

Church Affiliation and Life Course Transitions in The Netherlands, 1850-1970

Kok, Jan

Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:
GESIS - Leibniz-Institut für Sozialwissenschaften

Empfohlene Zitierung / Suggested Citation:

Kok, J. (2017). Church Affiliation and Life Course Transitions in The Netherlands, 1850-1970. *Historical Social Research*, 42(2), 59-91. <https://doi.org/10.12759/hsr.42.2017.2.59-91>

Nutzungsbedingungen:

Dieser Text wird unter einer CC BY Lizenz (Namensnennung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier:
<https://creativecommons.org/licenses/by/4.0/deed.de>

Terms of use:

This document is made available under a CC BY Licence (Attribution). For more information see:
<https://creativecommons.org/licenses/by/4.0>

Church Affiliation and Life Course Transitions in The Netherlands, 1850-1970

Jan Kok*

Abstract: »Kirchenzugehörigkeit und Lebensverlaufsmustertransition in den Niederlanden 1850-1970«. The Netherlands, with dozens of different religious denominations, offer a fine laboratory to study religious differentials in demographic behavior. In this article, I analyze a large historical database with more than 30.000 reconstructed life courses, to answer the question whether statistically significant and consistent behavioral differences across life course domains existed between members of different churches. For each domain – marriage, co-residence, fertility and mortality – the question will be whether the specific ideology of the denominations accounts for the differences or whether the social milieu or life style of the members of these denomination are more important, even after controlling for socio-economic status. By charting demographic differentials across the life course, it becomes possible to detect whether different churches had specific "life scripts" or ideal scenarios according to which their members should live their lives.

Keywords: Religion, life course, historical demography, fertility, mortality, household, marriage, migration.

1. Introduction

From their formation in the 16th century, the Netherlands have been the home of various, at times contending, religious groups. These groups were unevenly spread across the country and were quite unequal in terms of political rights and social characteristics. During the 19th century, the socio-economic differences between the denominations were moderated. But interestingly, their behavioral differences increased in the late 19th century, at least with respect to sexuality and family formation (Shepherd et al. 2006). This development has been ascribed to the phenomenon of 'pillarization.' In the final quarter of the 19th century, the political mobilization of Roman Catholics and neo-Calvinists ushered into a realignment of society along ideological lines. Catholics, Protestants, Liberals and Socialists were engaged in fierce competition and were keen on strengthening group identity in which their own notions on fami-

* Jan Kok, Afdeling Geschiedenis, Faculteit der Letteren, Radboud Universiteit Nijmegen, PO Box 9103, 6500 HD Nijmegen, Netherlands; j.kok@let.ru.nl.

ly values and moral purity played an important role. Due to their remarkable compliance with ethical prescriptions, the Dutch gained the nickname of the “moral nation” of Europe. This “morality” was particularly apparent in a slow adoption of modern birth control.

Although many studies have dealt with the Dutch fertility decline, demographers are still debating the relative weight of religious versus socio-economic or regional factors (Van Heek 1954, 1956; Buissink 1971; Hofstee 1981; Van Poppel 1985; Engelen and Hillebrand 1986; Van Bavel and Kok 2004; Schoonheim 2005; Janssens 2014). For several reasons this problem proves hard to solve. First, information on fertility was – until recently – only available at the aggregate level of municipalities, which impeded conclusions about causation at the individual level. Second, many participants of the debate employed simple categorizations of denominations (e.g. “Catholic,” “Protestant,” “others”) that obscured instead of elucidated religious differentials. Finally, we still know little about differences in behavior between religious groups before the onset of Pillarization and the fertility decline.

Whereas religious differentials in fertility have been relatively well-studied, we know little about the effect of religion in other domains of the life course, such as marriage, co-residence or health. Even more important, we don’t know to what extent the differentials in all these fields combine to form coherent patterns, let alone how to interpret this. This article aims to explore religious differentials in a large number of transitions across different domains of the life course, in order to see whether a consistent pattern emerges and to suggest explanations for such a pattern. For this effort, I draw on previous work, as well as on recalculations using data from the Historical Sample of the Netherlands (HSN). This database stores all information on the life course of 40.000 randomly selected individuals (born between 1863 and 1922). For several regions, detailed information is available for earlier birth cohorts (1822-1862). The information includes (changes of) religion, occupation, family situation, co-residence, migration and death (Mandemakers 2006). Thus, the HSN material provides an excellent opportunity to identify to what extent life courses differed by denomination. In fact, dozens of different religious groups are represented in the database. However, the information on religion poses two problems for our purposes. First, the largest single Church, the Dutch Reformed Church, was an amalgam of widely divergent groups ranging from ultra-orthodox to ultra-liberal, making it very difficult to interpret its demographic outcomes. Second, many groups are too small to be meaningfully included in statistical analysis. In the third section, I propose a solution to deal with these problems. In the fourth section, I will summarize the results from twenty multivariate regressions on life course transitions. Subsequently, I explore in more detail how these results could be interpreted and how they relate to findings by other scholars. In the concluding discussion, I try to answer the question whether particular religious ideologies and social control mechanisms

amounted to church members following consistent ‘life scripts,’ or scenarios of how their life courses should look like (Boonstra, Bras and Derks 2014; Jansen and Rubin 2010). First, however, I will give a brief overview of theories on religious differentials in demography.

2. Religion and Demography

Individual demographic behavior is the outcome of complex processes operating at the local and familial level and determined by economic opportunities, local conventions, family strategies and individual aspirations of social betterment. What role, if any, does religion play in this complex? Historical demography and the sociology of religion offer a wide range of hypotheses on the conditions and circumstances explaining why religious affiliation sometimes has strong effects on behavior, and sometimes not at all. Following others (e.g. Goldscheider 1971, 1999; Baudin 2015), I cluster these hypotheses in a number of broad categories of hypotheses related to: 1) the impact of the Churches’ prescriptions and control mechanisms; 2) the nature of religious communities; 3) the socio-economic positions of Church members and 4) local environmental factors. I will then discuss the problem of studying affiliation rather than religiosity.

1) *Religious prescriptions and social control*. In his seminal article, Kevin McQuillan (2004) suggested that there are three necessary conditions pertaining to religious ideology, church organization, and members’ identification with the clergy, for religion to have an effect on fertility. He states that, first, the religion must articulate values and norms that somehow, directly or indirectly, manifestly or latently, affect any of the proximate determinants of fertility; second, that it must possess the means to communicate these norms to its members and to enforce compliance; and third, that members must feel a sense of attachment to their religious community. According to McQuillan, none of these conditions is sufficient on its own, while the stronger they all apply, the stronger the expected impact on fertility is. Indeed, his framework neatly explains why the pronatalist prescriptions of the Roman Catholic Church in the late nineteenth century coupled with modern mass-organizations and forms of propaganda led to such remarkable effects in countries such as Quebec, Ireland and The Netherlands, countries where Roman Catholics strongly identified with the clergy who were simultaneously leading a political emancipation movement. McQuillan’s framework for religious effects on fertility stimulates the researcher to look for combinations of prescriptions, means of dissemination, effective sanctions, and lay identification with the clergy. Norms on fertility can range from the sacredness of life implying that births should not be prevented to ideas on paternal responsibility implying that responsible fathers should adjust family size to income (Praz 2009). Means of dissemination range from sermons, catechism (examinations) to periodicals, and, as in the Dutch

case, even to confessional schools, journals, trade unions and universities. Sanctions can be diverse as well, and include penitence (after the confession), withholding of poor relief, barring from the Eucharist, and expelling from the congregation. But all these do not work without identification of people with their church leaders, or the conviction that the church and clergy serve their best interests. In the Netherlands of the late nineteenth century, this conviction was strong among the Roman Catholics and the neo-Calvinist secessionists from the mainstream Dutch Reformed Church, but it was already weak in other segments of the population, especially among the lower classes still nominally members of the numerically dominant Dutch Reformed Church.

Is McQuillan's framework also applicable to other life course domains than sexuality and fertility? The domain of marriage probably fits the framework rather neatly. Roman Catholicism values marriage differently than Protestantism as its sacramental status implies that it cannot be dissolved. Moreover, Roman Catholics valued celibate alternatives to marriage higher than Protestants. When it comes to the domains of households and health, however, we can expect less direct religious prescriptions and norms. Most religions emphasize the importance of family relations, and strong differences between Protestant, Catholic and Jewish denominations are not very likely. The latter are known for the detailed rules for proper nutrition and hygiene, which is often reflected in mortality differentials (e.g. Derosas 2003, also below).

The described framework of norms-sanctions-identification does not deal extensively with internal family processes as they are affected by religious adherence (Dollahite and Marks 2009). An example is the impact of religion on marriage. Strongly religious persons will perceive their marital bond as willed and/or sanctioned by God, thus superseding to a point individual desires and frustrations. Because of their beliefs such persons will avoid adultery and will experience more feelings of guilt and rejection by their community in case of divorce. Apart from these effects of internalization and sanctions, religious practices at home may lead to more marital stability. An example are de-escalating effects of joint prayer in case of marital discord (Mahoney et al. 2008). From a Beckerian micro-economic perspective, when both partners share the same religion committing them to marriage and family life, this leads to more "efficient households". Thus, religiously mixed marriages are expected to end more often in divorce (Lehrer 2004, 707-8). However, finding a partner from the same church involves a cost-benefit calculation depending on one's adherence to the church in the first place, the waiting time, the marriage market et cetera (Lehrer 2004, 710).

2) *Religious communities*. Church members' demographic behaviour can be affected – even apart from the specific beliefs and moral prescriptions – by their belonging to a specific community. Their involvement may ease their integration in a local community, which can be of specific importance to migrants. The community can offer them social support, sociability, and counsel-

ling which can have a positive impact on marriage stability, child care and health. But negative effects are also possible; for instance when a community isolates itself from the “hostile” outside world and rejects scientific approaches to health problems. Thus, it has been shown that American communities practising faith healing have higher levels of infant and child mortality (Bartkowski et al. 2011).

When a religious community forms a minority in the local community at large, this can lead to specific outcomes. Minority groups tend to rely strongly on (kin) networks for their survival and reproduction. Not only does this lead to a strong emphasis on family bonds, the nature of the ties to kin is also of importance. If these ties are “weak”, that is the network is socially and geographically heterogeneous, members may benefit from new ideas and opportunities dispersed through the network. The “modern” demographic behaviour of Jewish minorities (e.g. as forerunners in the fertility decline) has sometimes been ascribed to this network effect (see literature overview in Van Poppel and Schoonheim 2005). Again, the opposite effect can be expected from “strong ties”, or a “closed” minority group consisting of members living in one locality and doing the same kind of work. An example are the small Orthodox Protestant groups found in agricultural or fishing villages across the Netherlands.

