

**AGE-DISCREPANT UNIONS IN CANADA**

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B.A., University of Western Ontario, 1992

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of


MASTER OF ARTS


in the Department of Sociology

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## ABSTRACT

While there appears to be a trend toward age-homogamous unions in both Canada and the United States, research on age-discrepant unions remains important. Unfortunately, over the past 10 years or so, very little research on age-heterogamous unions has been conducted. This thesis is an attempt to address this lack of research. I test five hypotheses based upon the economic and sociological theories of marriage. Recognizing its growing importance in Canadian union life, I also include a consideration of cohabitation. The data for my analysis were drawn from the 1995 General Social Survey, and although I provide some descriptive statistics, my core analysis utilizes logit and multinomial logit modelling techniques. While most Canadian unions can be characterized as age-homogamous, I do find that cohabitators are more likely than their married counterparts to experience an age-discrepant union. The risk of age-heterogamy also increases with age, and those born outside of Canada are generally also more likely to enter an age-discrepant union. Finally, age-heterogamous unions are more likely to occur with those born into the “1939 and earlier” cohort.


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## ACKNOWLEDGEMENTS

I was always afraid that this would be the longest chapter of my thesis.

First, I would like to thank Zheng Wu for his help with my thesis and dedication to my education. Without his tireless effort, hard work and determination, this thesis would have never reached completion. I will always be grateful to him for agreeing to work with me and making sure that I finished what I started.

Additionally, I would like to thank Darby Carswell and Randy Hart for their editorial contributions.

Also, I would like to thank Alan Headley, Carole Rains, Mikael Jansson, Cecilia Benoit, Bill McCarthy, Jean Veevers, Tanis Abuda, Lori Kmech, Stirling Friendly, Leslie Coates, Samantha Wells, and Melissa Atkinson for their fabulous example, continuous support and encouragement.

I thank my parents, Tom and Karen Burch for reading and editing endless drafts of chapters and for their love and true belief that I could and would finish.

Thanks to C. Robert Miers for seeing me so many times and for granting me so many extensions. Your faith in me was greatly appreciated. Thanks also to the wonderful staff at UVic Day-Care, to Leah Adams and to Corinne Doerksen. Without such extraordinary childcare, no mom could get through school.

Finally, I would like to thank my husband, David Cherry, for encouraging me and making it possible to finish, and thank my children, Thea and Britta, for being so tolerant and giving me a reason to complete what I had started.

## Chapter One

### INTRODUCTION

It will come as no surprise that Canadian union life has changed and continues to change. In Canada's recent past marriage was the most prominent union form, and nonmarital unions, such as cohabitations, were regarded as morally wrong. While marriage remains the most common form of union, marriage rates have been declining (Burch and Madan, 1986; Dumas and Peron, 1992). Canadian marriage rates have dropped from 8.75 (per 1000 population) in 1972, to 7.1 in 1987, and 5.4 in 1994 (United Nations, 1992, 1995). According to Dumas and Belanger (1997:28), if the current trend continues only 57 per cent of Canadian men and 61 per cent of women will be expected to marry. In Quebec the comparable proportions are 33 per cent and 37 per cent.

The increase in Canadian cohabitation accounts for some of the decrease in Canada's marriage rates. According to the 1996 Canadian Census, 12 per cent of all Canadian unions were cohabitations, and 17 per cent of Canadians aged 25 to 29 were cohabiting. The province of Quebec had the highest occurrence of nonmarital unions: at the time of the census, 43 per cent of all cohabiting couples were residing in the province of Quebec, and one couple in four in Quebec was living in a nonmarital union.

According to Belliveau, Oderkirk, and Silver (1994:9), there may be several reasons for the increased prevalence of cohabitational unions. First, there may be an increased individualism and a weakening role of social and religious institutions in the regulation of union life. Second, the rise in nonmarital unions may indicate some people's increased penchant for the financial benefits of cohabitation without the legality of marriage. Third,

cohabitation may allow couples to assess their compatibility before entering a legal marriage.<sup>1</sup>

While these changes in Canadian union life have been studied extensively, we know very little about age differences among couples. For example, we do not know whether age-heterogamy varies by union type. While it appears that in the majority of marital unions men tend to marry women of their own age (or one or two years younger than themselves) (Canadian Vital Statistics), we do not know whether this is also true of cohabiting couples.

Age-homogamous and age-heterogamous unions are greatly under-examined in the sociological literature. As will be evident in the following chapter, there are almost no studies conducted within the past 10 years. Furthermore, of the studies conducted since the 1950s, many have problems such as poor sampling techniques, inadequate statistical analysis, and unwarranted generalizations.

The literature does suggest, however, that over the past century or so, there has been a trend toward age-homogamous marriages (e.g., Atkinson and Glass, 1985; Veevers, 1984). For example, Atkinson and Glass (1985) have shown that in the United States the number of age-discrepant unions has decreased since 1900. In 1900, 27 per cent of American husbands were 10 or more years older than their wives. By 1960, that number had fallen to 10 per cent, and by 1980 to 7 per cent. The pattern for wife-older marriages is similar. In 1900, 5 per cent of wives were 5-9 years older than their husbands. By 1960, that number had dropped to about 3 per cent. In 1980, the proportion of female-older marriages remained at the 1960 level. Veevers' (1984) research suggests that a similar pattern is evident in Canada.

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<sup>1</sup> Ironically, there is strong evidence that those who cohabit prior to marriage are more likely to experience divorce (e.g., Burch & Madan, 1986; Balakrishnan, Rao, Lapierre-Adamcyk, & Krótki, 1987; Bennett, Blanc, & Bloom, 1988). So, while many people do believe that living together before marriage will help to determine their compatibility, it appears that in reality, cohabitation is a poor test of marital stability.

The purpose of this thesis is to explore age-discrepant unions in Canada by analysing data from the 1995 General Social Survey (GSS-95). Cohabitation is increasingly becoming a popular form of union life; this thesis examines and compares the patterns and determinants of age-discrepant unions between married and cohabiting couples. To my knowledge, no other study has done this. I have three main objectives: 1) to provide a descriptive analysis of age-discrepant unions; 2) to compare age-discrepant cohabitations with age-discrepant marriages and remarriages; and 3) to identify and examine the determinants of age-discrepant unions.

In the next chapter, I provide a review of the literature and discuss what is known about age-discrepant unions. In Chapter 3, I introduce my theoretical models and posit five hypotheses that will guide my analysis. Chapter 4 provides a discussion of my data set, my explanatory variables and explanation of my statistical analysis. Chapter 5 provides an elaboration of my results. Finally, in Chapter 6, I assess my hypotheses and discuss the relevance of both the economic and sociological theories of union life in the understanding of age-discrepant unions.

## Chapter Two

### AGE-HETEROGAMY: A REVIEW OF THE LITERATURE

Over the last century the age gap between marital partners has narrowed, but men are still more likely to be older than their spouses (Glick, 1957; Cox, 1970; Presser, 1975; Knupter, 1980; Mitra, 1980; Schoen, 1981; Saroukhani, 1981; Mensch, 1986; Basavarajappa et al. 1988; Jaffe and Chacon-Puignau, 1995). In Canada and the United States, the number of women-older relationships has increased, but marriages in which men are slightly older appear to remain the norm (Salaff, 1974; Momeni, 1976; Gunter and Wheeler, 1986; Wheeler and Gunter, 1987). Spousal age differences in these two countries, however, have been decreasing over the years (Monahan, 1953; Presser, 1975; Veevers, 1984; Mensch, 1986; Vera, Berardo and Vandiver, 1990).

Research has shown that the older a man is at first marriage, the more likely is his chance of entering an age-discrepant relationship (Glick, 1957; Blytheway, 1981; Casterline and McDonald, 1983; Gunter and Wheeler, 1986). For a woman, the younger her age at first marriage, the more likely it is that she will be involved in an age-discrepant union (Glick, 1957; Momeni, 1976).

Although less commonly examined in the literature, a number of other factors have been found to influence the formation of age-heterogamous marriages. In the United States, African Americans are more likely to be involved in age-heterogamous marriages (Shehan, Berardo, Vera and Carley, 1991), and also are more often involved in wife-older marriages (Schmitt, 1966). A wider age difference is reported for inter-racial marriages (Schmitt, 1969; Karl and Murguia, 1985), and for people living in rural areas (Zei, Astolfi and Jayakar,

1981; Veevers, 1984). Women whose fathers are much older than their mothers tend to marry older men (Zei, Astolfi and Jayakar, 1981). Men ten or more years older than their wives tend to have less education than men whose ages are closer to their wife's age (Glick, 1957; Cramer, 1993). There also is some evidence that men who marry older women are more likely to come from a lower socio-economic position than men who marry younger women (James, 1974; Vera et al., 1985).

Early studies on age-heterogamous marriages often relied on data from census and vital statistics records (Salaff, 1974; Fox et al, 1971; Zei et al, 1981; Blythway, 1981; Casterline and McDonald, 1983; Shaikh, 1990; Glilck and Landau, 1950; Glick, 1957; Presser, 1975; Knupter, 1980; Glick, 1980; Wilson, 1982; Klinger-Vartabedian and Wispe, 1989; Vera et al, 1990; Veevers, 1984; Basavarajappa et al, 1988; Veevers, 1988). Consequently, these studies tend to be more descriptive than analytical—there are few co-variates available in these data sources—and often they have problems in the study of age discrepancies. For example, there are censoring problems when using census data. Because marital experience is censored at the census time, only the data for living individuals are collected. Also, because of the sex differences in mortality (i.e., women tend to live longer than men), aggregate data tend to reflect the disproportionate number of wife-older marriages, and underrepresent the proportion of husband-older marriages (Carter and Glick, 1970).

Vital statistics records, on the other hand, are usually limited to one town, city, or region, and are less generalizable than census data. While some prior studies use survey data (e.g., Casterline, Williams and McDonald, 1986; Cramer, 1993; Gentleman and Park, 1994),

these studies have often relied on small samples and area samples, making the results less generalizable.

### **International Studies**

While there have been a number of international studies of age discrepancies over the years, variation in data quality and analytical techniques have made international comparisons difficult. For the most part, however, research from around the globe appears to be almost unequivocal in finding that marriages tend to consist of an older male and a younger female.

For example, Cox (1970) used 1958 data from the Demographic Yearbook issued by the Population Division of the United Nations to examine age-discrepant marriage patterns in England and Wales, Europe, and various commonwealth countries (Canada, New Zealand and Australia). Western European marriages were found to have an age gap of about two years, whereas in Eastern European countries (Czechoslovakia, Yugoslavia, Hungary and Poland) the average age gap was about four years. Among all countries, Cox found that about 90 per cent of first marriages had spouses who were within ten years of age.<sup>2</sup>

Other studies have had similar results. Salaff (1974) studied women in Hong Kong, and found that younger brides tended to marry older men, but older brides tended to marry men of an age similar to their own. Saroukhani (1981) looked at the age differences between spouses in Iran (specifically in the cities of Tehran and Mashad) and found that in 89 per cent of all marriages the husband was older, and in 52 per cent of these cases the husband was more than nine years older. Only 2.5 per cent of women in these two cities were older than their husbands, and in most cases they were less than nine years older.

Greene and Rao (1991) discuss the marriage squeeze—an inadequate supply of marriageable partners in a cohort—in Brazil, and conclude that the mean age difference between husband and wife was consistently lower in formal marriages and polygamous marriages than in informal unions such as cohabitation. More recently, Jaffe and Chacon-Puignau (1995) used birth and marriage records from the Venezuelan government to study assortative mating and age-discrepancy and found that older males prefer relatively younger females, and that females tend to choose older males.

The results of these studies suggest that among various societies and cultures, older-men/younger-women marriages are the norm. With this idea, Casterline and McDonald (1983) set out to examine the age difference between union partners utilizing World Fertility Survey data from twenty-two countries. Their principal focus was to consider the extent to which observed patterns of age differences between spouses reflect societal norms. They hypothesized that in patriarchal societies the age difference between spouses would be large because women's cultural status would be low. Indeed, the researchers found that in settings of relatively equal gender status, the age difference between spouses was fairly small. By contrast, in those settings where female status was relatively low, they found a large age difference between spouses.

