Name fashion dynamics and social class

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Abstract

Modern parents in The Netherlands choose the first names they like for their children. In this decision most follow fashion and as a typical property of fashion, many popular names now have a life cycle of only one generation. Some names show a symmetry between rise and fall of the name, but most names have a more complex behaviour, which can be modelled by multi-logistic distributions. These complexities could originate from social classes, that one after another adopt the name. This hypothesis was tested for the female name *Femke,* which has two more or less distinct popularity peaks centered around 1980 and 2000. The geographic diffusion of *Femke* did not provide an explanation for the two peaks. And also the names of brothers and sisters of *Femke* did not point into the direction of different groups of parents with distinct preferences and socio-cultural backgrounds. Since also names of media stars, politicians, or sportswomen do not provide a possible explanation, there still remains a challenge for further research.

I. Introduction

Naming of children in Western Europe has become highly dominated by fashion in the twentieth century. The popularity of some name starts to grow, reaches a maximum after some years, and declines again. Several questions arise about this mechanism, for instance: why does a name become popular, what determines its maximum popularity, what is the duration of the total period of popularity, is there a single mechanism or are multiple factors involved, what is the influence of social class in the process. In this paper we will address a number of these issues, but we will not arrive at conclusive answers.

An attractive model for the description of innovation and diffusion of some new product has been proposed by Rodgers (1964) , see figure 1. It assumes a total number of interested consumers, which can be distinguished in innovators as first buyers of the product, followed by early and late adopters, and laggards who buy late. The result is described by a logistic curve. This implies that the rate of growth is on the one hand governed by the number of products already sold, and on the other hand governed by the number of remaining possible consumers.

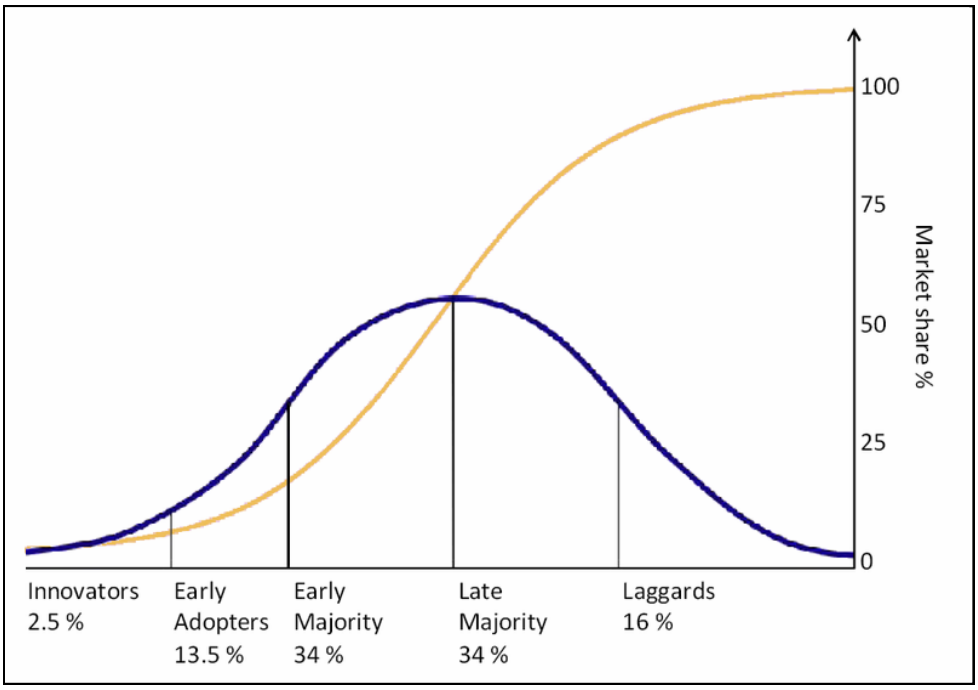


Figure 1. Innovation and diffusion of a new product, according to Rodgers (1962).

