of divorce. This effect was only found for church denomination, but was very pronounced. In particular, spouses who grow apart raise their divorce risks. If differences in religion, which were not present in the beginning, arise in the course of a marriage, one can predict that conflicts will arise and that the husband and the wife will no longer be able to get on with each other. Religious changes towards each other by spouses who were initially mixed do not significantly lower the risk of divorce. A possible explanation is that those who do not formally adapt but who do not divorce have in fact already adapted and come to terms with the situation, whereas those who adapt but still divorce may have adapted, converted, in name, but not wholeheartedly, causing false expectations and tension.

A general note with respect to adaptation in the overlap of cultural and occupational fields can be made when taking trends in society into account. In the past, adaptation would mean that the wife adapted to fit the husband's social environment. Wives are becoming more involved in pursuing their own occupational careers and, hence, are less inclined to adapt to their husbands (Oppenheimer 1988).

The third sub-question within research question 1 deals with changing effects of heterogamy across the course of marriage and within stages of marriage. From the theory of growing acceptance, I derived the *growing acceptance hypothesis* predicting a decrease over the course of marriage of characteristics of ascription, asymmetry and achievement, with the largest decrease for the latter. This, however, was not corroborated by the analyses. Over the course of marriage, the effects of none of the types of heterogamy appeared to decrease at all. When children are present, there are only a few indications of a decreasing effect of heterogamy on divorce, namely for the asymmetry effect of a wife with a higher social status than her husband and for the specific category of non-church member/Catholic mixed marriages.

The second research question about changes over historical time can be answered in a straightforward manner: there are hardly any changes over time as to the influence of heterogamy on divorce. The *trend hypotheses* predicted decreasing heterogamy effects of inherited characteristics of ascription and increasing heterogamy effects of characteristics of achievement. This was refuted by the analyses, except for a possible decrease of the divorce risk for non-church member/Catholic mixed marriages when comparing the period before and after 1970. For ethnicity, there were even indications that the heterogamy effect could possibly have increased over time.

Only a limited number of changes over time and over the marriage course which indicated a declining effect of heterogamy on divorce were found in Chapter 3, but the results were not very clear. In this chapter, I have used information on more characteristics, a longer historical period and longer observations for marriages. This did not lead to finding more decreasing effects of heterogamy over time or over the course of marriage. Heterogamy effects appear to be quite stable. Even though the number of years analysed is high and the non-significant interaction

effects are very small and not even close to any level of significance, it has to be noted that there is still a possibility that there is not enough statistical power in the analyses.

For the moment, the conclusion must be that over time and over the course of marriage, heterogamy effects do not or hardly change. On the macro level, this means that heterogamous combinations which are disappearing, like those with large educational or status differences, will proportionally contribute less to the number of divorces, while heterogamous combinations which are becoming more common, like ethnic and religious mixed marriages, will proportionally contribute more to the number of divorces.

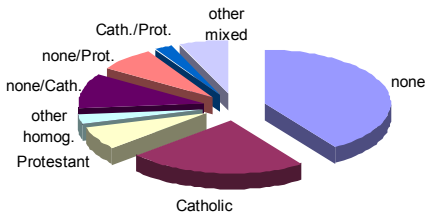
## Notes

1. An earlier version of this paper was presented at the Annual Meeting of CFR, ISA Research Committee on Family Research, Uppsala, Sweden, 20-23 June 2000.
2. There is an alternative hypothesis predicting that children give rise to new conflicts as a result of e.g. the care they need and the concern they cause (Booth & White 1980; Janssen, Poortman, De Graaf & Kalmijn 1998).
3. I consider religion as an inherited characteristic of ascription. It has to be noted that it is now in a special position since I 'allow' people to change it themselves.
4. The increase in the 1990s of mixed couples of ethnic Dutch and ethnic foreign persons coincides with a relatively large decrease of ethnically homogamous Dutch couples. This can be explained by the fact that I use parental information about the country of birth and the definition of ethnically mixed couples is very wide. Couples of which one of the four parents is born outside the Netherlands is considered as being mixed, see Chapter 4.
5. Together with the absolute age difference, the asymmetry effect of the wife being older than her husband was included. The effect is decreasing over the course of marriage. However, this interaction effect with duration is only significant at a 10 percent level. Furthermore, the main effect is insignificant and this asymmetry effect was not found in the previous chapter either. I may conclude that the effects of age differences do not decline over the course of marriage.
6. Again, together with the absolute age difference, the asymmetry effect of the wife being older than her husband was included. The effect is decreasing once children are present. However, this interaction effect with the presence of children is only significant at a 10 percent level. Furthermore, the main effect is insignificant and this asymmetry effect was not found in the previous chapter either. I may conclude that the effects of age differences do not decline once children are present.

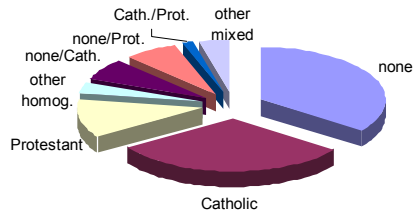
Changing effects of heterogamy on the risk of divorce?

Appendix 5.1 Distribution of church affiliation of both spouses over the course of marriage, unweighted

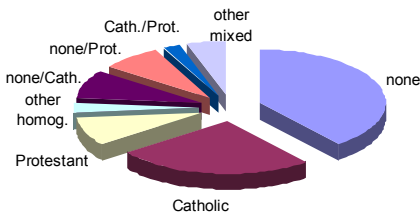
a: at the start of marriage



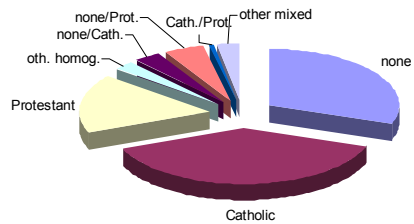
c: after 20 years



b: after 10 years

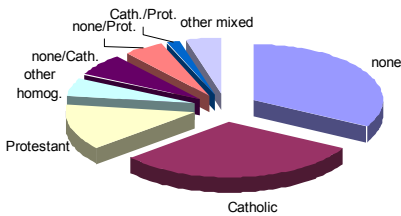


d: after 30 years

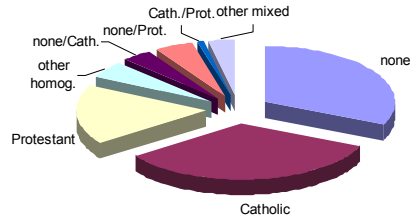


Appendix 5.2 Distribution of church affiliation of both spouses over the course of marriage, weighted

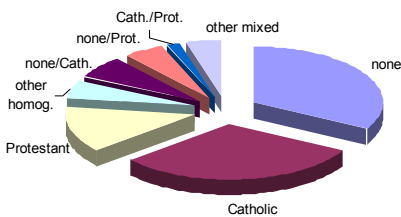
a: at the start of marriage



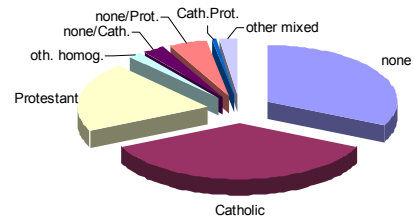
c: after 20 years



b: after 10 years



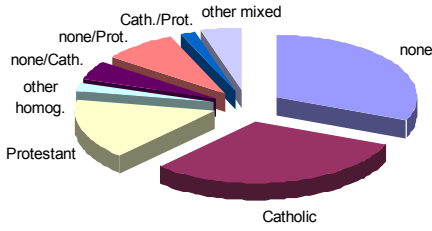
d: after 30 years



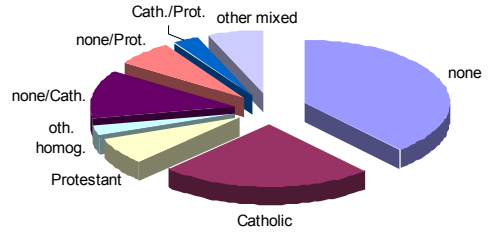
Chapter 5

Appendix 5.3 Distribution of church affiliation of both spouses at the start of marriage over time (marriage years), unweighted

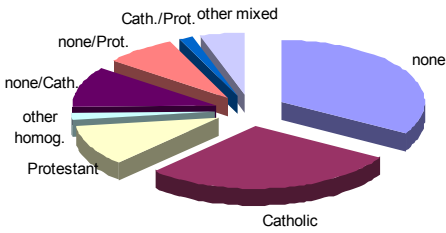
a: 1943-1959



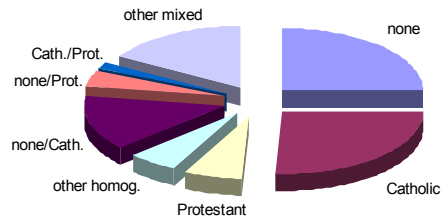
d: 1980s



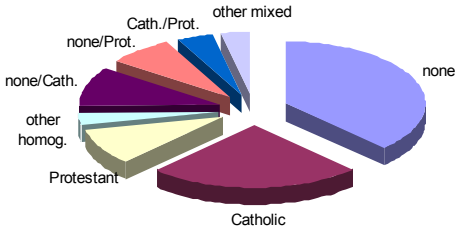
b: 1960s



e: 1990-1998

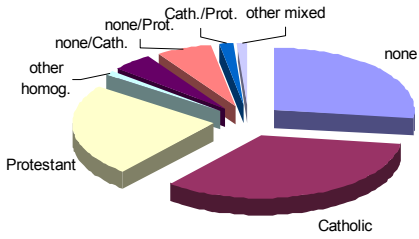


c: 1970s

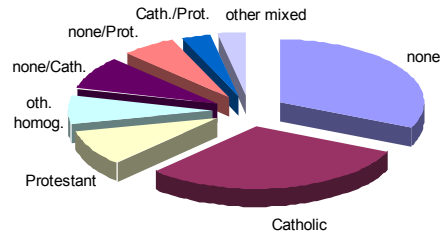


Appendix 5.4 Distribution of church affiliation of both spouses at the start of marriage over times (marriage years), weighted

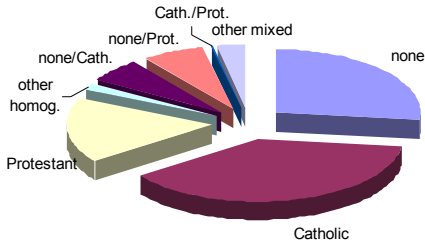
a: 1943-1959



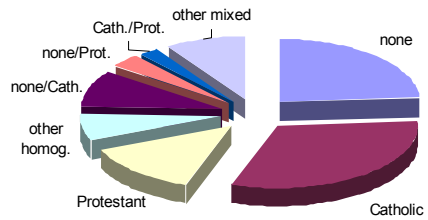
d: 1980s



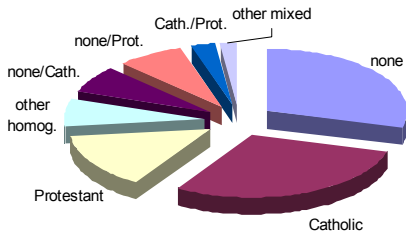
b: 1960s



e: 1990-1998



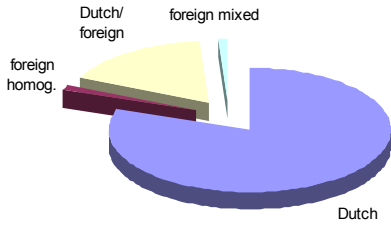
c: 1970s



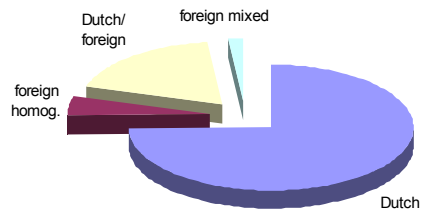
Chapter 5

Appendix 5.5 Distribution of ethnicity of both spouses at the start of marriage over time (marriage years), unweighted

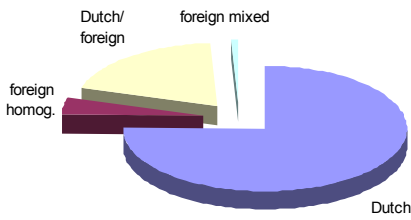
a: 1943-1959



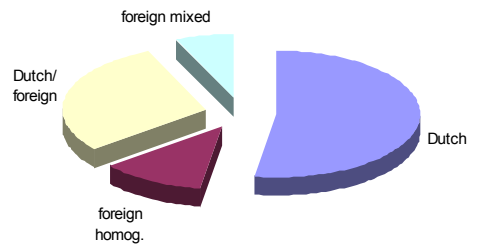
d: 1980s



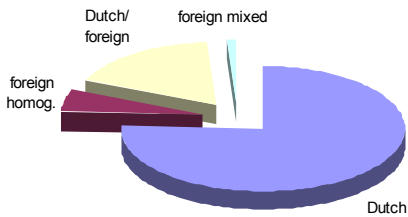
b: 1960s



e: 1990-1998

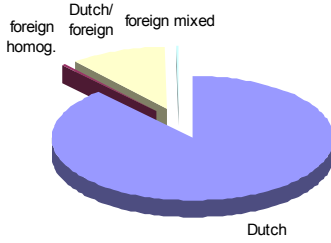


c: 1970s

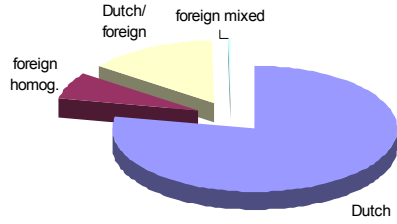


Appendix 5.6 Distribution of ethnicity of both spouses at the start of marriage over time (marriage years), weighted

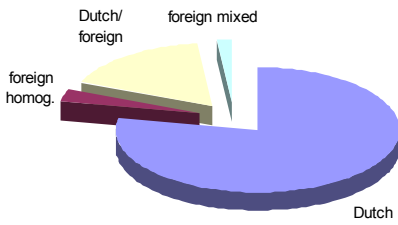
a: 1943-1959



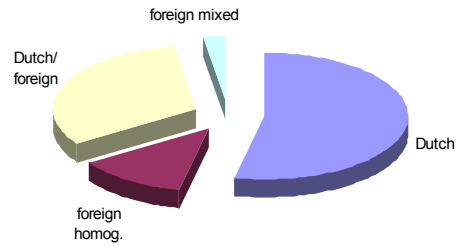
d: 1980s



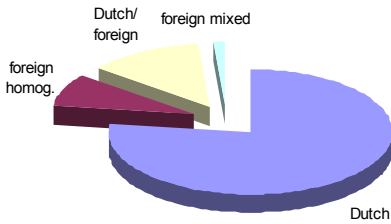
b: 1960s



e: 1990-1998



c: 1970s







# 6 Does the quality of spouse selection affect the risk of divorce because of heterogamy?

## A descriptive and explanatory analysis of SIN98.<sup>1</sup>

**T**his chapter sets out to study the effect of the quality and intensity of spouse selection on the risk of divorce. Data from the survey 'Divorce in the Netherlands 1998' (SIN98) show that the divorce rate is higher when there are indications that the spouse has been chosen hastily. Marrying young and a short courtship duration have large effects on the divorce risk. Pregnancy before cohabitation, however, does not seem to increase the divorce risk when appropriate control variables are included in the model. Although it is plausible that couples who cohabited before marriage have searched better for a suitable spouse, these couples have higher divorce rates. The explanation is that these couples adhere to traditional values towards marriage to a lesser degree. Social heterogamy hardly intervenes in the association between search behaviour and the risk of divorce. It is likely that other forms of similarity and maturity play a role in this association.