From this brief look at research from around the world, it would appear that age-heterogamy is quite common among many different societies, and that part of this phenomenon may be due to unequal gender relations. In the next section, I will briefly look at some studies from the United States. Canadian behavioural patterns have some similarity

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<sup>2</sup> Cox's study has a few drawbacks. Study of data at individual ages rather than data by five-year age intervals would have permitted a closer analysis. Also, a subdivision of the analysis into first marriage and remarriage could have revealed further international differences.

to those of Americans, and it may be fruitful to assess age-heterogamy among American unions before turning to the Canadian literature.

### **American Studies**

Age-heterogamy has been studied in the U.S. for some time. Glick and Landau (1950) analyzed the 1948 Bureau of the Census survey and found that 75 per cent of married men were older than their wives. Using Iowa marriage and divorce records between 1945 and 1947, Monahan (1953) found that marriages in which either the husband or the wife was substantially older than the other (i.e., women who were at least five years older than their husbands, and men who were at least ten years older than their wives) significantly increased the chances of divorce or separation. However, Monahan also found that of the marriages that failed, those in which the husband and wife were closer in age dissolved sooner than those unions in which the age discrepancy was greater.<sup>3</sup>

Glick (1957) examined 1953 vital statistics from twenty-one states in order to examine age heterogamy and remarriage. He found that men entering their first marriage were about three years older than their wives, while about six per cent of men were more than ten years older than their wives. For husbands entering a subsequent marriage, however, husbands were, on average, six years older than their wives.<sup>4</sup> As in Monahan's study, Glick's data were prominently on Caucasian individuals.

Because more recent studies have been able to utilize both better data sets and more advanced statistical techniques, we now have a better understanding of age-heterogamy among U.S. marriages. For example, to determine the average age differences between

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<sup>3</sup> I should note that Monahan's study was race-specific: he looked solely at the marriage records of Caucasian adults.

<sup>4</sup> In 1980 Glick updated his 1957 study using 1970 U.S. census data. He found that for couples under age 35, women were approximately two years younger than their husbands. However, for remarriages, women under age 35 were approximately six years younger than their husbands. Men who remarried were seven years older than their wives.

spouses for first and subsequent marriages, Wilson (1982) looked at age differences between spouses and marital instability using data from the American National Vital Statistics System from 1970-79. He concluded that during that period there had been a narrowing of the age difference between men and women at first marriage in the United States.

Mensch (1986) used the 1976 National Survey of Family Growth to examine whether such a narrowing age gap between couples was due to the “marriage squeeze” (the lack of available partners). She found that the age difference between spouses in first marriages had narrowed for those born between 1931 and 1951. The study showed that the largest decline occurred among those who married at older ages, although there had been reductions across all age groups. Overall, however, the “marriage squeeze” hypothesis was not supported. Mensch speculated that the relationship between age difference and age at marriage is a consequence of changing social norms and preferences, and not due to a shortage of single men.

In the 1980s, Wheeler and Gunter (1987) proposed that broad social changes—such as postponement of marriage, increased divorce, more equitable dispersion of power between men and women, and longer childbearing years for women—would affect male-female age differences at marriage. They used marriage certificates recorded in Hillsborough County Florida for 1985 and compared them to national averages for that same year. They found that although the average age between spouses followed the national trend, there was double the number of female-older marriages than had been previously reported. Although caution should be used when generalizing such results, the authors conclude that the results are reflective of changing gender roles for men and women. More specifically, Wheeler and

Gunter suggest that the baby-boom generation's penchant for non-traditional values and life-choices was increasing the number of age-heterogamous unions.

In a more nationally representative study, Atkinson and Glass (1985) analyzed U.S. census data from 1900, 1960, and 1980 in order to discern the trends in age-homogamous and age-heterogamous marriages. The researchers found that most marriages in 1900 were age-heterogamous, while marriages in 1960 and 1980 were more age-homogamous. Further, they found that compared to marriages between a couple of close ages, husband-younger and husband-older marriages tended to occur more frequently to people of lower socio-economic status.

Vera, Berardo and Vandiver (1990) used U.S. Census data from 1940 to 1980 to test whether age differences between spouses had become less relevant to U.S. marriages. If age norms become less binding, then one should expect that there would be an increase in the number of marriages with unconventional age differences. The research found that during the past five decades, there was no abatement of age homogamy. In fact, like Atkinson and Glass's study, they found a strong trend toward increasing homogamy. Vera et al. (1990) concluded that this indicates that age has become more, not less, relevant in mate selection.

Looking to identify salient sociodemographic correlates of women who marry outside normative age patterns, Shehan, Berardo, Vera and Carley (1991) drew a sub-sample of 46,844 married females drawn from the Public Use sample of the 1980 US Census. The results of their logistic regression indicate that African-American women are significantly more likely than Caucasian-American women to be in age-discrepant marriages. The researchers also found that previously married women and women who are heterogamous on

other dimensions in comparison to their husbands are the most likely to enter into an age-discrepant marriage.

Of course, the above studies all have limitations. Some are area studies, some have small sample sizes, and some are simply antiquated. It does appear, however, that there is a trend toward age-homogamy. In the next section, I will explore age-heterogamous unions in a Canadian context.

### **Canadian Studies**

As in the United States, there is very little recent research on age-discrepant marriages in Canada; and, to my knowledge, no Canadian research has been conducted on age-discrepant cohabitations. Because of the similarities between the two countries, however, there may be similar trends in, and determinants of, age-heterogamous unions. Indeed, Veevers (1984) compared trends in age-discrepant marriages for the United States and Canada and found that the two countries were quite similar. Both countries exhibited longitudinal trends that reflected a decrease in the incidence of marriages with large age differences between husband and wife, and an increasing trend toward age-homogamous unions. Both countries also show little change in the incidence of wife-older marriages.

In their international comparison of trends in age-discrepant unions,<sup>5</sup> Veevers and Gee (1987) noticed three common patterns. First, among all the countries in their study, the incidence of marriages wherein the husband is ten or more years old than the wife had decreased overall. Second, the incidence of unions wherein the husband is significantly older had increased slightly during the 1970s. Third, there was also a slight increase in the

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<sup>5</sup> Veevers and Gee compared data from Australia, Canada, England, Wales, Ireland, New Zealand, and the United States.

incidence of woman-older unions. Across many developed countries, then, patterns of age-homogamous and age-heterogamous unions may be similar.

In a specifically Canadian study, Basavarajappa, Norris and Halli (1988) examined spousal selection from 1921 to 1978. The researchers utilized time-series data from Vital Statistics Reports for Canada, as well as data from the 1971 Canadian Census. As may be the case in the U.S., Basavarajappa, Norris, and Halli found that up to 1971 there was an increasing trend toward age-homogamous marriages. More specifically, the researchers found that younger males increasingly tended to select brides of their own age group, while older males tended to enter more age-discrepant unions—i.e., they were at least ten years older than their wives. However, females under 20 years of age tended to select older male partners, while there was not a clear age trend in mate selection of older women.

Using Canadian Vital Statistics and Census data from 1981, Veevers (1988) attempted to explain Canadian age-heterogamous marriages by testing the “marriage squeeze” theory. She notes that for people in midlife, one in five is not married. Veevers suggests that gender differences in available mates plays an important role in mate selection; and that age-norms in marriage (i.e., male-older marriages) may restrict further those who would be deemed appropriate spouses. She found that for men, the number of available persons increases with age, while for women, the number of available persons decreases with age. These findings suggest that there may indeed be a “marriage squeeze” in Canada.

In a recent study on Canadian age-discrepant unions, Gentleman and Park (1994) analyzed data from the 1991 Canadian Census and the 1990 General Social Survey, and estimate the probability of a married couple divorcing based on their age difference. They

found that divorce rates are lowest when the husband is two to ten years older than the wife. The researchers also found that the chance of divorce is much higher in woman-older unions.

## **Summary**

As can be seen from the above discussion, there appears to be a trend toward age-homogamous marriages in both the U.S. and Canada. And while marriages in which the male is slightly older than the female remains the norm, the age gap between male and female partners is narrowing. Many of these studies, however, do not explore the determinants of age-heterogamous unions; and, as noted previously, none include a consideration of nonmarital unions. This lack of attention motivates this thesis: my primary aim is to provide, at the very least, an initial attempt to explain age-discrepancies among those in marriages and cohabitations. In order to achieve this, I will need to rely on a theoretical model(s). So, the next chapter will provide an explanation of two theories that may help explain age-discrepant unions, and it is from these two theories that I posit 5 testable hypotheses.

## Chapter Three

### THEORETICAL FRAMEWORK AND HYPOTHESES

In this chapter, I take a pluralistic view of sociological theory. As Burch (2000) argues, a good theory is one that helps to explain a social phenomenon or process; and it may be more fruitful to examine a theory's *utility* (e.g., for gaining an understanding of age-discrepant marriages), rather than regard it as necessarily *true* or *false*.

As I stated in the previous chapter, no research has been conducted on age-heterogamy in cohabitational unions. So, it should come as no surprise that there also are no exclusive theories that attempt to explain age-discrepant nonmarital unions. Because marriage and cohabitation have some similar processes and determinants, Landale and Forste (1991) have convincingly argued that the same theoretical frameworks used to understand marriage can be used to understand cohabitation. In this thesis, I will follow this strategy: a review of marriage theories will provide a theoretical framework for my empirical analysis of age heterogamy in both marital *and* nonmarital unions. I will begin this review with the economic theory of marriage. I will then look at a sociological explanation. I conclude this chapter with an explicit delineation of my hypotheses, which are based on these theories.

#### **The Economic Theory**

The economic theory of marriage is closely associated with the work of Gary Becker (1981). The basis of Becker's theory is that an individual's decision to marry is based upon a rational contemplation of the pros and cons of the union. Accordingly, a couple will form an intimate union if the benefits of remaining in the single state are outweighed (or at least

equalled) by the benefits of marriage. This theory is often called the theory of *gains to marriage*.

For Becker, the utility of a union is derived from the commodities produced within the household, such as domestic chores, prestige, children, love and good health. The total household utility can be combined into one measure, which is a function of the inputs to the household, i.e., goods, services and time. No member of the household can gain utility if this aggregate measure declines, and this fact encourages all members to help maximize the total household utility. Additionally, some of these household commodities include elements that cannot solely be provided by or purchased for one's self. These include children, mutual love and companionship. In economic terms, this means that these inputs are complementary.

Becker asserts that the time a spouse puts into his or her relationship is related to the time spent in the labour market. Where single people have to divide their time between paid employment and domestic responsibilities, married people, although they have the added responsibility of their spouse and children, have an opportunity for a division of labour. According to Becker, the partner with the largest earning potential will spend more of his or her time pursuing paid employment, while the spouse with the smaller earning potential will allocate more time to domestic work. If the wage disparity is sufficiently large, one partner may forgo paid labour altogether and concentrate on domestic work. Of course, up until quite recently this was the basis of the gendered division of labour in many Western societies in which males worked in the paid labour market and women's labour was largely relegated to the domestic activities.

Following the economic theory of marriage, Goldscheider and Waite (1986) attribute the decline in marriage to a decrease in both men's and women's gains to marriage. Since

North American women are increasingly participating in the paid labour force, and consequently are increasing their economic independence, the financial gain of marriage for women is less than it once was. Further, with a welfare system in place in some parts of the world, unmarried women can support children (however difficult this may be) without being in an intimate relationship and relying on a male partner for economic support.

On the other hand, Oppenheimer (1988), asserts that it is men's weak labour force position that has caused the recent reduction in marriage. She argues that men marry only if they feel that they can support a household, and poor chances in the labour market thus impede men's entry into marriage. Indeed, Oppenheimer suggests that when the job market is tough, men may choose to enter a nonmarital union rather than a marriage because they will benefit more from such an arrangement than if they were to remain in the single state.

According to Becker (1981), the final decision to pursue a particular mate is based on the assumption that a better one cannot be found within the marriage market. This mate selection process involves search costs. Generally, the longer the search, the higher the costs; each person must decide whether to continue the search or to settle for the match he or she has found. Oppenheimer (1988) compares the search for a mate with the search for a job. She argues that people set a minimum level of what they look for in a potential union partner, and potential mates who fall outside the minimal acceptance level are disregarded. If the search goes on too long, an individual may lower his or her standards and accept a mate who did not meet the original minimum standard.

Becker (1981) believes that these decisions are always made with a mind toward the future. People try as best they can to anticipate the future outcome, as well as the future pros and cons, of their mate selection. As with all decisions, however, there are always elements

of uncertainty; and when trying to decide on a mate, this uncertainty becomes part of the search cost.

