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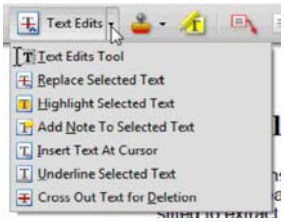


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# Domestic servants and diffusion of fertility control in Flanders, 1830–1930

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This article uses a mixed method approach to analyse whether urban domestic service functioned as a diffusion channel in the fertility decline. The central hypothesis is that nineteenth century female, rural-born domestic servants were influenced by the reproductive habits of their middle and upper-class employers, who were vanguards in the adoption of family size limitation within marriage. This happened via a process of *social learning*, a mechanism of social influence in heterogeneous social networks. Female domestic servants are an excellent research population to study reproductive ideas and behaviour because they were large in number and had a particular social position in between the working and upper classes and in between rural and urban environments. This paper is unique in its use of qualitative information to analyse social fertility diffusion and in the incorporation of geographical mobility in the statistical part.

**Keywords:** fertility decline; social diffusion; female work; migration; nineteenth and early twentieth century

This article investigates social learning by servants from three different angles: domestic service as an *information source* on contraception, the position of former employers as a *reference group* for reproductive decision making and the *behavioural outcomes* of servant experience. Using a broad range of narrative data, I argue that the service provided young women with knowledge about contraceptive practices. Yet, testimonial evidence shows that servants themselves did not denote their former employers as a reference group for their own reproductive behaviour. The statistical analysis is used to determine the actual outcomes of the urban servant experience on later life fertility. The models suggest that living in an urban area during childbearing was more important than having been a servant. Finally, some attention is paid to the type of birth control that servants used, indicating a combination of spacing and stopping.

## 1. Literature

From a recent overview of fertility research using individual data, it became clear that concerning reproductive behaviour there was:

> a broad divide between the on the one hand white collar, bourgeois classes adopting stopping behaviour relatively soon, and on the other hand the rest of the population who followed suit sooner or later (Van Bavel, 2010, p. 447).

All over Europe, there were clear signs of family size limitation within marriage among the elites from the early eighteenth century onwards (Livi-Bacci, 1986). In the rest of the

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population, the decline of fertility did not occur before the end of the nineteenth century in most countries.

Evidence on how ideas and practices concerning family size limitation spread between the social classes during the fertility transition (*social diffusion*) has been collected during the last two decades but is still rather sparse (Van Bavel, 2010). These empirical studies are based on theories of social diffusion, which state that behavioural change can occur as a mere result of interaction between individuals or groups of people (Casterline, 2001). The ideas and behaviours of people with whom an individual interacts (his or her *social network*) influence his or her own life choices, even though these people 'do not officially have a say in the reproductive process' (Bernardi, 2003, p. 529). One hypothesis, concerning the diffusion of fertility, states that in heterogeneous local societies, a process of *embourgeoisement* occurred (Oris, 1993). This involves that the fertility decline started among a pioneering group and gradually spread through the population in later stages. Particular social groups, often referred to as *cultural intermediaries*, could function as channels of diffusion in this process, facilitating the spread of new habits through the rest of the population. For nineteenth century Vottem for example, a Belgian French speaking village, a combination of quantitative and qualitative material convincingly showed that armourers identified themselves with the petty bourgeoisie rather than with the working classes, increasingly invested in schooling for their children and reduced the size of their families before others did (Leboutte, 1991).

Next to social differentiation in the adoption of fertility control, geographical variation existed as well. In Flanders, fertility levels dropped markedly earlier in large cities than in the surrounding countryside (Lesthaeghe, 1977). The diffusion of fertility between localities has not been empirically investigated. The study of servants' fertility is most valuable to study social as well as geographical diffusion since servants had a position on the crossroad between various social classes and between town and countryside

Domestic servants have been investigated as cultural intermediaries (Roche, 1978). During the nineteenth century domestic service was most frequent in large cities and was a predominantly female occupation (Fauve-Chamoux & Fiavola, 1997; Sarti, 2006). Most servants were rural born working-class women, who were unmarried, between 15 and 25 years old and lived in the house of their middle or upper class employers. Because of this proximity, chances for being influenced by the employers' lifestyle were obvious and have been documented regarding clothing and bank savings (Roche, 1978). Of course servants also had a potential influence on the employers, and mainly on their children. In this article however, I focus merely on top–down diffusion.

As early as 1974, gender historians suggested that there was an influence on the level of reproductive habits as well (Davidoff, 1974; McBride, 1974). In 1981, Joseph Banks argued that male servants were the first working-class people to realise the social benefits of small families (Banks, 1981). Yet, researchers like Banks and McBride only had access to aggregate or cross-sectional data, which are inadequate to study the diffusion of fertility practices (Vanhaute & Matthys, 2007). To effectively analyse behaviour, individual-level data are required. Furthermore, to study marital fertility, these data need to be longitudinal, given the fact that domestic service was strongly linked to the stage in life before marriage. Only a limited number of studies that refer to servants have thus far used empirical evidence of this kind; Diana Gittins used retrospective interviews with English working class women (1930–1939) in a qualitative study (Gittins, 1982), while Janssens (2007) and Van Bavel (2002) based their quantitative studies on life course data.

Gittins concluded that former servants were more ignorant about and more reluctant towards fertility control than factory workers. The shared working experiences and

frequent interaction of men and women in factories lead towards shared and modern norms and beliefs towards family size limitation. Women working in isolated occupations, such as domestic service, lacked such common work floor cultures. As a result, they were less informed and less exposed to a collective belief and norm system on reproduction. The absence of a clear conceptual framework in the work of Gittins hampers the interpretation and evaluation of the outcomes. Additionally, she fails to recognize that people adjust their responses to the social acceptability of their time. In this article I use a central concept in theories of social interaction, namely social learning, to improve our understanding of how exchanges of information and norms occurred between masters and servants. The statistical studies by Janssens and Van Bavel also suggest that Gittins' findings should not be generalised to different contexts and time periods. After all, both in the nineteenth-century city of Enschede (the Netherlands) and Leuven (Belgium) former female servants had lower marital fertility than women who had not been servants. In these two studies, the fertility of working class couples was analysed within one selected town and domestic service was treated as an occupational category. Yet, servants should also be considered as a very particular group of migrants (Piette, 2000). Migrants have received little attention in fertility studies (Creighton, Matthys, & Quaranta, 2012). The few studies that did account for migrants' fertility took the point of view of the receiving context, investigating how immigrants adapted to the fertility regime in their destination. These analyses showed that people moving from a more traditional region to an area where family size limitation was common, tended to become accustomed to the new regime, while migrants from a modern to a traditional region maintained their contraceptive habits. My own research starts from the opposite perspective, taking the places of origin as a starting point and examining the effects of rural–urban migrant trajectories. Contrary to analysing the contribution of servants to urban fertility, I examine if and how servant migration made a difference in the reproductive lives of women. As such, servants are an extremely interesting research population concerning the social and geographical spread of the fertility decline: not only were they intermediaries between working- and upper-class cultures, but also between rural and urban ways of life.