### 6.1 Introduction

In this chapter, I will investigate the relationship between spouse selection and divorce. To what extent does the search for a spouse influence marital stability? Do people who marry each other relatively quickly have more chance of their marriage going wrong? Or reversely, do people who search longer and maybe better for a suitable marriage partner have more chance that the marriage will last? This is the first, descriptive research question of this chapter.

The general expectation is that, when one has not searched long or well enough for a spouse, one runs a higher risk of making a 'wrong' choice. This does not only reveal itself in an increased marital instability and a higher risk of divorce, but also in a higher chance of marrying a less compatible spouse (Becker, Landes & Michael 1977). This implies, for instance, that a bad search and a hasty decision lead to greater differences between spouses regarding their personalities and their social characteristics. Marriages in which husband and wife differ in social respects are called heterogamous marriages.

In heterogamous marriages, spouses have less things in common than in homogamous marriages. Firstly, if husband and wife differ in terms of personality and social characteristics, this entails that they will have different tastes and preferences. A lack of shared interests and taste may translate into a higher marital instability in the course of marriage. Secondly, social differences between husband and wife bring along that their families and social networks will also differ from each other. Therefore, there is a relatively high chance in heterogamous marriages that husband and wife feel less at ease with their respective parents-in-law and mutual friends, and the other way around. This can lead to a lack of social support for the marriage. In times of marital problems, this may express itself in a higher probability of divorce. For that reason, it is no surprise that the positive relationship that indeed exists between mixed marriage and the probability of divorce can, in part, be explained by both differences of opinion between the

spouses themselves and a lack of social support for the marriage by parents, friends and others (see Chapter 4).

The possible differences between spouses resulting from a less intensive search leads to the second research question. It reads: to what extent does a 'worse match' as indicated by social heterogamy offer an explanation for the relationship between the quality or intensity of the search for a spouse and the probability of divorce? After all, if the people who made quick decisions have a higher chance of divorce, then it is reasonable to expect that this is the result of having a less compatible spouse who is different in social respect. Spouses differ from each other in social respect if they have a different level of education or a different religion, if they stem from a different social background or if there is an age gap between them.

For the record, the term 'marriages' also refers to unmarried cohabitation unions, except when married and unmarried cohabiting couples are explicitly contrasted.

## 6.2 Hypotheses

It is possible to discern different aspects of the intensity and quality of searching for a marital or cohabiting partner. Firstly, *age at marriage* will be used in this chapter. Previous research (Becker, Landes & Michael 1977; Janssen, Poortman, De Graaf & Kalmijn 1998; Manting 1993, 1994; Morgan & Rindfuss 1985; South & Spitze 1986; Thornton & Rodgers 1987; Tzeng & Mare 1995; Wagner 1993) has demonstrated that the younger a couple is at the time of marriage, the higher the risk of divorce. The most common explanation for this is that persons who marry young have not searched long enough for suitable partners. The chances are higher that their choices were impetuous and hasty, and that the social and personality differences between the spouses are large. Even when husband and wife initially seem to fit together sufficiently, it is possible that, in a later stadium of their relationship, they will encounter still unknown differences. On the one hand, this is caused by the fact that husband and wife are still young and developing, as a result of which they may grow apart. On the other hand, differences which were overcome in the beginning of the relationship may become a problem in later stages of the marriage, for example, when there are children. An additional explanation of the effect of the age at marriage on the risk of divorce is that couples who marry young have less experience of life and personal relationships. This lack of maturity for marriage may result in a higher risk of divorce.

The second measurement for the intensity or the quality of spouse selection is more direct. If a longer search leads to a qualitatively better choice, then a longer *duration of courtship* should lead to lower probabilities of divorce. Whereas the age at marriage relates to the total time of the search, the duration of courtship refers to the time of the search related to a specific partner. It indicates how long someone has observed his or her partner before deciding to marry or start living together.

The third indicator for the quality of search behaviour is a *premarital pregnancy*. The supposition is that couples who decided to marry because the wife got pregnant unintendedly have terminated their search for a suitable spouse early. Several orders of events can be distinguished (Morgan & Rindfuss 1985):

- a) marriage - conception - birth;
- b) conception - marriage - birth;
- c) conception - birth - marriage.

The first order is the most traditional one. In the other two cases, we are dealing with birth or conception out of wedlock, but these cases are not identical either. We can expect that the marriage in the second case, familiarly called a *shotgun marriage*, is more or less forced, which raises the probability that a premature decision is taken. The chances are higher that the spouses' match is less well and that their risk of divorce is relatively high. The third variant does not occur so frequently, but also in this case the marriage will relatively often be forced.

The hypothesis about the meaning of premarital pregnancy has to be viewed in the light of recent developments regarding unmarried cohabitation. Since the 1980s, premarital cohabitation has become more common and has even become the dominant pattern of the formation of long-term relationships. Often, a couple lives together and decides to marry when they want children or they consciously wait until a child is on its way. This cannot be seen as a forced and shortened decision to choose for each other: the choice for each other has already been made before pregnancy. Therefore, the term 'premarital pregnancy' in this hypothesis can better be changed in the direction of a 'pregnancy before cohabitation'. For the rest, the reasoning and expectations stay the same. The hypothesis then reads that couples who expected a child before (married or unmarried) cohabitation have a higher probability of divorce than couples who did not.

The relatively new phenomenon in society to live together for a period of time before marriage, brings us to the fourth aspects of search behaviour for a suitable partner: *unmarried cohabitation*. Living together before marriage is often considered as an extension of the search period. Although an increasing number of people see unmarried cohabitation as a full alternative to marriage, many see it as a trial or test period (Rindfuss & Van den Heuvel 1990). In those cases, having lived together before marriage is an indication of the quality of the search behaviour. We can expect more divorces within the test period than during marriage (Manting 1993; Teachman, Richmond & Paasch 1991). However, the idea is that a marriage which arises from such a relationship of cohabitation after surviving this test period will be more stable (Klijzing 1992).

However, much international research has demonstrated that couples who live together before marriage have a higher risk of divorce than couples who marry directly (Balakrishnan, Rao, Lapierre-Adamcyk & Krotki 1987; Bennett, Blanc & Bloom 1988; Bracher, Santow, Morgan & Trussell 1993; Bumpass & Sweet 1989; Cunningham & Antill 1994; Hall & Zhao 1995; Janssen *et al.* 1998; Manting 1993; Teachman & Polonko 1990; Thomson & Colella 1992; Trussell, Rodriguez & Vaughan 1992; Trussell & Rao 1989). The explanation for this finding is generally attributed to the fact that cohabitation before marriage reflects a lower degree of adherence to traditional norms and values regarding marriage and the family (Axinn & Thornton 1992; Clarkberg, Stolzenberg & Waite 1995).<sup>2</sup> Once they are married, such couples will still have less 'respect' for eternal fidelity and they will be more likely to leave a marriage than couples who married directly.

The above can be summarized by the hypothesis that the longer and more intense one has searched for a spouse, the lower the risk of divorce. In this chapter, this hypothesis will be tested by investigating to what extent the age at marriage, the duration of courtship, a pregnancy before cohabitation and unmarried cohabitation influence the risk of divorce.

In the test, a number of standard characteristics of which previous research showed that

they influence the risk of divorce, were taken into account. These are characteristics in the field of traditionality and experiences in the past. Children of divorced parents have a higher risk of divorce than children from intact families (Amato 1996; De Graaf 1996a, b; Diefenbach 1997; Diekmann & Engelhardt 1995; Dronkers 1997; Manting 1994; McLanahan & Bumpass 1988; Wagner 1993; Webster, Orbuch & House 1995; Wolfinger 1999). Similarly, a previous divorce of the spouses themselves raises the risk that they will divorce again. Having modern values also increases the risk of divorce. I expect that people who were raised in the city have more modern values than people who grew up in municipalities with a lower degree of urbanization. This also goes for people whose mother was not a church member, had a higher level of education or was working when she had children. In such cases, someone is raised in less traditional circumstances and it can be expected that he or she has a higher risk of divorce than someone who grew up in opposite circumstances. It is important to take such characteristics into account statistically, because they can distort the relationship between the search characteristics and the risk of divorce. For example, it is possible that children of divorced parents leave the parental home at a younger age and also start living together more hastily.

An additional question which will be answered in this chapter is whether the influence of the quality of search behaviour on the risk of divorce has been constant. Unmarried cohabitation has normalized and pregnancy before cohabitation is accepted to an increasing degree. This leads to the expectation that the impact of these characteristics is decreasing over time.

As well as a descriptive research question, an explanatory research question is raised in this chapter: does social heterogamy offer an explanation for the relationship between search characteristics and the risk of divorce? Does a hasty choice for a spouse raise the risk of divorce because of the fact that spouses who do so, resemble each other to a lesser extent in social respect (Becker, Landes & Michael 1977)? From the previous chapters, it is already known that several forms of heterogamy raise the risk of divorce in the Netherlands. This goes for heterogamy with respect to religion, level of education, age, social origin and nationality. The question is whether these types of heterogamy intervene in the effect of spouse selection on the risk of divorce.

### **6.3 Data and operationalization**

For the analyses in this chapter, I used the SIN98 data collection (Kalmijn, De Graaf & Uunk 1999). This is a survey among 2,346 married, divorced and remarried persons. To obtain sufficient numbers of divorced and remarried people in the data file, these groups were over-represented in the sample design. The data contain many aspects of causes and consequences of divorce, among which the information which is necessary for our research questions on characteristics regarding marriage, spouse selection and heterogamy.

A description of the used variables can be found in Table 6.1. For each variable, the minimum and maximum value, the mean and standard deviation is presented after applying a weight factor. This weight factor restores the distribution of characteristics in the married and divorced population aged between 30 and 75 years, from which the sample was taken. In the first place, this weight factor corrects the proportion of persons in their first marriage, persons who

Table 6.1 Description of used variables

characteristic	min.	max.	weighted mean	standard dev.
age at marriage of youngest spouse (years)	14	61	22.95	4.13
duration of courtship (years)	0	17	2.86	2.27
pregnancy played role to marry*	0	1	0.14	0.35
unmarried cohabitation*	0	1	0.34	0.48
parents of respondent divorced*	0	1	0.09	0.28
husband previously divorce*	0	1	0.06	0.23
wife previously divorced*	0	1	0.04	0.18
respondent grew up in a city*	0	1	0.29	0.45
non-church membership of mothers	0	1	0.21	0.33
level of education mother respondent	0	1	0.20	0.24
labour force participation of mother during youth of respondent	0	1	0.24	0.40
absolute age difference	0	26.75	3.46	3.18
wife older (at least by 1 year)*	0	1	0.38	0.49
mean education (years)	6	18	12.57	2.65
absolute educ. difference	0	12	2.53	2.37
wife higher education*	0	1	0.21	0.41
mean economic occupational status	-1.81	2.43	-0.31	0.60
absolute economic status difference	0	3.98	0.80	0.74
wife higher economic status*	0	1	0.28	0.45
mean cultural occupational status	-1.40	2.57	-0.22	0.71
absolute cultural status difference	0	3.46	0.70	0.66
wife higher cultural status*	0	1	0.55	0.50
church: none*	0	1	0.29	0.45
church: none/Catholic*	0	1	0.07	0.26
church: none/Protestant*	0	1	0.07	0.25
church: Catholic*	0	1	0.32	0.47
church: Catholic/Protestant*	0	1	0.02	0.15
church: Protestant*	0	1	0.15	0.35
church: other homogamous*	0	1	0.05	0.22
church: other mixed*	0	1	0.03	0.17
ethnicity: Dutch*	0	1	0.77	0.42
ethnicity: foreign*	0	1	0.06	0.24
ethnicity: Dutch/foreign*	0	1	0.16	0.36
ethnicity: mixed foreign*	0	1	0.01	0.10
mean economic status origin	-1.40	2.43	0.00	0.65
absolute economic origin difference	0	3.61	0.79	0.75
wife higher economic origin*	0	1	0.46	0.50
mean cultural status origin	-1.40	2.57	-0.41	0.65
absolute cultural origin difference	0	3.87	0.73	0.75
wife higher cultural origin*	0	1	0.48	0.50
year of cohabitation or marriage	43	97	74.05	11.25
divorced*	0	1	0.19	0.39

Source: Divorce in the Netherlands 1998 (SIN98). N=2,241.

Note: \* indicates a dichotomous variable (dummy). Because the weight factor is based on the complete data set (N=2,346), the effective N slightly differs in weighted figures (N=2,252).

got divorced and who are single at the moment of interview, and persons who got divorced and subsequently remarried. Next, the distributions of region, degree of urbanization, sex and age group are in correspondence with the Dutch population between 30 and 75 years of age after application of the weight factor. On the basis of this weighted sample, we obtained an overview of divorces taking place between 1949 and 1998. Most divorces took place in the 1980s in the 1990s.

The age on the wedding day or at the beginning of cohabitation was taken from the youngest partner, since it indicates whether at least one of both partners started living together at a young age. For the couples in our analysis, this youngest age at marriage is between 14 and 61 with a weighted average of about 23. The respondent was also asked when they started their relationship (courtship), which allowed me to compute the duration of courtship. This varies from 0 years (courtship less than six months) to 17 years, with an average of two years and ten months.

In the questionnaire, the time of the beginning of cohabitation and of the birth of the first child was measured in full years only. That is why it was impossible to reliably compute, in case of a pregnancy or birth in the wedding year or the year afterwards, whether a marriage or cohabitation had been forced by that pregnancy. The exact order of or the time span between conception, birth and marriage or cohabitation is unclear. Nevertheless, a list was presented to the respondent containing possible reasons to get married or to commence cohabitation. In this way, a question was included whether a pregnancy before marriage or cohabitation played no, some or an important role in the decision to start cohabitation, either married or unmarried. Among the people in the analysis, 14 percent, after weighting, indicated that the wife expected a child and that this played either some or an important role in the decision to start cohabitation.

Next, 34 percent of all couples appear to have lived together before marriage.

The controlling variables were operationalized as follows. The parents of 9 percent of the respondents had been divorced at some point. Obviously, there is quite some variation in the age of the respondent at which his or her parents divorced and it is even possible that the parents divorced later than the respondent himself or herself. Even in such cases, the parental divorce tells us something about the quality of the marital relationship of the parents. Of all men in the analysis, 6 percent experienced a divorce or a termination of cohabitation themselves. Among women, this amounts to 4 percent.

To measure the degree of urbanization, I made use of a dichotomous variable which indicates whether the respondent grew up in a city or not, which goes for 29 percent of the respondents. Cities were defined as municipalities which reached the number of 100,000 inhabitants in 1990 or before. For the religious climate during someone's youth, one indicator was available for both the respondent and his or her (ex-) partner: the religion of the mother. For both mothers, a dummy variable was constructed indicating whether or not the mother was a non-church member. Subsequently, the average of these two dummies has been computed. The mean scale value is 0.21. Information about the cultural climate in the parental home was determined on the basis of the level of education of the mother of the respondent. This was firstly recoded to the number of years necessary to reach that level without delay. Next, these scores, varying from 6 to 18, were recoded to a scale running from 0 to 1, with a mean value of 0.20. Besides, a scale was constructed for the mother's labour force participation during the upbringing of the respondent until about the age of 14. The scale got the value 0 for never, 0.5 for sometimes and 1 for regular labour. The average value is 0.24.