For Becker, people who are similar or dissimilar will marry only if they believe that the total utility will be maximized. Part of this utility is based upon the idea of assortative mating, or the process of mate selection in which partners choose their spouses based on the traits they will bring to the relationship, such as attractiveness, age, height, intelligence and income. For example, one might assume that people of the same age may find that they have more in common than they would with a much older or much younger partner. This is likely to lead to increased emotional support and happiness. When traits are substituted and the pairing of dissimilar mates occurs, the union gains may be compromised. For example, when age is substituted, the greater age difference between partners might mean that they have less in common.

With regard to the formation of age-discrepant relationships, age is a trait for which assortative mating is optimized (Becker, 1981). In other words, if search costs were held constant, people of similar ages would be more likely to marry or cohabit following age-norms of marriage. However, these unions would also be likely to be characterized by a slightly older male. People close in age are more likely to marry because the expected gains to the union increase when people of similar traits are paired.

Assortative mating is also related to search costs: the lower the search cost, the more time one can spend “screening” potential mates. Consequently, this increases the likelihood of assortative mating, and of an-age homogamous relationship forming. If a search is delayed (i.e., for the pursuit of higher education or career), the pool of eligible mates of one’s own age diminishes, and one is forced to search up and down the age scale, at greater costs. This

high search cost may lead to compromises, including the acceptance of an age-discrepant union. An age-discrepant relationships also can increase the level of uncertainty. For example, not only must the marital/cohabiting candidates anticipate coping with the normal and natural differences between people, but they will have to anticipate possible differences in values, morals, opinions and life experiences due to a large age gap.

### **Hypotheses based on the Economic Theory**

**Hypothesis 1:** *People experiencing remarriage will be at greater risk of entering an age-discrepant union than people of other union statuses.*

According to the literature, remarriage has the highest rate of age-discrepant couples (Chamie and Nsuly 1981; Glick 1957; Presser 1975; Schmitt 1966; Shehan, Berardo, Vera and Carley 1991). Becker's economic theory assumes that the divorced are selected for characteristics that are conducive to marital instability, including characteristics that yield lower gains and thus higher instability (Becker et al., 1977:1157). People who are divorced may expect less from a remarriage due to the failure of their first marriage. Since age differences between marital partners are negatively associated with expected gains to marriage, remarried couples, particularly the people whose first marriages were dissolved through divorce, may have a wider age gap than other couples. Also, divorce generally occurs at ages when people are past school and career development. At this point, people are more likely to be in contact with individuals of various ages. This factor, an environment of age diverse individuals, may broaden the pool of potential mates.

**Hypothesis 2:** *The younger a woman is at the commencement of a union, the more likely she will enter an age-discrepant union in which her male partner is much older.*

As stated in the above discussion, economic theory concentrates on the gains and costs of searching for a partner. In this search, youth can be both a gain and cost. On the one hand, youth may be a desirable characteristic for women to bring to a relationship because a youthful appearance is often attractive to men of all age groups. On the other hand, men searching for a mate might be more drawn towards a woman of the same age. With a same age relationship comes shared experience, if not first hand, then at least shared experience of events and history. In this case, a young age may be a cost because shared values and experiences may be forgone.

Economic theory suggests that people marrying or cohabiting at a young age tend to have greater search costs because they are less informed about themselves and the marriage market (Becker et al., 1977:1156). Consequently, a decrease in a woman's age at union may increase the probability of marrying an older man because she is less likely to have carefully selected a mate with similar characteristics.

From a sociological perspective, it also may make sense that the younger a woman is at the time of her marriage, the more likely she will marry an older man. When women are young (between 18 and 24) the pool of men from which they can choose is large. As a woman's age increases, her pool of eligible mates decreases, unless she is willing to marry someone younger than herself. So, a decrease in the age at union for a woman should increase her chances of marrying into an age-discrepant union. The literature supports this point-of-view. When looking at age differentials between spouses in Hong Kong, Salaff (1974) found that age differences decreased as the bride approached her late twenties. Momeni (1976) also found this when researching bride/groom age differentials in Shiraz

Iran. He noted that the younger the bride, the greater the age difference between the bride and the groom.

**Hypothesis 3: *As a woman's education increases, she will be more likely to experience an age-discrepant union.***

As I discussed above, Becker's economic theory assumes that a marriage market exists wherein people compete for mates, and that a mate is chosen when an individual believes that a better mate cannot be found. Each individual comes into the market bearing certain traits, some of which are more desirable and rare than are others. Individuals choose to form a union not only if their traits are similar or complementary, but also if they both value those traits.<sup>6</sup> Assortative mating can be hindered by a relatively high degree of uncertainty about the important attributes that people try to match (Oppenheimer, 1988). That is, people who are in search of mates with the same traits as themselves may have trouble finding someone if these traits are rare.

Mare's (1991) study of educational homogamy indicates that over the past five decades, American women with high levels of education have been increasingly marrying men with similar levels of education. However, a high or unusually low level of education can be a rare trait, and women who are highly educated may have trouble finding a partner with an equivalent educational status. As a result, the pool of available mates is reduced, and these women may have to compromise.

Alternatively, gaining a high level of education takes time. Thornton, Axinn and Teachman's (1995) studied the impact of educational accumulation and school enrolment on union formation, and found that full-time school enrolment was negatively associated with union formation. This means that women may delay their entry into a union until they have

met their educational goals. By the time these women have completed their education, they may be at an age wherein the pool of eligible mates of a similar age is reduced. Because of this reduction, these women may draw from a pool of mates of various ages. An age-heterogamous union may result.

### **Sociological Theory**

The sociological theory of marriage is based on the assumption that human behaviour is regulated and controlled through societal norms and values (Preston, 1986:177). Societal norms and values affect human behaviour in such ways that behaviours that benefit others are rewarded, and detrimental behaviours are punished (Preston, 1986). A collection of norms and values prevailing in a society is called a value system. The value system is the means by which societies “internalize the externalities” of social acts (Preston, 1986). Therefore, acts and behaviours that society does not condone are seen as the failure of the individual and are not a reflection of the society. As societies grow and develop, a legal system emerges to represent the status quo on morals and values. The prevailing value system in the society encourages and pressures members of the society to act in a manner more or less consistent with the values and norms defined in the system. The outcomes of these actions help establish a set of behaviour patterns. Thus, the values of the group influence individual behaviour and individual behaviour influences group values.

Value systems change over time. When a significant number of the members of a society diverge from the prevailing value system, the system erodes and a new system emerges. Consequently, several competing value systems may co-exist and compete for dominance in the society. As the world has grown from isolated towns and cities into more of

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<sup>6</sup> There is extensive sociological literature on assortative mating. See Rockwell, 1976; Taylor and Glen, 1976; Udry, 1977.

a global village, more rapid changes in values happen with greater homogenization. The media now help form social values as well as politicians and social scientists. What is considered socially acceptable depends on the perception of all three.

There are three sub-theories that help explain the changes in marriage patterns over the last few decades. A brief explanation of each is offered below.

### **Secular Individualism**

One of the most important societal value changes has been the spread of secular individualism, the “pursuit of personal goals devoid of reference to a cohesive and overarching religious or philosophical construct” (Lesthaeghe, 1983:415). This trend has affected many fundamental institutions in our society, including marriage, the family and religion. Higher incomes, a vast array of products on the market and urbanization have increased the consumption possibilities that are available to individuals. These economic changes have social “costs” attached to them. They have changed why people get married and at what point in their lives they choose to do so. They also have changed who it is acceptable to marry. Age may not play as big a role as it did in the earlier part of the century; instead, social and financial position may be more important.

Age-discrepant relationships in the late part of the twentieth century can be seen as a response to secular individualism. It is clearly a less conventional act to choose an age-discrepant mate, since the majority of all couples are within one or two years of age. The decision to do so may represent less conventional and more liberal personal attitudes towards traditional mate selection. Therefore, it may be reasonable to assume that the probability of an age-discrepant relationship increases with unconventionality. That is, people with

unconventional values and attitudes toward family life are more likely to be in an age-discrepant relationship than people with more conventional attitudes.

Another aspect of secular individualism is the change in tolerance toward sex outside of marriage and the acceptance of divorce. Young people with a socially liberal attitude toward sex have greater choices in mate selection. When premarital sex is taboo, young people have no other outlet but marriage. The people who are available are people within the same age cohort. Younger people are too young for marriage, and older adults are in most cases already married. Thus, the acceptance of sex before marriage in a society has opened up the potential pool of partners. This same logic is true for divorce. Divorce allows people in all age categories to marry or remarry others who would not have been available to them originally.

### **Rising Status of Women**

The increases in women-older relationships can be seen as a response to greater opportunities for woman. The rise in women's equality, especially during the 1960s and 1970s, encouraged women to pursue education and careers and gave them the possibilities for higher earning prospects and independence. In turn, there were also increases in woman-older marriages (Gunter and Wheeler, 1987). Women were enabled to spend their traditional procreation period gaining skills for the workplace, getting a foothold in the job market, and delaying childbearing. With financial motives less of a consideration when looking for a partner, women were able to choose from a larger pool of men, including younger adult males.

Espenshade (1985) argues that the institution of marriage arose to serve important societal functions, but because these functions have changed over time, the permanence of

marriage as an institution is not guaranteed. For example, procreation and the socialization and education of children were once the primary functions of the traditional family. However, over the last fifty years, many of these functions have been taken over by other societal and government institutions. Many women now work outside the home and can support themselves. So, the economic exchange between a husband and wife, which previously dominated marital exchanges within the family, has become increasingly less relevant. Because of these social changes, age-discrepant relationships may become more common than they were in the past. Women are increasingly bearing children at older ages, allowing them time to pursue career goals and establish themselves in the workplace. Consequently, women may not choose partners based on financial standing, but instead choose partners who, for instance, will help them raise children.

### **Individual Variations in Conformity**

People who cohabit are less conventional than people who marry before living together (Axinn and Thornton, 1993). Because of this unconventionality, these people may be more likely to be in an age-discrepant relationship. Once a norm has been broken, it is more likely that it will be easier to break other norms.

### **Hypotheses Based on Sociological Theory**

**Hypothesis 4: *Both men and women within a nonmarital union will be more likely to experience an age-discrepant relationship.***

Cohabitation goes against many of society's taboos: it defies religious instruction, as well as traditional North American union values. Sociological theory suggests that individuals who break such norms, such as cohabiting before (or instead of) marriage, might be more likely to break other social norms, such as marrying an age-discrepant partner

(Axinn and Thornton, 1993). So, cohabiting couples may be more likely than married couples to break the traditional norms concerning the age differences between a heterosexual couple.

**Hypothesis 5: *Age-heterogamous unions will be more likely to occur to people living in Quebec than elsewhere in Canada.***

Social norms are confined within geographical, cultural and linguistic regions. Indeed, research has shown that union behaviour is more homogenous within regions than across regions (Coale and Watkins, 1986). In the Canadian context, there is no doubt that union behaviour in Quebec is very different from the rest of Canada (Pollard and Wu, 1998). Prior studies also have shown that Quebec, once the most conservative province of the country, has become the most liberal on a variety of social issues (Lipset, 1990). For example, common-law unions are more common in Quebec than in anywhere else in Canada. One couple in four (24%) in Quebec live common law and one third of all families (36%) were either common-law or lone-parent families (Statistics Canada Daily, Oct. 14, 1997). Quebec also has the lowest proportion of married-couple families among the provinces. So, due to normative differences between Quebec and the rest of Canada, it may be reasonable to expect that Quebecers will be more likely to form age-discrepant unions than non-Quebeckers.

**Summary**

In this chapter, I have explained two of the most pertinent theories of marriage (and cohabitation), namely an economic theory of marriage and a sociological theory of marriage. Based on these theories, I have proposed five hypotheses that will guide my empirical

examination of age-discrepant unions in Canada. To reiterate, these hypotheses are as follows:

1. *People experiencing remarriage will be at greater risk of entering an age-discrepant union than people of other union statuses.*
2. *The younger a woman is at the commencement of a union, the more likely she will enter an age-discrepant union in which her male partner is significantly older.*
3. *As a woman's education increases, she will be more likely to experience an age-discrepant union.*
4. *Both men and women within a non-marital union will be more likely to experience an age-discrepant relationship.*
5. *Age-heterogamous unions will be more likely to occur to people living in Quebec than elsewhere in Canada.*

In the next chapter, I provide a description of my data source and research methods.