## 2. Data and methods

### *2.1 The case of Flanders*

The effect of service on marital fertility is studied here for Flanders. In this region, marital fertility did not fall decisively before 1900 (Lesthaeghe, 1977). Yet, particular upper class groups stood out. Between 1680 and 1830 age-specific marital fertility rates of the nobility and the urban industrial bourgeoisie were considerably lower than those of the rest of the population (Vandenbroeke, 1976). This gap persisted until the end of the nineteenth century (Van Bavel, 2002). In the decades before Flemish working class fertility dropped (1850–1900), the number of rural girls who left their home to become an urban servant gradually increased. In 1890, female domestic servants in Belgium accounted for almost 14% of the female active population (Piette, 2000, p. 53). A substantial part of the servants moved back and forth between the city and their hometown and it is likely that servants also helped to diffuse ideas and behaviour across regions. It is not my intention to investigate the potential link between the two phenomena on the macro-level. Rather I am interested in how domestic service affected individual attitudes. To analyse the effect of domestic service on subsequent marital fertility, a twofold approach is used. In a first part of the analysis I use testimonial and other qualitative evidence to document how service functioned as an information channel on reproductive issues and whether former employers were designated

as reference groups in fertility decision making. A second quantitative part reveals whether the fertility outcomes of women who had been urban servants differed from others.

### 2.2 *Qualitative sources and analysis*

Qualitative evidence has been largely overlooked in fertility research. Yet, in historical statistical studies, motivations are usually derived from behavioral outcomes, impeding a profound understanding of the underlying changing attitudes. The few exceptional studies that did consider narrative sources raised attention for previously ignored issues such as marital affection, sexuality and desired family size (Fisher, 2000). Rather than just counting births, qualitative studies focus on the conscious and unconscious processes involved in fertility decision making. I use a wide variety of sources offering different perspectives on reproduction in Flanders (Matthys, 2012). The Annals and Bulletins of the Ghent Medical Society (1835–1918) provide unique data on the reproductive health of all social classes from the viewpoint of local medical doctors. Testimonial evidence from lawsuits concerning infanticide and illegal practice of midwifery (nineteenth century), give information on childbirth customs (Gryson, 2009). Family archives of noble families contain ego-documents that report about the everyday coexistence of masters and their servants. Catholic publications on gendered rural–urban migration and Neo-Malthusianism reflect the dominant discourses on these topics. Published interviews with testimonies of women about reproductive matters and servant experience are available, covering the first half of the twentieth century (De Keyzer, 1997, 2005; Steverlynck, 2000).

Since the use of qualitative material in historical fertility studies is to date still relatively rare, I have opted for an exploratory approach. Most of the data are available from earlier research on various topics. This tactic has its drawbacks. The collection of raw data did not happen in function of the research question addressed here. As a result, the material used is very diverse. Yet, this offers the opportunity to grasp the issue from a multitude of perspectives. Potential bias in one source can be detected by examining another. For instance, medical writings and court records both report on practices surrounding pregnancy and childbirth from very different angles. By combining them, a more accurate picture emerges. It should also be noted that all of the data from medical reports and part of the data from family archives were collected by the author specifically for this study. Another problem with qualitative data is that it is hard to find testimonial evidence from working class women for the period before 1900. This causes some imbalance in the dominant time frame of the qualitative and the quantitative part of this article. Yet, I intend to demonstrate the possibilities of the use of narrative material for the study of reproduction, thus laying a foundation for further research. All quotes in the text were originally in Dutch (see Matthys, 2012). I have used my own translation here.

Qualitative analysis is used here to enhance our understanding of the mechanisms of interpersonal interaction underlying fertility behaviour. In particular, I focus on social learning. Mechanisms of social interaction are ways in which *information and norms* from *reference groups* are processed by the individual. An individual's social network can consist of multiple reference groups: the group 'that provides information and sets norms with respect to reproductive behavior' can be distinct from social network members who act as references for other types of behaviour (Montgomery & Casterline, 2010. p.459). The mechanisms of interaction at play are also affected by the composition of the reference group.

S*ocial learning* is the mechanism that has received most attention with regard to diffusion of fertility. It points to situations where information exchange in informal

interaction provides additional knowledge that contributes to the individual's decision making process. Social learning typically occurs in heterogeneous groups. No verbal communication is necessary; social learning can take place through observation-only (Casterline, 2001). Observation-only mechanisms allow for the spread of innovative information between people who differ in language, social status or cultural background. An analysis of police records on disputes between masters and servants showed that servants, especially when working as children's maids or chambermaids, had access to the most intimate details of their employer's life (Schlegel, 1983). They were thus in a good position to acquire knowledge through observation-only. The first half of the qualitative part focuses on the transmission of information during service.

The second half analyses to whom women referred as their reference groups with regard to fertility norms. After all, it has long been accepted that the acquisition of information alone is not sufficient to explain decreasing fertility. The social *acceptability* of family size limitation is another important requirement (Coale, 1973). Prevailing group norms are crucial to the acceptability of birth control. I analyse whether women referred to their former employers as normative examples. Other members of the social network, such as family members and social peers, may have acted as reference groups as well. In the latter case, other mechanisms of social influence were likely at play. Among these are *contagion* and *social pressure*, which prevail in dense and homogeneous networks with frequent contacts (Rossier & Bernardi, 2009). Contagion refers to the motivation to comply with the preferences in one's social environment, based on unconscious or emotional grounds. In the case of social pressure, the individual rationally evaluates the social sanctions and rewards to certain behaviour and behaves accordingly. Contagion and social pressure can explain why structural changes did not immediately result in altering behaviour but instead led to the preservation of existing norms.

### *2.3 Quantitative sources and analysis*

The quantitative part focuses on the Flemish city of Ghent and its rural environs. During the nineteenth century Ghent was one of the largest and most industrialized cities in Belgium. In this urban centre, marital fertility dropped decisively already around 1860, while in the surrounding rural areas this did not happen before 1900 (Lesthaeghe, 1977). Within Flanders, Ghent was thus a clear forerunner in the fertility decline. It was also a place where the struggle between social classes and between Catholic, liberal and socialist ideologies was very strong during the second half of the nineteenth century (Van Praag, 1977). Some of the freethinking cells advocated Neo-Malthusianism. The most famous example of this is socialist-feminist Emilie Claeys (1855–1943), who in 1894 published a brochure with explicit contraceptive information. It is however unclear to what extent these isolated initiatives had a broad effect on the – predominantly Catholic – working class population. After all, Neo-Malthusianism was heavily condemned in the Catholic discourse. Ghent was also a major attraction pole for rural immigrants in general and for servants coming from the countryside in particular. Around 1830 one fifth of the female active population in Ghent were servants and one third of the households had at least one domestic employee (Vermeulen, 1981). Most domestic staff were employed by noblemen, proprietors, farmers, professors, high-ranking officials, liberal professions, wholesalers and food businesses. During the second half of the nineteenth century servant immigration even increased.

The research population consists of four birth cohorts of women (1830, 1846, 1860 and 1880) selected in two rural local contexts, Assenede and Eine-Heurne-Mullem, both located

about 25 kilometres from Ghent.[1] The choice for two separate birth contexts originates from the assumption that the demographic regime in the place of origin affected people's fertility in later life. After all, it has been indicated in local studies that the region of origin was often reflected in the fertility behaviour of migrants (Eggerickx, 2001; Perrenoud, 1995). Assenede and Eine-Heurne-Mullem were comparable in population size and road and rail network, but differed in socio-economic organization and level of secularization. In Assenede, situated partly in the polder area, large farms dominated the employment market, which was mainly based on casual or contractual labour. Eine-Heurne-Mullem was located in inner Flanders where self-supporting farms prevailed and agrarian labour was supplemented with home-based linen industries. Episcopal reports furthermore signalled that Assenede was a *parochia minima devota*, while the people of Eine-Heurne-Mullem were considered good Catholics (Art, 1979). On the demographic level, the *traditional Malthusian escapes*, such as restricted marriage and outmigration, seemed to be less vigorously present in Assenede than in Eine-Heurne-Mullem (Matthys, 2012).