3) *Characteristics*. When churches consist disproportionately of specific socio-economic groups, the observed demographic differences may not be caused by religious creeds or the effects of belonging to a community, but simply by income, housing, or work (e.g. Ó Gráda 2008). In historical research, the opportunities to control for this are rather limited. Normally, one controls for occupational status, but this does not capture all socio-economic differentials. Moreover, socio-economic status of children, married women and the elderly have to be deduced from, respectively, their fathers, their husbands and themselves in an earlier stage in their life course. In the analyses summarized in this article, socio-economic status is included in the multivariate regression models, but we should remain aware of unobserved characteristics. For instance, the (Liberal) Protestant denomination of Remonstrants were rather strongly dominated by urban elites, which is not completely captured by their occupations.

4) *Environment*. The influence of religion on demographic outcomes, even if measured at the individual level, need not always or only have to run through individual beliefs and practices. For instance, the presence of a particular Church can have influenced the health “infrastructure” of a locality or region. Family doctors may be wary of setting up practice in a region known to be adverse to modern medicine. Thus, multilevel models, in which local presence of medical facilities are incorporated, would be ideal to study how mortality risks are affected by religion (Reid and Van den Boomen 2015, 314). In this study, we cannot avoid the risk of ‘atomic fallacy’ (Courgeau 2002), as only

rather superficial controls for local contextual factors (e.g. urban versus rural locality) can be included.

Historical sources, even as fine-grained as the Dutch ones, rarely allow for testing whether Church members are actually church goers, let alone whether they are deeply religious or not. Although, on principle, adding variables on religiousness is not impossible (e.g. by looking at Biblical name-giving, avoidance of conception and marriage during Lent and Advent, paying church contributions, and weddings in church) it is not feasible for the database at large. Although most scholars discussing possible effects from religion on demographic behaviour presuppose a certain level of religiousness, we can only work with the difference in (officially registered) Church affiliation. To some extent, however, affiliation does offer a clue to religiousness. First, we can expect that members of recently seceded Churches – quite a few on the Orthodox Protestant flank – were more actively involved in religious activities than members of traditional churches. Second, we expect that people who declared their religion as ‘none’ can be contrasted safely to Church members when it comes to religiosity. Finally, persons who married someone from another Church or someone without religion were less likely to be strongly involved in religious practices and beliefs than others. During the heyday of pillarization (1935-1955) the intensity of mixed marriages was the lowest in Dutch history. For instance, in 1947 only about five per cent of Catholics had a mixed first marriage (Hondius 2001, 59). Mixed marriages have often been associated with a low level of religiosity by contemporaries (Sanders 1931; Kruijt 1933). According to some authors, the indifference to religious prescriptions can explain the remarkably low marital fertility of mixed couples (Van Leeuwen 1959).

In the next section, we discuss the (perhaps bewildering) variety of denominations in The Netherlands and propose a simple classification, which can be used for statistical analysis. The classification is based on the first set of hypothesis, or the nexus of dogmas and beliefs, institutional means of dissemination and control, and identification. We control as much as possible for socio-economic characteristics. However, we cannot study properly the socio-psychological effects of participation in a church community, the effects of the differential composition of networks, the impact of religiosity, nor the indirect effects of living in a region dominated by a specific denomination.

3. Religious Denominations in The Netherlands

Already since the sixteenth century, The Netherlands are home to several religious denominations, including the Jewish. Calvinism was the official creed, and state officials had to be members of the Dutch Reformed Church. In disciplining the populace, church ministers and law enforcers worked closely together. However, minority religions were almost always condoned, since the

government recognized the benefits of religious tolerance for commerce and prosperity. In 1815, the Netherlands became a unified Kingdom, with the Dutch Reformed Church as the official Church, although members of all religions were now given equal rights. In the early half of the nineteenth century, reaction against modern Enlightenment ideas and “revolutionary” restructuring of power relations within families and within society intensified. Orthodox religions were rapidly gaining strength and societal impact in the second half of the nineteenth century. The combative spirit of the Catholic minority was fueled by their emancipation to full civil rights and in particular by the restoration of the clerical hierarchy (1853). From the 1850s onwards, the number of specific Catholic associations and institutions, such as schools, increased rapidly. On the Protestant side, the Orthodox were similarly building their own organizations. In the decades to follow, both groups intensified their efforts to improve national morality through education, poor relief and lay organizations (Righart 1988).

The competition between Catholic, Orthodox and more liberal groups was intense. From the 1880’s onwards, Dutch society gradually became “pillarized”. Pillarization means compartmentalization on an ideological basis: the pillars strove toward autarky by providing their members with all possible services, from cradle to grave: unions, insurance, banking, mass media, schools, hospitals, old people’s homes, youth and adult movements, and even political parties. The essential elements in the building of group identity among the Orthodox Protestants and Catholics were family values and sexual purity.

I expect denominational differences to be reflected in behavioral differences if the three preconditions described by McQuillan (see above) are met. Thus, the denomination needs to have specific values and norms with respect to family relations, health, sexuality or procreation, it needs to have effective means of communication and sanctions, and the Church members need to identify with their clergy. I will give a brief overview of Dutch denominations from the perspective of this framework, based on earlier work by Kok and Van Bavel (2006).

In the seventeenth century, the leading Dutch Reformed Church advocated a rather strict interpretation of the Bible and professed a strong belief in predestination. The Protestant view on marriage was different from the Catholic one: Protestantism emphasized mutual support between the spouses, whereas in Catholicism, the prime function of marriage was procreation (Van Poppel 1985; McQuillan 1999). In the late eighteenth and nineteenth centuries, the leading circles were influenced by Enlightenment ideas; “modernist” theology tried to reconcile scientific insights and rationality with religion. Literal interpretation of the Bible, predestination, and the Resurrection of Christ were discarded and replaced by an optimistic belief in human reason, that was seen as a manifestation of divinity (Cossee 2001). In the late nineteenth century, the “modernists” organized themselves in associations of *Vrijzinnig Hervormden*

(Liberal Reformed). In 1920, almost thirty per cent of the Dutch Reformed ministers were Liberal (Knippenberg 1992, 109). Somewhat less radical was the group of the “Ethicals.” Although receptive to new scientific insights, the Ethicals did not reject the authority of the Bible. In 1920, 28.4 per cent of the ministers was affiliated with this group. The Liberal Reformed, and to a lesser extent the Ethicals, were inclined to grant the individual a large degree of autonomy in matters of family planning. In other words, the necessary “ideological” precondition for a religious effect on demography is not valid in their case.

Not surprisingly, the advance of rationalist theology met with increasing resistance from conservative elements in the Dutch Reformed Church. Led by discontented rural elites, secessions of Orthodox ministers and their followers took place in 1834 and in 1886. In 1892 these groups merged in the Reformed Church (Gereformeerde Kerk), but a remainder of the 1834 group continued as the Christian Reformed Church. Both churches were very clear in their doctrinal message: sexuality could only take place within marriage and only with the aim of procreation. This message was conveyed through youth organizations, journals and periodicals. By 1900, both Orthodox Protestant Churches accounted for 13.6 per cent of Dutch Protestantism (Knippenberg 1992, 97).

However, there were many more Orthodox Protestants. A large Orthodox segment of the Dutch Reformed Church had chosen to remain within this church, which they saw as God's own “planting” in The Netherlands. They could maintain this position because of the very loose structure of the official church. Although the Dutch Reformed Church had a set of doctrines (such as the Heidelberg Catechism), church discipline in doctrinal matters had been abandoned. In fact, restoration of this discipline was the main bone of contention during the nineteenth century. Furthermore, the Dutch Reformed Church was highly democratic. Church members elected the deacons and elders who formed the church council. The council in its turn called a minister to the parish whose preaching was expected to match the convictions of the parish' majority. In other words, Orthodox congregations within the Dutch Reformed Church could go on very much as they liked. During the second half of the nineteenth century, they formed associations of their own. From 1864 onwards the Confessionele Vereeniging (Confessionals) aimed at restoring doctrinal discipline. From their circle, an ultra-Orthodox group split off in 1895. This fundamentalist Gereformeerde Bond (Unionists) was to become the strongest bulwark of Orthodoxy in the twentieth century. Their communities were characterized by a strong geographic and mental isolation; leaving the village was discouraged, newcomers were mistrusted and scientifically based innovations such as inoculation and chemical fertilizers were often rejected (Zwemer 1992). In 1920, both groups accommodated 48 per cent of the Dutch Reformed.

Finally, a number of smaller Protestant groups deserve attention. The Anabaptist Mennonites had their roots in the Radical Reformation of the sixteenth century. Although consisting of very diverse sub-branches, the Mennonite

Brotherhood was generally characterized by anti-authoritarianism, rationalism and a large emphasis on individual autonomy. Already in the eighteenth century, their growth was hampered by very low marital fertility (Knippenberg 1992, 53). The Mennonites were also highly receptive to new scientific insights. In 1800, two Mennonite ministers initiated the campaign against smallpox by having their own children inoculated (Rutten 1997, 237-8). Even more liberal were the Remonstrants, who had seceded from the Dutch Reformed Church already in 1619 because they could not accept the doctrine that predestination overruled individual belief. In subsequent centuries, this groups of dissenters formed a haven for Liberal Protestants from other churches. Mennonites and Remonstrants were also quite progressive in allocating responsible roles to women. For instance, the Mennonites had female deacons in charge of poor relief. In addition, these churches were the first to allow women to become priests (in 1905), on condition that they were not married. Lastly, the Lutheran Church, strongly associated with German and Scandinavian immigrants and their descendants, was by and large moderate in its doctrines, apart from a very small Orthodox secessionist group.

Among the Jews, the spread of modern interpretations of religion and the loosening of moral prescriptions remained by and large limited to a small elite and the majority of the Jews remained orthodox (Knippenberg 1992, 196, 199).

As far as the Churches held doctrines or values concerning demographic behavior, it is relevant to know whether they also had the means to communicate their messages to their followers and, if necessary, to sanction unruly members. The Roman Catholics had an extensive array of institutions at their disposal. Their message was brought home through periodicals, schools and lay organizations. Even more impact had the system of confessions and absolution of sins. The Gereformeerden were probably even more successful in organizing their supporters and forging a sense of corporate identity. Their leader Abraham Kuyper, who created his own newspaper, political party and university, is considered the first modern mass-politician in Dutch history (Van Rooden 2002). In the Gereformeerde Churches, traditional systems of moral control were revived. Disciplinary measures ranged from admonition, prohibition to join the Lord's Supper, to public confession of sins and expulsion from the congregation. In the Dutch Reformed Church these measures had already become obsolete in the first half of the nineteenth century. Likewise, the Lutheran Church was lenient in matters of morality (Kemkes-Grottenthaler 2003, 718).