We could transpose this model to name popularity. A new name - wherever it comes from - may be attractive to a certain group of parents. Some of these parents adopt the name for their child while it is still hardly known, followed by a growing number of parents until it reaches its maximum. Later in time there remain less and less parents who may consider the name, and the name declines until almost no parents choose it.

II. Material

The first names that underlie the analyses in this paper are taken from the Dutch Civil Registration. These concern 16 million names from persons alive with Dutch nationality living in The Netherlands, and of 6 million deceased persons but mentioned as parents or children. The date and place of birth of persons is known, as well as the identifiers of themselves and their parents. The latter information implies a full first name genealogy of the population. Popularity distributions could be reconstructed from 1880 onwards, while geographic maps of places of births for a name can be given for the current population. The data are online available on the website of the Corpus of Dutch First Names (www.meertens.knaw.nl/nfb).

III. Popularity distributions

Figure 2 shows the popularity of *Ingrid* in The Netherlands. The name was not given to girls before 1930, but became popular in the fourties and fifties, reached its maximum around 1965, was one of the most popular girls names at the time, and declined in the seventies and eighties, while hardly any girl got the name in 2010.

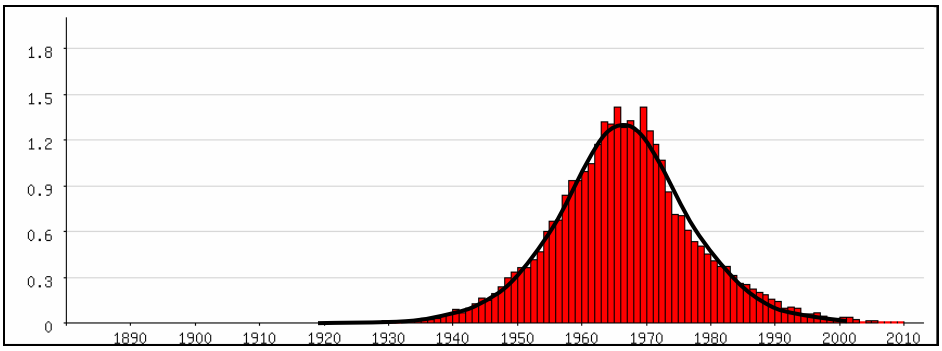


Figure 2. Popularity (%) of *Ingrid* in The Netherlands. The distribution is fitted with a logistic curve.

Figure 2 shows that the popularity distribution of Ingrid can be well described by a logistic curve. A major feature is the symmetry of the distribution: the popularity grows and declines in the same pace. This symmetry has been described for first names in France by Berger and Le Mens (2009). Other features are the maximum popularity (in % of all children), the year of maximum popularity and the duration of popularity. All these variables differ among names.

Although the popularity of some names can be described by a single logistic curve, this is certainly not the case for all names. Actually a few have this "ideal" profile, while most names show a more complex popularity. This is exemplified by the name *Hans* in figure 3. The popularity of *Hans* can be described by a) a base line of stable popularity over time and b) a series of logistic curves, each with its own maximum, year of highest popularity, and duration.