In order to determine the effects of social heterogamy, a number of variables were

constructed. For characteristics of heterogamy measured on the interval level, the average of the couple, the absolute difference between husband and wife and the direction of the difference were determined. This applies to age, level of education, job status of the spouses themselves and of the fathers. The direction of the difference is of importance to see whether the wife or the husband is the oldest, most highly educated, etcetera, which may make a difference in the risk of divorce (see Chapter 4). The age of both partners was measured in years, the level of education in the minimum number of years necessary to reach that level. Social statuses were determined on the basis of the jobs of both spouses at the beginning of cohabitation. It was divided in two dimensions (De Graaf & Kalmijn 1995). The economic status of a job or profession stands for the typical level of income for that job or profession and the cultural status for its average level of education.

It is impossible to compute averages and differences with regard to religious denomination and ethnicity. Instead, classifications were used, based on both partners' categories. For religious affiliation, combinations were made of the denomination of both partners on the wedding date (or the start of cohabitation). A distinction was made between the categories non-church member, Catholic, Protestant and otherwise. Many marriages appear to be characterized by religious homogamy: in 29 percent of the marriages, both husband and wife are not a member of any church, in 32 percent of the marriages, both are Catholic, in 15 percent, both are Protestant and in 5 percent of the marriages, the couple is religiously homogamous in another religious denomination. The largest heterogamous groups consist of a non-church member and a Catholic partner (7 percent) and a non-Church member and a Protestant partner (also 7 percent). Marriages in which both spouses consider themselves as a member of a religious group, but each of them a different one, occur relatively infrequent in the Dutch population: about one in twenty.

Combinations of ethnicity were determined on the basis of the countries of birth of the parents of both spouses. As a result of low numbers of specific allochthonous categories, it only appeared feasible to distinguish between homogamous autochthonous marriages, homogamous allochthonous marriages, heterogamous marriages between an autochthonous and an allochthonous partner, and heterogamous marriages between allochthonous partners of different ethnic origin. The majority of couples is ethnically homogamous: 77 percent autochthonous, 6 percent allochthonous. Of the 17 percent mixed marriages, the larger part consists of an autochthonous and an allochthonous partner.

Furthermore, Table 6.1 shows that the oldest relationship in the analysis started in 1943 and the youngest in 1997. Marriages were followed from beginning to end, which is either divorce or the moment of interview. This resulted in information for many marriage years. These differences in time were used to investigate whether the influence of search behaviour has changed in the course of time. Finally, it appears from Table 6.1 that in 1998, 19 percent of all those aged between 30 and 75 who married (discarding widowhood), got divorced.

## **6.4 Analyses and results**

A discrete time event history analysis was performed (Allison 1984) in order to test the hypotheses. For this reason, a couple-year file (person-period file) was constructed, containing one record of data for each year that each couple was at risk of getting divorced starting from the

moment of cohabitation. In other words, there is one record for each year of marriage or cohabitation of every couple in the file. The event history analysis was done by means of logistic regression. The dependent variable in this analysis is the natural logarithm of the conditional odds of divorce in a particular year, given that the couple is still together in the beginning of that year. The advantage of event history analysis is that the fact is taken into account that some marriages have not (yet) divorced and that some never will during the time of observation. In all models, linear and quadratic effects were included of the calendar year and of the duration of the relationship. In this way, changing divorce rates over time and over marriage duration were statistically controlled. In the discussion of the results, effects called 'present' or 'significant' are significant at a level of five percent or less unless stated otherwise.

#### 6.4.1 Descriptive analyses and trends

In Table 6.2, separate and simultaneous models are displayed of the effects of the intensity or quality of search behaviour on the probability of divorce. Model 1 represents separate baseline models in which the influence of each characteristic of search behaviour was analysed separately. Only the current duration of the marriage and the calendar year (minus 1943) and the square of both were controlled. Model 2 contains the multivariate baseline model in which all used characteristics of search behaviour are entered into the logistic regression analysis at once.

It appears from the models, that a younger age at marriage (of the youngest of both partners) coincides with a higher chance that the marriage will end in divorce. Depending on whether the effects are tested separately or simultaneously, the model predicts a decrease in the odds of divorce of not less than 3 to 4 percent for each year that the youngest partner is older at the beginning of marriage or cohabitation. This percentage can be computed by taking the natural exponents of the effects in the table (here -0.039 and -0.030, respectively) and subtract 1. The age at marriage has a considerable influence on the odds of divorce.

The effect of the duration of courtship indicates that couples who knew each other for a longer period of time before forming one household have a lower risk of divorce. This effect is large as well. The separate effect amounts to -0.098, and taking the exponent of this shows that the odds of divorce decrease by more than 9 percent for each extra year that the couple associated with each other in a relationship before the start of their marriage or cohabitation. When all other characteristics of search behaviour are statistically controlled, the effect decreases somewhat. But it is still considerable and significant, with a decrease in the odds of divorce of 6 to 7 percent for every extra year of courtship.

If a premarital pregnancy was a reason to get married, then the odds of divorce increase by 29 percent in the separate model and 14 percent in the multivariate model.

Couples who cohabited before marriage have a 56 percent higher odds of divorce than couples who started living together at marriage. In the multivariate baseline model, this effect becomes a bit smaller, but still amounts to 40 percent. This result contradicts the hypothesis that couples marrying after a period of cohabitation have searched better for a suitable spouse. Therefore, this effect has to be seen in the light of a lower degree of adherence to traditional norms and values with respect to marriage and the family. In other words: couples who marry directly may not know each other that well, but their traditional attitudes make them less likely to divorce. The sum of these opposite effects apparently goes in the direction of a lower risk of



divorce for those who did not cohabit before marriage.

Except in the case of premarital cohabitation, the effects found are in agreement with the hypothesis predicting that those who searched for a suitable spouse more intensively or during a longer period of time have a lower probability of divorce.

Table 6.2 *Event history analysis: regression of the risk of divorce on characteristics of spouse selection, models 1 to 3*

model	1 (separate baseline)		2 (multivariate baseline)		3 (multivariate controlled)	
	b	s.e.	b	s.e.	b	s.e.
duration at t	(several)		0.114***	0.010	0.117***	0.010
duration at t squared	(several)		-0.003***	0.000	-0.003***	0.000
year-1943	(several)		0.130***	0.022	0.124***	0.022
year-1943 squared	(several)		-0.001***	0.000	-0.001***	0.000
age at marriage of youngest spouse	-0.039***	0.008	-0.030***	0.008	-0.036***	0.008
duration of courtship (years)	-0.098***	0.013	-0.068***	0.014	-0.050***	0.014
pregnancy played role to marry	0.255***	0.064	0.134*	0.066	0.070ns	0.067
unmarried cohabitation	0.445***	0.058	0.339***	0.061	0.180**	0.065
parents of respondent divorced					0.170*	0.081
husband previously divorce					0.314**	0.100
wife previously divorced					0.374***	0.106
respondent grew up in a city					0.114*	0.054
non-church membership of mothers					0.312***	0.072
level of education mother respondent					0.217*	0.103
labour force participation of mother					0.067ns	0.063
constant	(several)		-6.376***	0.466	-6.388***	0.471

Source: Divorce in the Netherlands 1998 (SIN98). N=37,116 marriage years based on 2,241 couples.

Note: ns  $p > 0.10$ ;  $\sim 0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ .

In model 3 of Table 6.2, control variables have been added to the multivariate baseline model. Some effects of the influence of the quality and intensity of search behaviour on the risk of divorce indeed appear to become smaller if experiences with divorce in the past and the level of traditionality during one's upbringing are taken into account. Nevertheless, this does not apply for the effect of age at marriage at all: it is even a bit larger than in model 2. The odds of divorce still decrease by 3.5 percent for each year that the youngest spouse is older at the moment that the couple starts the formation of one household. The effect of the duration of courtship decreases from -0.068 to -0.050. The odds of divorce in a marriage year decreases by 5 percent for each extra year of courtship. According to model 2, it was 6 to 7 percent, but here, the influence is still considerable.

The effects of both other variables decrease to a larger extent after adding the control variables. The effect that marriages forced by pregnancy have a 14 percent higher odds of divorce is even discarded and is no longer significant.<sup>3</sup> The odds of divorce are higher for those who cohabited before marriage than for those who got married right away. Compared to model 2, however, this increase of the odds is halved in model 3, from 40 to 20 percent. The decrease of the effect is according to expectation, because a traditional socialization is now controlled, and it is likely that those who were raised less traditionally have a higher chance of both premarital cohabitation and divorce.

Most control variables themselves have clear effects on the risk of divorce. The odds of divorce increase by 19 percent if the parents were divorced, by 37 percent if the husband was previously divorced, by 45 percent if the wife was previously divorced, by 12 percent if the respondent grew up in the city, by 37 percent if both mothers were not affiliated to any religion (compared to two church member mothers) and by 24 percent if the respondent's mother had a university degree compared to a mother who only went to elementary school. If all this is taken into account, the mother's labour force participation no longer has any significant effect. In sum, the control variables demonstrate that a socialization in a more traditional environment and less experiences with divorce in the past strongly reduce the odds of divorce.

In the theory section, it was suggested that the effects of the quality of search behaviour on the risk of divorce could have decreased in the course of time. In model 4 (see Table 6.3), trend interactions have been added for the four characteristics of search behaviour in model 3.

In model 3, each year that the youngest spouse was older at the start of the marriage or cohabitation, resulted in a decrease of the odds of divorce by 3.5 percent. The significant interaction effect of 0.002 in model 4 shows us that this effect has become weaker over the years. Apparently, it is becoming less important for the probability of divorce whether one marries or cohabits at a younger or older age.

The positive influence of the duration of courtship on marital stability has not changed significantly in the past 50 years.

Also the influence of a premarital pregnancy as a reason to get married or start cohabitation does not show any linear trend. This means that, after controlling the variables concerning socialization and the marital past, it has never had an influence on the risk of divorce. In model 2, without statistically controlling those variables, premarital pregnancy does have a significant effect on the risk of divorce. If a trend effect is added to that model (resulting in a model not presented here), the trend is not significant either. It may be so that unmarried motherhood has become more widely accepted and that this has led to a decrease in the number of marriages forced by an unplanned pregnancy. Apparently, the shrinking group which does feel forced to marry because of a pregnancy still runs a higher risk to have taken a rash decision and to eventually divorce. But as described above, this can be completely attributed to socialization.

It is remarkable that the positive effect of premarital cohabitation on the risk of divorce has increased over time. Even though it was not expected, it may be possible to give an explanation for this. In the previous decades, the occurrence of unmarried cohabitation has increased, while the phenomenon was very uncommon in the beginning of the period under investigation here. In the 1940s and 1950s, premarital cohabitation was so rare, that we are dealing with special cases which apparently do not run a higher risk of divorce.

Table 6.3 Event history analysis: regression of the risk of divorce on characteristics of spouse selection, models 3 to 5

model	3 (multivariate controlled)		4 (trend effects)		5 (heterogamy controlled)	
	b	s.e.	b	s.e.	b	s.e.
duration at t	0.117***	0.010			0.121***	0.010
duration at t squared	-0.003***	0.000			-0.003***	0.000
year-1943	0.124***	0.022			0.121***	0.022
year-1943 squared	-0.001***	0.000			-0.001***	0.000
age at marriage of youngest spouse	-0.036***	0.008	0.002*	0.001	-0.042***	0.009
duration of courtship (years)	-0.050***	0.014	0.002ns	0.002	-0.039**	0.014
pregnancy played role to marry	0.070ns	0.067	0.000ns	0.008	0.003ns	0.069
unmarried cohabitation	0.180**	0.065	0.017*	0.008	0.076ns	0.068
parents of respondent divorced	0.170*	0.081			0.133ns	0.082
husband previously divorce	0.314**	0.100			0.314**	0.105
wife previously divorced	0.374***	0.106			0.346**	0.108
respondent grew up in a city	0.114*	0.054			0.084ns	0.056
non-church membership of mothers	0.312***	0.072			0.195*	0.094
level of education mother resp.	0.217*	0.103			0.160ns	0.115
labour force participation of mother	0.067ns	0.063			0.025ns	0.065
constant	-6.388***	0.471			-6.007***	0.520

Source: Divorce in the Netherlands 1998 (SIN98). N=37,116 marriage years based on 2,241 couples.

Note: ns  $p > 0.10$ ;  $\sim 0.05 < p \leq 0.10$ ; \*  $0.01 < p \leq 0.05$ ; \*\*  $0.001 < p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ . The effects in model 4 are trend effects. The accompanying main effects (with standard deviation) are: -0.117\*\* (0.041); -0.119~ (0.069); 0.046ns (0.316); -0.553~ (0.326).

#### 6.4.2 Explanations by heterogamy?

In the theory section, it was predicted that a part of the effects of the quality and intensity of search behaviour for a spouse on the risk of divorce can be explained by social heterogamy. The idea is that a hasty choice leads to a worse match of the spouses, which expresses itself in social heterogamy. For this reason, a number of types of heterogamy have been added to model 3, resulting in model 5: with respect to age, level of education, social economic and cultural status, religion, ethnicity and economic and cultural origin (or social status of the fathers).

The influence of heterogamy itself is not presented in this chapter: it can be found in Chapter 4. In short, many types of heterogamy, as operationalized in this chapter, have an effect on divorce. The largest effects are found for heterogamy with regard to age, level of education and religion. In the case of age, the effect stems from the absolute difference in age, whereas in the case of education, it is about the direction: if the wife has a higher level of education than her husband, then this deviation from the traditional pattern leads to a higher risk of divorce.

In model 5 (see Table 6.3), I examine whether the effects of search behaviour change when

the effects of heterogamy are added to the model. The effect of age at marriage of the youngest spouse does not decrease after controlling for social heterogamy; it even becomes somewhat stronger. So, social heterogamy does not offer any explanation here.

The effect of the duration of courtship has decreased, namely by 22 percent. The level of explanation by social heterogamy is limited. The odds of divorce are still reduced by almost 4 percent for each extra year that a couple had a relationship before cohabitation or marriage.

Besides, we can see that the effect of a marriage forced by an unforeseen premarital pregnancy, already no longer significant in model 3, is not significant in model 5 either.

The effect of an increased risk of divorce for couples who cohabited before marriage is no longer significant after taking heterogamy into account. The explanation has succeeded here. Perhaps, premarital cohabitation goes together with heterogamy in such a way that keeping heterogamy constant makes the effect of premarital cohabitation on the risk of divorce disappear. However, we should not forget that controlling heterogamy in model 5 also implies that church membership and other social characteristics are controlled. Compared to model 3, the traditionality of the spouses themselves is taken into account in a better way. This may lead to the disappearance of the effect of premarital cohabitation. For reasons of comparison, a model can be set up in which the main effects, without heterogamy effects, of age, education, social status, religion, ethnicity and social origin are added to model 3. (The parameters of that model are not presented here.) From that model, it appears that more than half of the decrease of the effect of premarital cohabitation in model 5 compared to model 3 stems from the main effects. The effect of unmarried cohabitation in that model amounts to 0.122, with a significance level of 0.07.