The Orthodox groups within the Dutch Reformed Church lacked the organizational drive of the secessionist Orthodox (Van Rooden 1996). In addition, they were remarkably ineffective in terms of moral discipline. This has everything to do with their pietistic views on salvation. Redemption is granted by divine grace, not earned by one's own belief or pious acts. Only a person himself knows whether he or she is redeemed and only then will he or she take part in the Lord's Supper. Thus, "avoidance" of communion is widespread in these

circles. On the one hand, this belief requires a constant inspection of the state of one's soul. On the other hand, there is an overpowering emphasis on the sinfulness of the "world" and the "flesh." This situation appears to result in an ethical vacuum: there are no clear behavioral rules and no clear control mechanisms, either from the side of the parents or from the Church (Miedema 1989).

Until the Batavian-French period (1795-1813) the Jewish "nation" had been allowed to rule itself, which in practice mean strong control of their local dignitaries on religious practices and moral discipline. Emancipation meant the weakening of internal control mechanisms. From the last quarter of the nineteenth century onward and in contrast to the Orthodox Protestant and Roman Catholic minorities, the Jews did not form their own "pillar" with strong civic associations and political clubs but began to assimilate strongly (Knippenberg 1992, 198).

Both in terms of ideology and institutional practices, Dutch denominations display a bewildering variety. For the sake of simplicity, we place the major Protestant groupings as well as the other religions into a scheme based on McQuillan's first two criteria: the presence of doctrines or values stimulating high fertility and the presence of institutional means to communicate these (Table 1). There is a clear distinction between groups with no or moderate doctrines regarding procreation and groups with outspoken doctrines and values. Along more or less the same line, the religious groups are divided by the strength of the organizations and control mechanisms.

Table 1: Main Dutch Religious Groups by Ideology and Institutions

Strength of institutions	Importance of values and norms regarding family, sexuality and marriage		
	Low	Moderate	High
Low	Mennonites Remonstrants Dutch Reformed (Liberals)	Dutch Reformed (Ethicals) Lutherans	
Moderate			Dutch Reformed (Confessionals) Dutch Reformed (Unionists) Jews
High			Christian Reformed (1834) Reformed (Gereformeerd) (1892) Roman Catholics

Based on Kok and Van Bavel 2006, 91. See also Appendix 1.

According to McQuillan (2004), for religion to have an impact on demographic behavior a third condition is necessary: individual believers need to identify with their church. In the period between roughly 1880 and 1960, the level of identification of most Christians with their Church was extremely high and, in fact, unprecedented. Developments in this period have been described in terms

of a cultural class-formation. The Gereformeerde leader Kuyper was not only successful in mobilizing and organizing the revolt of commoners against the Enlightened elites, his discourse came to be accepted by other groups as well. He claimed that the Dutch people had always consisted of three groups: Liberals, Orthodox Protestants and Catholics. In his view, the dominance of the liberals was unjustified and all groups should be free to run their own affairs. Indeed, the success of Protestant and Catholic political parties ensured that this vision was realized: state subsidies were directed to private confessional schools as well as to confessional broadcasting corporations. Dutch “pillarization” goes beyond McQuillan’s notion of the coincidence of religion and nationalism. The identity of the “imagined communities” of religious groups superseded national identity. The attachment was strongest among the Roman Catholics and the Gereformeerden. For example, in the early 1960’s 90 per cent of their members attended church several Sundays per month. Although religious (group) identification may have been strong, this still leaves us with the question of religiosity: to what extent did people really participate in Church activity and religious practices. As we stated in the previous section, we can only approach this issue indirectly.

A more specific problem of research on demographic differentials between religious groups is that the single largest Church in the Netherlands, the Dutch Reformed (54,5 per cent of the population in 1879) tends to be described as an “intermediate” group with “moderate” behavior. In my opinion, this is a statistical artifact due to the researchers’ incapability to make a distinction between the subdivisions within the Dutch Reformed Church which I have just described. Instead of being “moderate,” this Church actually consisted of very outspoken Liberal and Orthodox streams. Unfortunately, it is not possible to detect membership of these groups on the basis of the population registers. However, the religious orientation of the Church ministers is known for the year 1920. Since communities chose their own ministers, it can be assumed that fully orthodox communities were already Orthodox in the late nineteenth century. We assume Dutch Reformed persons to be of Orthodox persuasion if they were born in a locality where all ministers adhered to one of the Orthodox organizations. Obviously, this remains an unsatisfactory proxy, as individuals need not identify with their community’s predominant orientation, but so far it is the best solution at hand.

For analytical purposes, I divide for the remainder of this paper the Protestants in two groups: Liberal Protestants (Mennonites, Remonstrants, Liberal Reformed, Ethical Reformed and Lutherans) and Orthodox Protestants (Confessional Reformed, Unionist Reformed, Christian Reformed and Reformed (Gereformeerd). Some small denominations could not be classified as “Liberal” or “Orthodox” and are mostly relegated to a category “other denominations.” An example is the Old Catholic Church, which seceded from the Roman Catholic Church in the early eighteenth century in resistance to the

centralist organization of the mother church. In Appendix I, a more complete overview is given of the denominations found in the Dutch population administration in the period 1850-1970, and of how these are classified.

4. Overview of the Effects of Religion on Demographic Behavior

This article draws on a number of earlier studies on life course transitions, based on (parts of) the Historical Sample of the Netherlands. This database compiles life course data as completely as possible for a representative portion of the nineteenth and twentieth century population (Mandemakers 2006). The sample is drawn from the birth certificates from the period 1812-1922 (n=78,000). Most of the data for the reconstruction of life courses, however, are extracted from the population registers. The Netherlands is one of the few countries in the world that has kept a continuous population register starting in the mid-nineteenth century. In 1940, the system was replaced by personal cards, which makes it more difficult to reconstruct households. In the population registers, date and place of birth, relation to the head of the household, sex, marital status, occupation, and religion were recorded for each individual. Also, all changes occurring in the household were recorded in the register. These changes were usually made at least within a month of occurrence of an event.

Most of the studies summarized here cover the period between 1850 and 1940, as the information on life courses are optimal in this period. In these studies, several life course transitions have been analysed, mostly using religion only as a control factor. In this article, I focus on the actual strength of religious differentials in various transitions across the life course. Each transition has been studied with a multivariate regression model controlling for possible confounders. For instance, in studying birth spacing we have controlled for age of the mother, marriage duration, children ever born, number of children alive, death of the previous child, socio-economic status, and religion (Van Bavel and Kok 2010b). I have made sure that all regression models control at least for type of locality and socio-economic status, in order to account as much as possible for the effect of “characteristics.” For instance, Jews are portrayed as “forerunners” in the demographic transition with lower levels of marital fertility than religious groups. This has been explained from their concentration in urban localities and in specific occupations (Knippenberg 1992, 201). By controlling for urban-rural differences and socio-economic status, we are better able to observe the possible impact of ideologies, lifestyle or networks. Another reason to control for rural-urban differences is that, generally, religious adherence was weaker in cities, as noted in contemporary studies. Kruijt (1933) listed several reasons for this phenomenon. In the countryside, church attendance was often part of communal traditions (in several villages

people went in procession to church) and embedded in intense social control. The more isolated the villages were, the longer this could continue. Migrants to cities often felt not “at home” in church and would cease going altogether. Cities were also places where people with divergent backgrounds and beliefs intermingled. To avoid conflicts, one tended to evade the topic of religion in social encounters. Finally, the apparatus of the Church had not kept pace with the growth of the cities (Schoonheim 2005, 101). For ministers and elders in large cities it was impossible to make personal acquaintance with all the members. In addition, people were often “lost” to Church supervision due to frequent removals.

I have chosen not to present twenty different tables with extended model outcomes, but, instead, to harmonize and to simplify the outcomes in two ways. First, I have rephrased the potential differences in demographic behavior between the denominations in the form of differences in relation to Liberal Protestants. A comparison with non-denominationals as the statistical reference category might have been of more theoretical interest, but they form a rather small group (only 2,3% in 1899) in the period under consideration and were also strongly associated with Socialist anticlericalism (Knippenberg 1992, 229). Using the same reference category implied I sometimes had to redo the original calculations. Second, I only show whether a particular behavior was more (indicated with a +) or less (indicated with a -) likely than among the Liberal Protestants. When the sign is given in parentheses this means the result was not statistically significant. When no sign is given this means that the model did not include a specific group. I also leave out the outcomes for “other” religions and cases with “religion unknown” as they are not of theoretical interest. When possible, I look for gender differences. Life course transitions (such as getting married or not) can have different implications for men and women. But also, the religions can vary in their appreciation of male and female statuses and roles. Finally, religiosity can differ strongly between men and women. When no distinction in sex was made in the analysis, the results are listed under M.

Table 2 presents the results of this exercise. Overall, we observe that in all demographic domains, religious affiliation had a remarkable effect on behavior, even after controlling for urban-rural and socio-economic differences. Especially the Roman Catholics differed from the Liberal Protestants in almost all life course domains. The only exceptions are the household situation of adolescents (see next section for more discussion) and infant and child mortality, in which they do not differ statistically significant from the Liberal Protestants. The Orthodox Protestants are in some respects more similar to the Liberal Protestants than the Catholics, as we can see from the non-significant scores on leaving home, celibacy, divorce, childlessness and the incidence of one-children families. And Orthodox Protestant women were actually more often pregnant at marriage than Liberal Protestant women. The Jews appear as more family-minded (although not in all respects), but also more traditional in

terms of marriage than Liberal Protestants, judging from lower levels of bridal pregnancy and later marriage. They were not inclined to celibacy. In terms of birth control the Jews do not differ strongly from the Liberal Protestants, and – as expected – they experienced lower risks of infant mortality. People without (official) religion do not stand out in relation to Liberal Protestants, except for a lower likelihood of young widowers of living with kin, and a higher likelihood of young widows. Religiously mixed couples were not often included in the regression models here.¹

Table 2.1: Outcomes of Hypothesized Differences in Demographic Behavior of Denominations in Relation to Liberal Protestants (Part 1)

Hypothesis	Period	Region	N	Orthodox Protestants		Roman Catholics		Jews		None	
				M	F	M	F	M	F	M	F
Household											
Adolescents staying with parents [ii]	1860-1940	rural	7579	(-)	(+)	(+)	(-)			(+)	(-)
Living with kin:											
At age 18 [iii]	1860-1940	all	15697	(-)	(+)	(-)	(-)	+	(+)	(+)	(-)
As illegitimate child [iv]	1863-1902	all	848	+		+		-		(+)	
As orphan age 10 [v]	1873-1902	all	92	+		+		(+)		(-)	
As celibate age 40 [vi]	1890-1922	all	802	+	+	+	+	+	+	-	+
As widow(er) age 70 [vii]	1920-1940	all	422	+		+		+		(+)	
Sexuality and marriage											
Pregnancy before marriage [viii]	1870-1940	all	9893	(+)	+	-	-	-	(-)	(-)	(+)
Late marriage [ix]	1860-1970	all	15697	+	+	+	+	+	(+)	(+)	(-)
Celibacy [x]	1860-1970	all	15697	(-)	(+)	+	+	(-)	(+)	(+)	(+)
Divorce [xi]	1870	all	13435	(-)	(-)	-	-	(+)	(+)	(-)	(+)

[ii] Only children of farmers and agricultural workers living in the countryside. Based on dataset presented in Mönkediek, Kok and Mandemakers (2015).