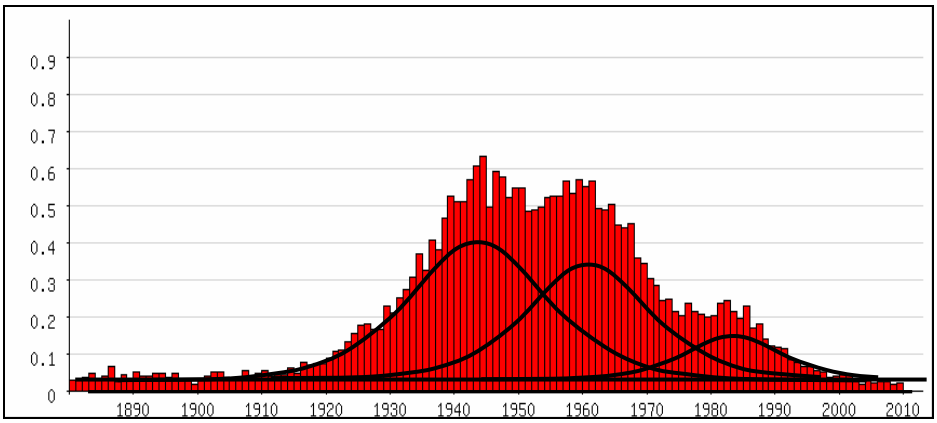


Figure 3. Popularity (%) of *Hans* in The Netherlands. The distribution can be fitted by a combination of three different logistic curves upon a stable base line.

IV. Name group dynamics

The popularity of *Hans* and other names of complex popularity, may suggest that there is not a single group of parents who fancy a name during a period, but that several groups of parents adopt the name, each group with its own dynamics. The existence of groups of parents with particular preferences for types of names has been shown by Bloothooft and Groot (2008) on the basis of the names of all children in the Netherlands born between 1985 and 2005. They

distinguished 14 name groups, each characterised by specific name preferences of parents. Figure 4 shows the contribution of each of 10 of these name groups, and some remaining categories, to the total number of births over the period 1900-2010.

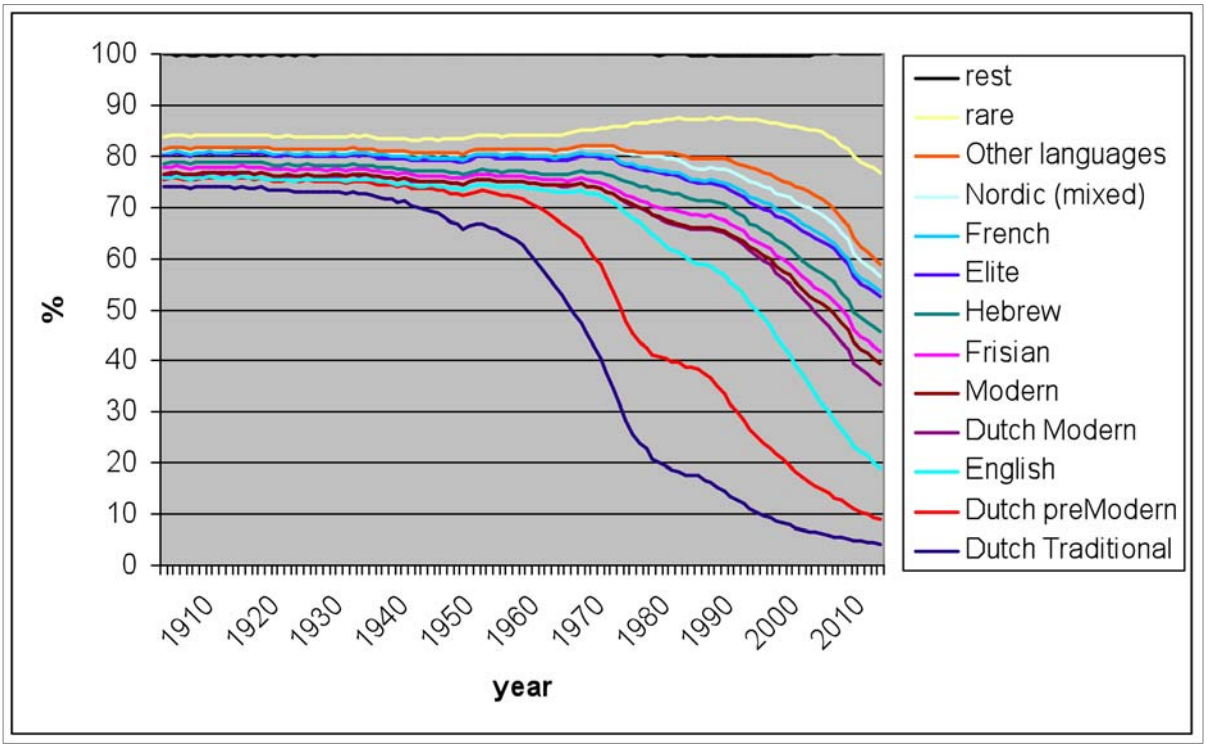


Figure 4. Cumulative percentage contribution of name groups to the total number of births per year, from 1900-2010.