## Chapter Four

### DATA

In this chapter I describe my data source and outline my methodological procedures. There are three main sections: 1) data and study sample; 2) variable definitions; and 3) statistical analysis. The chapter concludes with a brief summary.

#### **Data and Study Sample**

For this thesis, I use the most recent Canadian data available relevant to the study of age-discrepant unions, namely the tenth cycle of the General Social Survey (GSS-95) conducted by Statistics Canada in 1995. The GSS-95 is a nationally representative sample of 10,749 people aged 15 and older. It excludes people living in Canada's northern territories, as well as those residing in institutions. The GSS-95 collected information on a variety of aspects of family life, such as family and marital/cohabitation histories, children, family origins, fertility intentions, work interruptions, as well as personal values and attitudes.

Canada's ten provinces were divided into two geographic regions: one representing the Census Metropolitan Area (CMA) of the province, and one representing the non-CMA.<sup>7</sup> Each person was interviewed via telephone using random digit dialling.<sup>8</sup> One person from each household was selected for an interview. The overall response rate for the GSS-95 was almost 81 per cent.

The GSS-95 is divided into three data files. The main file consists of one record for each respondent, and provides measures for both the respondent's and the household's characteristics. A child file includes a record for each of the respondent's children. Each

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<sup>7</sup> Prince Edward Island does not have a CMA. So, it was not divided into two separate regions. Montreal and Toronto, however, were each separated as distinct geographical regions.

respondent could have up to ten associated files on their children; and when a respondent had more than ten children, records were retained for the nine eldest as well as the youngest child. Provisions were also made for up to five stepchildren and three adopted children. The union file consists of one record for each union in which the respondent had been, or was currently, involved. A file was kept for up to nine unions.

To study age-discrepant unions, I restricted the sample to those currently in either a marital or cohabiting relationship. Although the GSS-95 did collect information on union histories from which the age at prior unions can be identified, virtually all the co-variants (i.e., socio-economic and demographic attributes) were measured at the time of the survey. Thus, they may have little bearing upon the circumstances under which prior unions occurred. In a first study of the topic, it seemed reasonable to focus on persons currently in a union—an examination of union histories would constitute another study. With these restrictions, the final sample included 6,016 respondents. Among them, 5,089 respondents were married, and 927 were cohabiting at the time of the survey.

### **Variable Definitions**

I included two dependent variables in this study. First, I defined a dichotomous variable to indicate whether or not a respondent was currently in an age-discrepant union. Second, I defined a trichotomous variable to indicate whether the respondent was involved in a man-older union, a woman-older union, or a same-age union. The GSS-95 does not provide the spouse's age or year of birth, but rather provides the respondent's reported age-difference

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<sup>8</sup> It is estimated that only 2 per cent of the Canadian population are living in household without telephone services. The GSS-95 estimates ha

in selected age groups (see Table 2 for these age groups). With this limitation and to avoid the male is reported to be six or more years older. I consider women-older relationships as small (sample) cell problems, I have defined a male-older relationship as age-discrepant if age-discrepant when a woman is reported to be two or more years older than her male partner.

Table 1 provides operational definitions as well as descriptive statistics for my independent variables. For the most part, these variables are derived from my theoretical perspectives and hypotheses (see the previous chapter). However, I also have included a number of demographic variables that may be of some importance to understanding age-heterogamous unions. Each variable and its rationale for inclusion are outlined below.

### **Economic variable**

As discussed in the previous chapter, educational attainment may affect the formation of age-discrepant unions in two ways. First, high levels of education may be somewhat rare and, as a result, assortative mating becomes impeded. In other words, the pool of highly educated individuals may be small, and people may have to settle on a mate from a different age group in order to find someone of a similar level of education. Second, acquiring education takes time, especially the pursuit of graduate and post-graduate degrees. Prior research (e.g., Thornton, Axinn and Teachman, 1995) indicates that people often delay union formation and transitions while enrolled in school. However, by the time an individual has completed her/his education, the pool of mates of a similar age may be drastically reduced.

In this study, educational attainment is treated as a continuous variable ranging from no schooling (1) to a completed doctorate, masters, or bachelor degree from a university (10).

**TABLE 1. Definitions and Descriptive Statistics for Variables Used in the Analysis of Age Discrepant Unions: Canada, 1995**

Variable	Description and Coding	Women Mean or %	Men Mean or %
<i>Economic Variable</i>			
Educational status	Educational attainment in 10 levels (1 = no schooling, ..., 10 = bachelor's or higher)	6.11	6.29
<i>Cultural Variables</i>			
Religion			
Protestant	Dummy indicator (1 = yes, 0 = no)	35.0%	34.2%
Other religion	Dummy indicator (1 = yes, 0 = no)	4.1%	4.2%
None	Dummy indicator (1 = yes, 0 = no)	11.3%	13.4%
Catholic	Reference group		
Nativity			
Canadian born	Dummy indicator (1 = yes, 0 = no)	77.5%	77.0%
Foreign born	Reference group		
Region			
Quebec	Dummy indicator (1 = yes, 0 = no)	24.8%	25.2%
Non-Quebec	Reference group		
<i>Demographic Variables</i>			
Birth cohort			
1960+	Dummy indicator (1 = yes, 0 = no)	33.1%	26.9%
1946-59	Dummy indicator (1 = yes, 0 = no)	35.0%	34.8%
1939-45	Dummy indicator (1 = yes, 0 = no)	10.8%	12.4%
<1939	Reference group		
Marital status			
Cohabiting	Dummy indicator (1 = yes, 0 = no)	14.1%	14.2%
Remarried	Dummy indicator (1 = yes, 0 = no)	8.8%	7.5%
Married	Reference group		
Age at current union	Age at current union in years	25.29	27.89
<i>Family Background</i>			
Mother's education	Educational attainment in 10 levels (1 = no schooling, ..., 10 = bachelor's or higher)	3.82	3.67
Father's education	Educational attainment in 10 levels (1 = no schooling, ..., 10 = bachelor's or higher)	3.89	3.88
Mother's education missing	Dummy indicator (1 = yes, 0 = no) Reference group	14.8%	19.7%
Father's education missing	Dummy indicator (1 = yes, 0 = no) Reference group	18.8%	19.4%

**TABLE 1. Definitions and Descriptive Statistics for Variables Used in the Analysis of Age Discrepant Unions: Canada, 1995**

Variable	Description and Coding	Women Mean or %	Men Mean or %
<i>Continued</i>			
Intact family	Grew up with both parents until age 15		
Yes	Dummy indicator (1 = yes, 0 = no)	85.4%	85.3%
No	Reference group		
<i>N</i>		2,826	3,089

*Note:* Weighted means or percentages, unweighted *N*.

*Source:* The 1995 General Social Survey.

The mean educational score for both women and men is about 6, indicating that most of the respondents have some community college or university education.

### **Socio-Cultural Variables**

Recall that the sociological perspective on marriage and cohabitation suggests that social norms, values, and attitudes determine union characteristics and outcomes. To measure the effects of these values, I have included a number of cultural variables, namely religion, nativity and region.

Because different religions espouse different values and norms—and indeed most religions in Canada favour marriage over other forms of union—it is likely that age-discrepant unions will vary by religious denomination. Religious affiliation was treated as a categorical variable, with Roman Catholic as the reference category. At the time of the survey, 49.6 per cent of women were Catholic, 35.0 per cent were Protestant, 4.1 per cent were of another religion and 11.3 per cent had no religious affiliation. For men, the respective proportions are 48.2 per cent Catholic, 34.2 per cent Protestant, 4.2 per cent another religion and 13.4 per cent had no religious affiliation.

Like religion, I expect that values, norms, and attitudes toward age-heterogamous unions will vary by place of birth. So, I included a measure of nativity, which was divided into two categories, Canadian versus foreign-born. Foreign-born is the reference category. Table 1 shows that about 77.5 per cent of the women respondents and 77 per cent of the men respondents were born in Canada.

Quebec has been shown to have different values, norms and attitudes than the rest of Canada (e.g. Pollard and Wu, 1998), especially with reference to union behaviours.

Therefore, a dummy variable was used to indicate whether a respondent was residing in the Province of Quebec. As Table 1 indicates, about 24.8 per cent of women and 25.2 per cent of men resided in Quebec at the time of the survey.

### **Demographic variables**

In his influential paper, demographer Norman Ryder (1965) argued that cohort changes may reflect societal changes, and he suggested that birth cohort may be used as a proxy indicator of these changes. This means that differences between cohorts may be taken as an indication of changing values, norms, and attitudes. I have included a measure of birth cohort in an attempt to examine whether people born in different eras are more or less likely to enter an age-discrepant union.

To measure birth cohort, respondents were categorized into 4 groups by year of birth, reflecting different historical periods: before 1939 (pre-war cohorts), 1939-45 (World War II cohorts), 1946-59 (post-war baby-boom cohorts) and 1960 or later (recent cohorts). The reference group consists of those born before 1939. About 33.1 per cent of women and 26.9 per cent of men in the sample were born in 1960 or later, 35 per cent of women and 34.8 per cent of men were born between 1946 and 1959, 10.8 percent of women and 12.4 per cent of men were born into the 1939-1945 cohort and 21.1 per cent of women and 25.9 percent of men were born in 1939 or earlier.

In order to determine whether age-heterogamy varies by the type of union, I include a measure of marital status. Marital status is a categorical variable which indicates whether a respondent was in a cohabitational union, remarriage, or marital union at the time of the survey. The "married" status is the reference group. Table 1 shows that 14.1 per cent of women were cohabiting at the time of the survey, 8.8 per cent were remarried and 77.1 per

cent were married. Among men, the respective proportions are 14.2 per cent cohabiting, 7.5 per cent remarried and 78.3 per cent married.

As I discussed in the previous chapter, the age at which a person enters into a union may have an effect on whether or not the union will be age-discrepant. A young age at entering a union may indicate that not enough time was spent searching for a mate. I hypothesized that, for women, this would increase the chances of entering into an age-discrepant union. So, I have included a measure of age at the initiation of the current union. The average age at current union was 25 for women and about 28 for men.

### **Family Background**

Family background provides information on the respondent's childhood family. Parental education may be taken as an indication of socio-economic status: prior research indicates that people of lower socio-economic status may be more likely to experience age-heterogamous unions (e.g., James, 1974; Vera et al., 1985). The respondent's parent's education is categorized in the same way as the respondent's education; it is broken down into ten categories and treated as a continuous variable. The average education of the respondents' parents is about 4, which indicates a high school diploma.<sup>9</sup> In the previous chapter, I argued that people with non-traditional union beliefs—i.e., people in nonmarital unions—may also disregard age-norms in partnering. Because experiencing a traditional familial setting as a child may have some bearing on whether an adult will adopt traditional views of marriage as well as follow the marital age-norms (e.g., Blechman, 1982), I have included a measure of whether or not the respondent experienced an "intact" family while growing up. This measure is a dichotomous variable indicating whether or not the respon-

dent lived with both parents until at least age 15. Not experiencing an intact family is the reference group. About 85.4 per cent of women and 85.3 per cent of men grew up in a house with both parents.

### Statistical Analysis

The core analysis in this thesis utilizes logit and multinomial logit models. As mentioned in the above discussion, I created two dependent variables: the first is a dichotomous variable indicating whether or not the respondent is currently in an age-discrepant union; and the second is a “trichotomous” variable which identifies the respondent’s current union as man-older, woman-older, or the same age.

The dichotomous variable was assessed according to logit modelling techniques which estimate the log-odds that the value outcome of the independent variable is associated with the dependent variable when other factors are held constant (see Maddala, 1983). The odds are a ratio of the probability of being in an age-discrepant union versus not being in an age-discrepant union, and can be calculated by taking the anti-log ( $e^{\beta}$ ) of the parameter estimate. A transformation,  $100 \times (e^{\beta} - 1)$ , can be interpreted as the percentage change in the odds that the union is age-discrepant for a one unit increase in a given independent variable, when the other independent variables are held constant (Long, 1997: 81).

In order to analyze the effects of the independent variables on the second dependent variable, I estimated a series of multinomial logit models. As with binomial models, multinomial logit models estimate the log-odds that a value of the explanatory variable is associated with the dependent variable when other independent variables are held constant.

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<sup>9</sup> According to the survey, 14.8 % of women and 19.7 % of men did not know their mother’s educational attainment, while 18.8 % of women and 19.4 % of men did not know their father’s educational attainment.