[iii] Defined as not living in households headed by a parent, but as kin in other households. Recalculation of dataset in Kok 2014.

[iv-v] Recalculation of database described in Kok and Mandemakers 2012.

[vi] Ibid, includes (still) living with parents(s).

[vii] Ibid. Dependent variable defined as living with siblings and/or children and /or other kin.

¹ [i] For mixed couples all outcomes would be neutral, except
 - marriage, both genders 1870-1940 all regions: (-)
 - divorce, both genders 1870-1940 all regions: (-)
 - childlessness, both genders, 1919-1950 all regions: +
 - stopping, both genders, 1890-1940 West-Central region: -.

[viii] Recalculation of the dataset described in Kok 2011.

[ix] Model based on life courses of persons who survived at least until age 50. Late marriage defined as marriage between age 28 (women) or age 30 (men) and death. Based on Kok 2014.

[x] Based on Kok 2014.

[xi] Calculation with dataset described in Kok 2011, including infertile couples.

Table 2.2: Outcomes of Hypothesized Differences in Demographic Behavior of Denominations in Relation to Liberal Protestants (Part 2)

Hypothesis	Period	Region	N	Orthodox Protestants		Roman Catholics		Jews		None	
				M	F	M	F	M	F	M	F
Migration											
Interregional [xii]	1850-1940	rural	33355	(-)		-				(-)	
Urban	1850-1940	rural	33355	(-)		-				(+)	
Emigration	1850-1940	rural	33355	(+)		(+)				(+)	
Birth Control											
Childlessness [xiii]	1919-1950	all	2896	(-)		-		(-)		(+)	
One child family [xiv]	1919-1950	all	2406	(-)		-		(-)		(+)	
Spacing [xv]	1825-1885	West Central	2206	-		-		(+)			
Stopping [xvi]	1890-1940	West Central	1007	-		-		(+)		(+)	
Mortality											
Infant mortality [xvii]	1863-1909	all	29963	+		(+)		-		(-)	
Child mortality [xviii]	1863-1914	all	24273	(-)		(+)				(-)	
Old age mortality [xix]	1905-1940	all	2800	-	(-)	-	(+)	(-)	(+)	(-)	(-)

[xii] Recalculations of dataset presented in Kok, Mandemakers and Mönkediek (2014), heads of households in which HSN Research Persons resided, only countryside (Jews excluded because of small numbers).

[xiii] Based on Van Bavel and Kok (2010b).

[xiv] Based on Van Bavel and Kok (2010c, 217).

[xv] Based on Van Bavel and Kok (2010a, 134) . N is the number of intervals. See also Van Bavel and Kok 2004; 2005.

[xvi] Kok, Yang and Hsieh 2006, 231, model 2 (mothers born 1870-1900). N refers to the number of births.

[xvii] Vandezande, Kok, and Mandemakers 2011, 155.

[xviii] Ibid.

[xix] Mortality after age 55, N=2758 men and 2872 women. Unpublished lecture, Jan Kok, Resources, religion and residence as factors in old-age mortality, The Netherlands 1905-1940 (2012).

Again, the differences with Liberal Protestants appear to be small, except for the greater likelihood of remaining childless and a tendency to stop later with

childbearing, but the latter is only tested in specific areas in Western and Central Netherlands. In the next section, I will discuss the outcomes of Table 2 in more detail.

5. Religion and Life Course Domains

Table 2 suggested strong differences in behavioral outcomes between Orthodox Protestants and Catholics on the one hand, and Liberal Protestants, Jews, unaffiliated and mixed marrying people (see footnote 1) on the other hand. But why do we find in some life domains stronger effects than in others? And can the differences that we have found be ascribed to normative prescriptions and social control or are they explained by belonging to a religious minority? The answer to these questions might differ across life course domains, which is why we will take a look at each of these domains in turn.

5.1 Household

Not much is known on the role of religious norms in relation to household composition and the care for needy kin in historical populations. Family sociology suggests that, in general, religiosity is related to a strong commitment to the family and is associated with values encouraging help to family members and maintaining strong family relations (Kalmijn and Dykstra 2006; Gans et al. 2009). Were these values in the past also translated in actual housing behavior? In my statistical exercises using reconstructed life courses, I have tried to discover to what extent people in vulnerable circumstances were living with (extended) kin. Table 2 shows that some groups of non-believers in vulnerable situations (e.g. orphans and adolescent girls) were less likely to be taken in by kin. But the outcomes are not statistically significant, which also has to do with the low absolute numbers of the unaffiliated in our sample. The interpretation of co-residence patterns is also made difficult by the differential availability of kin. For instance, celibates or widows from small families are less likely to be taken in by siblings than those from large families. Thus, kin co-residence can be affected by (religious) differentials in fertility, migration and mortality which cannot be accounted for in the models.

Can we also expect a difference between denominations in their valuation of (extended) kin and their likelihood to take in family members in need? Several scholars have suggested that Protestantism valued the marital bond, the nuclear family, and the individual stronger than Catholicism. The latter apparently supported a more “familistic” culture (see overview of the literature in Van Poppel and Schoonheim 2005; also Kalmijn and Dykstra 2006). Bahle (2008, 102) suggests that “...the significance...of individual consciousness [in Protestantism] paved the way for an ‘individualisation’ of family relationships

whereas Catholicism kept a group-centered image of the family as an institution.” Among the Jewish minority, kin relationships may have been cultivated more than among other groups (Van Poppel and Schoonheim 2005, 176). A study of extended households in an American suburb in the 1960s showed that they were most prominent among the Jews, to a lesser extent among Catholics, and the least among Protestants (Winch et al. 1967). Differences among Protestants might be expected as well. Kooy (1959) speculated that since Orthodox Protestant neo-Calvinists (Gereformeerden) strongly advocated the autonomy of the couple with respect to the religious upbringing of the children, they would be relatively averse to living with non-nuclear family members. Our findings suggest that leaving home in adolescence and the destination (with kin or not) of those who had left, was not greatly affected by denominations. Only Jewish boys aged 18 were living with extended kin significantly more often than Liberal Protestants. The literature often refers to the geographically extended network of the Jews (e.g. De Nijs 2005 for Rotterdam), and this probably made it possible for boys who had left home for study or work to live with relatives.

In modern studies of Dutch kin relations, Catholics stand out with more frequent contact among family members and stronger norms of mutual obligations than others (Komter and Knijn 2006). In the period between about 1860 and 1940 (see Table 2) they also stand out with a consistent tendency to take in relatives who were children of single mothers, or who were orphans, celibates or widow(er)s. However, in this respect they did not differ from the Orthodox Protestants. To some extent, this was also true for the Jews, but in contrast to Liberal Protestants, they did not accept illegitimate children in their homes. All in all, these results seem to confirm that (Orthodox) religion was associated with closer kin ties and mutual obligations, at least a greater likelihood to take in single or needy relatives. One caveat to be mentioned here is the possibility that kin co-residence occurred because there were not enough confessional institutions (e.g. neo-Calvinist orphanages) available for needy persons belonging to specific religions.

5.2 Sexuality and Marriage

In Christian and Jewish religions alike, premarital sexuality was strongly rejected. Social control and sanctions might have been especially effective in the case of adolescents, who depended on their reputation, their parents and their community for support and jobs (Burdette 2007). Doctrinal differences between Roman Catholics and Protestants can have different outcomes, however. Among Catholics the Sacraments were a direct means to grace and salvation, and not just a symbol, therefore threats to withhold them might have been more effective in their case. Furthermore, enforcing effective discipline on premarital behavior was a problem for the Protestant clergy, for several reasons. First, in

various parts of the country the betrothal still signalled “marriage” and the freedom to have intercourse, as it had before the Council of Trent (1563). Also, old traditions of courtship still lingered on. Customs such as “night courting” could involve sexuality, but almost always a pregnancy led to marriage as the local peer group effectively supervised proceedings. These customs survived most of all in relatively isolated, endogamous and socially homogeneous villages (De Jager 1981). Second, among Liberal Protestants the traditional sanction in the case of bridal pregnancy – barring the couple from the Eucharist – was hardly applied anymore in the first half of the nineteenth century, as it tended to drive people away from the mainstream church (Kok 2011). Third, strongly Pietist branches of Orthodox Protestantism tended to have low levels of effective social control, as I discussed in section 3. One of the most embarrassing problems of the Dutch “Bible Belt” was (and still is) the unruly behavior of youths, in particular in the field of premarital sexuality (Kooy and Keuls 1967). Among the secessionist Orthodox Protestant groups moral discipline was revived, e.g. through public shaming of “enforced marrying” couples. Dutch historical demography shows strong differences in bridal pregnancy ratios between Protestants and Roman Catholics (Engelen 2014), which even seemed to have increased in the course of the 19th century. Very low levels were found in isolated and predominantly Catholic villages (Kok 1991, 78). Clearly, the Catholic clergy in such villages had succeeded in stamping out pre-Tridentine notions of marriage where their Protestant colleagues had failed. Our model (Table 2) confirms that Catholics couples less often expected a child before marriage than Protestant ones (controlling for occupational group and type of locality), and the same was true for Jewish couples. Orthodox Protestant women were even more often pregnant at marriage than Liberal Protestant ones. With respect to premarital sexuality, the combination of unambiguous prescriptions and effective social control seem to be the most important factors.