Where in the beginning of the 20th century, 75% of the names were traditional Dutch, from 1940 onwards a differentiation started (at the expense of the decline of the traditional names). First the pre-modern Dutch names became popular, around 1960 followed by the English names, while around 1980 the Dutch modern names started to take over. The other name groups showed a gradual, but limited increase in popularity over time. <Other languages> concern Arabic, Turkish, Slavic, Italian, Spanish names that are recognised as separate groups but are taken together here. The category <rare> is defined as names with a frequency less than on average 1 per year. This category shows a considerable increase as well, but is scattered across names with uncommon spellings and names from other immigrant languages. The <rest> category are names that could not be assigned to a specific name group.

In the context of understanding the popularity of individual names, the period of popularity and and its maximum popularity should be understood in the framework of the dynamics of the name group they belong to.

Bloothooft and Onland (2010) showed the relationship between name groups with the education level (and income) of the parents and their lifestyle: traditional versus trendy (figure 5). This analysis is based on the period 1985-2006, but can be considered as the result of a process that started around 1940. Whereas until 1940 naming was highly traditional, a differentiation along the traditional-trendy dimension first separated the traditional names from the pre-modern Dutch names, soon followed by a further extension to English names. In later stages refined distinctions emerged (compare figure 4). The unsolved issue is whether social groups are

associated to distinct name groups, each with its own dynamics, or that social groups move naming preferences from one name group to another over time. Or, perhaps, that links between name groups and social classes are much more complex and only of a fuzzy nature.