The life courses of the individuals in the cohorts were reconstructed using longitudinal data from population registers. Population registers are a unique source for historical demographic studies in the sense that they combine frequent cross-sectional overviews of all inhabitants of a municipality with interim updates on the individual level (Matthys, 2012). For example, changes in marital status, the births of children and migrations are reported in the registers. As a result, it is possible to reconstruct the life courses of mobile populations. In this case, I consulted population registers in the two rural birth places and in Ghent. The core group consists of those individuals who migrated to Ghent as domestic servants. Their behaviour was compared to that of those who were never servants or who only held servant jobs in the countryside. Table 1 overviews the entire research population.

Rural servants during the nineteenth and early twentieth century have not received the same amount of attention as their urban counterparts. Yet, there are several reasons to include them in this study as a separate category. To begin with, rural servants shared with urban servants the fact that they left their parental home to live with their employer. They thus became more independent from the family of origin than those girls who never entered service. Secondly, rural and urban servants share some demographic peculiarities. It has, for instance, been shown that both rural and urban servants had higher ages at first marriage than other locals (Devos, 1999; McBride, 1974). Furthermore, rural service was sometimes a stepping stone towards urban servant employment (Bras, 2004). Only those women who were most deprived (in terms of economic capital, literacy, etc.) usually did not make it to the city in the end. In this study as well, rural servants in general came from the lowest social background, compared to urban and non-servants (Matthys, 2012). Yet, the motivations to leave home may have the same than among women who finally became urban servants. The main differences between rural and urban servants is that the former moved in general stayed closer to their birthplace and were less exposed to very different normative and behavioural patterns than the latter. Most rural servants worked with

Table 1. Overview of research population.

| | Assenede | Eine-Heurne-Mullem |
|---|---|---|
| Urban servants | 212 | 184 |
| Rural servants | 114 | 49 |
| Non-servants | 384 | 418 |
| Total | 710 | 651 |

farmers, who usually belonged to the most conservative groups when it comes to demographic behaviour.

Multivariate survival analysis was used to determine whether former urban servants had lower marital fertility than others. The technique used here is *event history analysis*, which is especially appropriate to deal with individual longitudinal data (Box-Steffensmeier & Bradford, 2004). For this study I used the Cox model. Unlike other statistical techniques, event history models can account for life courses that are only partially observed (censoring) and are fit to deal with time varying covariates, such as age or occupation.

## 3. Qualitative analysis

This qualitative part offers a critical reading of narrative sources, examining two facets of social learning. Firstly, I focus on servant employment as a channel for facilitated access to contraceptive information. Secondly, I investigate whether former servants viewed their past employers as reference groups with regard to reproductive behaviour. Before that, it is important to consider the position of (former) employers in the social networks of young women.

### *3.1 The social networks of servants*

As stated before, Gittins, using interviews with working class women, was convinced that servants were in an isolated position and thus had less opportunity to exchange reproductive information and ideas than factory workers (Gittins, 1982). However, she tends to accept women's claims about social isolation and sexual ignorance without further argumentative contextualization. Yet, her interviews considered the interwar period, a time during which prudishness reflected respectability. Therefore, as Kling stated:

> The demonstration of sexual ignorance can therefore be said to include a claim for respectability (Kling, 2007, p. 183).

It is possible that former servants were keener to pretext sexual unawareness than former factory workers, which would mean they had been *more* penetrated by concerns about respectability than women who had worked in factories.

Fuchs and Moch, in contrast, argued that domestic servants were not isolated, but in fact had access to more extended and varied *reproductive networks* than women who worked at home or in manufactories (Fuchs & Moch, 1995). Reproductive networks represent information networks influencing partner choice, knowledge of contraceptive practices, abortion and childcare. Contrary to the personal networks of other working class women, those of servants included people of higher social status, namely their employers. From legal documents and other testimonial evidence, it showed that some servants relied on their employers for advice or support in case of pregnancy: for instance to give a favourable statement to charity officials. Whether servants were also influenced by their masters' reproductive norms or knowledge about contraceptives, was not investigated.

It is hard to draw a general picture of how much servants and masters were attached to each other. The strength and stability of the relationship depended on many factors, including the length of employment, and personal characteristics of both employer and employee. In nineteenth-century Flanders there are some examples of lifelong contacts. For example, Monica Bos and Petrus Vermeire, who had been servants with a doctor in Ghent for no less than 15 years, employed one of their former employers' maids after they settled on their own (Matthys, 2012). During service, the doctor had also helped Monica to

accumulate bank savings. The following example from a letter written in 1859 by a noblewoman to her sister likewise reflects a close affective bond between mistress and servant:

> I jump like a bird from branch to branch because now I will tell you about our little Charlotte who returned to her parents in Knesselare (as cited in Hemelsoet, 2004, p. 70).

It is likely that close relationships like these were exceptions, but they nevertheless show that servants and masters could have a strong impact on each other's lives. It is unclear if there was a development over time. In the first half of the twentieth century many employers looked back with nostalgia to former times when servants were still attached to their masters, but at the same time French speaking Catholic columnist Adolphe Hardy criticised bourgeois women in Belgium for being too confidential with their maidservants (Vanderpelen, 2001). He believed that many female employers were too open with their servants about intimate matters. Even when employers and servants did not have close personal relationships, it was still possible for servants to be influenced by their masters' behaviour by means of social learning.

### *3.2 Service and information exchange*

Social learning involves that individuals acquired new information via social interaction. With regard to domestic service, the central issue is whether servants learned about contraceptive practices through observation of their employers' behaviour.

To begin with, there are indications that domestic servants were perceived by medical doctors to be aware of the sexual and reproductive habits of their masters. In the writings of the Ghent Medical Society, housemaids were mentioned as informants in such delicate matters. For example, in 1839 doctors investigated a young girl with overall serious health problems. In order to find out the mysterious cause, her nursemaid slept with her in the same bed and

> observed her more attentively, and confided to the doctors that this unfortunate girl frequently committed the act of onanism (Société de Médecine de Gand, 1839, p. 223)

This quote indicates that the domestic employee in this case was considered capable of observing and understanding the sexual experiments of her employers' children.

To some extent, servants were also involved during the pregnancy and delivery of their mistresses in the eighteenth and nineteenth centuries. Evidence from upper-class family shows that they were part of the joy and misery surrounding childbirth: usually they were offered some punch and money when a child in their employer's family was born or baptized (Robberechts, 1986). In exceptional circumstances they even actively assisted during their mistress's delivery. This was the case in 1858 when a Ghent noblewoman wrote in a letter to her sister-in-law that one of her servant girls *with a little experience* assisted her successfully at the birth of one of her children in the absence of a doctor. Of course, this was not a common situation, but multiple other records confirm that female servants were often present at the deliveries of their mistresses. It is clear that in these instances the participation of the servants happened with the permission of the employers and was considered normal.

[Q4] In the interviews about early twentieth century there are some accounts of masters who explicitly educated their servants on matters of partner choice, sexuality and even contraception. One servant mentioned that whenever she came back to the house of her employers after a free Sunday afternoon, her mistress joined her. On these occasions she advised her servant about her relationship with her boyfriend, who always wanted to go to

the movies, a favourite spot for secret kissing and cuddling (De Keyzer, 1997). Another woman even declared that her former mistress unambiguously advocated birth control:

> When I had my second child, my last mistress gave me a card for periodical abstinence (as cited in Steverlynck, 2000, p. 131).