Churches did not advocate a specific ideal age to marry. But as Orthodox Protestants and Roman Catholics adamantly opposed birth control within marriage, traditional marriage restraint remained the only way to limit the size of one’s family. Of course, occupational differences and employment opportunities in rural versus urban areas were of major importance in determining the age at marriage, but even if we control for these factors, we find that Orthodox Protestants and Roman Catholics had a higher likelihood to marry late, and the same was true for Jews (statistically significant only for men). Catholicism offered church careers and a safe livelihood for some of its celibate followers. The lives of prelates, nuns and monks may have inspired others to abstain from marriage too. We have found (Table 2) that Catholics were more likely to remain celibate than Liberal Protestants. A positive valuation of celibacy did not exist in Protestantism or Judaism, and Orthodox Protestants and Jews did not differ significant nor unambiguous from the Liberal Protestants (in both cases,

men seemed to have remained less often celibate). Interesting is the positive sign for the unaffiliated; possibly there was an association between specific socio-cultural environments, atheism and celibacy. For instance, the contemporary sociologist Kohlbrugge wrote in 1928, “The woman [in intellectual circles] has become so individualistic, that she misses the adaptability necessary for marriage” (Kohlbrugge 1928, 4).

In Roman Catholicism, marriage is a sacrament and therefore indissoluble. Remarriage (in church) after a divorce was therefore not possible. For everyone, however, obtaining a divorce posed formidable legal obstacles and it remained quite rare until the early 1970s. Our model shows that, indeed, Roman Catholics had a lower divorce incidence than Liberal Protestants (also in Van Poppel 1997), whereas the signs of the Orthodox Protestants are in the same direction (but not significant). According to the signs (but, again the outcomes are not statistically significant), Jews tended to have relatively frequent divorces. Indeed, obtaining a divorce was not a difficult procedure for them, and, for instance, in 19th century eastern Europe they stood out with high divorce rates (e.g. Leinarte 2012). Non-affiliated (women) and mixed marrying couples (see footnote 1) also seemed to divorce more often. Several factors might explain this: persons who are not or less religious than others will not perceive their marriage as having been willed by God, and may be less willing to sacrifice their personal well-being to keep the marriage intact and they will also be less likely to suffer from community sanctions. But some scholars have also pointed at the possibility that mixed marrying persons have fewer shared values than others, which might make their marriage less “efficient” (Lehrer 2004, 708).

5.3 Migration

There are hardly, if any, studies on the autonomous impact of religion on geographical mobility. We expect that in the period under consideration Roman Catholics and Orthodox Protestants were more or less shielded by their church leaders from outside, “modern” influences and thus were less open and responsive to information on opportunities elsewhere. Possibly, this led to a lower likelihood of interregional and urban migration. To test this, we have done a competing-risk event-history analysis of migration of rural households, controlling for various household and regional characteristics. In this analysis (Kok et al. 2014), we have studied all forms of geographical mobility, including residential moves within a municipality. But for our purpose here, (relatively) long-distance migration (more than 40 kilometres) to another rural location, to a city or to another country are the more interesting. The outcomes (see Table 2) show that Orthodox Protestants and Roman Catholics were less likely than the Liberal Protestants to migrate to another rural region or to a city, but this was only statistically significant in the case of the Roman Catholics. Both groups seemed to have been more prone to emigrate (even after controlling for

a “border effect,” as especially in the South and South-East catholic villages formed the border with Belgium and Germany).

Apart from factors related to mentality (openness to outside information, adversity to city life) we need to consider the effect of forming a religious minority. That is why, in the model just described, we controlled for a minority effect. We considered Roman Catholics living in municipalities with less than 20% Roman Catholics a minority, and likewise (Orthodox or Liberal) Protestants living in communities with more than 80% Roman Catholics. As mentioned above, in the last quarter of the nineteenth century the competition between religious groups intensified, strengthening their (cultural and social) isolation from one another. On the southwestern islands of the province of Zeeland, emigration and long distance migration of either Roman Catholics or Protestants has been associated with being a local minority (Wintle 1992). This impression from Zeeland can be confirmed. Households belonging to Catholic or Protestant minorities were much more likely to experience long-distance migration to other villages or cities (this was found even stronger in separate models in which we only included the minority variable). Their outmigration from the countryside can be explained from increasing social isolation, but also from their social and kin networks, which may have been more spatially distributed than the ones of the majority groups.

Little is known on religious differentials in emigration. A study focusing on emigration to America has shown that Roman Catholics were underrepresented compared to Protestants (Swierenga and Saueressig-Schreuder 1983), but this may have been related to their socio-economic profile, as Protestants were more likely to be farmers seeking land. Our models, which controlled for socio-economic status, showed that Catholics were as or even more likely than Protestants to emigrate. In one model in which we did not control for minority status, the result that Catholics were more likely to emigrate than Liberal Protestants was statistically significant.

5.4 Birth Control

Dutch denominations differed strongly in their approach to birth control. From the second half of the 19th century, pronatalism became an essential ingredient in the Catholic messages to families, from the clergy as well as from the rapidly growing lay organizations. For example, the Brotherhood of the Holy Family devoted to improving Catholic morality and family life gained a mass adherence after 1870 (Righart 1988, 203). Also, the Roman Catholic Union for Large Families (1918) agitated against the availability of contraceptives. The clergy reminded couples that the sole purpose of marriage was procreation and that it was sinful to deny each other sexual gratification (the “marital debt”) (Flandrin 1970; Schoonheim 2005, 214, 218). This Catholic marital debt notion (which also had an equivalent in Judaism) probably increased coital frequency

among the members (Schellekens and van Poppel 2006, 240). Protestantism put more emphasis on love and compatibility of the spouses, which seems to preclude thinking of sex in terms of rights and duties.

In Roman Catholicism, confession was a powerful control mechanism to increase compliance. The neo-Calvinists Orthodox Protestants were similarly opposed to birth control. Both secessionist Gereformeerde Churches were very clear in their doctrinal message: sexuality could only take place within marriage and only with the aim of procreation. This message was conveyed through youth organizations, journals and books. For instance, in an Encyclopedia (1925) specifically directed to the Gereformeerde audience, a lengthy article was devoted to Neo-Malthusianism. It dismissed economic reasons for limiting family size and claimed that, in fact, education of the children was less effective in small families. When medical problems made it irresponsible to have more children, abstention was proposed as the only solution. The crux of the objection against birth control was that by using contraceptive devices one “put oneself in God’s place” (Grosheide et al. 1925 IV: 342-4, also in Kok and van Bavel 2006).

Such clear and direct prescriptions cannot always be found. But perhaps they are even less important than the differences in indirect norms or mentality between religious groups which are sometimes mentioned. According to several scholars, Jews and Liberal Protestants tended to emphasize individual responsibility and self-control in the face of problematic situations, for instance the need to prevent and cure diseases and to make sure a family is properly cared for. Orthodox Protestants and Catholics were supposedly more fatalistic, accepting hardships as God’s will (Van Poppel et al. 2012, also Jacobson 1999). Another factor of importance is schooling. As Protestants were incited to read the Bible in their native language for themselves, literacy and schooling was valued stronger than among Catholics. This might have made Protestants also more susceptible to new, non-religious, “scientific” insights on family planning.

Table 2 displays clear differences in stopping behavior between Orthodox Protestants and Roman Catholics on the one hand, and Liberal Protestants on the other. Although not statistically significant, Jews and unaffiliated couples seem to have been stopping earlier than Liberal Protestants. For stopping behavior, this outcome has been corroborated recently by studies using the same classification of denominations (Van Poppel et al. 2012; Bras 2014). Van Poppel et al. (2012) showed that Liberal Protestants, Jews and unaffiliated couples responded to the survival of their young children by stopping with childbearing, whereas Orthodox Protestants and especially Catholics did not. Bras (2014) found particular strong differences in stopping in the late transition period, after 1920. To be sure, in Table 2 we have not made a clear distinction in pre- and post-transition periods, whereas in most studies religious differen-

tials before the fertility transition were found to be weak, if at all (Schellekens and Van Poppel 2006).

Stopping has often been considered a more “modern” form of birth control, whereas spacing could be achieved with traditional methods such as abstinence and prolonged breast feeding. Thus, spacing could have been a more acceptable form of birth control in the more traditional churches (Anderton and Bean 1985; Junkka and Edvinsson 2016). Table 2, however, shows that Orthodox Protestants, just as the Catholics, were much less inclined than Liberal Protestants to space their births.

Catholic couples were significantly less often childless than Liberal Protestants, after controlling for obvious variables such as age at marriage, occupation and place of residence. An American study has shown that also in contemporary society Catholics object more often to voluntary childlessness than others (Pearce 2002). Interestingly, mixed marriages were even more often childless than Liberal Protestant marriages (see footnote 1), which suggest that religiosity does have an effect on this form of fertility behaviour, which was not found in a recent study by Baudin (2015, 414). The Jews did not have very small families, as they did in several other countries, which is generally ascribed to their higher (opportunity) costs of having children, due to their valuation of schooling for girls (Lehrer 2004). But our outcomes seem to confirm the impression of Schellekens and Van Poppel (2006) that, at least in their study of The Hague, the Jews were not forerunners in the fertility transition.

5.5 Mortality

Historical demography, in The Netherlands and elsewhere, suggest two major differences in infant and child mortality rates by religion: the first between Jews and Gentiles, and the second between Roman Catholics and Protestants. In many historical populations, Jewish infants had better chances of survival than others. Several direct religious prescriptions and more indirect life style effects were responsible for this favorable situation. First, the rules for personal hygiene (e.g. nail cutting, frequent hand washing, ritual baths) probably resulted in fewer infections of children through their parents. Second, dietary laws (such as the separation of milk and meat) protected children from contaminated food. Third, Jewish mothers tended to breastfeed their children longer than others, sometimes acting on rabbinical advice (Schellekens and van Poppel 2006, 24). Fourth, Jews were noted for their careful housecleaning. Fifth, they were more inclined than other groups to seek help from medical experts (Derosas 2003, 112). Sixth, there appear to have been many specialized Jewish welfare institutions which were effective in helping poor mothers (Derosas 2003, 113). And, finally, the fact that they were isolated from other groups may have protected the Jews from infectious diseases (Van Poppel, Schellekens and Liefbroer 2002). Differential mortality of Catholic versus Protestant children is

expected for two reasons. First, there is the already mentioned Catholic fatalism which stands in contrast to Protestant emphasis on personal responsibility. Van Poppel et al. (2012) quote the influential Catholic writer Truyen, who wrote in 1918 that Catholic women “being adverse to neo-Malthusianism, accepted the burden and the risks of motherhood rather than being unfaithful to her natural and religious obligations (...)” (p. 327). Second, Catholic mothers were supposedly less inclined to breastfeed their children, in response to an early 20th century campaign of the priests to remove all erotic seductions from public life, such as exposing breasts to feed an infant (Van Poppel 1992; Walhout 2010; Janssens 2014).