## 6.5 Conclusions and discussion

In this chapter, the influence of a number of characteristics of the quality of search behaviour for a suitable partner on the risk of divorce has been investigated. The main finding is that this influence of the quality of search behaviour indeed exists and is fairly strong. Getting married or embarking on cohabitation at a more mature age and after a longer period of courtship is more favourable to the stability of a marriage than starting cohabitation at a premature age with someone whom one has not known for very long.

Does heterogamy play a role in these effects of search behaviour? The influence of age at marriage cannot be explained at all by differences between spouses regarding age, education, social status, religion, ethnicity and social origin. It is probably more about being socially and emotionally mature for marriage. The effect of age at marriage on the risk of divorce is declining over time, which is an indication that there is a trend towards postponing marriage or cohabitation until one is emotionally ready for it. Postponing marriage or cohabitation further does not give any extra protection for the subsistence of the relationship.

The influence of the duration of courtship is explained by social heterogamy to a small extent. I presume that the explanation of the effects of both age at marriage and duration of courtship may be found in another type of heterogamy, namely with respect to personality. According to this argumentation, a hasty, premature marriage does not so much lead to marrying someone with another level of education or another religious affiliation, but someone with non-complementary personality characteristics. Research into marriage patterns has shown that the

commonplace that opposites attract is not generally valid. And when opposites do attract, they often quickly repel.

Another characteristic regarding search behaviour is a marriage forced by pregnancy, a *shotgun marriage*. At first sight, suchlike marriages have a higher risk of divorce, but this effect is fully explained by characteristics related to the marital past and traditionality during socialization. This corroborates the idea that the hasty occurrence of a marriage or cohabitation forced by pregnancy is predominantly related to social circumstances and social pressure. Marriages not forced by pregnancy in the same circumstances appear to have a comparable risk of divorce. And heterogamy of whatever kind does not play a role in this aspect of search behaviour.

Premarital cohabitation can be interpreted as an extension of the search period for a spouse by considering it as a test marriage. However, as previously demonstrated, it is exactly the married couples who lived together before their marriage who have a higher risk of divorce. In this light, cohabitation must be seen as a lower level of adherence to traditional norms and values regarding marriage and the family. It is striking that controlling for heterogamy makes the effect of unmarried cohabitation on the risk of divorce disappear. However, this was largely caused by the main effects of religion, education, social status, ethnicity and social origin. This strengthens the idea that people with less traditional views often start with unmarried cohabitation and, moreover, that they are the ones who more easily take the step towards divorce.

In sum, search behaviour appears to play an important role in marital stability, but social heterogamy does not play a role in the relationship between search behaviour and stability. An explanation for the influence of the intensity of the search for a spouse on the risk of divorce has rather to be found in two other aspects. The first aspect is that, when one makes one's choice too early, the marriage takes place before one is ready and mature. If this happens and the persons concerned are still developing during marriage, then the stability of marriage suffers from it. The second aspect is that, after a hasty choice for a spouse, one does not yet have sufficient knowledge about the other partner's personality. This results in a higher chance that the marriage is heterogamous with regard to personality and that spouses do not match well in this respect.

## Notes

1. A Dutch version of this chapter was published in *Sociale Wetenschappen*, 44 (2), pages 53-68 (Janssen 2001).
2. Present differences with respect to adhering to traditional values between the married who previously cohabited with each other and those who married directly do not have to explain the difference in marital stability between both groups (DeMaris & MacDonald 1993). Due to self selection, the same couples who have a higher risk of divorce are also the ones who choose unmarried cohabitation. Controlling this should yield results which support the idea of cohabitation as a test marriage, making a subsequent marriage more stable. Brüderl, Diekmann and Engelhardt (1997) use indirect methods to fix self selection in order to test whether cohabitation before marriage does have a stabilizing effect on the marriage. The positive effect of premarital cohabitation on the risk of divorce in a subsequent marriage decreases, but the negative effect in their probit model with double dependency is not significant. This chapter does not aim at these double dependencies and suchlike models will not be applied here.

## *Chapter 6*

3. Note that the presence of children in the family is not controlled, which has an effect on divorce according to the analyses in Chapter 4. One may argue that it can be of importance here, since marriages forced by pregnancy will, by definition, soon have children. In order to make a fairer comparison, parameters of model 3 were computed after adding the presence of children under 13 years of age in the family. The effect of a shotgun wedding is not significant in that model either. The effect of a shotgun wedding which was found in model 2 is still present, even a little more pronounced, if the presence of children is added to that model. So the effect of premarital pregnancy on the divorce risk is still explained by traditionality and divorce experiences in the past.

## 7 Conclusion

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In the empirical research papers forming Chapters 2 to 6, research questions were answered by empirically testing hypotheses derived from theories and other research findings. In this final chapter, my findings will be brought together in order to answer the general research questions raised in Chapter 1. Those research questions were descriptive, explanatory, trend and life course questions with respect to the influence of heterogamy on divorce. Besides, a descriptive and an explanatory question were raised with respect to the impact on divorce of the intensity or quality of search behaviour in the spouse selection process.

### 7.1 Questions, findings and answers

I will now bring all of the findings together, grouped by the research question that they are supposed to answer. An answer will then be formulated for each general research question raised in Chapter 1.

#### 7.1.1 Heterogamy and divorce

In Chapters 2 and 4, hypotheses were presented concerning the effects of mixed marriage on the risk of divorce. These are tools to answer the first general research question posed in Chapter 1, which read:

1 Does heterogamy with respect to (1) age, (2) level of education, (3) social status, (4) religion, (5) ethnicity, and (6) social origin, have an influence on the risk of divorce in the Netherlands? And which types of heterogamy have the largest impact?

The most basic and general hypothesis is the *heterogamy hypothesis*, which states: “Heterogamous couples have a higher risk of divorce than homogenous couples.” A further specification was made, taking into account that certain combinations are less accepted than others in society when it comes to divisions between husband and wife. More specifically, this is about whether the husband or the wife has a better position. The *asymmetry hypothesis* or *hypergamy hypothesis* was formulated, stating: “The probability of divorce in a mixed marriage is higher if the wife is older, has a higher level of education or a higher social status position than her husband”.

Another hypothesis concerned with traditional divisions between husband and wife was introduced in Chapter 4. Since a traditional division of labour between husband and wife is expected to stabilize their marriage, the *specialization hypothesis* weakens the heterogamy hypothesis in certain respects. It reads: “With respect to the (economic) social status of husband and wife, the effect predicted in the heterogamy hypothesis will be reduced or even be turned around”. A traditional division of labour is expected to be associated with a somewhat older husband for whom the level of education is more important than for his wife. Nevertheless,

reduction due to specialization of the effects of heterogamy with respect to age or education was not expected to be very large, since these characteristics are also associated with culture, taste and preferences.

Were the hypotheses borne out by the findings? The hypotheses were tested using population registrations at Statistics Netherlands (Chapter 2) and survey data of SIN98 (Chapter 4). By using the registration data on almost a million marriages, the hypotheses could be tested in multivariate models for heterogamy with respect to age, church affiliation, nationality and previous marital status. The survey data contain information on more types of heterogamy in almost 2,400 existing or dissolved marriages. I could investigate spousal differences with respect to age, education, social status, religion, ethnicity and social origin. The survey data also allowed more sophisticated analyses over the course of marriage. In general, clear effects of heterogamy on divorce were found in the registration data for heterogamy with respect to age, church affiliation and nationality. With SIN98, I could, again, demonstrate the influence of heterogamy on the risk of divorce. Spousal differences regarding age, level of education, religion and economic origin have the greatest impact on the risk of divorce. Let me go into this in more detail.

According to the registration data, more couples divorced within ten years if their age differences were larger. This heterogamy effect was found for 42 percent of the distinguished heterogamous combinations of age. This influence is present, net of the main effect of age at marriage itself: the younger the couple is on the wedding day, – measured by looking at youngest spouse – the higher their risk of divorce.

Religious differences also raise the risk of divorce. The most important heterogamy effects in Chapter 2 were for the main Christian denominations: mixed Catholic/Protestant couples had higher divorce risks. Of all the combinations analysed, 51 percent of the cells showed the heterogamy effect. Once more, these impacts are net of the main effects of religion, which indicate that homogenous non-church members have the highest and homogenous Re-reformed have the lowest risk of divorce.

Ethnic differences promote the risk of divorce in a comparable way. In Chapter 2, only the official nationality was available and only registrations of marriages and divorces processed in the Netherlands could be analysed. Therefore, the results were assessed with prudence. Nevertheless, I can conclude that an ethnic heterogamy effect is present, because of the extremely high divorce risks within ten years of mixed couples compared to their homogenous counterparts. Only 13 combinations of nationalities could be compared, of which 11 (85 percent) showed the heterogamy effect.

Because of the relatively small numbers of mixed marriages, the impact of mixed marriage on the risk of divorce as found on the micro level, is not as large on the macro level. However, comparing an imaginary fully open society with a fully closed one, demonstrates that heterogamy with respect to age and nationality does have some macro level implications towards the average divorce risk.

The above conclusion drawn from information on the whole marriage population about heterogamy pertaining to age can also be drawn from the event history analyses on the survey. The greater the age difference, the higher the risk of divorce. The odds of divorce increase by 4 percent for each year of age difference and the odds are doubled if a couple differs 17 to 18 years of age compared to an equally aged couple.



Religious heterogamy effects in the survey are shown in higher divorce risks for mixed marriages between a non-church member and a Catholic, a Catholic and a Protestant and some other not further specified mixed combinations compared to their homogamous counterparts. The non-church member/Catholic mixed marriages have odds of divorce which are 24 percent higher than the odds for homogamous non-church member couples and even 111 percent higher than for homogamous Catholic couples. The Catholic/Protestant mixed marriages have odds of divorce which are 59 percent above those of homogamous Catholics and 89 percent above those of homogamous Protestants.

Another ascribed characteristic, only available in the survey data, which displays an effect of heterogamy on divorce is economic origin: as the difference between the economic social status of the husband's and the wife's father becomes larger, the odds of divorce become somewhat higher, namely 15 percent per unit on a scale which, in our data, ranges from -1.40 to 2.43.

Thus, some clear effects were found on both registration and survey data which are in accordance with the heterogamy hypothesis. The findings also confirm patterns in accordance with the asymmetry hypothesis. The combinations of age categories displaying an impact of heterogamy in the registration data are, for the larger part, combinations in which the wife is older than her husband. The survey data lack evidence of an asymmetry effect of age. However, the impact of educational heterogamy in SIN98 is asymmetric in nature: only if the wife has a higher level of education than her husband, do the odds of divorce rise by 17 percent (in an extended model) to 21 percent (not controlling for other types of heterogamy). An asymmetry effect for economic status was found in a model which does not control for other types of heterogamy, but was explained in a multivariate model.

Furthermore, the specialization hypothesis is confirmed in the absence of the effects of absolute differences between spouses concerning level of education and both the economic and cultural dimensions of social status. The heterogamy effect on divorce is compensated here by the advantages brought by task specialization.

The above results still stand if the presence of children in the family is taken into account. Having a family with one or more children lowers the risk of divorce, but the effect of heterogamy on divorce is not explained by having children, nor is the probability of first childbirth affected by heterogamy.

The above description forms the answer to the first research question. In short, the answer could be summarized as:

*Heterogamy with respect to age, level of education, religion, ethnicity and social origin has an influence on the risk of divorce in the Netherlands. The effect of educational differences takes an asymmetric shape. The heterogamy effect of absolute origin differences is found in the economic dimension. Differences regarding social status of the spouses themselves do not have an independent influence of increasing the rate of divorce. A wife with a higher cultural job status than her husband even appears to have a lower risk of divorce. The sizes of the impacts were described in Chapters 2 and 4. Age differences, (asymmetric) educational differences and religious differences seem to have the largest impact on the risk of divorce.*

To give some concrete examples, I could say that, on average, the following situations would be fairly stable:

- a couple not too young at the time of marriage and close in age, but if different, then a slightly older husband – for example a 28 year old bride and a 30 year old groom;
- the educational and own social status level is not important but the husband should not have a lower education than his wife, even though it would help if the cultural job status of the wife is higher than her husband's;
- both are religious in the same, more conservative stream, i.e. Re-reformed;
- both are Dutch;
- both originate from families who are economically, but not culturally well-off, for example families in which both fathers are successful and prominent businessmen.

On the other hand, a higher divorce risk would have:

- a couple with large age differences, one of them being very young, the other middle aged or over;
- the wife has a university degree and the husband does not have any educational certificate;
- one of them is not a member of any church, the other one is a Catholic;
- possibly from different countries;
- one of them stems from a high economic social status family, while the other stems from a low one, but both their cultural social origins are relatively high; for example one of the fathers is a university professor, the other is an artist without a secure economic position.

Of course, these examples are illustrative and based on averages. Pinpointing specific professions is a bit risky because in the analyses, status scales were used instead of specific professions.

### 7.1.2 Explaining heterogamy effects on divorce

In Chapter 4, the survey data allowed for an extension towards a possible explanation of the relationship between heterogamy and divorce. Hypotheses were derived to answer the second general research question posed in Chapter 1:

#### 2 How can the relationship between heterogamy and divorce be explained?

Hypotheses were derived from the advantages of homogamy. The theory emphasized that heterogamy will lead to a higher divorce risk because spouses, on average, are less able to get on with each other because of differing preferences or expectations. The *explanatory conflict hypothesis* with respect to divorce predicts that differences of opinion between husband and wife explain the effects of heterogamy on divorce. Next, it was noted that social environments, on average, accept a mixed marriage to lower degree, which will lead to less support for the marriage

and an inclination to support a divorce during hard times within the marriage. The *explanatory support hypothesis* with respect to divorce reads that disapproval by the social environment explains the effects of heterogamy on divorce.

Subsequently, the hypotheses are made more specific by referring to the distinction (Blau & Duncan 1967) between characteristics which are ascribed by inherited background – the parents, social environment – and characteristics which are achieved on one’s own merits – the spouses themselves. The *ascription explanation hypothesis* predicts that the effects of heterogamy with respect to religion, ethnicity and social origin on divorce can be explained mainly by social disapproval of the marriage. The *achievement explanation hypothesis* predicts that the effect of heterogamy with respect to the level of education and own social status on divorce will be explained mainly by differences of opinion between the spouses. Asymmetry effects are expected to be explained by both the lack of support from the social environment and the differences of opinion between the spouses to about the same extent.

The analyses in Chapter 4 indeed showed that mixed marriage had an influence on differences of opinion and disapproval of the marriage by the social environment and that these, in turn, appeared to have an impact on divorce risks. Furthermore, some of the influence of mixed marriage on divorce weakened after taking differences of opinion and disapproval of the marriage by the social environment into account.

In which instances could we speak of a causal explanation? The effect indicating that age differences between spouses, regardless of their direction, lead to a higher risk of divorce, was explained for one third by the explanatory characteristics. It appeared to be mainly the lack of support from parents, friends, neighbours and representatives of the church which is responsible for this explanation. The asymmetry effect of a higher divorce risk for couples when the wife has a higher level of education than her husband can be considered as completely explained by spousal opinions and environmental support. As could be expected for a characteristic of one’s own achievement, differences of opinion seem to have the largest share in the effect reduction, but, as hypothesized for asymmetry effects, the role played by the social environment’s lack of support is almost equally important.