In these models, each possibility (man-older, woman-older, same age) is taken as a competing option. The transformation for interpretation of numerical explanatory variables is  $100 \times (e^{\beta} - 1)$ . The comparable transformation for categorical variables is  $100 \times (e^{2 \times \beta})$ .

### **Summary**

The data utilized in this study are drawn from the GSS-95. I apply logit and multinomial logit modeling techniques in order to assess the impact of various economic, socio-cultural, and demographic variables on age-discrepant unions. For the most part, these explanatory variables are derived from the hypotheses outlined in the previous chapter. In the next chapter, I will present the results of my analysis.

## Chapter Five

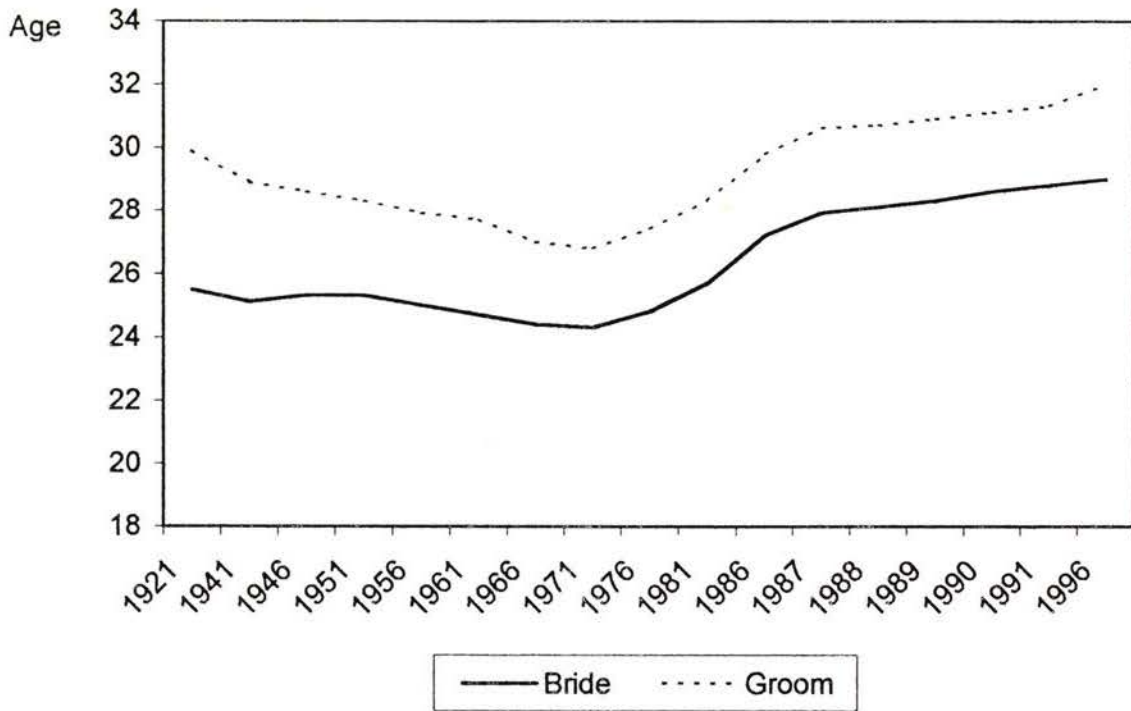
### RESULTS

In this chapter I present the results of my statistical analysis. I begin by presenting a brief profile on the average age at which Canadians marry and the average age at first marriage. I explore the age differences between marital/nonmarital partners and attempt to discern whether age-discrepancies vary by union status, birth cohort and region. Following this discussion is a presentation of the results of the logit and multinomial logit analysis.

#### **Profile of Canadian Unions**

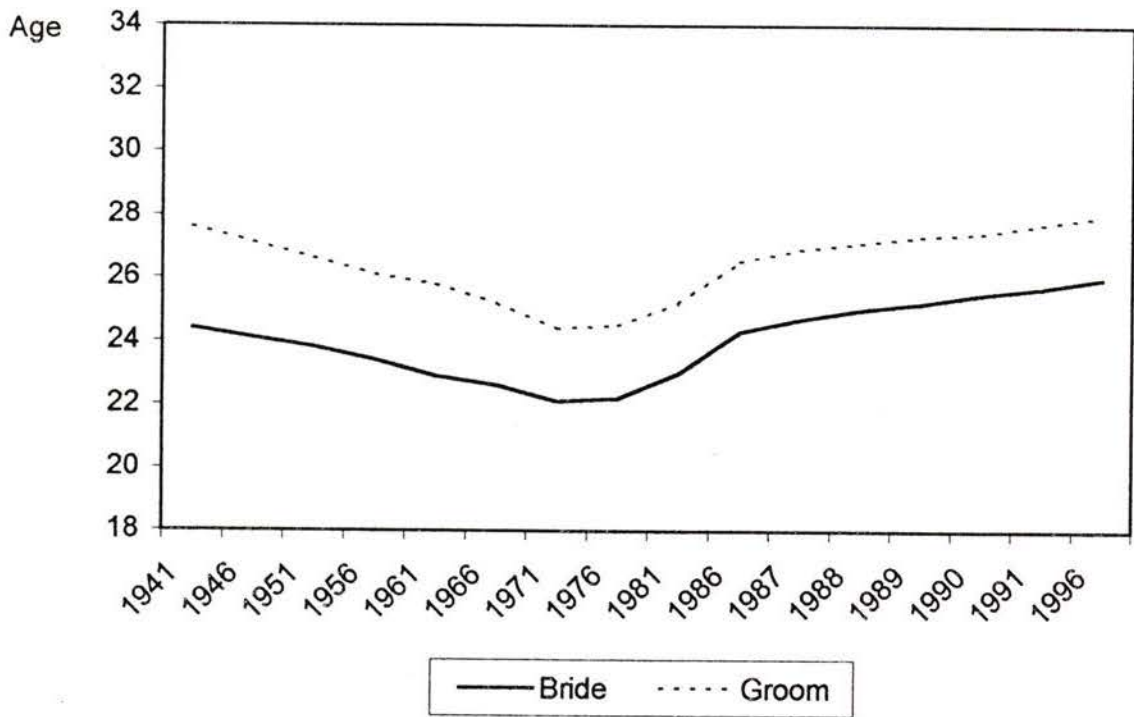
Figure 1 depicts the average age at marriage for both men and women from 1921 to 1996. In 1921 men tended to marry at about 30 years of age and women at about 26 years of age, a difference of four years. By 1976, the average age of marriage dropped to about 27 years for men and 24 years for women. In 1996, however, the age at marriage surpassed the 1921 averages: during that year the average age at marriage was about 32 years for men and 29 years for women.

Figure 2 shows the average age at *first* marriage between 1941 and 1996. Like the overall age at marriage, men tend to first marry at older ages than women. For example, in 1941 the average age at first marriage was about 28 years for men and about 24 years for women. By 1976, these averages decreased to 25 years for men and 22 years for women. However, by 1996 men tended to first marry by age 28 and women by age 26. Both Figures 1 and 2 very clearly show that men tend to marry at an older age than women do.



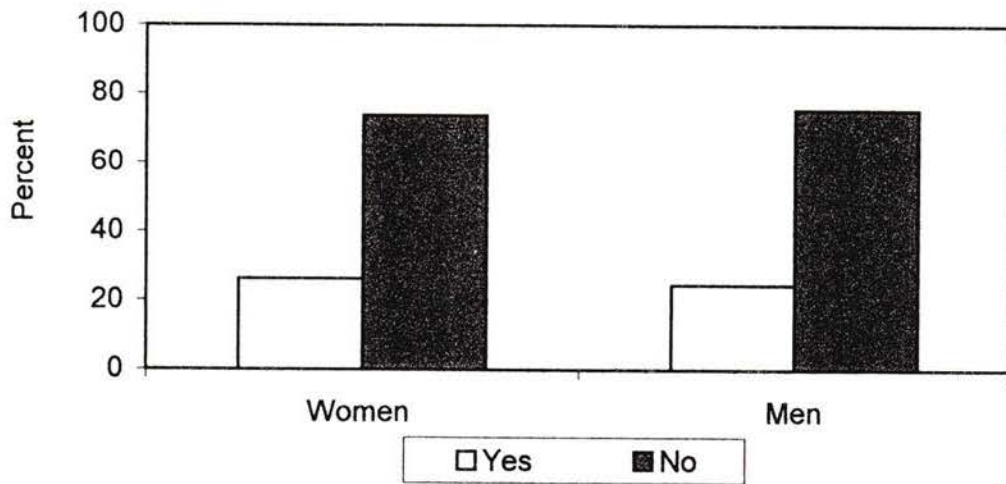
**FIGURE 1. Age at Marriage, Canada: 1941-1996**

Sources: Canadian Vital Statistics.



**FIGURE 2. Age at First Marriage, Canada: 1941-1996**

Sources: Canadian Vital Statistics.



**FIGURE 3. Percentage Distribution of Age-discrepant Unions: Canada, 1995**

*Note:* Age discrepant union is defined whether male partner is 6 or more years older or female partner is 2 or more years older.

*Source:* The 1995 General Social

Figure 3 depicts the percentage distribution of age-discrepant unions in 1995. I have defined a man-older union as age discrepant if the man is six or more years older than his female partner. Women-older unions are considered age-discrepant if the woman is two or more years older than her male partner. It is apparent that age-heterogamous unions *do not* characterize the majority of marriages in the survey: only about 20 per cent of men and women were in age-discrepant marriages in the GSS-95.

Table 2 presents the distribution of age differences between the respondent and his/her current partner and provides a more detailed account of the age-differences between union partners in the survey. This table supports Figure 3: age-discrepant unions do not appear to characterize the majority of unions in the GSS-95. While most men and women appear to be experiencing unions in which the male is slightly older than the female, these age differences are not large enough to qualify as age-discrepant. That noted, there does appear to be a fairly high proportion of unions in which the male is six to ten years older than the female. As per my definition, these unions do classify as age-discrepant. As can be seen in this table, 12.59 per cent of women and 12.19 per cent of men in the survey are in unions in which the male is between six and ten years older than the female. Overall, however, about 17 per cent of women and 16 per cent of men are in unions in which the male partner is six or more years older than the female. About 9.5 per cent of women are in unions in which they are ten or more years older than their male partners, whereas about eight per cent of men are in unions in which their female partner is two or more years older.

**TABLE 2. Percentage Distribution of Age Difference between Respondent and Current Partner: Canada, 1995**

Partner's Age	Women	Men
11 + years younger	0.31	4.18
6-10 years younger	1.93	12.19
5 years younger	0.73	5.76
4 years younger	1.66	7.52
3 years younger	1.98	10.57
2 years younger	2.87	12.3
1 year younger	4.93	13.46
Same Age	19.68	20.14
1 year older	12.79	5.73
2 years older	13.14	2.72
3 years older	9.24	1.48
4 years older	7.91	0.75
5 year older	6.15	0.98
6-10 years older	12.59	1.69
11 years + older	4.11	0.52
Total <sup>a</sup>	100%	100%

<sup>a</sup> Total may not add up to 100% due to rounding errors.

Source: The 1995 General Social Survey.

In order to gain an even more detailed understanding of how age-discrepant unions are distributed in the survey, the next three tables provide percentage distributions of age-discrepant unions by union status (Table 3), birth cohort (Table 4), and region (Table 5). Turning first to Table 3, it is apparent that among all union statuses age-homogamy is the most prevalent: about 61 per cent of those cohabiting, 80 per cent of those in marriages and 51 per cent of those in remarriages are in unions in which their partner is of a similar age. In all union statuses, men-older unions are the second most common: about 22 per cent of cohabitations, 14 per cent of marriages, and 33 per cent of remarriages are characterized by male-older heterogamous unions.

Table 4 presents the percentage distribution of age-discrepant unions by birth cohort. Among all cohorts, age-homogamy is the most common, while women-older unions are the least prevalent. Only about eight per cent of people born in 1939 or earlier are experiencing unions in which the female partner is two or more years older than the male partner. Of the 1939-45, 1946-59 and 1960-80 cohorts about nine per cent of each is experiencing a woman-older union.

Table 5 presents the percentage distribution of age-discrepant unions by region. Age-homogamous unions are the most prevalent in both Quebec and the rest of Canada. About 27 per cent of Quebec unions in the survey and about 25 per cent of unions elsewhere in Canada are characterized as age-heterogamous. More specifically, of the Quebec unions about 18 per cent are male-older and nine per cent are female-older. The respective numbers for the rest of Canada are 16 per cent and nine per cent.