Also during the nineteenth century employers sometimes actively assisted their employees in their reproductive choices. In a court case from 1888 the role of a female employer in buying an abortive medicine for her servant was examined (Gryson, 2009, p. 122). Yet, cases like these are not frequently cited and it is unlikely that the overt intervention of employers in their servants' reproductive life was common practice.

As expected, there are a lot more references towards social learning that took place through observation-only. Either servants found information in books or they actually overheard conversations or witnessed contraceptive practices.

Several Catholic handbooks and writings warned servant girls for *bad books* that could be present in the houses of their employers. At a Catholic conference in 1914, Joris Matheussen presented a report about rural immigrants in the city, which stated that:

> The bad press spreads and captures the curious, ignorant girl. Because on many job positions there are non-catholic periodicals, sometimes very worldly fashion and other magazines, who are sniffed through by maidservants more than once, before they are thrown in the bin. Often it happens that there are immoral books in the house and the female servant has the opportunity to read them after her work (Matheussen, 1914, p. 192).

The Catholic authors never state clearly what exactly they mean by *bad press* and *immoral books*. These concepts are probably not limited to books which contain contraceptive information. However, given the harsh discourse against Neo-Malthusianism that was developed during this period[2] and the frequent references of Matheussen himself towards this evil, it is clear that books with contraceptive advice were at least an non-negligible part of the malicious literature. Even for illiterate women, these books contained useful information as they were extensively illustrated (McLaren, 1983). A former servant confirmed that:

> everything could be read and seen on drawings (as cited in De Keyzer, 2005, p. 54).

Books were however not the only source of information about contraceptive matters. Those servants who were involved in the most intimate components of personal care, such as helping to bathe and dress their mistresses, became aware of private everyday habits as well. This care for personal hygiene and make up was mainly performed by chambermaids. One former servant indicated that:

> The chambermaids were often around the masters' bedroom and therefore heard everything and were a lot brighter (as cited in Steverlynck, 2000, p. 131).

Clearly, acquiring insight and sex and reproductive issues was a gradual process. Several women testified how at the beginning of their career, they were very uninformed. One servant who walked in on her employers making love, could not make sense of what she was seeing and believed that

> what they were doing, was certainly something for the rich (as cited in De Keyzer, 1997, p. 241).

There were more testimonies like this. A young servant girl for instance had no idea what the *strange rubber thing* was that stood in a glass next to the master's bed. Several respondents however stated that despite this early naivety they became well informed after spending some time in service:

later I understood that must have been a condom (as cited in De Keyzer, 1997, p. 241).

The above quotes reveal that servants did indeed acquire information about sexuality and reproduction during domestic service, even without conversation. As such the Flemish results are opposite to those of Gittins, whose interviews concern the same time frame as those used here. While this different output could arise from methodological differences, it may also be an indication of regional differences in the European fertility transition. For instance, in Belgium there was a sharp distinction between the fertility decline in French- and Dutch-speaking areas (Lesthaeghe, 1977). Van Bavel demonstrated that even within Flanders, French-speaking couples had lower fertility than others (Van Bavel, 2002). Most of the noble and bourgeois households in Ghent were francophone. This linguistic distinction between servants and masters was likely less present in the British case, especially because relatively more maids in Britain worked in middle-class households. Linguistic and social aspects like these determined the master–servant relationship in various European contexts and undoubtedly affected social interaction mechanisms. More comparative research is needed, however, to get a more profound grasp of these processes.

Nevertheless, from the results displayed above, it appears that in households where there were multiple servants, information exchange took place between colleagues as well. More experienced servants helped their younger co-workers to frame unfamiliar situations. A 16-year-old chambermaid, for example, had accidentally witnessed a lesbian petting by a member of the employer's family. When she asked the kitchen maid about what she had seen, this woman explained it to her (De Keyzer, 1997, p. 241). Sometimes fellow servants themselves took the initiative to inform their younger colleagues. When a 16-year-old girl was approached by a boy in the house where she worked, the kitchen maid gave her a book about sexual education (De Keyzer, 1997, p. 54).

Work floor gossip was thus not absent in the lives of servants with co-workers. Those who were the only employee in the household may have had fewer contacts within the household, but more often frequented markets and shops where a lot of contraceptive knowledge was acquired according to testimonies in court cases (Gryson, 2009). On top of that, servants often changed jobs, so most of them were not maids-for-all-work during their entire career.

### *3.3 Reference groups*

Information on contraception is not sufficient to explain fertility control. It should also be morally acceptable for the individual to limit childbearing. Reference groups, who set the norms for reproductive behaviour, play an important role in this. I examine whether former employers were seen as a *reproductive* reference group by women themselves.

It has been demonstrated that normative influence can even be more important than disposing of accurate information to explain practices of fertility control. Using interviews, Kate Fisher showed that the adoption of fertility limitation did not necessarily involve being well-informed (Fisher, 2000). Although family size limitation became an integral part of sexuality around 1900, she nevertheless discovered a *vague and haphazard* approach towards birth control among British couples in the first half of the twentieth century. It appeared that a new ideal of small families was the result of a more oblivious mentality change. Being well-informed is thus not sufficient to explain family size limitation. There must also be a motivation that is stronger than the social prohibitions on fertility control (Van Bavel, 2010). Servants witnessed the lifestyle, perceptions and behaviour of the middle and upper classes from nearby and may therefore not only have been more informed but also more motivated to control their family size than other women

because they were more influenced by bourgeois family values. After all, diffusion studies have already shown that spatial proximity to low fertility couples had a negative impact on one's own fertility (Van Bavel, 2004).

According to Catholic authors the upper classes had a strong impact on the spread of contraceptive intentions within the working classes (Vermeersch, 1909). By limiting the size of their own families, they set a bad example to the masses, which associated upper class behaviour with respectability and *higher intellectual culture*. The relatively unspoiled rural immigrants, who sought employment in town, were soon affected by these attitudes:

> And so the rural immigrant soon knows the burden of childbearing, and he feels humiliated when he sees Sir or Madam disgusted about coming into their house with 6-7-8 children. Ugh! (Matheussen, 1914, p. 101).

On top of that, the elites were believed to put pressure on medical doctors to *transmit* their morals onto the working classes (Vermeersch, 1909).

Yet, from medical reports and testimonies there is little evidence that the upper classes were seen as a reference group by working class women, motivating contraceptive practices among the working classes.

The reasons to practice family size limitation expressed by Flemish women in the first half of the twentieth century were strikingly similar to those distinguished by Kling for Sweden (Kling, 2007). The main incentives were related to preserving one's standard of living and to the health status of the woman. It was not extreme poverty that led people to the use of fertility control, but the ideas about the appropriate resources to raise children. These ideas were clearly inspired by bourgeois perceptions of childrearing, but there were never explicit references to the habits of the upper classes. Respectable childrearing was defined within working class networks: in the early twentieth century, women with many children were pitied by their neighbours or friends (De Keyzer, 2005; Steverlynck, 2000).

When it came to health issues, women sometimes referred to their own former negative experiences with childbearing (for example De Keyzer, 2005, p. 382; Steverlynck, 2000, p. 143). During the nineteenth century, similar references to reproductive health were still rare. In general, the doctors of the Ghent Medical Society complained about the strong reluctance of working class people with regard to health care (Société de Médecine de Gand, 1868). More often than making allusions to their own lives, however, the twentieth-century respondents referred to their mothers as dreadful examples of how the burden of a large family harmed physical and emotional wellbeing. One woman born in 1902 claimed:

> My mother was constantly pregnant between the ages of twenty and forty. [ . . . ] Her entire sexual life was grafted on childbearing. It was torture [ . . . ] I definitely knew I did not want so many children (as cited in Steverlynck, 2000, p. 145–146).