Spousal opinions and disapproval from the environment explain more than one third of the impact of being non-church member/Catholic or Catholic/Protestant mixed on the risk of divorce. For religiously mixed marriages involving smaller groups, this explanatory power is a little more than one fifth. Only the explanation offered by the social environment is statistically causal, in the sense that it is intervening: religious heterogamy affects environmental support; support affects the risk of divorce. This corroborates the *ascription explanation hypothesis* which predicts that the influence of heterogamy with respect to ascribed characteristics on divorce can be explained mainly by social disapproval for the marriage. This does not apply to the impact of differences in economic parental background, which is only causally explained by differences of opinion to a very limited extent.

Overall, these conclusions can be summarized in the following answer to the second general research question posed in Chapter 1:

*As to the impact of mixed marriage on the risk of divorce, there is an explanatory power from differences of opinion and disapproval by the social environment, consisting of*

parents, friends and others. The differences of opinion consist of different expectations in life, diverging life styles and experiences regarding the relationship. The disapproval by the social environment manifests itself in a lack of support that the couple can fall back on. The distinction between inherited characteristics of ascription and achieved characteristics by own effort has only a mediocre meaning in the explanation of heterogamy effects on divorce.

### 7.1.3 Macro-level trends

This study also looked into changes over historical time. Heterogamy affects the risk of divorce, but this does not necessarily remain constant over time. This constitutes the third general research question in Chapter 1:

3 Which trends can be discerned in the past few decades with respect to the relationship between heterogamy and divorce?

Hypotheses were derived from the societal changes which took place in the past few decades. I pointed out the trend towards individualization and secularization which was accompanied by a shift in norms and values. This implies that, despite an increase in the number of divorces, the growing liberalization of norms and values would lead to more acceptance of mixed marriage and, thus, a decreased effect of mixed marriage on the risk of divorce: the *decreasing heterogamy effect hypothesis*. A second type of change was also taken into account. Society is changing from one in which positions are merely acquired by characteristics ascribed by social origin towards one in which positions are acquired more by characteristics achieved on one's own merits (Blau & Duncan 1967). Before, this has been applied to account for the relatively higher importance of a characteristic such as the level of education compared to characteristics such as religion or social origin in the spouse selection process. In the same way, characteristics of ascription and achievement can be used in the prediction of trends with respect to the influence of heterogamy on the risk of divorce. The *ascription part of the trend hypothesis* predicts that the influence of differences between husband and wife regarding religion, ethnicity and social origin on the risk of divorce decreases over time. At the same time, the *achievement part of the trend hypothesis* predicts that the influence of the level of education and spousal social status on the risk of divorce increases over time.

With respect to changes over time, statistical analyses were possible on both the official registrations and the survey data. This was accomplished in Chapters 3 and 5, respectively. The general increase in the number of divorces, especially in the first few years of marriage, from the beginning of the 1970s until the beginning of the 1980s was clearly demonstrated. Historical trends in the absolute level of heterogamy in the data analysed in this study go in different directions. Age differences fluctuated a little but do not show a clear pattern over time. The absolute differences between husband and wife with regard to the level of education and economic social status seemed to increase until the middle of the 1960s and subsequently decrease until the 1980s. The absolute level of religiously mixed marriage increases over time, but

this increase mainly takes place from the mid 1980s onwards. The same applies even more extremely to the level of ethnic heterogamy. The trends regarding spousal differences in economic and cultural social origin are less clear and lack a recognizable pattern.

Even though the levels of heterogamy may sometimes change, changes in the impact of heterogamy on the risk of divorce over historical time are hardly or not found. Only very little changes in line with the ascription part of the trend hypothesis were found on registration data in Chapter 3. This is limited to a decreasing impact in the first five years of marriage of being a Catholic/Re-reformed or a Dutch Reformed/Re-reformed couple on the divorce risk: those two heterogamy effects do exist in the 1974-1979 cohort but they do not in the 1980-1984 cohort. This trend is not found in Chapter 5 with survey data and more controlling variables. Only when comparing the period before and after 1970, do non-church member/Catholic mixed marriages have declining divorce risks, but this trend is not very convincing. In the survey data, the measurement of religious affiliation is more honestly measured by a two step question, first asking: "Do you consider yourself as a member of a church or religious group?" In Chapter 3, the officially registered affiliation could only be corrected by taking a wedding ceremony in church into account. According to the survey data, ethnically mixed marriages seemed to have an increasing risk of divorce in the second half of the 20<sup>th</sup> century, but the correct group comparisons could not be made.

Summarizing, my answer to the third general research question is:

*Overall, there are few indications that the influence of heterogamy on the risk of divorce changes much in the second half of the 20<sup>th</sup> century.*

#### 7.1.4 Changes in the course of marriage

Apart from changes over historical time, changes can also occur during a marriage. This also goes for heterogamy and the influence of heterogamy on divorce. That is why the fourth general research question was posed in Chapter 1. This research question consists of two parts.

- 4a Does the impact of mixed marriage on the risk of divorce change over the course of marriage and in which direction?
- 4b What happens to the risk of divorce when heterogamy changes during marriage in either direction?

In order to answer the first part of this research question, hypotheses were derived predicting the direction taken by the impact of heterogamy on divorce over the course of marriage. The *hypothesis of growing acceptance* predicts that spouses learn to accept their differences and this causes the influence of heterogamy on divorce to decline during marriage. The *hypothesis of accumulated irritations*, however, predicts that spouses will get more fed up with their differences and this leads to an increase of heterogamy effects on divorce. A pattern of an initial increase followed by a decline of heterogamy effects was predicted in the *inverse U-shape hypothesis*. Proceeding on the hypothesis of growing acceptance, an *ascription and asymmetry part* and an *achievement part* were distinguished. It was predicted that the decrease of the heterogamy effects

during marriage will be small for characteristics of ascription, namely church affiliation, ethnicity and social origin as well as for asymmetry effects. The effects of characteristics of achievement, namely the level of education, own social status and also age, on divorce were predicted to show a more pronounced decrease over the course of marriage.

With respect to the second part of the research question, I predicted that marriage partners who adapt to each other by growing towards each other in terms of social heterogamy have lower divorce risks, whereas partners who become alienated from one another in the sense of a growing level of social heterogamy have higher divorce risks. This is called the *growing together-growing apart hypothesis*.

Changing effects of heterogamy on the risk of divorce were analysed on the basis of registration data in Chapter 3 and on the survey data in Chapter 5. The analyses were preceded by a description of levels of heterogamy over the course of marriage. In the registration data, this merely reflects heterogamy effects and not changes within married couples, since the level of heterogamy could only be measured at the beginning of the marriage. In the survey data, however, changes could be measured within married couples with respect to economic and cultural status differences, and church affiliation. Age differences were dynamically measured by using age ratios. Status differences between spouses rise during the first 25 years of their marriage. This rise occurs most strongly in the cultural dimension of social status. The proportion of religiously mixed marriages decreases over the course of marriage. These changes reflect both heterogamy effects and adaptation.

Which conclusions were drawn with respect to changes of heterogamy effects on divorce during marriage? A very slight and inconsistent decline of the heterogamy effect for some categories of nationality was found. Any other linear changes over the course of marriage could not be found. Comparison between the period before and after first child birth in the survey data reveals a decreasing asymmetry effect of a wife with a higher economic status than her husband: before childbirth, there is a significant effect towards a higher probability of divorce, after childbirth, this effect disappears. Furthermore, there is a decreasing heterogamy effect after childbirth for the specific category of mixed marriages between a non-church member and a Catholic. A short answer to research question 4a can be formulated as follows:

*Overall, there are little changes in the influence of heterogamy on the risk of divorce over the course of marriage.*

This leaves us with the question about how the risk of divorce is affected if spouses grow together or apart. This question could only be answered for characteristics which were sufficiently measured for both spouses at different points in time during marriage. These characteristics are: economic and cultural status and religious denomination. For both dimensions of social status, changes in the level of heterogamy during marriage do not affect the risk of divorce. Changes in the level of religious heterogamy, however, do affect the risk of divorce but only if spouses are growing apart. In short, the answer to research question 4b reads:

*Changes in the level of social status heterogamy during marriage do not affect the risk of divorce. Changes in religious heterogamy do: if spouses have the same religion or both have no religion when they marry, but one of them decides to change, then the divorce risk increases.*

### 7.1.5 Spouse selection

The focus was extended toward characteristics of spouse selection which precede heterogamy. Did the spouses look well enough when selecting each other or did they marry in a hurry or under social pressure? This concerns the intensity and quality of the search for a suitable spouse. The following descriptive research question was put forward:

5 *Does the intensity with which persons look for a spouse before deciding to marry influence the risk of divorce?*

Four indicators for the intensity or quality of the search behaviour for a suitable spouse were investigated in Chapter 6: age at marriage, the duration of courtship, a premarital pregnancy leading to a more or less forced marriage (shotgun marriage) and premarital cohabitation. The all-encompassing *quality of search behaviour hypothesis* states that the longer and more intensive one has searched for his or her spouse, the smaller the probability of divorce.

The most important finding in Chapter 6, using the survey data, is that the influence of the quality of search behaviour on the risk of divorce does indeed exist and that it is fairly strong. Starting married or unmarried cohabitation at a more grown-up age and after a somewhat longer period of courtship is more favourable for marital stability than starting cohabitation at a premature age with someone whom one has not known for long. For each year the youngest spouse is older at the time of marriage, the odds of divorce decrease by 3 to 4 percent, depending on which control variables are included. For each extra year of courtship, this decrease is 5 to 9 percent. The influence of age at marriage or cohabitation on the risk of divorce decreases over time, which could indicate that people are increasingly likely to engage in marriage or cohabitation when they are emotionally ready for it. Any further postponements of marriage do not provide extra protection for the continuity of the relationship.

Premarital pregnancy as a reason for cohabitation or marriage initially seems to increase the risk of divorce. But this effect is completely explained by characteristics of the marital past and traditionality during socialization. Instead of the quality of search behaviour, shotgun marriages are associated with pressure from the social environment.

Premarital cohabitation could be considered as an extension of the search behaviour for a spouse by calling it a test marriage. However, couples have a higher probability of divorce if they lived together before marriage: the odds of divorce increase by at least 20 percent up to 56 percent without controlling other variables. Unmarried cohabitation is associated with less adherence to traditional norms and values concerning marriage and the family and not merely with a test marriage.

A short answer to the fifth general research question can be formulated as follows:

*The influence of the quality and intensity of the search for a suitable spouse on the risk of divorce is fairly strong. With regard to marital stability, it is, therefore, advisable to marry at a more mature age and after a reasonable period of courtship instead of marrying at a premature age with someone whom one has only known for a short period of time. Cohabitation before marriage is associated with less adherence to traditional norms and values concerning marriage and the family and, therefore, with a higher risk of divorce.*

The final research question in the present study is an explanatory one:

6 *Can the influence of the intensity of search behaviour on the risk of divorce be explained by mixed marriage?*

The results in Chapter 6 showed that only the influence of the duration of courtship becomes a little smaller after taking social heterogamy into account. Thus, the following answer can be given:

*The influence of the intensity of search behaviour on the risk of divorce can hardly be explained by socially mixed marriage. It is to be expected that prematurity and heterogamy with regard to personality characteristics play a more important role in that influence.*

The implications of the results for the hypotheses are schematically summarized in Table 7.1. In this table, the main hypotheses from the previous chapters are listed, sometimes condensed, followed by the characteristics for which they are confirmed or rejected by the registration data from Statistics Netherlands and by the survey data of SIN98.

## 7.2 Discussion and implications

By answering the six general research questions above, I have sketched a more complete image of the relationships between spouse selection, heterogamy and divorce. The magnitude of the influence and changes in the influence on macro and micro level have been described and explanations have been given.

Before this present study, little was known with regard to the relationship between heterogamy and divorce in the Netherlands. A few bivariate studies indicated an increased risk of divorce for mixed marriages with respect to ethnicity, church affiliation and age. Research into explanations or trends were absent. In the United States and some other countries, more research has been carried out in this field, but most studies were limited to describing the impact of one or just a few types of heterogamy.



Table 7.1 Main hypotheses: confirmations and rejections per data set

hypothesis	content	registrations confirmed	registrations rejected	SIN98 confirmed	SIN98 rejected
heterogamy	heterogamy increases divorce risk	age, religion, ethnicity (nationality)	marital status	age, religion, social origin (economic)	education (see asymmetry & specialization), social status (see specialization)
asymmetry	increases risk if wife in better position	age		education	age, social status (after controlling)
specialization	no heterogamy effect			education, social status	
explanatory conflict				education (asymmetry), social origin	age, religion
explanatory support				age, education (asymmetry), religion	social origin
trend	several hypotheses	decreasing religion (hardly)	rest	decreasing religion (specific group; ?)	overall; ethnicity opposite (increasing) effect (?)
changes over course of marriage	several hypotheses	decline ethnicity (nationality; ?)	rest	after childbirth: decreasing social status (asymmetry), decreasing religion (one group)	rest
growing together-growing apart	effect when heterogamy level changes			religion	social status
quality of search behaviour	longer and better search leads to less divorce			age at marriage, period of courtship	shotgun marriage (after controlling), premarital cohabitation
explained by heterogamy	spouse selection effects explained			duration of courtship (limited)	rest

It is no surprise that, for the Netherlands, no suitable data were available to carry out the investigations as they were in this present study. However, official registrations of marriages and divorces which were kept at Statistics Netherlands were matched as part of this study. These valuable data had never before been used for profound analysis and were stored on a computer system after separate basic descriptive statistics on marriages and divorces had been published. A survey was needed for characteristics which are not registered in the official registrations, such as the level of education, social status, spousal differences of opinion, disapproval by the social environment and the intensity of searching for a spouse. At the start of this present study, a suitable survey was not available in which a sufficient number of divorced and non-divorced couples could be compared. Then the Divorce in the Netherlands (SIN98) survey (Kalmijn, De Graaf & Uunk 1999) was carried out and this present study participated in it. We gathered the necessary and previously unavailable information from both married and divorced couples in order to be

able to carry out several research projects, including this one.

An important point of discussion concerns the difference between the micro and macro impact of the effects of heterogamy on divorce. In Chapter 2, I already stressed the fact that a large influence of heterogamy on the risk of divorce on the micro level does not necessarily contribute a great deal to the divorce figures on the macro level. After all, married couples are quite homogamous on average. If a relatively small group of mixed couples has a higher divorce risk, then this only makes a little contribution to the total number of divorces. In Chapter 2, I demonstrated that the contribution of age and ethnic heterogamy to the total amount of divorce is still notable. If the occurrence of mixed marriage increases, the contribution to the divorce figures on the macro level will also increase under the condition that heterogamy effects on divorce remain stable.

A relatively high contribution of heterogamy to divorce figures has implications for research into homogamy and heterogamy as well. The higher the proportion of divorce among mixed couples compared to homogamous couples, the more likely it is that a survey among (still) married couples is a selective sample of relatively homogamous couples. If information for research purposes on homogamy is gathered among the presently married and only present marriages are taken into account, then this can distort the results by an overestimation of homogamous couples, since there is a higher probability of the mixed marriages already having ended in divorce and therefore being absent in the sample.