**TABLE 3. Percentage Distribution of Age Discrepant Unions by Union Status: Canada, 1995**

Age Difference	Cohabiting	Married	Remarried
Men older union	21.84	13.84	33.23
Women older union	17.04	6.55	16.1
Age-homogenous union	61.12	79.62	50.67
Total <sup>a</sup>	100%	100%	100%

Chi square = 313.7, df = 4, p < .001

<sup>a</sup> Total may not add up to 100% due to rounding errors.

Source: The 1995 General Social Survey.

**TABLE 4. Percentage Distribution of Age Discrepant Unions by Birth Cohort:  
Canada, 1995**

Age Difference	Birth Cohort			
	<1939	1939-45	1946-59	1960-80
Men older union	21.77	20.12	15.47	12.26
Women older union	8.15	9.49	8.84	9.0
Age-homogenous union	70.08	70.39	75.68	78.73
Total <sup>a</sup>	100%	100%	100%	100%

Chi square = 61.6, *df* = 6, *p* < .001

<sup>a</sup> Total may not add up to 100% due to rounding errors.

**TABLE 5. Percentage Distribution of Age Discrepant Unions by Region:  
Canada, 1995**

Age Difference	Quebec	Non-Quebec
Men older union	17.79	16.11
Women older union	9.41	8.6
Age-homogenous union	72.79	75.29
Total <sup>a</sup>	100%	100%

Chi square = 3.72, df = 2, p = .155

<sup>a</sup> Total may not add up to 100% due to rounding errors.

Source: The 1995 General Social Survey.

So far it is apparent that most unions in Canada, whether marital or nonmarital, can be characterized as age-homogamous. This is consistent with various Canadian trend studies (e.g. Veevers 1984; Veevers and Gee 1987). It is also clear that women-older unions are less common than man-older unions. Again, this is consistent with previous research (e.g. Cox, 1970; Casterline and McDonald, 1983; Rawlings, 1978; Glick, 1980; Schoen, 1981; Vera et al, 1990; Veevers, 1984). In the next section, I will provide the results of my logit analyses. These results will allow me assess the effects of my independent variables on age-heterogamous unions.

### **Determinants of Age-Discrepant Unions**

Table 6 provides the logit models of age-discrepant unions. In order to assess gender differences, women and men are modelled separately. Recall that the dependent variable is a dichotomous variable that indicates whether or not the respondent was involved in an age-discrepant union.

Educational status is not significant in either model, but the signs would indicate that there might be an inverse relationship between educational status and age-discrepant unions. Contrary to my hypothesis, this would mean that women with a higher educational status would be *less likely* to experience an age-heterogamous union. Of course, this is inconclusive because educational status has not reached a level of significance.

TABLE 6. Logit Models of Age Discrepant Union: Canada, 1995

Variable	Women b		Men b	
<i>Economic Variable</i>				
Educational status	-0.026		-0.027	
<i>Cultural Variables</i>				
Religion				
Protestant	0.066		-0.382	***
Other religion	0.116		0.357	
None	-0.188		-0.191	
Catholic <sup>a</sup>				
Nativity				
Canadian born	-0.346	***	-0.324	**
Foreign born <sup>a</sup>				
Region				
Quebec	-0.130		-0.067	
Non-Quebec <sup>a</sup>				
<i>Demographic Variables</i>				
Birth cohort				
1960+	-0.174		-0.463	***
1946-59	-0.240	*	-0.312	**
1939-45	0.124		-0.339	**
<1939 <sup>a</sup>				
Marital status				
Cohabiting	0.769	***	0.647	***
Remarried	0.463	***	0.590	***
Married <sup>a</sup>				
Age at current union	0.057	***	0.082	***
<i>Family Background</i>				
Mother's education	-0.008		-0.024	
Father's education	-0.003		0.013	
Mother's education missing				
Yes	-0.078		-0.152	
No <sup>a</sup>				
Father's education missing				
Yes	0.164		0.255	*
No <sup>a</sup>				

TABLE 6. Logit Models of Age Discrepant Union: Canada, 1995

Variable	Women b		Men b	
<i>Continued</i>				
Intact family				
Yes	-0.039		-0.080	
No <sup>a</sup>				
Intercept	-2.009	***	-2.700	***
- Log Likelihood (Chi Square)	-1633.2		-1353.1	

<sup>a</sup> Reference group.

\*  $p < .10$ . \*\*  $p < .05$ . \*\*\*  $p < .01$ . (two-tailed test.)

Source: The 1995 General Social Survey.

Turning to the cultural variables, Protestant men are less likely to be engaged in an age-discrepant union than are Catholic men. In fact, a simple transformation ( $100(.723 - 1)$ )—where .723 is the anti-log of  $-.382$ —indicates that, all else being equal, Protestant men are about 28 per cent less likely to experience an age-discrepant union than Catholic men.

Nativity is significant in both models. For women and men, being born in Canada decreases the odds that a union will be age-discrepant. Canadian-born women are 29 per cent less likely to enter into an age-heterogamous union than those born elsewhere. The comparable figure for Canadian-born men is 28 per cent. This finding may indicate that foreign-born residents experience higher search costs when looking for a mate because finding someone of similar traits in a host country may be somewhat difficult. As a result, these people may settle for someone much older or younger than themselves. Alternatively, these results may indicate a cultural variation: people from other parts of the world may adhere to different age-norms concerning partnering.

Turning to birth cohorts, men born in 1939 or earlier are much more likely to experience an age-discrepant union than those born into any other cohort. For example, men born into the 1946-59 cohort are 27 per cent less likely to experience age-heterogamy than are men born in 1939 or earlier; men born into the 1939-45 cohort are 29 per cent less likely. Women born into the 1946-59 cohort are 21 per cent less likely than women born in 1939 or earlier to be engaged in an age-discrepant union. If we can take cohort differences as an indication of historical change, as Ryder (1965) argues, then age-discrepant unions appear to have been more common in the past. This supports prior studies (e.g., Basavarajappa, Norris and Halli, 1988; Veevers, 1984) that suggest that the incidence of age-heterogamous unions is decreasing, and that in the past these type of unions were more common.

It is apparent in both models that marital status has a significant effect on the odds of experiencing an age-discrepant union. For both women and men, those in nonmarital unions and remarriages are much more likely to experience an age-discrepant union compared to those in a first marriage. This may mean that people in nonmarital unions are less likely to adhere to the cultural norms surrounding union life. Because cohabiting can be regarded as an “alternative” lifestyle choice, its adherents are sometimes thought to express different values and attitudes than the dominant norms. If these people are likely to disregard marriage norms, they also may be more likely to disregard the age-norms surrounding union behaviour. That people in remarriages are more likely to be involved in an age-discrepant union may indicate that at the time of remarriage the pool of eligible mates of the same age was small and, consequently, these people had to expand the age-group from which to draw in order to find a mate with similar traits.

The age at which women and men enter into a union is also statistically significant in both models, and the chances of a current union being characterized as age-discrepant increases as the age at the current union increases. This may indicate that as the search for a mate becomes prolonged, and search costs accrue, an individual may compromise on the ideal age of an acceptable mate. This means that after a long search, a woman or man may partner with someone who is significantly older or younger.

Because Table 6 only indicates whether the union is age-discrepant, I cannot use it to assess the chances of entering into a specific type of age-heterogamous union. In the next four tables, I will explore the likelihood that a current union is either a man-older union or woman-older union. In order to assess gender differences, women and men are modelled separately.

I begin my analysis of age-discrepancies by treating type of union as an independent variable. Subsequently, I estimate separate models to examine whether the determinants of age-discrepant unions vary by union type. Table 7 presents the multinomial logit models of age discrepant unions. Turning first to educational status, it is apparent that as a woman's education increases, she is less likely to be involved in a union in which her male partner is older. Recall that I hypothesized that as a woman's educational attainment increased, she would be more likely to enter an age-discrepant union. The analysis does not appear to support this hypothesis.

Compared to Catholic men, Protestant men are less likely to experience a men-older union. This may mean that Protestant men have a larger pool of mates from which to draw compared to Catholic men—Catholic men may have higher search costs if they are inclined to search out and marry women of the same religious affiliation. Turning to nativity, both women and men born in Canada are less likely to be engaged in a men-older union than those born elsewhere. As noted in my discussion of Table 6, foreign-born people may have a higher search cost or may follow different age-norms surrounding union behaviour. As a result, these people may be more inclined to marry someone significantly older or younger than themselves.

My analysis of birth cohorts reveals that men of all later cohorts are less likely to be in unions in which they are significantly older than their female partners than are men born into the 1939 and earlier cohort. Further, women of the 1946-59 cohort are less likely than women of the 1939 and earlier cohort to be engaged in a male-older union. These results may indicate that male-older unions were more common in the past.

TABLE 7. Multinomial Logit Models of Age Discrepant Union: Canada, 1995

Variable	Women		Men	
	Men Older vs. Other	Women Older vs. Other	Men Older vs. Other	Women Older vs. Other
<i>Economic Variable</i>				
Educational status	-0.044 **	0.027	-0.031	-0.009
<i>Cultural Variables</i>				
Religion				
Protestant	0.024	0.045	-0.222 ***	-0.145
Other/None	-0.025	-0.134	-0.045	-0.012
Catholic <sup>a</sup>				
Nativity				
Canadian born	-0.238 ***	-0.032	-0.260 ***	-0.071
Foreign born <sup>a</sup>				
Region				
Quebec	-0.034	-0.122	-0.069	0.032
Non-Quebec <sup>a</sup>				
<i>Demographic Variables</i>				
Birth cohort				
1960+	-0.110	0.023	-0.461 ***	0.005
1946-59	-0.206 ***	0.095	-0.157 **	-0.083
1939-45	0.048	0.106	-0.182 *	-0.138
<1939 <sup>a</sup>				
Marital status				
Cohabiting	0.313 ***	0.466 ***	0.193 **	0.415
Remarried	0.245 **	0.194	0.267 **	0.233
Married <sup>a</sup>				
Age at current union	0.032 ***	0.098 ***	0.113 ***	0.017
<i>Family Background</i>				
Mother's education	-0.002	-0.026	-0.080 **	0.033
Father's education	0.006	-0.021	0.018	0.006
Mother's education missing				
Yes	-0.073	0.040	-0.105	-0.008
No <sup>a</sup>				
Father's education missing				
Yes	0.048	0.191 *	0.169 *	0.073
No <sup>a</sup>				

TABLE 7. Multinomial Logit Models of Age Discrepant Union: Canada, 1995

Variable	Women		Men	
	Men Older vs. Other	Women Older vs. Other	Men Older vs. Other	Women Older vs. Other
<i>Continued</i>				
Intact family				
Yes	-0.086	0.172	0.032	-0.118
No <sup>a</sup>				
Intercept	-1.470 ***	-4.335 ***	-4.559 ***	-2.242
- Log Likelihood (Chi Square)	4176.2		3432.5	

<sup>a</sup> Reference group.

\*  $p < .10$ . \*\*  $p < .05$ . \*\*\*  $p < .01$ . (two-tailed test.)

Source: The 1995 General Social Survey.

For the most part, marital status appears to be a strong indicator of the likelihood of experiencing an age-discrepant union. For example, cohabiting and remarried women and men are more likely than their married counterparts to be engaged in a union in which the male partner is significantly older. Further, women and men in non-marital unions are more likely than those in marriages to be involved in a male-older union. These are interesting results. As I suggested above, those involved in cohabiting relationships may be more likely to disregard the age-norms surrounding union behaviour.

With the exception of men in women-older unions, age at entry into the current union has a positive impact on the likelihood of entering an age-discrepant union. For example, for each year increase in age at entry into a union, the chances of a woman entering a male-older union increase by about three per cent. A woman's chances of entry into a union in which she is significantly older than her male partner increases by about ten per cent. For a man, the odds that he will be significantly older than his female partner increase by about 12 per cent with every year increase in his age of entry into union. If search costs increase over time, then these results may mean that people forgo age norms and are more likely to choose a mate who is significantly older or younger than themselves.

Finally, men are less likely to enter into a union in which they are significantly older than their partner if their mothers have a high level of education. If we can take level of education as an indicator of socio-economic status, this may mean that a man's socio-economic status during childhood has a negative effect on his chances of entering an age-discrepant union in which he is much older than his mate.