Our findings confirm that infant mortality among Jews was significantly lower than in all other groups. However, the Roman Catholics did not have (statistically) significant higher mortality than the Liberal Protestants. The latter is in line with recent research in which Roman Catholicism is exculpated from high infant mortality (Janssens et al. 2010; Walhout 2010; Van den Boomen 2015). Recently, Janssens and Pelzer (2014) concluded that “region” trumps religion, as in their analysis of infant mortality regional differences turned out to be stronger than denominational ones. They suggest that women from different Churches shared the same, local, habits of infant care, including breastfeeding. It will be of interest to test this hypothesis in more detailed religion-region interactions. However, we do see that Orthodox Protestants, which were certainly not all confined to specific regions, had higher levels of infant mortality than the Liberal Protestants. Perhaps certain characteristics of Orthodoxy, such as fatalism and adversity to modern science, did play a role. Also, the outcomes refutes the idea that growing up in a (religious) minority protected young children. As for child mortality, we did not find statistically significant differences, but the Jews still seem to do well. Orthodox Protestant children seem to have done better than Liberal Protestant ones.

Finally, we have looked at old age mortality, defined as the mortality risks of people older than 55. In studies on the effect of religion on old age mortality, specific prescriptions hardly play a role. Religiosity is supposed to be more important than belonging to a specific denomination. Religious practice has regularly been associated with lower levels of depression; apparently religious participation helps to cope with adversity in later life (Braam et al. 2001; Lee and Newberg 2005). Church attendance is associated with higher survival rates, which seems to work through higher frequency of contacts and greater likelihood to receive help (Sullivan 2010; La Cour et al. 2006). To some extent denominational differences can be expected: fundamentalist religions tend to emphasize moderation with smoking and drinking more than other religions. Also, the tight communities found in secessionist groups form more effective environments for social control (O’Reilly and Rosato 2008). Our findings confirm the hypothesis that denominations with a higher level of religious involvement – in the period under consideration many branches of Orthodox

Protestantism and Roman Catholicism – were associated with higher survival chances of elderly members. However, the outcomes for the nonaffiliated seem to contradict this (but they are not statistically significant). Interestingly, the significant positive findings for Orthodox Protestant and Catholics were only found among men, which contradicts the conclusion in other studies that churchgoing is much healthier for women than for men (La Cour et al. 2006). Also, Jewish women were not doing better than Liberal Protestant ones, which puts in perspective the notion that religious prescriptions on personal hygiene and food preparations has a salutary effect.

Overall, our outcomes on mortality are mixed. Orthodox Protestant infants had lower chances of survival, which seems to point at the effect of fatalism and aversion to ‘outside’ advice. The opposite was found for the Jews. In old age, belonging to more Orthodox Churches had a positive effect on survival, probably through a stronger involvement in social networks.

6. Discussion and Conclusion

In four ways, this paper contributes to the debate on the question how religion impacts on demographic behaviour. First, it proposes a classification to deal with the myriad of Protestant groups. In many studies, Protestants have been lumped together, ignoring their strong dogmatic differences (Levin and Schiller 1987, 13). Moreover, these intra-Protestant differences extend to internal mechanisms of communication and systems of social control as well. On the basis of religious norms and mechanisms of ensuring compliance, a distinction between Liberal and Orthodox Protestants was made. Second, the paper moves beyond the local and regional scope of most studies of religious differentials by using a nationwide sample with reconstructed life courses. As most religious groups were spread across the country, this approach allows us to control for factors such as type of residence. Of course, the downside of this approach is that we cannot study how religious communities interacted with their local environment, perhaps resulting in a reinforcement or weakening of effects that we have found at the national level. In addition, the database allows us to control for many factors, foremost the socio-economic characteristics that have been found to explain religious differentials in behaviour. Third, we go beyond the usual focus on sexuality and birth control by looking at a large number of life course transitions, ranging from infant mortality to kin co-residence at old age. The question is whether a consistent pattern of denominational differentials appears when we compare all those transitions. Finally, the paper seeks to explain those differentials, by evaluating the usual explanations given in the literature. Thus, for each life course domain, we discuss the role of specific religious norms and prescriptions, the role of mechanisms of communication

and control, the role of life style and mentality, and the role of belonging to a minority and its networks.

In the period we have studied, Dutch society was characterized by a strong competition between ideological groups. The struggle was mainly concerned with the claim of different groups to be relatively autonomous versus the state. The differences of opinion did not extend to views on sexuality, morality or family. On the contrary, all parties aspired to moral respectability, in order to be considered a worthy opponent. All, including the Socialists, emphasized their adherence to traditional family ideals, which, among others, led to the rejection of propaganda for modern birth control (1911). Thus, during this era of ‘pillari- zation’, the Dutch came to be known as the “moral nation” (Kok 1990). Given this general conformity to traditional (bourgeois) family ideals, it is unlikely that large differences in moral prescriptions existed between the different de- nominations, or between them and the non-affiliated. Therefore, it is even more remarkable that we have found such strong and consistent differences in behav- iour, especially between the Roman Catholics and the Liberal Protestants. The results make clear that – even though we do not know the level of individual religiosity – religious affiliation is an important factor to be included in (histori- cal) demographic analysis. To be sure, this analysis, which takes the long period 1850-1970 as a whole (thus ignoring changes within this period) does not allow to see whether religious differentials had been weaker before pillari- zation, and how they changed after 1970.

But why does denomination matter? As said, there were no strong differ- ences in opinion between the Churches on morality: premarital sexuality, vol- untary childlessness, divorce were more or less rejected by all, including by non-believers. Of course, some differences in moral prescriptions existed, which probably affected behaviour. Examples are the Catholic rejection of divorce which is reflected in lower divorce rates and their notion of the “marit- al debt” which probably increased coital frequency and shortened birth inter- vals. We can also mention Jewish regulations on food preparation and personal hygiene, which lowered infant mortality risks. Probably more important than (differences between) religious norms were the churches’ means of communi- cation, control and sanctions. The Liberal Protestants emphasized individual responsibility in family matters, and they had more or less abandoned tradition- al moral discipline. Secessionist Protestant groups as well as the Roman Catho- lics, on the other hand, were as effective in communicating moral messages as in disciplining the flock. They could do so because their adherents strongly identified with their church leaders, and did do well into the second half of the twentieth century. Social control did not only come from the clergy, the church elders and the deacons in charge of poor relief, but also from the members one regularly met. Tight communities could restrain people from deviant (e.g. premarital sexuality) or unhealthy behaviour. Effective control and mutual help resulted in mortality differentials at old age.

Apart from direct prescriptions and the effects of social control, the more indirect influence of mentality has come to the fore. It is difficult to prove how denominations differed exactly in terms of “familism” and “fatalism,” but the behavioural outcomes are suggestive. Roman Catholics and Orthodox Protestants seem to have been more likely to accept needy kin in their homes. And their rejection of birth control (apart from late marriage) suggest they were resigned to accept children as gifts from God. Rural Catholics were more adverse to move away from their region than Liberal Protestants.

Finally, belonging to a religious minority may have had effects on its own. For one thing, it may have led to the formation of more expanded kin networks than in majority groups. This could be an explanation for the kin co-residence patterns we have found as well as for the greater likelihood of both Protestant and Catholic minorities to move away from the region in which they lived. We have not found that living in isolated minorities as such protected people from infectious diseases.

Table 2 summarizes the mechanisms that may have led to behavioural differences by denomination in each life course domain. It is clear that a single causal mechanism cannot be identified, and that we have to combine different explanations. Future research, for instance using a multilevel design, will need to clarify the role of environment effects (e.g. the local presence of specific confessional institutions for vulnerable persons, or the presence of doctors, which may be caused by the regional distribution of religions).

Table 2: Overview of Mechanisms explaining Religious Differentials, by Life Course Domain

	Co-residence	Sexuality and marriage	Migration	Birth control	Mortality
Direct prescriptions		x		x	x
Indirect norms	x		x	x	x
Social control		x		x	x
Sociability					x
Minority networks	x		x		
Environment effects	?				?

The overview of religious differentials across the life course allows us to answer one final question. Are the differences between denominations so consistent that we can speak of specific idealized life courses or “life scripts”? The answer is no. Of course, one could say that the Liberal Protestants (and the non-affiliated, to some extent the Jews, and the mixed marrying couples) followed an “individual responsibility script” whereas we could discern a “devout Christian script” among the Roman Catholics and Orthodox Protestants. But it is more likely that the behavioural patterns we have found resulted from differences in identification with the clergy, differences in churches’ social control

and communication, and differences in group cultures (mentalities) than from denominationally specific norms on how to lead one's life.

References

- Anderton, Douglas L., and Lee Bean. 1985. Birth spacing and fertility limitation: A behavioral analysis of a nineteenth century frontier population. *Demography* 22: 169-83. doi:10.2307/2061176.
- Bartkowski, John P., Xiaohu Xu, and Ginny E. Garcia. 2011. Religion and Infant Mortality in the U.S.: A Preliminary Study of Denominational Variations, *Religions* 2 (3): 264-76.
- Baudin, Thomas. 2015. Religion and fertility: The French connection. *Demographic Research* 32: 397-420.
- Boonstra, Onno, Hilde Bras, and Marjet Derks. 2014. Historical Research on Cultural Life Scripts. An Exploration of Opportunities and Future Prospects. *Historical Social Research* 39 (1): 7-18. doi: 10.12759/hsr.39.2014.1.7-18.
- Braam, A.W. et al. 2001. Religion as a cross-cultural determinant of depression in elderly Europeans: results from the EURODEP collaboration. *Psychological Medicine* 31 (5): 803-14.
- Bras, Hilde. 2014. Structural and diffusion effects in the Dutch fertility transition, 1870-1940. *Demographic Research* 30: 151-86.
- Burdette, Amy M. 2007. *Religious involvement, race/ethnicity, family and adolescent sexual activity*. PhD diss., University of Austin, Texas.
- Buissink, John D. 1971. Regional differences in marital fertility in the Netherlands. A statistical analysis of regional differences in the level and development of the birth rate and of fertility, 1850-1890. *Population Studies* 25: 353-74.
- Cossee, Eric 2001. Tegendraadse theologie: terugblik op vier eeuwen vrijzinnigheid in Nederland. In *Een beetje geloven. Actualiteit en achtergronden van het vrijzinnig Christendom*, ed. Willem B. Drees, 181-200. Amsterdam: Balans.
- Courgeau, Daniel. 2002. New approaches and methodological innovations in the study of partnership and fertility behavior. In *Dynamics of fertility and partnership in Europe. Insights and lessons from comparative research*, vol. 1, ed. Miroslav Macura and Gijs Beets, 99-114. New York, Geneva: United Nations.
- Derosas, Renzo. 2003. "Watch out for the Children!" Differential Infant Mortality of Jews and Catholics in Nineteenth-Century Venice. *Historical Methods* 36: 109-30.
- Dollahite, David C., and Loren D. Marks 2009. A conceptual model of family and religious processes in highly religious families. *Review of Religious Research* 50 (4): 373-91.
- Engelen, Theo. 2014. Life scripts and life realities: women in nineteenth-century Nijmegen. *Historical Social Research* 39 (1): 104-12. doi: 10.12759/hsr.39.2014.1.104-112.
- Engelen, Theo L.M., and Hans Hillebrand. 1986. Fertility and Nuptiality in the Netherlands, 1850-1960. *Population Studies* 40: 487-503.
- Flandrin, Jean-Louis. 1970. *L'Église et le contrôle des naissances*. Paris: Flammarion.