A striking finding in this study is that there are many characteristics of ascription amongst the characteristics of heterogamy which have an effect on the risk of divorce. This goes for differences with respect to religion, coming from families with a different economic status and wealth and, seemingly, ethnic differences. This is contradictory to expectations based on a meritocratization of society. According to this expectation, characteristics which are inherited from the parents should become less important in comparison to characteristics achieved on one's own merits when it comes to achieving certain social positions and also when it comes to choosing a spouse. Stronger decreases of effects of heterogamy with respect to social origin and religion could be expected. Earlier research indicated that religion has become less important, whereas the level of education has become more important as a selection criterion with respect to marriage (Kalmijn 1991a, b). This research demonstrates that, regardless of these possible changes in preferences at the time of the marriage, these dividing lines of ascription continue to exert their impact on the risk of divorce.

Not only the dividing lines of ascription still continue to have their impact on the risk of divorce. In fact, all types of heterogamy studied here, whether associated with characteristics of achievement or characteristics of ascription, hardly showed significant changes over time concerning their effect on the risk of divorce. Simultaneously, heterogamy with respect to certain characteristics of achievement occurs less frequently and heterogamy with respect to certain characteristics of ascription occurs more frequently. On the macro level, the result will be that the share in the total divorce rate of couples who are mixed on characteristics of ascription will increase while the share of couples who are mixed on characteristics of achievement will decrease. In this way, more openness on the wedding side coincides with a 'correction' on the divorce side, because the openness of society has not yet penetrated there.

Maybe people's preferences regarding their marriage partners change over time, but the mechanisms of divorce remain the same. The result of which marriages survive, therefore,

remains the same. The only difference is that the level of divorce is higher, along with the occurrence of certain types of heterogamy. It is possible that it is not the openness of society which is changing here, but the attitudes towards the value of marriage. A growing number of people want to reach personal goals with their marriage. Those people consider marriage not as a sacred goal by itself, but as a means of achieving these goals. If a marriage does not yield what they expect from it, they are willing to end their marriage.

It is important to note that it is a worthwhile exercise to replicate the trend analyses on more data when they become available. As always with analyses including interaction parameters, the statistical power of data sets is easily exhausted. In the present study, this does not apply to the population data, but it does apply to the survey data. I tried to capture this by also entering interaction parameters characteristic by characteristic or by comparing dichotomously defined periods. Still, confirmation of trend effects is necessary.

Changes within marriages were studied as well. With respect to changes of the level of heterogamy during marriage, only a few characteristics were sufficiently measured at different points in time for both spouses, namely occupations and religion. To be able to draw more conclusions on changes during marriage or to measure the correct temporal and causal order of events, more points of measurement of characteristics of both spouses are necessary. The fact that this kind of information can only be obtained in a retrospective design or a panel study of decades makes it more difficult to reliably gather this information on both existing marriages and marriages which have ended in divorce.

In this study, explanatory mechanisms for the effects of heterogamy on divorce were tested. Differences of opinion between spouses regarding a wide range of subjects and disapproval of the marriage or the spouse by parents, friends and others in the social environment constitute a partial explanation of heterogamy effects on the risk of divorce. Of course, an extended test is possible in future research if the appropriate information is available. Not only differences of opinion, but also different expectations in the relationship, such as the division of labour and household tasks, and different lifestyle characteristics, such as cultural participation and time and money spending, could be taken into account when heterogamy effects on the risk of divorce are to be explained. With respect to the disapproval of the marriage by the social environment, an extension of explanatory characteristics is conceivable in the sense of more blatant or more subtle social pressure by, for example, the parents. Attention of parents given to the couple, contact between the couple and the parents or a parental attempt to stop the marriage could be taken into account.

Another possible extension is to introduce psychological causes. If persons with colliding personalities have higher risks of divorce, then this can also be used for the explanation of effects of heterogamy on the risk of divorce. This study showed that sociological and demographic characteristics play a role in the risk of divorce. The explanation of this is sometimes sociological, but may as well be psychological. More integration in research may be possible. In this way, heterogamy with respect to personality characteristics can also be integrated in research in this field. In Chapter 6 regarding the spouse selection process, it was already put forward that this may be a possible explanation for the influence of the quality of searching for a suitable spouse on the risk of divorce. Obviously, integrating sociological and psychological aspects demands a data set which combines information in both fields.

Another recommendation can be made in relation to theory testing. It was said that homogamy is prevailing because it ensures that spouses have similar tastes, preferences and lifestyles. When dealing with the reasons of the existence of heterogamy, it was said that one may find a spouse with corresponding ideas, opinions, behaviour and expectations but deviating social characteristics. The question, then, is whether socially heterogamous couples who decide to marry, do so because their opinions and behaviour correspond, despite their social differences. More insight can be obtained by comparing levels of heterogamy on social and personality characteristics between couples who marry and those who decide not to marry and break up their relationship. This will shed more light on the spouse selection process. These new-to-gain findings will strengthen or weaken the findings up till now that birds of a feather flock together and that opposites repel rather than attract.

# Samenvatting

## Summary in Dutch

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### Inleiding

In 1950 lag het aantal echtscheidingen in Nederland per jaar nog op 30 per 10.000 gehuwde paren, in 1985 was dit aantal gestegen tot 99. Vooral de jaren '70 en de eerste helft van de jaren '80 vertoonden een stijging. In de tweede helft van de jaren '80 en in de jaren '90 vertoonde het cijfer enige schommelingen, maar bleef tussen pakweg 80 en 100. De toename van de echtscheidingsfrequentie wordt veelal toegeschreven aan ontwikkelingen in de samenleving zoals een toenemende economische onafhankelijkheid van vrouwen en veranderende normen en waarden.

### Heterogamie

In deze studie onderzoek ik enkele specifieke sociaal-culturele echtscheidingsoorzaken: partnerselectie en, in het bijzonder, gemengd huwen. Gemengde huwelijken worden ook wel *heterogame* of *exogame* huwelijken genoemd, terwijl niet-gemengde huwelijken wel worden aangeduid met de term *homogame* of *endogame* huwelijken. In deze studie worden verschillende vormen van heterogamie onderzocht voor wat betreft hun invloed op de echtscheidingskans: heterogamie naar leeftijd, opleidingsniveau, sociale status, religie, etniciteit en sociale herkomst.

Gemengde huwelijken worden vaak geassocieerd met godsdienst en etnische herkomst. Wat godsdienst betreft denkt men in Nederland van oudsher aan de verschillen tussen katholieken en protestanten – in Nederland met name hervormden en gereformeerden. De traditionele reserveringen ten aanzien van huwelijken tussen partners uit beide groepen komen tot uitdrukking in het gezegde: “Twee geloven op één kussen, daar slaapt de duivel tussen”. Bij koninklijke huwelijken krijgt het gemengd trouwen naar religie en etniciteit heden ten dage nationale aandacht, zoals bij de volgens traditie Nederlands hervormde prins Maurits met de katholieke Marilène van den Broek en bij de Nederlands hervormde kroonprins Willem-Alexander met de katholieke en Argentijnse Máxima Zorreguieta.

Maar er zijn meer herkomstkenmerken waarop huwelijkspartners kunnen verschillen. Man en vrouw kunnen uit een verschillend economisch of cultureel milieu stammen: van een rijke of arme familie met een meer of minder verfijnde culturele bagage. Vaak worden dit soort kenmerken eenvoudig afgelezen aan het beroep van de vader, hetgeen blijkt uit vragen als: “Wat doet je vader?”. Ook ouders stellen dit soort vragen over de vader van de vriend of vriendin van hun dochter of zoon.

Bovenstaande kenmerken waarop huwelijkspartners al dan niet kunnen verschillen zijn geërfd van de ouders. Dit wordt aangeduid met de term toegeschreven kenmerken of ascriptie. Zelfs de religie, in principe een persoonlijke keuze, is doorgaans overgenomen van de ouders, tenzij men besluit de kerk te verlaten. Conversie van de ene naar de andere religie is in Nederland vrij zeldzaam. In een meritocratische samenleving zijn, naast de toegeschreven kenmerken, juist

ook kenmerken van belang die voortkomen uit eigen verdienste. Men vraagt immers niet meer alleen naar het beroep van de vader, maar vooral ook naar het beroep van de aanstaande huwelijkspartner zelf. Met deze zogenaamde verworven kenmerken, ook wel aangeduid met de Engelse term *achievement*, doelen we op het opleidingsniveau en het beroepsniveau van de echtgenoten. Daarnaast kijk ik naar leeftijdsverschillen tussen partners.

#### *Heterogamie en echtscheiding: relevantie*

De relatie tussen sociale heterogamie en de kans op echtscheiding zoals bestudeerd in deze studie is een stap in het zogenaamde mobiliteitsonderzoek. Deze tak van onderzoek is onderdeel van de sociologische vraag naar sociale ongelijkheid. Omdat sociale ongelijkheid niet stabiel hoeft te zijn, hebben onderzoekers gekeken naar veranderingen in sociale ongelijkheid. Deze veranderingen zijn ook te onderzoeken tussen generaties: zonen kunnen stijgen en dalen ten opzichte van hun vaders voor wat betreft hun sociale klasse, status of opleidingsniveau. Ook door te trouwen kan men in andere sociale kringen terecht komen. Een volgende stap is derhalve de sociale mobiliteit ten gevolge van een huwelijk met een partner met verschillende sociale kenmerken. De sociologische mobiliteitsvragen gaan specifiek over kenmerken als status en opleiding. Sociaal-culturele kenmerken als godsdienst en etniciteit worden nu in het onderzoek betrokken.

De demografische inslag van familiebanden en het sociologische aspect van verbintenissen tussen vertegenwoordigers van verschillende sociaal-culturele groepen geven deze studie ook relevantie op het gebied van een andere sociologisch vraag, namelijk die naar sociale cohesie in de samenleving. De mate waarin gemengde huwelijken voorkomen is een indicator voor de mate waarin leden van verschillende groepen in de samenleving integreren of gescheiden blijven, ofwel: de openheid van de samenleving. In Nederland lijken huwelijkspartners over het algemeen nogal sterk op elkaar wat sociale kenmerken betreft. Dit is onderzocht voor het opleidingsniveau, leeftijd, sociale achtergrond en godsdienst. De mate van homogamie is niet noodzakelijkerwijs constant over de tijd, zoals voor Nederland is aangetoond. Een verandering in de mate van heterogamie kan worden beschouwd als een verandering in de openheid van de samenleving.

We kunnen echter een uitgebreidere kijk op de openheid van de samenleving krijgen door de andere kant van de medaille te onderzoeken: eindigen gemengde huwelijken eerder in een echtscheiding dan homogame huwelijken? Stijgende echtscheidingscijfers maken het zowel interessant als mogelijk om dergelijk onderzoek uit te voeren.

In de Verenigde Staten en enkele andere landen is de relatie tussen heterogamie en echtscheiding voor verschillende decennia onderzocht. Desondanks was dit onderzoek niet erg systematisch en nam het maar één of enkele typen heterogamie per studie in ogenschouw. Voor Nederland zijn er enkele bivariate statistische artikelen en een studie voorhanden die aantonen dat huwelijken een grotere echtscheidingskans hebben wanneer ze gemengd zijn naar etniciteit, kerkelijke affiliatie of leeftijd. Behalve het feit dat met weinig kenmerken rekening gehouden wordt, is een ander nadeel van deze studies dat zij de vergelijking tussen homogame en gemengde categorieën niet altijd expliciet op de juiste manier maken, ook als de gegevens daaromtrent beschikbaar zijn. Dit is met name het geval waar het gaat over kerkelijke gezindte waarbij effecten van zowel denominatie als heterogamie bestaan, zodat ze verstrengeld kunnen

raken en uit elkaar gehaald moeten worden. In deze studie wordt daar rekening mee gehouden.

De mate van heterogamie kan gezien worden als de uitkomst van het partnerselectieproces. Wanneer mensen zoeken naar een geschikte huwelijkspartner kunnen ze lang op zoek zijn of degene met wie ze hun leven willen delen snel vinden. Een lange zoekperiode kan resulteren in langer wachten tot een meer volwassen leeftijd, in het hebben van meer verkeringen of in het observeren van een kandidaat-echtgenoot gedurende een langere periode alvorens zeker te zijn de ware gevonden te hebben. Dit klinkt als een bewuste en nauwkeurige calculatie, maar dit proces is vanzelfsprekend subtieler en deels onbewust. Het selecteren van de 'perfecte' huwelijkspartner kan, hoe dan ook, een tijdrovende zaak zijn.

## Onderzoeksvragen

De onderhavige studie heeft tot doel om het eerder onderzoek systematisch uit te breiden. In mijn onderzoeksvragen richt ik mij in eerste instantie op een zo volledig mogelijk beeld van de invloed van heterogamie op de echtscheidingskans, waarbij met zoveel mogelijk aspecten rekening gehouden wordt. In het verleden werden deze aspecten vaak afzonderlijk en sommige niet onderzocht. De eerste beschrijvende onderzoeksvraag luidt:

*1 Heeft heterogamie met betrekking tot (1) leeftijd, (2) opleidingsniveau, (3) sociale status, (4) godsdienst, (5) etniciteit, en (6) sociale herkomst, een invloed op de echtscheidingskans in Nederland? En welke typen heterogamie hebben de grootste invloed?*

Natuurlijk is het interessant om te kijken naar de echtscheidingskans van een paar dat naar bijvoorbeeld opleidingsniveau gemengd is zonder naar andere sociale verschillen te kijken. Dit kan echter een onvolledig of vertekend beeld geven. Sommige kenmerken kunnen immers gecorreleerd zijn. Vandaar dat het noodzakelijk is om met verschillende vormen van heterogamie rekening te houden. Wanneer de invloed van verschillende vormen van heterogamie is vastgesteld, dan resteert de vraag naar de oorzaken van deze invloed. Dit is een verklaringsvraag:

*2 Hoe kan de relatie tussen heterogamie en echtscheiding worden verklaard?*

Naast beschrijvingen en verklaringen worden trends besproken. In de samenleving hebben zich in de afgelopen decennia allerlei sociaal-culturele veranderingen voorgedaan die gerelateerd zijn aan het onderzoeksveld van deze studie. De mate van heterogamie en echtscheidingscijfers zijn niet constant. Dit is ingebed in twee soorten veranderingen in de samenleving. De eerste soort veranderingen is individualisering en secularisering, tezamen met een verandering in normen en waarden en een groeiende acceptatie van echtscheiding. De tweede soort betreft meritocratisering: de samenleving is veranderd van een waarin posities kunnen worden verworven op basis van sociale afkomst naar een waarin men posities bereikt op basis van eigen verdiensten. De vraag is wat er gebeurd is met de relatie tussen heterogamie en echtscheiding. Dit leidt tot mijn macro-trendvraag:

*3 Welke trends kunnen in de afgelopen decennia worden onderscheiden met betrekking tot de invloed van*

*heterogamie op de echtscheidingskans?*

Ook binnen huwelijken kunnen veranderingen optreden. Twee typen veranderingen zijn hier van belang: die in de invloed van heterogamie op echtscheiding en die in de mate van heterogamie zelf. Wat de veranderingen in de invloed van heterogamie op echtscheiding betreft, kan men zich afvragen of mensen gedurende het huwelijk steeds meer geïrriteerd raken door hun echtgenoot die van hen verschilt. Of wellicht is het andersom en raken echtgenoten steeds meer gewend aan elkaars sociale verschillen. Wat ook mogelijk is – en dit brengt ons naar veranderingen in de mate van heterogamie gedurende het huwelijk – is dat echtgenoten naar elkaar toe groeien, bijvoorbeeld doordat de laagst opgeleide partner een aanvullende opleiding volgt of doordat een echtgenoot zich bekeert tot het geloof van de ander. Natuurlijk kunnen deze persoonlijke veranderingen in de tegenovergestelde richting gaan van vervreemding of sociaal uit elkaar groeien van de huwelijkspartners. Wat levensloopveranderingen betreft zijn er twee deelvragen:

*4a Verandert de invloed van heterogamie op het echtscheidingsrisico gedurende de loop van het huwelijk en in welke richting?*

*4b Wat gebeurt er met het echtscheidingsrisico wanneer de mate van heterogamie verandert gedurende het huwelijk in welke richting dan ook?*

De laatste onderzoeksvragen gaan in op de intensiteit van het zoekgedrag, zoals een korte zoekduur of een haastig beëindigde zoekperiode. Vraag 5 is beschrijvend, vraag 6 verklarend.