In the next three tables, I have modelled separately the chances of entering into age-discrepant cohabitations (Table 8), first marriages (Table 9), and remarriages (Table 10). As

noted above, these tables will allow me to examine whether the determinants of age-discrepant unions vary by union type. To my knowledge no other studies have conducted this type of analysis of age-heterogamous unions.

Table 8 presents the multinomial logit models of age-discrepant unions among cohabiting women and men. Consistent with my hypothesis, the likelihood that a cohabiting woman is significantly older than her partner increases with her educational status. Indeed, a one unit increase in a cohabiting woman's education increases her odds of being older than her partner by about 18 per cent. On the other hand, being Canadian-born reduces a cohabiting woman's odds of entering into a man-older relationship.

Turning to birth cohort, cohabiting woman born into later cohorts are less likely than those born in 1939 and earlier to experience a male-older union. Men born into the 1960+, and 1946-59 cohorts are less likely than men born in 1939 or earlier to be involved in woman-older unions. Interestingly, compared to men born in the earliest cohort, men of the 1939-45 and 1946-59 cohorts are more likely to be living in a non-marital union in which they are significantly older than their mate.

As expected, as age at entry into a non-marital union increases, both the chances that a woman is older than her mate, and the chances that a man is older than his partner increase. Unexpectedly, there is an inverse relationship between a man's age at entry into a non-marital union and his chances that his mate is significantly older than himself. This means that the older a man is when entering a cohabitational union, the less likely his female partner will be much older. This result could mean that older men who enter non-marital unions have a preference for relationships with younger rather than older women.

**TABLE 8. Multinomial Logit Models of Age Discrepant Union Among Cohabiting Women and Men: Canada, 1995**

Variable	Women		Men	
	Men Older vs. Other	Women Older vs. Other	Men Older vs. Other	Women Older vs. Other
<i>Economic Variable</i>				
Educational status	0.035	0.162 ***	0.058	0.044
<i>Cultural Variables</i>				
Religion				
Protestant	0.205	0.108	-0.243	-0.241
Other/None	0.023	0.126	-0.045	0.103
Catholic <sup>a</sup>				
Nativity				
Canadian born	-0.301 #	0.131	-0.191	-0.160
Foreign born <sup>a</sup>				
Region				
Quebec	-0.011	-0.034	-0.191	-0.056
Non-Quebec <sup>a</sup>				
<i>Demographic Variables</i>				
Birth cohort				
1960+	-1.008 #	-0.647	0.240	-0.850
1946-59	-0.860 #	-0.445	0.478 #	-0.730
1939-45	-0.503	-0.651	0.748 **	-0.189
<1939 <sup>a</sup>				
Age at current union	0.011	0.096 ***	0.084 ***	-0.055
<i>Family Background</i>				
Mother's education	-0.130 **	-0.029	-0.121 #	0.054
Father's education	0.040	0.015	-0.070	-0.005
Mother's education missing				
Yes	-0.105	0.354 #	0.246	0.193
No <sup>a</sup>				
Father's education missing				
Yes	-0.250	0.301 #	-0.192	0.130
No <sup>a</sup>				

**TABLE 8. Multinomial Logit Models of Age Discrepant Union Among Cohabiting Women and Men: Canada, 1995**

<i>Continued</i>							
	Women				Men		
Intact family							
Yes	0.029		0.424	*	0.084		-0.186
No <sup>a</sup>							
Intercept	-1.511	*	-5.502	**	-2.835	***	-0.203
- Log Likelihood (Chi Square)			775.62				704.83

<sup>a</sup> Reference group.

\*  $p < .10$ . \*\*  $p < .05$ . \*\*\*  $p < .01$ . (two-tailed test.) #  $< .10$  (one-tailed test.)

Source: The 1995 General Social Survey.

Mother's education is seen to have a significantly negative impact on both women's and men's likelihood that their cohabitational union will be male-older. As noted above, if parents' education is an indication of a socio-economic status during childhood, then a higher socio-economic status while growing up may reduce the likelihood of entering this type of age-discrepant union. Unexpectedly, Table 8 indicates that there is a positive relationship between living with both parents until at least age 15 and the likelihood that a woman will be significantly older than her cohabiting partner.

Table 9 presents the multinomial logit models of age-discrepant unions among women and men in first marriages. The chance of either a woman or man entering a first marriage in which the male is significantly older is negatively associated with educational status. This means that as educational status increases women and men are less likely to experience a male-older relationship. At first sight this appears to contradict my hypothesis that as a woman's level of education increases so will the likelihood that she will experience an age-discrepant union. However, because these models are concerned with *first marriages*, these results make sense: first marriages are more likely to be age-homogamous to begin with.

Compared to Catholic women, women of other/no religious affiliation are less likely to enter into a first marriage in which they are significantly older than their mate. Further, the chances of entering into an age-discrepant first marriage are less for Protestant men compared to Catholic men. These results may indicate that some Catholic women and men accrue higher search costs and consequently settle on an age-discrepant first marriage.

**TABLE 9. Multinomial Logit Models of Age Discrepant Union Among Women and Men in First Marriages: Canada, 1995**

Variable	Women		Men		Women Older vs. Other
	Men Older vs. Other	Women Older vs. Other	Men Older vs. Other	Women Older vs. Other	
<i>Economic Variable</i>					
Educational status	-0.060 **	-0.023	-0.059 **		-0.015
<i>Cultural Variables</i>					
Religion					
Protestant	0.021	0.107	-0.223 **		-0.149
Other/None Catholic <sup>a</sup>	0.037	-0.456 **	-0.064		-0.079
Nativity					
Canadian born	-0.259 ***	-0.046	-0.275 ***		-0.099
Foreign born <sup>a</sup>					
Region					
Quebec	-0.049	-0.057	-0.134 #		0.061
Non-Quebec <sup>a</sup>					
<i>Demographic Variables</i>					
Birth cohort					
1960+	-0.089	0.053	-0.562 ***		-0.005
1946-59	-0.189 **	0.032	-0.252 ***		-0.042
1939-45	0.002	0.136	-0.414 ***		-0.197
<1939 <sup>a</sup>					
Age at current union	0.024 *	0.179 ***	0.196 ***		0.032
<i>Family Background</i>					
Mother's education	0.025	-0.002	-0.088 *		0.030
Father's education	0.006	-0.053	0.024		0.018
Mother's education missing					
Yes	-0.090	0.093	-0.028		-0.119
No <sup>a</sup>					
Father's education missing					
Yes	0.104	0.162	0.210 *		0.084
No <sup>a</sup>					

TABLE 9. Multinomial Logit Models of Age Discrepant Union Among Women and Men  
in First Marriages: Canada, 1995

<i>Continued</i>							
	Women				Men		
Intact family							
Yes	-0.166	**	0.157		0.090		-0.095
No <sup>a</sup>							
Intercept	-1.723	***	-6.948	***	-7.478	***	-3.395
- Log Likelihood (Chi Square)			2816.6				2242.3

<sup>a</sup> Reference group.

\*  $p < .10$ . \*\*  $p < .05$ . \*\*\*  $p < .01$ . (two-tailed test.) #  $< .10$  (one-tailed test.)

Source: The 1995 General Social Survey.

Being Canadian-born significantly reduces the chances of either a woman or a man entering into a man-older first marriage, while a Quebec man is less likely than a man from elsewhere in Canadian to enter into a first marriage in which he is significantly older than his wife. Women born into the 1946-59 cohort are less likely to enter a man-older first marriage, while men of all later cohorts are less likely to be significantly older than their wives compared to men born in 1939 or earlier.

In all four models, age at current union is statistically significant. The chances of a man or woman entering an age-discrepant first-marriage are increased as the age at entry into the first marriage increases. For example, the chances of a woman marrying a man significantly older than herself increases by two per cent with each successive year, and her chances of being older than her husband increase by 20 per cent. A man is about 22 per cent more likely to be older than his wife. As his age at first marriage increases, he is three per cent more likely to be younger than his wife. These findings are consistent with previous studies (e.g., Glick, 1957; Blytheway, 1981; Momeni, 1976; Casterline and McDonald, 1983; Gunter and Wheeler, 1986).

Finally, as a man's mother's level of education increases, he is less likely to enter a first marriage in which he is significantly older than his wife. Again, taking mother's education as a measure of socio-economic status during childhood, as socio-economic status increases, a man's chances of male-older first marriage decreases.

Table 10 presents the multinomial logit models of age-discrepant unions among remarried women and men. Compared to a Catholic woman, a woman of other/no religious affiliation is less likely to enter a remarriage in which she is older than her husband.

**TABLE 10. Multinomial Logit Models of Age Discrepant Union Among Remarried Women and Men: Canada, 1995**

Variable	Women		Men	
	Men Older vs. Other	Women Older vs. Other	Men Older vs. Other	Women Older vs. Other
<i>Economic Variable</i>				
Educational status	-0.004	-0.023	0.025	-0.046
<i>Cultural Variables</i>				
Religion				
Protestant	-0.244	-0.179	-0.080	-0.045
Other/None	-0.498 *	-0.332 #	-0.002	-0.109
Catholic <sup>a</sup>				
Nativity				
Canadian born	0.081	-0.018	-0.213	0.491
Foreign born <sup>a</sup>				
Region				
Quebec	0.042	-0.935 ***	0.343 #	-0.060
Non-Quebec <sup>a</sup>				
<i>Demographic Variables</i>				
Birth cohort				
1960+	0.019	-0.185	-1.025 **	0.607
1946-59	-0.387 #	0.020	-0.225	0.238
1939-45	0.332	0.336	0.189	0.383
<1939 <sup>a</sup>				
Age at current union	0.005	-0.002	0.050 ***	0.020
<i>Family Background</i>				
Mother's education	0.029	-0.167 *	0.026	-0.073
Father's education	-0.023	-0.024	-0.023	-0.051
Mother's education missing				
Yes	-0.105	-0.182	-1.131 ***	0.392
No <sup>a</sup>				
Father's education missing				
Yes	0.045	-0.055	0.686 **	-0.222
No <sup>a</sup>				

**TABLE 10. Multinomial Logit Models of Age Discrepant Union Among Remarried Women and Men: Canada, 1995**

<i>Continued</i>						
	Women			Men		
Intact family						
Yes	0.052		0.084	-0.281	#	0.215
No <sup>a</sup>						
Intercept	-1.246	#	-0.973	-2.825	***	-1.712
- Log Likelihood (Chi Square)		455.33				342.95

<sup>a</sup> Reference group.

\*  $p < .10$ . \*\*  $p < .05$ . \*\*\*  $p < .01$ . (two-tailed test.) #  $< .10$  (one-tailed test.)

Source: The 1995 General Social Survey.

Also, a Quebecois woman is less likely than a woman from elsewhere in Canada to enter an age-discrepant union in which she is older than her husband. On the other hand, a Quebecois man is more likely than a non-Quebecois man to enter a remarriage in which he is significantly older than his wife.

Turning to birth cohorts, the odds of women born into the 1946-59 cohort entering men-older remarriages are lower compared to women in the 1939 and earlier cohort. For men born into the 1960 and later cohort, their chances of entering a remarriage in which they are older than their wives are lower compared to men born in 1939 or earlier. Again, taking cohort differences as a measure of historical change, these results may indicate that age-norms surrounding marriage life have changed, i.e., age-discrepant unions may be more acceptable to women and men born in 1939 and earlier.

Table 10 indicates a positive relationship between a men's age at entry into remarriage and his chances of being significantly older than his wife. In fact, for every year increase in his age at remarriage, his odds of entering a man-older relationship increase by five per cent. However, a man's chances of entering a male-older remarriage decrease by about 25 per cent if he experienced an intact family during childhood.

## **Summary**

In this chapter, I have outlined the results of my analyses, and, in some places, have provided a brief explanation for the findings. The next chapter will be concerned with a more elaborate assessment of my hypotheses in light of these results. I will then assess the relevancy of each theoretical model for understanding age-discrepant unions.

## Chapter Six

### DISCUSSION & CONCLUSION

In this thesis, I provide a much-needed exploration of age-discrepant unions in Canada. Very little research has been conducted in this area of sociology of the family, and most of the studies that have been carried out are now outdated. In addition, I have incorporated a consideration of non-marital unions, and examined whether or not those who cohabit also are more likely to enter an age-heterogamous union. Such an inclusion of cohabitation is important, especially given the fact that the number of non-marital unions in Canada is increasing steadily while marriage rates in Canada have been on the decline.