Another woman said:

> My mother was in no condition for such a large family. Her pregnancies were torture. She lost weight before our very eyes. The deliveries were long and hard. [ . . . ] I took my fate in own hands (as cited in Steverlynck, 2000, p. 146).

No direct or indirect references to servants' employers or middle and upper class habits in general could be found. The negative experiences of mothers appeared to be the main stimuli to use birth control, but there are also regular allusions to the opinions of other peers, such as neighbours who lamented mothers with many children (Steverlynck, 2000). Middle- and upper-class acquaintances or former employers were not designated as reference groups.

Yet, concern about maternal health reflects a typical upper-class preoccupation. This gives away that a process of *embourgoisement* of values has taken place even though women did not explicitly refer to the behaviour of the bourgeois (Banks, 1981; Velle, 1986). This apparent paradox reveals that embourgeoisement was a complex process that took place to a large extent on the unconscious level.[3] Quantitative analysis might help to reveal such patterns of diffusion that remain hidden in the narrative evidence. For example, using a Ghent survey from around 1900, Van den Eeckhout argued that that as soon their husbands' wages permitted it, married women chose jobs in the domestic sphere, although this was usually not the best choice from an economic perspective (Van den Eeckhout, 1993). This suggests that some segments of the working class population pursued the bourgeois male breadwinner ideal. In contrast to testimonial data, quantitative data for Flemish working class populations are also available on a large scale for the nineteenth century. This allows covering exactly the period of change that remains largely out of sight in the qualitative material and during which working-class pioneers of fertility control stood out from the rest of the masses. In the following statistical analysis, I will analyse whether former urban domestic servants had lower fertility than other women.

## 4. Quantitative analysis

In the qualitative part it was shown that servants collected information about birth control via their older colleagues and via their masters. Furthermore, the main incentives to limit family size – state preservation and maternal health – were undeniably inspired by bourgeois family values. Yet, when women explained their own fertility choices, they did not refer to their former employers or other upper-class individuals. Instead, the experiences of peers – family, friends and neighbours, served as examples. Nevertheless, it is possible that more unconscious and latent mechanisms of social influence have operated here. In order to measure these unspoken channels of influence, the marital fertility of former servants needs to be confronted with that of women who never had the servant experience. To this end, life course information was used of four cohorts of women born in two rural places around Ghent.

### *4.1 Marital fertility of former servants*

The main hypothesis is that those women who had been servants in Ghent were influenced by reproductive behaviour of their employers – a pioneering group in the use of marital family size limitation – and applied similar behaviour when they were having children within marriage themselves. Former urban servants are thus expected to have lower marital fertility than women who had not been in service.

In the subsequent longitudinal analysis, servant status is a categorical variable distinguishing among women who were never a servant (non), women who were a servant only on the countryside (rural) and women who were servants in the city (urban). It is thus considered a fixed characteristic of the individual based on particular *previous life experiences*, of which rural–urban forms an integral part, rather than a simple occupational category at the time of childbearing.

Figure 1 shows the age-specific marital fertility rates of former servants and women who were never servants in all cohorts.[4] The graph indicates that the urban servants indeed had considerably lower fertility than non-servants.

In all age groups, the fertility level of non-servants is higher than that of former urban servants, resulting in a difference of more than two births in the total marital fertility rate.

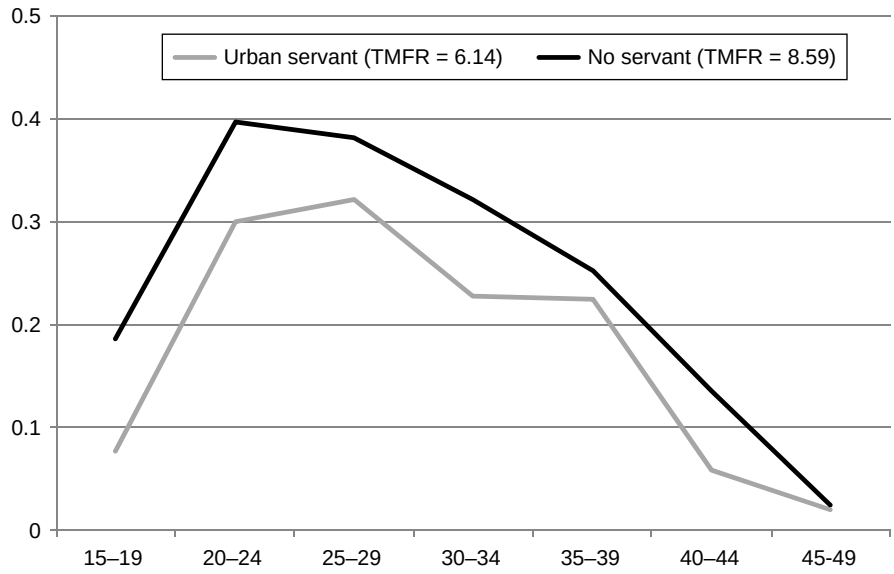


Figure 1. Age-specific marital fertility of servants and non-servants.

In addition, the curve of the non-servants has a clear convex shape, which might suggest the absence of fertility control at later ages (stopping or parity dependent fertility control). This sharp outline is noticeably disrupted in the curve of former urban servants. Yet, variations like these might also be attributable to intertwining factors, such as differences in the average marriage age of various groups. To control for this a multivariate event history analysis is carried out. I have made five models, each time adding a different set of explanatory variables. The covariates used in the statistical models are displayed in Table 2 and described below.

Next to servant status, two important variables of interest are place of birth and birth cohort. As mentioned before, two separate birth places were chosen because studies on migrants' fertility behaviour have shown that the fertility regime in the place of origin had an effect on migrants' childbearing. Eine-Heurne-Mullem was situated in the heartland of the restrictive marriage pattern in Flanders, while the Malthusian pattern was less strict in Assenede. It can therefore be expected that among the women born in Eine-Heurne-Mullem fertility was controlled more through marriage than within marriage compared to those from Assenede. Birth cohort is measured with a variable in which each cohort is a category: G1830, G1846, G1860 and G1880. The women of the different cohorts were born in different stages of the fertility decline. I expect fertility to be significantly lower in the last two cohorts.

The basic model also accounts for general characteristics associated with fertility: age of the woman at the time of childbirth, death of the previous infant, age at marriage and parity. All of these variables usually have a strong influence on the probability of another birth, even in the absence of efficient birth control. Both in contexts of natural and controlled fertility, childbearing gradually declined as women aged and marriage duration and parities increased as a result of biological factors and of decreased coital frequency. Age is a categorical variable using 5-year age intervals. Death of the previous infant is a variable related to breastfeeding and potential child replacement. Breastfeeding prolongs the period of postpartum amenorrhea, the temporary sterility after giving birth, and

Table 2. Distribution of explanatory variables.