*5 Heeft de intensiteit waarmee personen zoeken naar een huwelijkspartner alvorens ze besluiten om te trouwen een invloed op het echtscheidingsrisico?*

*6 Zo ja, kan deze relatie worden verklaard door heterogamie?*

## **Gegevens**

Er worden in dit onderzoek twee databronnen gebruikt. De eerste databron betreft de registraties aanwezig bij het Centraal Bureau voor de Statistiek (CBS) welke ik ter plekke heb geanalyseerd. Deze informatie was geleverd door elke Nederlandse gemeente en bevat elk huwelijk en elke echtscheiding die in deze gemeenten werden geregistreerd tussen 1974 en 1994. Door de gemeenten werd achtergrondinformatie van het echtpaar ingevuld op een formulier dat door het CBS werd verwerkt. Van vóór deze periode zijn geen elektronische dataregels beschikbaar. Sinds 1994 worden de gegevens niet meer op deze manier verzameld, maar wordt informatie verkregen over personen uit de Gemeentelijke Basisadministratie (GBA) van iedere gemeente. Die informatie is niet toegankelijk voor externe analyses over de tijd. Dat de gegevens omtrent huwelijken en echtscheidingen tussen 1974 en 1994, die de hele populatie dekken, wel door mij konden worden gekoppeld en geanalyseerd was een unieke kans. Voor een dergelijk doel en op de wijze zoals in deze studie waren deze data nog nooit eerder gebruikt. Door de kleine één miljoen huwelijken gesloten tussen 1974 en 1984 te analyseren, konden ze allemaal minimaal tien jaar worden gevolgd.



Het gebruik van deze gegevens heeft twee voordelen. Omdat de informatie van officiële registraties stamt, lijdt zij niet aan een mogelijke onbetrouwbaarheid ten gevolge van retrospectieve vragen. Bovendien is informatie voorhanden van de werkelijke populatie in plaats van uit een steekproef, waardoor we niet afhankelijk zijn van statistische significantie. Ook is het mogelijk om relatief kleine groepen te bestuderen. Het gebruik van deze gegevens heeft ook nadelen. Het aantal kenmerken waarvoor heterogamie kan worden bestudeerd is beperkt. Echtgenoten kunnen worden vergeleken wat betreft hun leeftijd, godsdienst, nationaliteit en hun voorgaande burgerlijke staat, maar andere sociale kenmerken op basis waarvan huwelijkspartners elkaar mogelijkwijs uitkiezen, zoals opleidingsniveau en sociale herkomst, blijven buiten beeld.

Vanwege de beperkingen van de registratiegegevens, is ook gebruik gemaakt van surveygegevens. Tevoren was onvoldoende surveymateriaal beschikbaar voor de vergelijking van wel en niet gescheidenen voor een onderzoek zoals het onderhavige. Het SIN98 survey werd speciaal voor dit en verscheidene andere onderzoeken ontworpen en bevat voldoende gegevens over beide echtgenoten in bijna 2400 zowel intacte als verbroken relaties. Het survey bevatte onder andere vragen over de levensloop van de respondenten, hun huidige of beëindigde huwelijk en hun arbeidsloopbanen. Voor de onderhavige studie zijn vragen toegevoegd over sociale kenmerken van beide echtgenoten, hun verkering, onenigheden tussen de echtgenoten en de acceptatie van de relatie door de sociale omgeving. Beide gegevensbronnen, registraties en survey, vullen elkaar aan.

## **Bevindingen: toetsing van hypothesen**

### *Heterogamie-effecten op de echtscheidingskans*

In hoofdstuk 2 en 4 werden hypothesen gepresenteerd omtrent de effecten van heterogamie op het echtscheidingsrisico ter beantwoording van de eerste onderzoeksvraag. De meest basale en algemene hypothese is de *heterogamiehypothese* die voorspelt dat heterogame paren een hogere echtscheidingskans hebben dan homogame paren. Een verdere specificatie werd gemaakt door rekening te houden met het feit dat bepaalde combinaties in de samenleving minder worden geaccepteerd dan andere wanneer het gaat om man-vrouw verhoudingen. De *asymmetrie- of hypergamiehypothese* voorspelt dat de kans op echtscheiding in een gemengd huwelijk groter is wanneer de vrouw ouder of hoger opgeleid is of een hogere sociale status heeft dan haar man. Van de traditionele arbeidsverdeling wordt verwacht dat zij het huwelijk stabiliseert. Vandaar dat de *specialisatiehypothese* de *heterogamiehypothese* afzwakt en een reductie of zelfs omkering voorspelt van het effect van heterogamie naar (economische) sociale status op de kans op echtscheiding. Andere kenmerken gerelateerd aan een traditionele rolverdeling zijn een wat oudere man met een hoger opleidingsniveau vergeleken met zijn vrouw. Desalniettemin wordt niet verwacht dat het heterogamie-effect van leeftijd en opleidingsniveau klein zal zijn ten gevolge van specialisatie, omdat deze kenmerken ook te maken hebben met cultuur, smaak en voorkeuren.

Met de registratiegegevens van het CBS konden (in hoofdstuk 2) de hypothesen multivariaat worden getoetst voor leeftijd, kerkelijke gezindte, nationaliteit en de burgerlijke staat vóór het huwelijk. Met de SIN98-surveygegevens gebeurde dit (in hoofdstuk 4) voor heterogamie naar leeftijd, opleidingsniveau, sociale status, kerkelijke gezindte, etniciteit en

sociale herkomst. Met de surveygegevens waren meer gesofisticeerde levenslopanalyses mogelijk. Duidelijke heterogamie-effecten werden gevonden in de registratiegegevens voor leeftijd, kerkelijke gezindte en nationaliteit. De grootste effecten die werden gevonden met de surveygegevens waren voor leeftijd, opleidingsniveau, kerkelijke gezindte en economische herkomst.

Volgens de registratiegegevens zijn meer paren na tien jaar huwelijk gescheiden naarmate hun leeftjdsverschillen groter zijn. In 42 procent van de onderscheiden heterogame leeftjdscombinaties werd dit effect gevonden, gecontroleerd voor het hoofdeffect van de huwelijksleeftijd, welk aangeeft dat naarmate een bruid of bruidegom jonger is op de huwelijksdag, de echtscheidingskans groter is.

De belangrijkste heterogamie-effecten naar godsdienst die in hoofdstuk 2 werden gevonden zijn voor de grootste christelijke denominaties: gemengde katholiek/protestantse paren hebben grotere echtscheidingsrisico's. Van alle geanalyseerde combinatiemogelijkheden vertoonde 51 procent het heterogamie-effect. Ook deze effecten zijn gecontroleerd voor het hoofdeffect van kerkelijk gezindte, waaruit blijkt dat onder de homogame paren de onkerkelijken de grootste en de gereformeerden de kleinste echtscheidingskans hebben.

Soortgelijke effecten werden voor etniciteit gevonden. In hoofdstuk 2 gebeurde dit aan de hand van de nationaliteit. Omdat alleen in Nederland geregistreerde huwelijken en echtscheidingen konden worden geanalyseerd, moeten de resultaten op dit vlak met terughoudendheid worden geïnterpreteerd. Toch zijn er extreem hoge echtscheidingskansen binnen tien jaar voor gemengde paren in vergelijking met de respectievelijke homogame paren in de categorieën van man en vrouw. Van de 13 gemengde combinaties die konden worden onderzocht vertoonden 11 (85 procent) een meestal zeer groot heterogamie-effect.

Door relatief kleine aantallen gemengde huwelijken is de behoorlijke invloed van gemengd huwen op de echtscheidingskans zoals gevonden op het microniveau beduidend kleiner op het macroniveau. Toch leert een gesimuleerde vergelijking van een denkbeeldige volledig open samenleving met een volledig gesloten samenleving dat heterogamie met betrekking tot leeftijd en nationaliteit toch enige macro-implicaties heeft voor de gemiddelde echtscheidingskans.

Het genoemde effect van leeftijds heterogamie op de echtscheidingskans kon ook worden vastgesteld met de surveygegevens. De kansverhouding om te scheiden (versus niet te scheiden) neemt met 4 procent toe voor elk jaar dat het leeftjdsverschil groter is. Dat betekent dat een paar met een leeftjdsverschil van 17 tot 18 jaar een dubbel zo grote kansverhouding heeft als een even oud paar.

Kerkelijke verschillen resulteren volgens de surveygegevens in een grotere echtscheidingskans voor gemengde huwelijken tussen een onkerkelijke en een katholiek, een katholiek en een protestant en enkele niet nader gespecificeerde gemengde combinaties in vergelijking met homogame paren in de categorie van zowel man als vrouw. De kansverhouding van een onkerkelijk/katholiek paar ligt 24 procent boven die van homogame onkerkelijke paren en zelfs 111 procent boven die van homogame katholieke paren. Katholiek/protestantse paren hebben een kansverhouding 59 procent boven die van homogame katholieken en 89 procent boven die van homogame protestanten.

Een ander toegeschreven kenmerk, alleen beschikbaar in de surveygegevens, dat een invloed heeft op de echtscheidingskans is economische herkomst: naarmate de verschillen in economische status van de vaders van man en vrouw groter zijn, neemt ook de kansverhouding

om te scheiden toe met 15 procent per eenheid van de schaal die in onze gegevens een bereik heeft van tussen de -1.40 en 2.43.

Aldus zijn duidelijke effecten gevonden in zowel registratiegegevens als survey die de *heterogamiehypothese* bevestigen. De bevindingen bevestigen ook patronen in overeenstemming met de *asymmetriehypothese*. De leeftijdscategorieën die in de registratiegegevens een heterogamie-effect laten zien zijn grotendeels combinaties waarin de vrouw ouder is dan de man. In de surveygegevens ontbreekt het bewijs voor een asymmetrie-effect van leeftijdsheterogamie, maar is de invloed van opleidingsheterogamie volledig asymmetrisch van aard: de kansverhouding voor echtscheiding stijgt alleen als de vrouw een hogere opleiding heeft dan de man en wel met 17 (in een uitgebreid model) tot 21 procent (niet gecontroleerd voor andere vormen van heterogamie). Een asymmetrie-effect voor economische status werd gevonden in een model dat niet voor andere vormen van heterogamie controleert, maar werd verklaard in een multivariaat model.

Verder werd de *specialisatiehypothese* bevestigd door de afwezigheid van de effecten van absolute verschillen tussen partners betreffende zowel de economische als de culturele dimensie van sociale status en betreffende het opleidingsniveau. Het heterogamie-effect op echtscheiding wordt hier gecompenseerd door de voordelen die taakspecialisatie met zich meebrengt.

Als er een of meer kinderen jonger dan 13 jaar in het huishouden wonen dan wordt de echtscheidingskans lager. Heterogamie-effecten op de echtscheidingskans worden echter niet verklaard door het hebben van kinderen. Evenzeer wordt het moment van de geboorte van het eerste kind niet beïnvloed door de mate van heterogamie.

### Verklaring

Hiermee is de eerste onderzoeksvraag beantwoord met analyses uit hoofdstuk 2 en 4. Met behulp van analyses op de surveygegevens kon in hoofdstuk 4 ook een antwoord worden gegeven op de tweede onderzoeksvraag naar de verklaring van de relatie tussen heterogamie en echtscheiding. Daartoe werden eerst hypothesen afgeleid van de voordelen die homogamie aan het huwelijk biedt. De theorie benadrukt dat heterogamie tot een grotere kans op echtscheiding leidt omdat echtgenoten gemiddeld genomen minder goed met elkaar zouden kunnen opschieten vanwege verschillende voorkeuren en verwachtingen. De *verklarende conflicthypothese* met betrekking tot echtscheiding voorspelt daarom dat verschillen van mening tussen man en vrouw de heterogamie-effecten op de echtscheidingskans kunnen verklaren. Vervolgens werd erop gewezen dat de sociale omgeving een gemengd huwelijk door de bank genomen in mindere mate accepteert. Dit leidt tot minder steun voor het huwelijk en een neiging tot het steunen van een echtscheiding wanneer het huwelijk zich in moeilijke tijden bevindt. De *verklarende steunhypothese* met betrekking tot echtscheiding houdt in dat afkeuring door de sociale omgeving het effect van heterogamie op echtscheiding verklaart.

Vervolgens werden de hypothesen meer specifiek gemaakt door te verwijzen naar het onderscheid tussen enerzijds kenmerken die door overerving aan mensen worden toegeschreven, namelijk kenmerken van de ouders, de sociale omgeving, en anderzijds kenmerken die bereikt worden door eigen verdiensten van de mensen zelf. De *ascriptie-verklaringshypothese* voorspelt dat de effecten van heterogamie naar godsdienst, etniciteit en sociale herkomst op de echtscheidingskans vooral verklaard kunnen worden door sociale afkeuring van het huwelijk. De

*verwerving-verklaringshypothese* voorspelt dat de effecten van heterogamie betreffende het opleidingsniveau en eigen sociale status vooral verklaard kunnen worden door meningsverschillen tussen de partners. Asymmetrie-effecten worden verwacht gelijkelijk verklaard te worden door zowel gebrek aan steun van de sociale omgeving als meningsverschillen tussen de echtgenoten.

De analyses in hoofdstuk 4 lieten inderdaad zien dat gemengd huwen een invloed heeft op de meningsverschillen van partners betreffende bijvoorbeeld smaak, voorkeuren, gedrag, de relatie, en op de afkeuring van het huwelijk door de sociale omgeving en dat deze op hun beurt een invloed hebben op de echtscheidingskans. Verder werd de invloed van bepaalde vormen van heterogamie op echtscheiding kleiner nadat rekening gehouden werd met de meningsverschillen tussen partners en het afkeuren van het huwelijk door de sociale omgeving, zoals ouders, vrienden, burens en vertegenwoordigers van de kerk.

In welke gevallen kunnen we spreken van een oorzakelijke verklaring? Het effect dat leeftijdsverschillen, ongeacht hun richting, leiden tot een grotere kans op echtscheiding werd voor een derde verklaard. Deze verklaring leek voor het grootste deel tot stand te komen door een gebrek aan steun door ouders, vrienden, burens en vertegenwoordigers van de kerk. Het asymmetrie-effect van een hogere echtscheidingskans voor paren waarvan de vrouw een hoger opleidingsniveau heeft dan haar man wordt volledig verklaard door meningsverschillen tussen partners en steun door de sociale omgeving. Zoals kon worden verwacht van een kenmerk door iemand zelf verworven, spelen meningsverschillen de grootste rol in deze effectreductie, maar zoals voorspeld voor asymmetrie-effecten is het aandeel van een gebrek aan steun uit de sociale omgeving bijna even belangrijk.