In this final chapter, I will assess each hypothesis stated in Chapter 3. This assessment will allow me to comment on the adequacy of the economic and sociological theories in explaining age-discrepant union behaviour in Canada. Before my concluding comments, this chapter will also provide a brief discussion of the limits of my research and avenues for further research.

#### **Age-Discrepant Unions in Canada**

Previous research has shown that in Canada's past age-heterogamous unions were much more common than they are today (e.g., Veevers 1984; Basavarajappa, Norris and Halli 1988). While it appears that man-older unions are more common than woman-older unions in the GSS-95 (Table 2), most of these can be characterized as age-homogamous, i.e., the male is only up to five years older than the female. However, as Table 2 shows, about 16 per cent of women and men in the survey are in unions in which the male partner is six or

more years older than the female. Figure 3 shows that overall about 20 per cent of the unions in the survey are age-heterogamous.

Tables 3, 4, and 5 indicate that age-homogamous unions are more common among all union statuses, birth cohorts, and regions. However, a greater proportion of the remarried are in age-heterogamous unions than are the married or the cohabiting unions. A higher percentage of people born in 1939 or earlier also experience male-older, age-discrepant unions, while a greater proportion of those born into the 1960-80 cohort are in age-homogamous unions. Finally, while non-Quebec unions appear to have slightly higher proportion of age-homogamy, the difference is rather small, and statistically nonsignificant.

Some have suggested that a “marriage squeeze” is accountable for age-discrepant unions (e.g., Veevers, 1988; Greene and Rao, 1991). This means that when the pool of available mates in one’s age group is small, one will, by necessity, forgo age-homogamy. While testing the “marriage squeeze” explanation is beyond the scope of this thesis, its underlying argument is closely related to Becker’s economic theory of marriage. Recall that assortative mating means that an individual will attempt to form a union with someone of similar traits. This includes age. According to Becker, the search for a mate is a rational act, and an individual will attempt to assess the future gains to forming a union with a particular mate. While an age-discrepancy may be seen as a reduction to these union gains, a negative attitude towards an age difference may be set aside if more important traits and resources are available through the formation of a particular union.

My first hypothesis is based upon an economic theory of marriage. It stated that people experiencing remarriage will be at a greater risk of entering an age-discrepant union than people of other union statuses. The rationale behind this is twofold. First, people

experiencing remarriage may have a limited pool of eligible mates from which to draw. Consequently, in order to increase the potential gains to a union, an individual may expand her/his chances of finding a relatively compatible mate by considering partners of various ages. Second, these people may be self-selected into union instability. This means that these people are more prone to marital instability, and also are more likely enter into age-discrepant union formations.

As I noted above, Table 3 shows that while age-homogamy is common among all union statuses, a greater proportion of remarriages are men-older compared to cohabitations and marriages.<sup>10</sup> This lends some support to my hypothesis. Table 6 shows further that women and men are more likely to enter an age-discrepant union if that union is a remarriage than if it is a first marriage. Table 7 indicates that among both women and men, remarriages are more likely to become male-older compared to first marriages.

These findings suggest that many remarried individuals may forgo age-homogamy in order to match what they consider to be more important traits. For example, Table 10 shows that women of other/no religion are less likely than Catholic women to enter male-older and women-older remarriages. Because Catholics tend to marry other Catholics (e.g. Teevan, 1982) these women's search costs may be higher than other women's. As a result, they may expand their age-pool of eligible mates in order find a Catholic partner.

My second hypothesis stated that the younger a woman is at the commencement of a union, the more likely she will enter an age-discrepant union in in which her male partner is much older. I find no support for this hypothesis. In fact, the opposite appears to be the case: the older a woman is at entry into a union, the more likely she will enter a male-older, age-

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<sup>10</sup> Table 3 also shows that the proportion of women-older unions are higher among the cohabiting.

heterogamous union.<sup>11</sup> For example, Table 7 shows that for every year increase in a woman's age, her chances of entering a union in which her male partner is significantly older increase by about three per cent (Table 7). If the union is a first marriage, her odds of male-older heterogamy increase by about two per cent (Table 9). These results may mean that as women age the pool of male partners of a similar age decreases, as the "marriage squeeze" theory postulates. Consequently, these women would have to expand their pool of eligible mates by considering men of older ages.

Of course, Becker's economic theory also provides a plausible explanation. Recall that Becker postulates that as a search for a mate becomes prolonged, the search costs increase. So, as a woman's search for a mate becomes extended, she may deem her costs to be too high, and thus settle for an age-heterogamous union. This makes particular sense if the union is a first marriage, whereas the "marriage squeeze" theory may make more sense for divorced, separated, or widowed women because these women are likely to experience a reduction in the number of available male partners during later life.

My third hypothesis stated that as a woman's education increases, she will be more likely to experience an age-discrepant union. I suggested two possible reasons for this. First, women with a high level of education may have to draw upon a pool of potential mates from a variety of ages in order to find a partner with a comparable education. Indeed, Mare's (1991) study of educational homogamy in the United States indicates that over the past fifty years, women have increasingly sought-out male partners with similar levels of education. Second, because education takes time and people tend not to change their union status while

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<sup>11</sup> Of course, this finding may simply indicate curvilinear relationship in which younger and older women who live outside the union age-norms are likely to enter male-older unions, whereas women within the age-norm may enter unions with men of a similar age.

enrolled in school (e.g., Thornton, Axinn and Teachman 1995), highly educated women may experience a small pool of potential mates once their own educational goals are met.

Support for this hypothesis is somewhat equivocal. While there is a statistically significant, positive relationship between level of education and the likelihood that a woman will be in a woman-older cohabitation (Table 8), an increase in a woman's level of education significantly *reduces* her odds that a first marriage will be characterized as man-older (Table 9). Further, education is seen to *reduce* a woman's chances that a union will be male-older discrepant (Table 7). While a woman in a nonmarital union may incur a higher search cost by delaying union formation for education and thus settle on a younger male partner, a sociological explanation also may be pertinent: higher educated women in nonmarital unions may not adhere to union age-norms and thus may be self-selected into women-older cohabitations.

My fourth and fifth hypotheses are based upon sociological theory. The fourth hypothesis stated that both men and women within a non-marital union will be more likely to experience an age-discrepant relationship. Sociological theory suggests that because people in non-marital unions go against the dominant norms of Canadian society—namely that heterosexual couples should marry—these people also will be more likely to break other social norms, such as those surrounding the “appropriate” ages of union partners (Axinn and Thornton, 1993). While most of the non-marital unions in the survey can be characterized as age-homogamous, about 20 per cent of cohabitations can be characterized as age-discrepant (see Figure 3 and Table 3).

I find strong support for my fourth hypothesis. Table 6 clearly shows that for both women and men cohabitation increases their odds of experiencing an age-discrepant union

compared to the married. In fact, cohabiting women are 116 per cent more likely to be in an age-heterogamous union than married women. The comparable figure for men is 91 per cent. Table 7 also clearly indicates that compared to married women and men, those in cohabitations are much more likely to be in a union in which either the male or the female is significantly older. These results may very well indicate that women and men who are in non-marital unions are self-selected into age-heterogamous unions: these people may be disregarding the dominant norms surrounding union life.

My final hypothesis states that because of different norms, values and attitudes, Quebecers' age norms will be different from those of the rest of Canada, with age-heterogamous unions being more likely to occur to people living in Quebec than elsewhere in Canada. Indeed, Pollard and Wu (1998) have shown that union life is quite different in Quebec compared to the rest of Canada. The results of my analysis are mixed. Quebec men are more likely than their counterparts to enter a remarriage in which they are significantly older than their wives (Table 10). However, if the union is a first marriage, Quebec men are less likely to experience a male-older marriage (Table 9). Compared to other Canadian women, Quebecois women are less likely to enter a woman-older remarriage (Table 10). Although these results may indicate cultural and gender differences between Quebec and the rest of Canada, it is impossible to discern this with certainty in the present study.

As is evident from the above discussion of my research hypotheses, both economic theory and sociological theory aid our understanding of the formation of age-discrepant unions. As the economic theory of assortative mating suggests, an individual will attempt to form a union with someone of similar characteristics. However, as the search for a mate becomes drawn out and continuingly unsuccessful, an individual may rationally choose to

expand the pool of eligible partners by considering people of various ages. In this way, age-homogamy is compromised but other traits, such as level of education, socio-economic status or religion, may be more easily matched.

Sociological theory suggests that dominant norms, values, and attitudes have a strong influence on union life. As my results have shown, compared to their married counterparts, cohabiting men and women are much more likely to experience an age-heterogamous union. This may mean that people who cohabit are more likely to disregard, or are less affected by, dominant norms, attitudes, and values surrounding union life. This supports the view that, for some, cohabitation is an alternative form of family living (Wu 2000); and that the norms, values, and attitudes of those in cohabitations differ markedly from those in marital unions.

If we can take birth cohort differences as an indication of historical change, then it would appear that age-heterogamy is more common among people born in 1939 or earlier (see Tables 6, 7, 8, 9, and 10). This may mean that large age differences between union partners were more acceptable in the past than they are today. As I discussed in Chapter 2, many trend studies in the United States and Canada have confirmed a trend toward age-homogamy in these two countries. The results of my analyses suggest that this trend may very well be indicative of changing norms, values and attitudes toward age-discrepant unions. However, because my research is concerned with the current union, rather than individual union histories, these cohort differences may actually indicate a “marriage squeeze” phenomenon. In other words, those born in 1939 or earlier may be in a second or third union; and at later life the pool of eligible mates may be small. As a result, people within this cohort may have formed a union with someone with a discrepant age.

There is also an interesting result of my analysis which, while outside the scope of my hypotheses, deserves comment, namely the impact of nativity on age-heterogamous unions. The Canadian-born are less likely to enter an age-discrepant union than those born outside of Canada (Table 6). Also, the Canadian-born are less likely than the foreign-born to be in men-older unions (Table 7). Table 8 indicates that the chances of a man-older cohabitation are lower among Canadian-born women than their foreign-born counterparts; and Table 9 indicates that men-older first marriages are less likely to occur to Canadian-born women and men compared to those born elsewhere.

Becker's theory would seem applicable here. If the foreign-born look for partners of similar cultural/ethnic heritage, then they may find that the pool of eligible mates in Canada is somewhat small. One strategy for expanding this pool would be to consider people within a wider age distribution. Alternatively, the greater likelihood of age-discrepant unions among the foreign-born may be indicative of cultural norms that differ from the norms of dominant Canadian society. Future research should take up these differences in nativity in order to gain a better understanding of the processes involved.

While testing the "marriage squeeze" explanation was beyond the scope of this thesis, it also may be a useful consideration for future research. There is a demographic literature that suggests that sex ratios in the union market play an important role in the proportion of age-discrepant unions at any given period of time (e.g., Guttentag and Secord 1983). While Becker's economic theory of marriage, especially of assortative mating, does provide an underlying rationale for how sex ratios determine the proportion of age-heterogamous unions, much more research is needed. Such a consideration was not possible in the current

study because it was not possible to determine the sex ratios of the union markets in Canada using the GSS-95.

## **Conclusion**

In this thesis, I have shown that those in cohabitations are more likely than those in marriages to experience an age-discrepant union. While age-homogamy is more prevalent among all Canadian unions, and although there has been a well-documented trend toward same-age marriages, the study of age-heterogamy remains important. As the number of cohabiters in Canada rises, we may see a concomitant increase in the number of age-heterogamous unions. While the consequences of age-discrepant cohabitations are relatively unknown, I speculate—following Becker’s theory of assortative mating—that these nonmarital unions may be less stable than ones characterized by age-homogamy. This is simply because a mismatch in partnering may decrease the gains realized by the union over time. Future research should explore whether age-discrepant cohabitations are more likely to dissolve than are those characterized as age-homogamous.

Both economic theory and sociological theory provide insight into age-heterogamy. I suggest that both should be utilized in future research, as they are not necessarily mutually exclusive. For example, assortative mating assumes that certain traits are more valued than others. Certainly, such valuations are socially constructed, and an explanation of these social constructs can be derived from sociological theory. Further, the economic theory of marriage focuses on people’s rational decisions. The “rationality” of these decisions is always socially informed. In other words, what makes an act “rational” often depends upon the dominant norms, values and attitudes of a particular society. In the past, age-discrepant (male-older)

unions were much more common and probably more accepted. Today, age-homogamy appears to be the norm. Whether this trend will continue remains to be seen.

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Age-Discrepant Unions in Canada

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Date: Aug 18, 2000