| | Percentage/Mean (Standard deviation) |
|---|---|
| Servant status | |
| No servant | 77.30 |
| Urban servant | 14.70 |
| Rural servant | 8.00 |
| Place of birth | |
| Assenede | 56.37 |
| Eine-Heurne-Mullem | 43.63 |
| Cohort | |
| G1830 | 21.15 |
| G1846 | 26.23 |
| G1860 | 25.63 |
| G1880 | 26.99 |
| Age of the woman | |
| 15–19 | 0.73 |
| 20–24 | 10.7 |
| 25–29 | 21.87 |
| 30–34 | 21.74 |
| 35–39 | 22.83 |
| 40–44 | 14.24 |
| 45–49 | 7.98 |
| Death previous infant | |
| No | 95.33 |
| Yes | 4.67 |
| Parity | |
| 1 | 21.3 |
| 2 | 17.83 |
| 3 | 14.37 |
| 4 | 12.98 |
| 5 | 9.43 |
| 6 | 7.11 |
| 7 | 6.01 |
| 8 and more | 10.97 |
| Age at marriage | 25.59 (4.84) |
| Previous extramarital birth | |
| No | 92.87 |
| Yes | 7.13 |
| Previous bridal pregnancy | |
| No | 98.73 |
| Yes | 1.27 |
| Literacy | |
| No | 21.37 |
| Yes | 43.87 |
| Unknown | 34.76 |
| Social status of father | |
| Low | 57.31 |
| Middle | 36.39 |
| Upper | 2.13 |
| No father | 4.17 |
| Social status of husband | |
| Low | 52.99 |
| Middle | 33.71 |
| Upper | 3.70 |
| Unknown | 9.60 |

(*continued*)

Table 2 – *continued*

| | Percentage/Mean (Standard deviation) |
|---|---|
| Place of residence | |
| Rural residence | 86.98 |
| Urban residence | 8.75 |
| Mixed residence | 4.27 |
| N episodes | 4350.00 |
| N women | 450.00 |
| N births | 1877.00 |
| N person years | 8132.06 |

popular beliefs hampered intercourse during the breastfeeding period (which is assumed to be until the first birthday). Alternatively, it is possible that the death of an infant led to the replacement of this child. In both cases, the death of a previous infant was linked with increased fertility. This dummy variable was limited to the intervals 9–17 months after previous childbirth to account for the 9-month time difference between conception and birth. Parity refers to the number of childbirths a woman has experienced. A childless woman had parity zero, a woman who had one child has parity one, and so on. In the models used here, first births are excluded. Age at marriage is included as a continuous variable.

In a second model, two variables are added that refer to the social background and premarital fertility of the women: social status of the father, literacy and occurrence of extramarital births and bridal pregnancies. It is important to include variables of social status because urban servants might have been selected among particular layers of the population. Urban servants were usually of a working class background, but did not belong to the very poorest groups in society (Bras, 2002). It is expected that literate women had lower fertility than illiterate women because they might have been more open to innovations and literacy facilitated access to Neo-Malthusian information. The variable is based on whether a woman signed the marriage registers or not. Social status of the woman's father is based on the occupational title of the father when a woman was 15. If this was not available, the father's occupational title from her birth register was used. Weavers and (un)skilled workers were categorized as low, farmers and artisans as middle and highly skilled professions as upper class. In both cases of previous illegitimate births and prenuptial conceptions, a fixed dummy variable was created. Studies on the effect of premarital births and conceptions on marital fertility are rare. Yet, Michel Oris found that couples without premarital conceptions – des couples sages – were more likely to control fertility within marriage (Oris, 1993). The underlying idea was that they lived up to bourgeois family values. I distinguished between extramarital births and bridal pregnancies because in the latter case, deviant behaviour was 'corrected' by marriage.

As a third step, place of residence was added to the covariates. After all, this study aims to investigate a rural–urban migration trajectory. Some women who left their birthplace to become a servant in Ghent, remained in the city after the end of their career. About one third of the women, however, returned to the countryside after the servant experience. The variable place of residence distinguishes between women who only lived in the countryside during their childbearing years (rural residence); those who lived only in the urban area (urban residence) and those who moved back and forth between Ghent and their hometown (mixed residence). Place of residence is linked to the influence of local fertility

customs during childbearing. It can be seen as a proxy of the influence of social peers on fertility.

Fourthly, I included social status of the husband based on his occupation. The same criteria as with the social status of the father were used. In Model 4 place of residence was excluded for reasons explained below; in Model 5 the analysis was run with all abovementioned variables.

Table 3 below displays the outcomes of the subsequent regressions. The hazard ratios and standard errors are shown. The levels of significance are indicated with stars, defined below the table. The models include both open and closed birth intervals. Strictly, the model measures duration so the reading comes down to the interpretation of relative durations. Women who do not experience another birth are considered *censored* observations. The Cox regressions account for this. In practice, the common interpretation is as follows: for each categorical variable a reference category is selected. Usually this is the category with the highest frequency. In this category the hazard ratio equals one. Values lower than one are associated with lower risks of experiencing the event of interest. They should be interpreted as proportional hazards: this means that a ratio of 0.8 can be perceived as a 20% lower risk of experiencing the event (Jenkins, 2005). Likewise, values higher than one are associated with higher risks of failure. For example, a value of 1.3 is considered as a 30% higher risk of experiencing the event. Without specifications, the model assumes that all events (births in this case) are independent from one another. Therefore, births were clustered per woman in all models. This accounts for the correlation between births of the same woman.

In the first model urban service has a significant lowering effect on fertility; former urban servants had a risk 18% lower than non-servants to experience a next birth. Rural service had no measurable effect. This suggests that the migration from countryside to town had a greater impact on the reproductive life course, than the mere fact of living and working outside the parental home. The place of birth also affected marital fertility in the anticipated way: it was higher for women born in Eine-Heurne-Mullem than for those born in Assenede. Similarly, the results of the demographic covariates are largely as predicted: fertility declines with age and increases particularly strongly when the previous infant died. The risk for another birth for women at parities two, three and four is significantly lower than for women who had only one previous child, but the (not significant) outcomes starting from parity five do suggest increased at the highest parities. Age at marriage has no measurable effect.[5] After the introduction of variables controlling for social background and reproductive history in Model 2, these outcomes persist. None of the new variables added any significant effects.

However in Model 3, after the introduction of the social status of the husband, the significance effect of urban servant experience is lost. This indicates that former urban servants differed in partner selection from women in the non-servant and rural servant categories; although a descriptive analysis on social mobility through marriage did not produce clear results (see Matthys, 2012). The explanation probably lies with the 9.6% husbands in the unknown category. In 68.26% of the observations these husbands of unknown social status were married to former urban servants. The unknown group is also the only category in which fertility was significantly lower. Yet, not only were husbands in the unknown category more common among former urban domestics, they also occurred mainly among couples who lived in the city during their reproductive period (66.16% of all unknown husbands). Occupational registration was less accurate in the urban population registers, especially when people moved a lot within town.

Table 3. Cox proportional hazard models of marital fertility standard errors.