- Gans, Daphne, Merrill Silverstein, and Ariela Lowenstein. 2009. Do Religious Children Care More and Provide More Care for Older Parents? A Study of Filial Norms and Behaviors across Five Nations. *Journal of Comparative Family Studies* 40 (2): 187-201.
- Goldscheider, Calvin. 1971. *Population, Modernization, and Social Structure*. Boston: Little Brown.
- Goldscheider, Calvin. 1999. Religious values, dependencies, and fertility: Evidence and implications from Israel. In *Dynamics of Values in Fertility Change*, ed. R. Leete, 310-30. Oxford: OUP.
- Gráda, Cormac Ó. 2008. Economic status, religion, and demography in an Ulster town in the early twentieth century. *The History of the Family* 13 (4): 350-9. doi: 10.1016/j.hisfam.2008.09.002.
- Grosheide, Frederik W., Johan H. Landwehr, Cornelis Lindeboom, and J.C. Rullman, eds. 1925. *Christelijke Encyclopaëdie voor het Nederlandsche volk*, 6 vols. Kampen: J.H. Kok.
- Hofstee, Evert. 1981. *Korte demografische geschiedenis van Nederland van 1800 tot heden*. Haarlem: Fibula.
- Hondius, Dienke. 2001. *Gemengde huwelijken, gemengde gevoelens. Hoe Nederland omgaat met etnisch en religieus verschil*. Den Haag: SDU Uitgevers.
- Jacobson, Cardell K. 1999. Denominational and racial and ethnic differences in fatalism. *Review of Religious Research* 41 (1): 9-20. doi: 10.2307/3512424.
- Jager, Jan L. de. 1981. *Volksgebruiken in Nederland. Een nieuwe kijk op tradities*. Utrecht, Antwerpen: Het Spectrum.
- Jansen, Steve M. J., and David C. Rubin. 2010. Age effects in cultural life scripts. *Applied Cognitive Psychology* 25: 291-8.
- Janssens, Angélique. 2014. *Labouring Lives, women, work and the demographic transition in the Netherlands, 1880-1960*, Bern: Peter Lang.
- Janssens, Angélique, Maaike Messelink, and Ariana Need. 2010. Faulty genes or faulty parents? Gender, family and survival in early and late childhood in the Netherlands, 1860-1900. *The History of the Family* 15 (1): 91-108.
- Janssens, Angélique, and Ben Pelzer. 2014. Lovely little angels in heaven? The influence of religiously determined cultural scripts on infant survival in the Netherlands, 1880-1920. *Historical Social Research* 39 (1): 19-47. doi: 10.12759/hsr.39.2014.1.19-47.
- Junkka, Johan, and Sören Edvinsson. 2016. Gender and fertility within the free churches in the Sundsvall region, Sweden, 1860-1921. *The History of the Family* 21 (2): 243-266.
- Kalmijn, Matthijs, and Pearl A. Dykstra. 2006. Differentials in face-to-face contact between parents and their grown-up children. In *Family solidarity in the Netherlands*, ed. Pearl A. Dykstra, Matthijs Kalmijn, Trudy C.M. Knijn, Aafke E. Komter, Aart C. Liefbroer, Clara H. Mulder, 63-88. Amsterdam: Dutch University Press.
- Knippenberg, Hans. 1992. *De religieuze kaart van Nederland. Omvang en geografische spreiding van de godsdienstige gezindten vanaf de reformatie tot heden*. Assen, Maastricht: Van Gorcum.
- Knippenberg, Hans. 2003. Een veelkleurig palet. De godsdienstkarte in de negentiende en twintigste eeuw. In *Nederland in verandering. Maatschappelijke ont-*

- wikkelingen in kaart gebracht 1800-2000, ed. Erik Beekink, Onno Boonstra, Theo Engelen and Hans Knippenberg. Amsterdam: Aksant.
- Kohlbrugge, Jacob H. F. 1928. *Practische sociologie*. Deel V Sociale nooden I. De vrouw, hoogere standen, degeneratie, alcohol. Groningen: Wolters.
- Kok, Jan. 1990. The moral nation. Illegitimacy and bridal pregnancy in the Netherlands from 1600 to the present. *Economic and Social History. The Netherlands 2*: 7-36.
- Kok, Jan. 1991. *Langs verboden wegen. De achtergronden van buitenechtelijke geboorten in Noord-Holland (1812-1914)*. Hilversum: Verloren.
- Kok, Jan, and Jan van Bavel. 2006. Stemming the tide. Denomination and religiousness in the Dutch fertility transition, 1845-1945. In *Religion and the Decline of Fertility in the Western World*, ed. R. Derosas and F. van Poppel, 83-105. Dordrecht: Springer.
- Kok, Jan. 2011. Moeten en mogen trouwen. Gedwongen huwelijken en generatieconflict, 1870-1940. In *Levenslopen in transformatie. Liber amicorum bij het afscheid van prof.dr. Paul M.M. Klep*, eds. Theo Engelen, Onno Boonstra and Angélique Janssens, 94-104. Nijmegen: Valkhof Pers.
- Kok, Jan, and Kees Mandemakers. 2010. A life-course approach to co-residence in the Netherlands, 1850-1940. *Continuity and Change 25*: 285-312.
- Kok, Jan. 2014. "At age 27, she gets furious". Scripts on marriage and life course variation in The Netherlands, 1850-1970. *Historical Social Research 39* (1): 113-32. doi: 10.12759/hsr.39.2014.1.113-132.
- Kok, Jan, and Kees Mandemakers. 2012. *Nuclear hardship in the nuclear heartland? Families and welfare in The Netherlands, 1850-1940*. Working paper WOG/HD/2012-1.
- Kok, Jan, Kees Mandemakers, and Bastian Mönkediek. 2014. Flight from the land? Migration flows of the rural population of the Netherlands, 1850-1940. *Espace populations sociétés*, 2014-1. <<http://eps.revues.org/5631>> Accessed 10-5-2016.
- Kok, Jan, Wen-shan Yang, and Yinghui Hsieh. 2006. Marital fertility and birth control in rural Netherlands and Taiwan, 19th and early 20th centuries. In *Positive or preventive. Fertility developments in Taiwan and the Netherlands, 1850-1950*, ed. Yin-Chang Chuang, Theo Engelen and Arthur P. Wolf, 199-235. Amsterdam: Aksant.
- Komter, Aafke, and Trudy Knijn. 2006. The strength of family ties. In *Family solidarity in the Netherlands*, ed. Pearl A. Dykstra, Matthijs Kalmijn, Trudy C.M. Knijn, Aafke E. Komter, Aart C. Liefbroer and Clara H. Mulder, 107-22. Amsterdam: Dutch University Press.
- Kooy, Gerrit A. 1959. *De oude samenwoning op het nieuwe platteland. Een studie over de familiehuishouding in de agrarische Achterhoek*. Assen: Van Gorcum.
- Kooy, Gerrit A., and M. Keuls. 1967. Enforced marriage in the Netherlands. A statistical analysis in order to test some sociological hypotheses. *Afdelingen Sociologie en Sociografie Bulletin 28*.
- Kruijt, Jakob P. 1933. *De onkerkelijkheid in Nederland. Haar verbreiding en oorzaken. Proeve ener sociografiese verklaring*. Groningen, Batavia: Wolters-Noordhoff.
- La Cour, Peter, Kirsten Avlund, and Kirsten Schultz-Larsen. 2006. Religion and survival in a secular region. A twenty year follow-up of 734 Danish adults born in 1914. *Social Science and Medicine 62*: 157-64.

- Lee, Bruce Y., and Andrew B. Newberg. 2005. Religion and health: a review and critical analysis. *Zygon* 40 (2): 443-68.
- Lehrer, Evelyn L. 2004. Religion as a Determinant of Economic and Demographic Behavior in the United States. *Population and Development Review* 30 (4): 707-26.
- Leinarte, Dalia. 2012. Cohabitation in imperial Russia: the case of Lithuania. *The History of the Family* 17 (1): 16-30. doi: 10.1080/1081602X.2012.658146.
- Levin, Jeffrey S., and Preston L. Schiller. 1987. Is There a Religious Factor in Health? *Journal of Religion and Health* 26 (1): 9-36.
- Mahoney, Annette, Kenneth I. Pargament, Nalini Tarakeshwar, and Aaron B. Swank. 2008. Religion in the Home in the 1980s and 1990s: A Meta-Analytic Review and Conceptual Analysis of Links Between Religion, Marriage, and Parenting. *Psychology of Religion and Spirituality* 5 (1): 63-101.
- Mandemakers, Kees. 2006. Building Life Course Datasets from Population Registers by the Historical Sample of the Netherlands (HSN). *History and Computing* 14: 87-107.
- McQuillan, Kevin. 2004. When does religion influence fertility. *Population and Development Review* 30 (1): 25-56.
- Miedema, Nick. 1989. The Orthodox Protestants and Enforced Marriage. In *Dutch dilemmas: anthropologists look at the Netherlands*, ed. Jeremy Boissevain and Jouda Verrips, 5-23. Assen: Van Gorcum.
- Mönkediek, Bastian, Jan Kok, and Kees Mandemakers. 2015. The impact of family setting and local opportunities on leaving home and migration destinations of rural youths, The Netherlands 1860-1940. *Historical Life Course Studies* 3: 43-65.
- Nijs, Timo de. 2005. Partnerkeuze in de hoge Rotterdamse burgerij 1815-1890. In *Gelegenheid en genegenheid. Twee eeuwen partnerkeuze en huwelijk*, ed. Jan Kok and Marco H.D. van Leeuwen, 309-30. Amsterdam: Aksant.
- O'Reilly, Dermot, and Michael Rosato. 2008. Religious affiliation and mortality in Northern Ireland: Beyond Catholic and Protestant. *Social Science & Medicine* 66: 1637-45.
- Pearce, Lisa D. 2002. The Influence of Early Life Course Religious Exposure on Young Adults' Dispositions Toward Childbearing. *Journal for the Scientific Study of Religion* 41 (2): 325-40.
- Reid, Alice, and Nynke van den Boomen. 2015. The faces of death: regional differentiation in cause-specific mortality in the past. *The History of the Family* 20 (3): 309-19.
- Rutte, Willibrord. 1997. 'De vreselijkste aller harpijen'. *Pokkenepidemieën en pokkenbestrijding in Nederland in de achttiende en negentiende eeuw: een sociaal-historische en historisch-demografische studie*. Wageningen: Landbouwniversiteit.
- Sanders, J. 1931. *The declining birth rate in Rotterdam. A statistical analysis of the drop in the number of children in 246643 Rotterdam families during the last 50 years*. The Hague: Martinus Nijhoff.
- Schellekens, Jona, and Frans van Poppel. 2006. Religious Differentials in Marital Fertility in The Hague (Netherlands) 1860-1909. *Population Studies* 60 (1): 23-38.
- Schoonheim, Marloes. 2005. *Mixing ovaries and rosaries. Catholic religion and reproduction in the Netherlands, 1870-1970*. Amsterdam: Aksant.