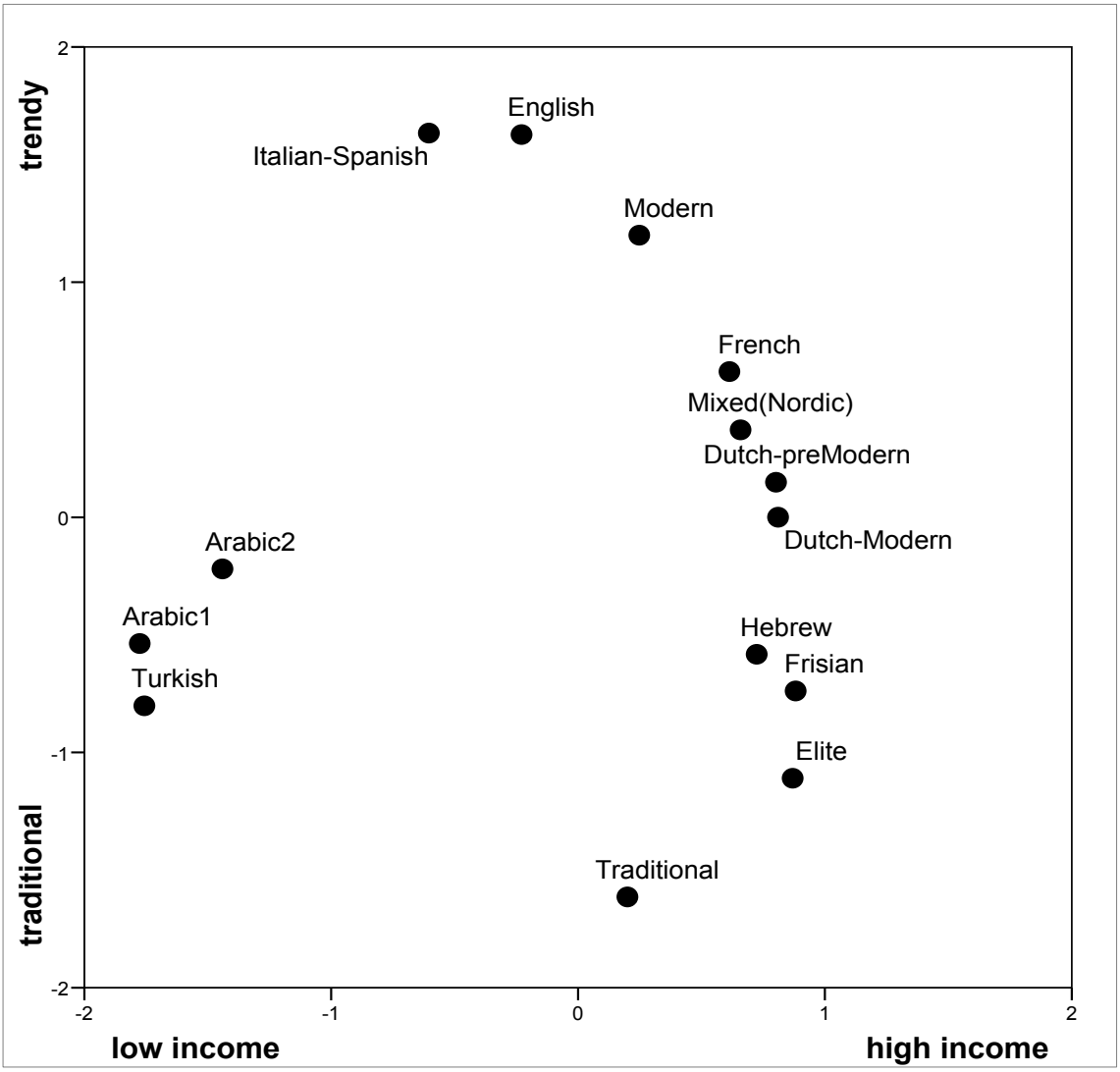


Figure 5. Name groups associated to dimensions related to income and lifestyle (Bloothooft and Onland 2010).

V. The case of *Femke*

Whereas the popularity of *Ingrid* could be explained by a single group of parents, with its own innovators and followers, for explanation of the popularity of *Hans* over almost a century it should be assumed that also groups as a whole could function as innovator and followers. Whether such a model applies could be investigated if groups are distinguishable from each other. Given the overlap between groups for Hans, this is a difficult task. But we also have the example of the girl's name *Femke* (figure 6), which has a very limited base line, and two quite distinct peaks in popularity.

Femke is a traditional Frisian girl's name (derived from male *Femme,* with female diminutive *-ke*) with very limited popularity in the province of Friesland. Until 1960 the name was unknown in the rest of the country. There was no famous name bearer at that time. Around 1960 the name started to become quite popular with a maximum in 1980 (the most popular name reaches 1,5 % at that time). While the name was in decline, a second period of popularity started which peaked in 2005. The three distinct periods each have a time range where they have full dominance: before 1960, between 1960 and 1980, and after 2000.