Echtelijke meningsverschillen en afkeuring door de omgeving verklaren meer dan een derde van de invloed van onkerkelijk/katholiek en katholiek/protestant gemengde huwelijken op de kansverhouding van echtscheiding. Voor kerkelijk gemengde huwelijken tussen kleinere kerkelijke groeperingen is deze verklaringskracht iets meer dan een vijfde. Alleen de verklaring door de sociale omgeving is statistisch gezien causaal en interveniërend: kerkelijke heterogamie beïnvloedt steun, steun beïnvloedt de echtscheidingskans. Dit ondersteunt de *ascriptie-verklaringshypothese*. Dit geldt niet voor de invloed van verschillen in economische ouderlijke herkomst, welke causaal alleen voor een klein deel verklaard wordt door meningsverschillen tussen de echtgenoten.

### *Veranderingen over de tijd*

Om de derde onderzoeksvraag naar veranderingen over historische tijd te kunnen beantwoorden werden hypothesen afgeleid van de veranderingen die zich in de laatste decennia hebben voltrokken in de samenleving. Ik wees daarbij op de trend naar individualisering en secularisering die gepaard gaat met veranderingen in normen en waarden. Dit betekent dat, naast de toename van de echtscheidingfrequentie, een toenemende liberalisering van normen en waarden leidt tot een grotere acceptatie van gemengde huwelijken en daarmee tot een afnemende invloed van heterogamie op de kans op echtscheiding.

Een tweede soort verandering betreft die naar een samenleving waarin sociale posities verkregen worden op basis van eigen verdiensten en niet meer zozeer op basis van geërfde, toegeschreven kenmerken. Dit gegeven is eerder gebruikt voor de voorspelling dat een kenmerk zoals opleidingsniveau relatief belangrijker wordt als criterium in het partnersselectieproces dan

bijvoorbeeld kerkelijke gezindte of sociale herkomst. In deze studie gebruiken we de trend naar meritocratisering voor voorspellingen aangaande de invloed van heterogamie op de echtscheidingskans. Het *ascriptiegedeelte* van de *trendhypothes*e voorspelt dat de toegeschreven kenmerken religie, etniciteit en sociale herkomst een door de tijd afnemende invloed hebben op echtscheiding. Tegelijkertijd voorspelt het *verwervingsgedeelte* van de *trendhypothes*e een door de tijd toenemende invloed van de verworven kenmerken opleidingsniveau en sociale status van de partners.

In hoofdstuk 3 en 5 werden de veranderingen over de historische tijd onderzocht op respectievelijk de registratie- en de surveygegevens. De absolute niveaus van heterogamie over de tijd werden beschreven. Bij leeftijd en sociale herkomst was geen sprake van een duidelijk patroon; bij opleidingsniveau en economische sociale status was een duidelijke daling van heterogamie zichtbaar tussen midden jaren '60 en de jaren '80; kerkelijke en etnische heterogamie nemen sinds het midden van de jaren '80 duidelijk toe.

Veranderingen in de invloed van heterogamie op de kans op echtscheiding werden echter niet of nauwelijks gevonden. Slechts enkele specifieke groepen vertonen een trend in overeenstemming met het *ascriptiedeel* van de *trendhypothes*e. Dit betreft een minimale afname tussen de perioden 1974-1979 en 1980-1984 van het echtscheiding bevorderende effect van katholiek/gereformeerde en Nederlands hervormd/gereformeerde paren uitsluitend gevonden in de registratiegegevens voor de eerste vijf jaar van het huwelijk. Met de surveygegevens wordt geen afnemende trend gevonden behalve, maar niet echt overtuigend, voor de groep onkerkelijk/katholiek gemengde huwelijken wanneer de periode voor en na 1970 wordt vergeleken. Etnisch gemengde huwelijken lijken zelfs een toenemende trend te vertonen, maar hierbij konden de juiste vergelijkingen niet worden gemaakt vanwege geringe groepsgroottes.

#### *Veranderingen gedurende het huwelijk*

Ook werd in deze studie gekeken naar veranderingen gedurende het huwelijk ter beantwoording van onderzoeksvraag 4. De *hypothes*e van *groeïende acceptatie* tussen partners voorspelt een afname van het heterogamie-effect op echtscheiding over de duur van het huwelijk, terwijl de *hypothes*e van *geaccumuleerde irritatie* tussen partners over hun verschillen een toename van het heterogamie-effect voorspelt. Een combinatiehypothes

voorspelt een omgekeerde-U-verband: een aanvankelijke stijging gevolgd door een daling van het effect. De *hypothes*e van *groeïende acceptatie* werd vervolgens uitgesplitst. Hierbij werd voorspeld dat de afname over de duur van het huwelijk bij het effect van de ascriptiekenmerken, kerkelijke gezindte, etniciteit en sociale herkomst, en bij de asymmetrie-effecten beperkt zou zijn, en dat de afname voor de verwervingskenmerken, opleidingsniveau, eigen sociale status en ook voor leeftijd meer geprononceerd zou zijn. Verder werd in de *groeïhypothes*e voorspeld dat huwelijkspartners die zich aan elkaar aanpassen door qua sociale kenmerken naar elkaar toe te groeien gedurende het huwelijk kleinere scheidingsrisico's hebben, terwijl partners die van elkaar vervreemd raken in de zin van een toenemende sociale heterogamie grotere scheidingsrisico's hebben.

Ook deze veranderingen werden onderzocht in hoofdstuk 3 en hoofdstuk 5 op basis van respectievelijk de registratie- en de surveygegevens. Hierbij werd eerst een beschrijving gegeven van de veranderingen in absoluut niveau van de mate van heterogamie gedurende het huwelijk. Alleen in de surveydata waren verschillende meetmomenten van heterogamie voorhanden voor

sociale status en kerkelijke gezindte. Wat leeftijd betreft konden veranderingen over het huwelijk bekeken worden in de vorm van het natuurlijk verloop van de leeftijdsratio. De verschillen in sociale status nemen in de eerste 25 jaar van het huwelijk toe, religieuze verschillen nemen gedurende het huwelijk af. Deze veranderingen zijn deels aanpassing, deels een gevolg van de onderzochte heterogamie-effecten.

Met betrekking tot de veranderingen in invloed op echtscheiding werd alleen een lichte en inconsistente afname gevonden voor enkele categorieën van heterogamie naar nationaliteit. Verder werden in beide hoofdstukken geen lineaire trends aangetroffen. Een vergelijking van de periode voor en na de geboorte van het eerste kind laat een afnemend asymmetrie-effect zien van het hebben van hogere sociaal-economische status van de vrouw in vergelijking met haar man: dit positieve effect is uitsluitend vóór de geboorte van het eerste kind zichtbaar. Verder neemt het positieve heterogamie-effect voor een onkerkelijk/katholiek gemengd huwelijk af na de geboorte van het eerste kind. Concluderend kan gesteld worden dat de invloed van heterogamie op de kans op echtscheiding maar weinig verandert gedurende de duur van het huwelijk.

Wat het naar elkaar toe en van elkaar af groeien betreft, maken veranderingen in de mate van heterogamie tijdens het huwelijk naar economische en culturele status niet uit voor de echtscheidingskans. Veranderingen in godsdienstheterogamie zijn wel van belang, maar alleen als de partners van elkaar af groeien: indien godsdienstverschillen tijdens het huwelijk ontstaan, dan wordt de echtscheidingskans groter.

#### *Partnerselectieproces*

De laatste twee onderzoeksvragen die werden onderzocht betreffen het partnerselectieproces. Leidt een overhaaste keuze of een keuze onder druk tot een grotere scheidingskans en wordt dit verklaard door een grotere mate van sociale heterogamie? Vier indicatoren voor de intensiteit of kwaliteit van het zoekgedrag werden gebruikt in hoofdstuk 6: de huwelijksleeftijd, de verkeringsduur, een voorhuwelijkse zwangerschap leidend tot een min of meer gedwongen huwelijk (moetje) en voorhuwelijkse samenwoning. De *hypothese betreffende de zoekkwaliteit* voorspelt een lagere scheidingskans naarmate men langer en intensiever naar een partner heeft gezocht.

De surveydata laten zien dat de invloed van de kwaliteit van het zoekgedrag op het echtscheidingsrisico behoorlijk sterk is. Huwelijken houden het langer uit indien ze tot stand komen op een meer volwassen leeftijd en na een wat langere periode van verkering dan op een immature leeftijd met iemand die men eigenlijk nog nauwelijks kent. De kansverhouding voor echtscheiding neemt met 3 tot 4 procent af voor elk jaar dat de jongste echtgenoot ouder was bij huwelijksluiting. Voor elk extra jaar verkering is deze afname 5 tot 9 procent, afhankelijk van het aantal controlevariabelen. Het effect van de huwelijksleeftijd neemt af over de tijd, hetgeen erop duidt dat men steeds meer trouwt of gaat samenwonen op een leeftijd dat men daar rijp voor is. Verder uitstel geeft dan geen extra bescherming voor de huwelijksstabiliteit.

Een voorhuwelijkse zwangerschap lijkt aanvankelijk ook de echtscheidingskans te verhogen, maar dit wordt verklaard door de controlevariabelen, met name socialisatie en ervaringen in het verleden met betrekking tot echtscheiding. Zogenaamde 'moetjes' hebben daarom eerder te maken met sociale druk dan met de kwaliteit van het zoekgedrag.

Als we voorhuwelijks samenwonen zien als een testhuwelijk, zou het te beschouwen zijn

als een uitbreiding van het zoeken naar een partner. Als men eerst met elkaar heeft samengewoond is de kansverhouding voor echtscheiding echter 20 (gecontroleerd) tot 56 (ongecontroleerd) procent hoger. Ongehuwd samenwonen heeft daarom veeleer te maken met een minder onderschrijven van traditionele normen en waarden met betrekking tot het huwelijk en het gezin en niet slechts met een testhuwelijk.

Wanneer heterogamie in het model wordt opgenomen dan neemt alleen de invloed van de verkeringsduur op de echtscheidingskans licht af. De invloed van de intensiteit van het zoekgedrag op de kans op echtscheiding wordt nauwelijks verklaard door sociale heterogamie. Te verwachten valt dat prematuriteit en heterogamie met betrekking tot persoonlijkheidskenmerken een belangrijkere rol spelen in die invloed.

## **Discussie**

Na het schetsen van een zo compleet mogelijk beeld van de relatie tussen heterogamie en echtscheiding is een van de discussiepunten dat een grote invloed van heterogamie op de echtscheidingskans niet noodzakelijkerwijs veel bijdraagt aan het macro echtscheidingscijfer. Maar als gemengde huwelijken meer voorkomen, dan wordt die macrobijdrage van heterogamie groter onder de voorwaarde dat de invloed van heterogamie op echtscheiding gelijk blijft. Dit heeft voor het onderzoek als consequentie dat een survey onder momenteel gehuwden een steeds selectievere steekproef oplevert van relatief homogame paren.

Eerder onderzoek heeft aangetoond dat bij de partnerkeuze het opleidingsniveau van een aanstaande partner belangrijker is geworden ten opzichte van bijvoorbeeld godsdienst. Dit is conform de verwachting van een meritocratische samenleving waarin eigen kenmerken belangrijker worden dan geërfde kenmerken. Het onderhavige onderzoek laat echter zien dat naast heterogamie naar verworven, ook die naar toegeschreven, van de ouders geërfde kenmerken nog steeds een duidelijke echtscheiding bevorderende invloed heeft.

Het relatief toenemen van heterogamie naar toegeschreven kenmerken ten opzichte van heterogamie naar verworven kenmerken en het feit dat hun effecten op echtscheiding niet veel lijken te veranderen over de tijd, brengen de verwachting naar voren dat heterogamie naar toegeschreven kenmerken een relatief belangrijkere rol kan gaan spelen in de echtscheidingskans dan die naar verworven kenmerken. Dit lijkt op een soort 'correctie' die de groeiende openheid van de samenleving weer vermindert. In de relatie tussen partnerselectie, heterogamie en echtscheiding is daarom waarschijnlijk niet zozeer de openheid van de samenleving aan het veranderen, maar de houding ten aanzien van het huwelijk: het huwelijk is geen doel op zich meer, maar een middel om gelukkig te worden en zich te kunnen ontplooiën. Brengt een huwelijk niet op wat men ervan verwacht, dan besluit men tegenwoordig eerder om het huwelijk te beëindigen.

Het is de moeite waard om trendeffecten van heterogamie op de echtscheidingskans te repliceren omdat ze moeilijk zijn vast te stellen. Verder zouden meer meetmomenten van meer vormen van heterogamie gedurende het huwelijk een nuttige uitbreiding van toekomstig onderzoek kunnen zijn om de juiste causale volgorde van gebeurtenissen vast te stellen. Ter verklaring zouden behalve meningsverschillen ook verschillen in verwachtingen rondom de verdeling van taken en leefstijlkenmerken meegenomen kunnen worden. Aan de verklaring door

afkeuring vanuit de sociale omgeving zouden ook andere, meer uitgesproken of juist subtiele vormen onderscheiden kunnen worden, zoals aandacht of ingrijpen van de ouders tijdens het huwelijk. Een andere mogelijke uitbreiding betreft de introductie van psychologische oorzaken in de sfeer van botsende persoonlijkheidskenmerken.

Homogamie zou ervoor zorgen dat echtgenoten overeenkomstige voorkeuren en leefstijlen hebben. De vraag is of sociaal heterogame paren die toch trouwen dat doen omdat hun meningen en gedrag overeenkomen ondanks hun sociale verschillen. Paren die wel besluiten te gaan samenwonen of trouwen zouden vergeleken kunnen worden met paren die besluiten dat niet te doen en voordien hun relatie beëindigen. Een dergelijk onderzoek naar het partnerselectieproces kan een nieuw licht werpen op de huidige bevindingen dat soort over het algemeen soort zoekt en tegenpolen elkaar toch vaak afstoten.



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## **Curriculum Vitae**

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Jacques Janssen was born in Zeist, the Netherlands on the 22<sup>nd</sup> of August 1972. He completed his secondary education in 1990 in Roermond, and studied Sociology at the University of Nijmegen from 1990 to 1995. During his studies, he did a traineeship at Statistics Netherlands (CBS) in Heerlen studying the transmission of the level of education from parents to their children. In 1994 and 1995, he worked for CBS on the Dutch Parliamentary Election Study for several months. He wrote his Master's thesis on the influences of parental and spousal class and religion on voting behaviour. After obtaining his Master's degree, he became a PhD candidate at the Interuniversity Center for Social Science Theory and Methodology (ICS) and was based at the Department of Sociology in the University of Nijmegen. He conducted research on spouse selection, mixed marriage and divorce subsidized by the Netherlands Organisation for Scientific Research (NWO), which resulted in this dissertation. Part of the research was carried out on site at CBS in Voorburg in 1997. In 1996, he participated in the ICPSR Summer Program at the University of Michigan in Ann Arbor, Michigan, USA. In 1999, he participated in the Essex Summer School in Social Science Data Analysis and Collection at the University of Essex in Colchester, UK. Currently he is employed as a Statistical Researcher at Statistics Netherlands (CBS) in Heerlen, the Netherlands.



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