- Shepherd, John, Ing-hai Pan, Jan Kok, Claudia Engel, Theo Engelen, and Melissa Brown. 2006. Group Identity and Fertility: An Evaluation of the Role of Religion and Ethnicity in the Netherlands and Taiwan. In *Positive or preventive. Fertility developments in Taiwan and the Netherlands, 1850-1950*, ed. Yin-Chang Chuang, Theo Engelen and Arthur P. Wolf, 121-61. Amsterdam: Aksant.
- Sullivan, Allison R. 2010. Mortality Differentials and Religion in the U.S.: Religious Affiliation and Attendance. *Journal for the Scientific Study of Religion* 49 (4): 740-53.
- Swierenga, Robert P., and Yda Saueressig-Schreuder. 1983. Catholic and protestant emigration from the Netherlands in the 19th century: a comparative social structural analysis. *Tijdschrift voor Economische en Sociale Geografie* 74 (1): 25-40.
- Van Bavel, Jan, and Jan Kok. 2004. Birth spacing in the Netherlands. The effects of family composition, occupation and religion on birth intervals, 1820-1885. *European Journal of Population* 20 (2): 119-40.
- Van Bavel, Jan, and Jan Kok. 2005. The Role of Religion in the Dutch Marital Fertility Transition. Starting, Spacing and Stopping in the Heart of the Netherlands, 1845-1945. *Continuity and Change* 20 (2): 247-63.
- Van Bavel, Jan, and Jan Kok. 2010a. Pioneers of the Modern Lifestyle? Childless Couples in the Early Twentieth-Century Netherlands. *Social Science History* 34 (1): 47-72.
- Van Bavel, Jan, and Jan Kok. 2010b. A mixed effects model of birth spacing for pre-transition populations. *The History of the Family* 15 (2): 125-38.
- Van Bavel, Jan, and Jan Kok. 2010c. Uitsstel en afstel van ouderschap tijdens het interbellum in Nederland. In *De levenskracht der bevolking. Sociale en demografische kwesties in de Lage Landen tijdens het interbellum*, ed. Jan Kok and Jan van Bavel, 197-227. Leuven: Universitaire Pers Leuven.
- Van den Boomen, Nynke, and Peter Ekamper. 2015. Denied their 'natural nourishment': religion, causes of death and infant mortality in the Netherlands, 1875-1899. *The History of the Family* 20 (3): 391-419. doi: 10.1080/1081602X.2015.1022199.
- Van Heek, Frederik. 1954. *Het geboorte-niveau der Nederlandse Rooms-katholieken. Een demografisch-sociologische studie vaneen geëmancipeerde minderheidsgroep*. Leiden: Stenfert Kroese.
- Van Heek, Frederik. 1956. Roman Catholicism and fertility in the Netherlands. Demographic aspects of minority status. *Population Studies* 10: 125-38.
- Van Leeuwen, B. 1959. *Het gemengde huwelijk. Pastoraal-sociologisch onderzoek naar de huwelijken van katholieken met niet-katholieken in Nederland*. Assen: Van Gorcum.
- Van Poppel, Frans W.A. 1985. Late Fertility Decline in The Netherlands: The Influence of Religious Denomination, Socio-economic Group and Region. *European Journal of Population* 1: 347-73.
- Van Poppel, Frans. 1992. Religion and Health: Catholicism and Regional Mortality Differences in Nineteenth-Century Netherlands. *Social History of Medicine* 5 (2): 229-53.
- Van Poppel, Frans. 1997. Family breakdown in nineteenth-century Netherlands: divorcing couples in the Hague. *The History of the Family. An International Quarterly* 2 (1): 49-72.

- Van Poppel, Frans, and Marloes Schoonheim. 2005. Measuring cultural differences between religions using network data. An example based on nineteenth century Dutch marriage certificates. *Annales de Démographie Historique* (1): 173-97.
- Van Poppel, Frans, Jona Schellekens, and Aart Liefbroer. 2002. Religious differentials in infant and child mortality in Holland, 1855-1912. *Population Studies* 56: 277-89.
- Van Poppel, Frans, Davis S. Reher, Alberto Sanz-Gimeno, Maria Sanchez-Dominguez, and Erik Beekink. 2012. Mortality decline and reproductive change during the Dutch demographic transition: Revisiting a traditional debate with new data. *Demographic Research* 27: 299-338.
- Van Rooden, Peter. 1996. The emergence of Orthodox and Liberal Protestant areas in The Netherlands. In *La christianisation des campagnes. Actes du colloque du C.I.H.E.C. (25-27 août 1994)*, ed. Jean-Pierre Massaut and Marie-Elisabeth Henneau, 365-86. Brussel, Rome: Belgisch Historisch Instituut te Rome.
- Van Rooden, Peter. 2002. Long-term religious developments in The Netherlands 1750-2000. In *The decline of Christendom in Western Europe, 1750-2000*, ed. H. McLeod and W. Ustorf, 113-29. Cambridge: Cambridge University Press.
- Vandezande, Matthijs, Jan Kok, and Kees Mandemakers. 2011. The Impact of Kin Co-Residence on Survival Chances of Infants and Children in the Netherlands, 1863-1909. *Romanian Journal of Population Studies* 5 (2): 139-60.
- Walhout, Evelien C. 2010. Is breast best? Evaluating breastfeeding patterns and causes of infant death in a Dutch province in the period 1875-1900. *The History of the Family* 15 (1): 76-90.
- Winch, Robert F., Scott Greer, and Rae L. Blumberg. 1967. Ethnicity and extended familism in an upper middle- class suburb. *American Sociological Review* 32: 265-72.
- Wintle, Michael. 1992. Push factors in emigration: the case of the province of Zeeland in the nineteenth century. *Population Studies* 46: 523-37.
- Zwemer, Jan. 1992. *In conflict met de cultuur. De bevindelijk Gereformeerden in de Nederlandse samenleving in het midden van de twintigste eeuw*. Kampen: De Groot Goudriaan.

Appendix

Classification of Dutch Protestant Religious Denominations (1850-1940)

Liberal Protestant

Nederlands (or Nederduitsch) Hervormd, in case in one's place of birth not all church ministers (in 1920) belonged to an organization for Orthodox Liberal Dutch Reformed, either the Confessionele Vereniging or the Gereformeerde Bond tot Verbreiding van de Waarheid in de Nederlandsche Hervormde (Gereformeerde) Kerk, Knippenberg 2003, p.109-110 and CD-ROM with Historical database of Dutch Municipalities.

Waals Hervormd

Doopsgezind or Mennoniet
Remonstrants
Evangelisch Luthers
Hersteld Evangelisch Luthers

OrthodoxProtestant

Nederlands (or Nederduitsch) Hervormd, in case in one's place of birth all church ministers (in 1920) belonged to an organization for Orthodox Liberal Dutch Reformed, either the Confessionele Vereniging or the Gereformeerde Bond tot Verbreiding van de Waarheid in de Nederlandsche Hervormde (Gereformeerde) Kerk, Knippenberg 2003, p.109-110 and CD-ROM with Historical database of Dutch Municipalities.

Christelijk Gereformeerd
Gereformeerd (Gereformeerde Kerken in Nederland)
Christelijk Afscheiden Gemeente
Christelijk Gereformeerd
Gereformeerde Kerken onder het Kruis
Gereformeerde Gemeenten (onder het Kruis)
Oud-Gereformeerd
Nederlands Gereformeerd
Baptist
Apostolisch Genootschap
Hersteld Apostolische Zendingsgemeenschap in de Eenheid der Apostelen
Leger des Heils
Pinkstergemeente

Not classified

Oudkatholiek (also Oud Bisschoppelijk or Oud Rooms)
Anglicaans

Historical Social Research

Historische Sozialforschung

Other articles published in this Forum:

Kevin McQuillan & Rolf Gehrmann

The Impact of Religious Denomination on Mentality and Behavior. An Introduction.

doi: [10.12759/hsr.42.2017.2.7-22](https://doi.org/10.12759/hsr.42.2017.2.7-22)

Anne-Lise Head-König

Religion Mattered: Religious Differences in Switzerland and Their Impact on Demographic Behaviour (End of the 18th Century to the Middle of the 20th Century).

doi: [10.12759/hsr.42.2017.2.23-58](https://doi.org/10.12759/hsr.42.2017.2.23-58)

Jan Kok

Church Affiliation and Life Course Transitions in The Netherlands, 1850–1970.

doi: [10.12759/hsr.42.2017.2.59-91](https://doi.org/10.12759/hsr.42.2017.2.59-91)

Rolf Gehrmann

Denomination and Number of Children: The Case of Rural Baden, 18th/19th Century.

doi: [10.12759/hsr.42.2017.2.92-113](https://doi.org/10.12759/hsr.42.2017.2.92-113)

Grażyna Liczbińska

Between Religion and Environment. Mortality and Its Causative Factors in Greater Poland in the 19th Century.

doi: [10.12759/hsr.42.2017.2.114-133](https://doi.org/10.12759/hsr.42.2017.2.114-133)

Siegfried Gruber

The Influence of Religion on Marriage Ages in Albania around 1900.

doi: [10.12759/hsr.42.2017.2.134-157](https://doi.org/10.12759/hsr.42.2017.2.134-157)

Christoph Nebgen

Economic and Confessional Relationships in 18th Century Travel Writing from the Rhine.

doi: [10.12759/hsr.42.2017.2.158-169](https://doi.org/10.12759/hsr.42.2017.2.158-169)

Stefan Benz

Measurable Effects of Denominations on Narrative Patterns. The German Case of Diversity in Narrating Histories.

doi: [10.12759/hsr.42.2017.2.170-196](https://doi.org/10.12759/hsr.42.2017.2.170-196)