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| Servant status | | | | | |
| No servant (ref.) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban servant | **0.82**†† | **0.84**†† | 0.90 | 0.96 | 0.98 |
| | (0.07) | (0.07) | (0.08) | (0.09) | (0.09) |
| Rural servant | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 |
| | (0.76) | (0.80) | (0.78) | (0.89) | (0.86) |
| Place of birth | | | | | |
| Assenede (ref.) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Eine-Heurne-Mullem | **1.19***** | **1.21***** | **1.19***** | **1.23***** | **1.22***** |
| | (0.06) | (0.07) | (0.06) | (0.07) | (0.07) |
| Cohort | | | | | |
| G1830 (ref.) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| G1846 | 1.01 | 1.00 | 1.01 | 1.01 | 1.01 |
| | (0.92) | (0.99) | (0.85) | (0.94) | (0.84) |
| G1860 | **0.87**† | **0.87**† | 0.90 | **0.88**† | **0.89**† |
| | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) |
| G1880 | **0.62***** | **0.60***** | **0.61***** | **0.60***** | **0.61***** |
| | (0.04) | (0.05) | (0.05) | (0.05) | (0.05) |
| Age of the woman | | | | | |
| 15–19 | 1.56 | 1.53 | 1.51 | **1.67**† | **1.65**† |
| | (0.50) | (0.47) | (0.47) | (0.47) | (0.46) |
| 20–24 | 1.00 | 1.00 | 1.00 | 1.02 | 1.02 |
| | (0.08) | (0.08) | (0.08) | (0.08) | (0.08) |
| 25–29 (ref.) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 30–34 | **0.86**** | **0.86*** | **0.86*** | **0.86**** | **0.85**** |
| | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) |
| 35–39 | **0.77***** | **0.77***** | **0.76***** | **0.75***** | **0.75***** |
| | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) |
| 40–44 | **0.43***** | **0.44***** | **0.44***** | **0.43***** | **0.43***** |
| | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) |
| 45–49 | **0.10***** | **0.10***** | **0.10***** | **0.10***** | **0.10***** |
| | (0.02) | (0.02) | (0.02) | (0.02) | (0.02) |
| Death previous infant | | | | | |
| No (ref.) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | **2.52***** | **2.50***** | **2.47***** | **2.49***** | **2.48***** |
| | (0.15) | (0.15) | (0.15) | (0.15) | (0.15) |
| Parity | | | | | |
| 1 (ref.) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 2 | **0.65***** | **0.65***** | **0.65***** | **0.65***** | **0.65***** |
| | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) |
| 3 | **0.76**** | **0.76**** | **0.76**** | **0.76**** | **0.76**** |
| | (0.07) | (0.07) | (0.07) | (0.07) | (0.07) |
| 4 | **0.75**** | **0.75**** | **0.75**** | **0.75**** | **0.75**** |
| | (0.07) | (0.08) | (0.08) | (0.08) | (0.08) |
| 5 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 |
| | (0.09) | (0.10) | (0.09) | (0.09) | (0.09) |
| 6 | 0.87 | 0.86 | 0.87 | 0.86 | 0.86 |
| | (0.10) | (0.11) | (0.11) | (0.10) | (0.10) |
| 7 | 0.83 | 0.83 | 0.83 | 0.84 | 0.84 |
| | (0.12) | (0.12) | (0.12) | (0.12) | (0.12) |
| 8 and more | 0.98 | 0.99 | 0.98 | 0.98 | 0.98 |
| | (0.11) | (0.11) | (0.11) | (0.11) | (0.11) |
| Age at marriage | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Previous extramarital birth | | | | | |

(*continued*)

Table 3 – *continued*

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| No (ref.) | | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | | 0.99 | 1.01 | 1.01 | 1.02 |
| | | (0.08) | (0.08) | (0.08) | (0.08) |
| Previous bridal pregnancy | | | | | |
| No (ref.) | | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | | 1.17 | 1.14 | 1.13 | 1.12 |
| | | (0.14) | (0.13) | (0.14) | (0.14) |
| Literacy | | | | | |
| No (ref.) | | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | | 1.02 | 1.00 | 1.02 | 1.00 |
| | | (0.07) | (0.07) | (0.07) | (0.07) |
| Unknown | | 0.99 | 1.02 | 1.03 | 1.04 |
| | | (0.08) | (0.08) | (0.08) | (0.08) |
| Social status of father | | | | | |
| Low (ref.) | | 1.00 | 1.00 | 1.00 | 1.00 |
| Middle | | 0.97 | 0.96 | 0.97 | 0.95 |
| | | (0.05) | (0.06) | (0.05) | (0.06) |
| Upper | | 1.03 | 1.00 | 1.09 | 1.05 |
| | | (0.05) | (0.06) | (0.23) | (0.21) |
| No father | | 1.19 | 1.17 | 1.19 | 1.17 |
| | | (0.16) | (0.16) | (0.15) | (0.16) |
| Social status of husband | | | | | |
| Low (ref.) | | | 1.00 | | 1.00 |
| Middle | | | 1.04 | | 1.04 |
| | | | (0.06) | | (0.06) |
| Upper | | | 1.03 | | 1.08 |
| | | | (0.15) | | (0.16) |
| Unknown | | | **0.73**$^{\dagger\dagger}$ | | 0.83 |
| | | | (0.10) | | (0.13) |
| Place of residence | | | | | |
| Rural residence (ref.) | | | | 1.00 | 1.00 |
| Urban residence | | | | **0.67**** | **0.73**$^{\dagger}$ |
| | | | | (0.10) | (0.13) |
| Mixed residence | | | | **0.77**$^{\dagger\dagger}$ | **0.78**$^{\dagger\dagger}$ |
| | | | | (0.10) | (0.10) |
| N episodes | | | 4350 | | |
| N women | | | 450 | | |
| N births | | | 1877 | | |
| N person years | | | 8132.06 | | |
| Wald chi2 ($p < 0.0001$) | 501.86 | 587.69 | 527.31 | 527.79 | 534.60 |
| Log pseudolikelihood | −11111.71 | −11110.07 | −11106.18 | −11103.96 | −11102.37 |

Note: $^{\dagger}p < 0.1$, $^{\dagger\dagger}p < 0.05$, $*p < 0.01$, $**p < 0.005$, $***p < 0.001$.

Therefore, a fourth model was run, excluding once more the social status of the husband, but including the place of residence during childbearing. This model shows that both urban and mixed residence were associated with lower fertility and neutralized the significant impact of urban service. Yet, it should be noted that former urban servants more often had urban or mixed residence during their reproductive career than other women: no less than 61.03% compared to 7.13%. As such, service was the main channel for women to move from the countryside to the city and did have an indirect effect on marital fertility.

Although urban residence and having a husband of unknown social status were closely linked – for over 75% of all women with urban residence the husband's social status is missing – a final model was run, including all variables. The husband's unknown social

status was no longer significant, but urban and mixed residence were still associated with lower fertility significant. [Q5]

In summary, the subsequent models demonstrate that the effect of urban service on marital fertility was likely of a more indirect nature, namely by facilitating urban settlement after marriage and/or by selective partner choice. Living in the city had a negative effect on marital fertility, while servant experience did not result in long-lasting social influence on behaviour. It appears that upper class and higher middle class habits were not transmitted to former servants' own lives. This is consistent with the qualitative analysis, which showed no direct influence of the employers' habits on those of their servants. However, the testimonial data unquestionably revealed an embourgeoisement of values by the early twentieth century. It is likely that a slower, more latent transmission has taken place during which innovative ideas were not immediately put in practice. From this perspective, domestic service could still have been an important diffusion channel. After all, it was shown that during service useful information could be collected.

### *4.2 Spacing versus stopping?*

So far, the analysis has ignored the *type* of family size limitation. Yet, a considerable amount of literature on the European fertility decline is dedicated to the spacing versus stopping-debate. Spacing refers to the parity-independent prolonging of intervals between births. It has been found in pre-transitional populations and is often considered a more traditional type of birth control (Van Bavel, 2004). Stopping refers to parity-dependent termination of childbearing. The use of stopping was more innovative and was inherent to the fertility decline. If servants were influenced by the behaviour of the upper classes, who were forerunners in the use of modern contraception, it is likely that they applied more stopping than other women. In the models above, both closed and open birth intervals were included. As a result, the separate effects of spacing and stopping could not be determined: for some covariates spacing and stopping might have opposite effects, thus neutralising each other.

Until today, specialists do not agree upon an appropriate method to deal with spacing and stopping in multivariate analysis. After all, the two types of family size reduction are not easily distinguishable. What appears to be stopping might, for example, be non-completed spacing because the woman entered menopause. Jan Van Bavel has developed a method in which an event history analysis model of closed birth intervals is used to detect spacing and a logit model to investigate the probability of stopping (Van Bavel, 2004). Yet, in several recent unpublished conference contributions, George Alter proposed a different method, using bio-statistical cure models.[6] An application of Van Bavel's method to the data used here (results not shown here) produced outcomes that were in line with the expectations and with models shown in Table 3: urban service and urban residence were not associated with increased spacing, but urban residence did seem to have a positive effect on the more modern type of fertility control, namely stopping.

Until experts reach consensus about the correct method to use, bivariate analyses can provide basic insight in the use of spacing and stopping. The average length of all completed birth intervals ($N = 2410$) was not very different for former urban servants and non-servants: respectively 29.79 and 28.66 months. The age at which the last child was born among married women who were under observation until age 50, however, showed a marked distinction: it was only 36.98 years for urban servants and 39.78 for non-servants. This suggests that servants applied more stopping than women who had not been in service. These measures do not account for missing observations. A more advanced tool to detect

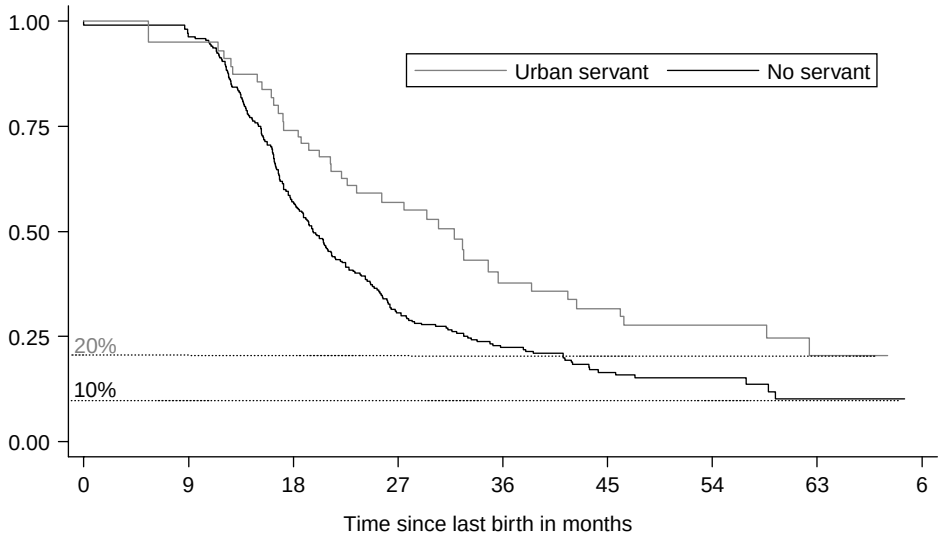


Figure 2. Kaplan-Meier survival estimates of birth intervals by servant status.

spacing and stopping between groups is the Kaplan Meier curve (KM). This frequently used tool in survival analysis offers a graphical display of the estimates of the 'survivor function' and accounts for missing data. In this case it displays the percentage of women without a birth in function of the time since the previous birth for completed and open intervals. First births are excluded. The more abruptly the curve drops, the shorter birth intervals are. The percentage without a birth provides an indicator of stopping. Figure 2 shows the survivor estimates per servant status. Rural servants were omitted because of the small number of observations.

The figure clearly suggests that urban servants used both more spacing and stopping than other women: the curve of former servants drops more rapidly and twice, and the amount of women with open intervals after 6 years is twice as high for urban servants than for non-servants. Evidently, underlying dynamics may be concealed in this bivariate approach. Differences in stopping and spacing might be more strongly affected by other factors, such as place of residence of social status, than by servant experience. It is also possible that selection effects were at play; servants were not entirely randomly recruited within the population. Further research is needed to determine whether the distinctive fertility behaviour of former urban servants is due to factors before or after entering service. The preceding multivariate models seemed to indicate that there was an indirect effect of service on the fertility of rural–urban migrants, by facilitating urban settlement.

## 5. Conclusions

The aim of this paper was to determine whether urban domestic service functioned as a diffusion channel of fertility control in Flanders. The narratives showed that there was certainly work floor conversation about reproductive issues among servants, yet in the statistical model former servants did not have lower fertility than women who had never been servants. There are several possible reasons why the impact of domestic service on marital fertility was not observable in the figures.

Firstly, the qualitative analysis revealed that work floor gossip between co-workers and observation-only social learning between servants and masters mainly consisted of information exchange rather than of normative diffusion. This differs from Gittins' statements that servants were less informed about birth control than factory workers because of their isolated social position. Yet, it can be assumed that service was only one of many reproductive information channels for the working classes. Other analyses have shown that information exchange indeed took place in factories as well as in male dominated social networks (De Wilde, 2000; Matthys & Devos, 2010) or stressed the role of troubadours and salesmen travelling between town and countryside (Balthazar, 1999). As such, various diffusion channels of information operating within different groups of the working classes and servants are not distinguishable from the rest.

Secondly, from the testimonies it became clear that former employers or other upper class acquaintances were not designated as reference persons for fertility choices for one's own behaviour by former servants. Instead, working-class women referred to the life experiences of their family members and other peers when explaining their own fertility choices. Nevertheless, from about 1900 bourgeois values had undoubtedly penetrated the reproductive lives of working class women. It is likely that a slower, more latent and oblique process of influence had taken place, as Fisher's research on Great Britain suggested as well. In this process interaction mechanisms other than social learning are at play. Members of the social network that have a closer and more equal relationship to the individual than contacts in higher social strata, for instance neighbours, family and friends, exercise other types of social influence, such as contagion and social pressure. This is illustrated by the fact that women who lived in an urban environment during their childbearing years had lower fertility than those in the countryside. Working-class urban families controlled their fertility much earlier than their rural counterparts. In other words, the reproductive norms and values of the social network differed between town and countryside. As a result, the effect of urban domestic service on individual fertility may have been neutralised by the weight of group norms in rural areas. However, the large numbers of servants returning each year to their rural hometowns most likely contributed to a change in these dominant normative systems on the countryside. If this is the case, the effect of service operated more on a meso-level rather than that it left traces on the individual life course.

This paper enhances our understanding of the role of domestic service as a diffusion channel of fertility control. The unexpected and complex outcomes also prove that the study of migrants and the use of multifaceted methodologies – combining qualitative evidence and longitudinal individual data – are the best way to get a profound insight into the diffusion of innovative ideas and behaviour through different social strata and between urban and rural areas.

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## Notes

1. Eine-Heurne-Mullem in fact consists of the three villages Eine, Heurne and Mullem, which formed a historical and socio-economic unit (Matthys, 2012).

2. For example, in 1909 cardinal Mercier published a pastoral letter in French about *the duties of married life* in which contraception was severely condemned. One year later, it was translated into Dutch and published as Mercier, D. (1910). *Herderlijke brief voor den Vasten over de plichten van het huwelijksleven.* Mechelen.
3. Of course, for the twentieth century, I used only the testimonial evidence here that were published, which means that I used secondary sources. Although I am convinced that the main outcomes would be similar, the complete interviews might sketch a more nuanced picture.
4. Based on the following information: urban servants = 1901.67 person years (171 women); non-servants = 8080.02 person years (645 women). For reasons of clarity, the rather small number of rural servants (1024.55 person years or 98 women) was omitted.
5. Alternatively, the models were run with age at marriage as a categorical variable. This did not affect the outcomes.
6. Presentations at for instance Population Association of America 2007; Economic History Workshop 2010.

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