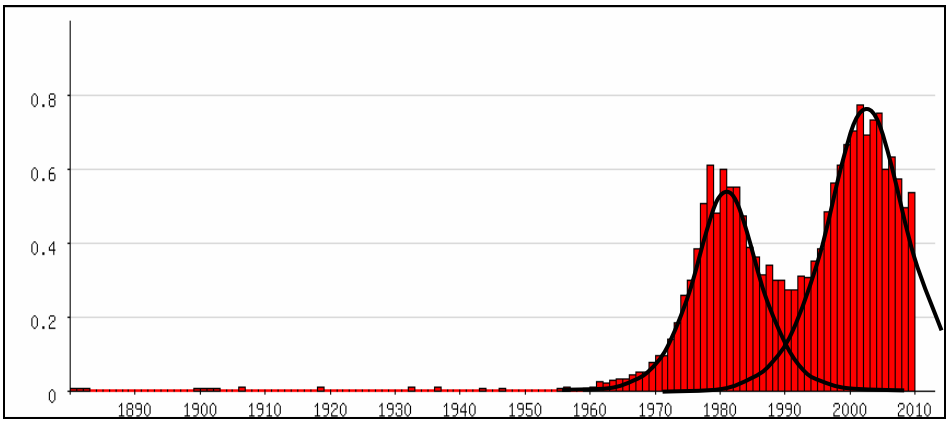
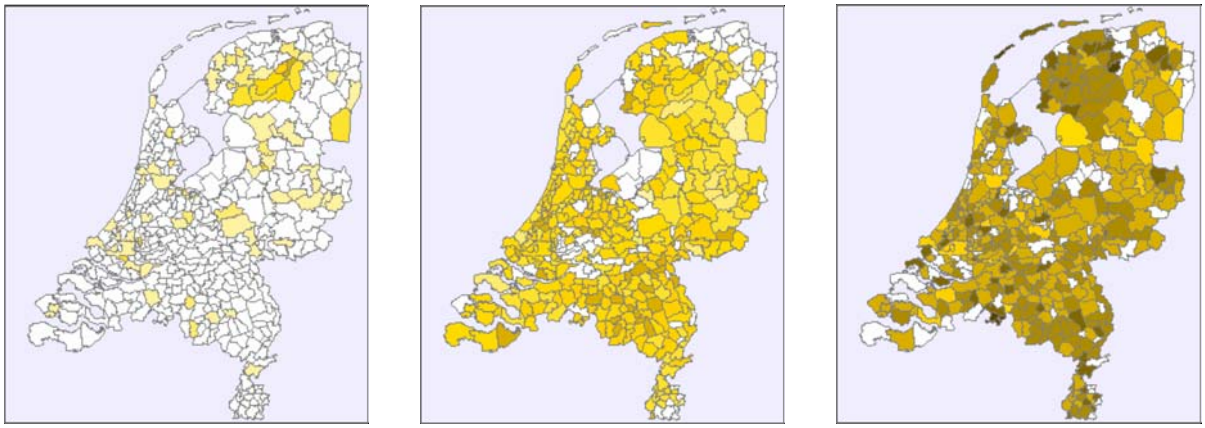


Figure 6. Popularity (%) of *Femke* in The Netherlands. The distribution can be fitted by two logistic curves with limited overlap.

V.1 Geographical diffusion

We analysed properties of the three popularity intervals of *Femke*, and start with the geographic distribution of the places of birth, see figure 7.



<1960 1960-1980 2000-2006

Figure 7. Geographic spread of place of birth of *Femke* in three periods with distinct popularity.

It can be seen that before 1960 the name was mainly given in the north of the country, in the province of Friesland, with scattered births across the country. Likely, the latter are girls with Frisian parents who moved outside their province to find a job elsewhere. Between 1960 and 1980, *Femke* became popular throughout the country with a slight dominance of the southern part. Detailed analysis for smaller time intervals did not reveal a particular diffusion pattern.

The same can be observed for the period 2000-2006. The conclusion is that there is no specific diffusion pattern and there are no specific regions that can explain the two separate periods of popularity of *Femke* after 1960.

V.2 Names of parents and siblings

A second attempt to find difference between the two popularity periods of *Femke*, could be to investigate the names of the parents. If the names of the parents would belong to different name groups in the first and second period, this may indicate that the groups of these parents develop a preference for Femke at different periods of time. This analysis does not work yet, because the parents of Femke are mainly born in a period in which differentiation between names of parents is still limited to traditional Dutch, pre-modern Dutch and English names (see figure 4).

However, we could also identify the names of the siblings of Femke. It could be that these names are different for both periods and therefore indicate different groups (and perhaps social classes) of parents. The numbers of siblings in name groups are presented in figure 8.

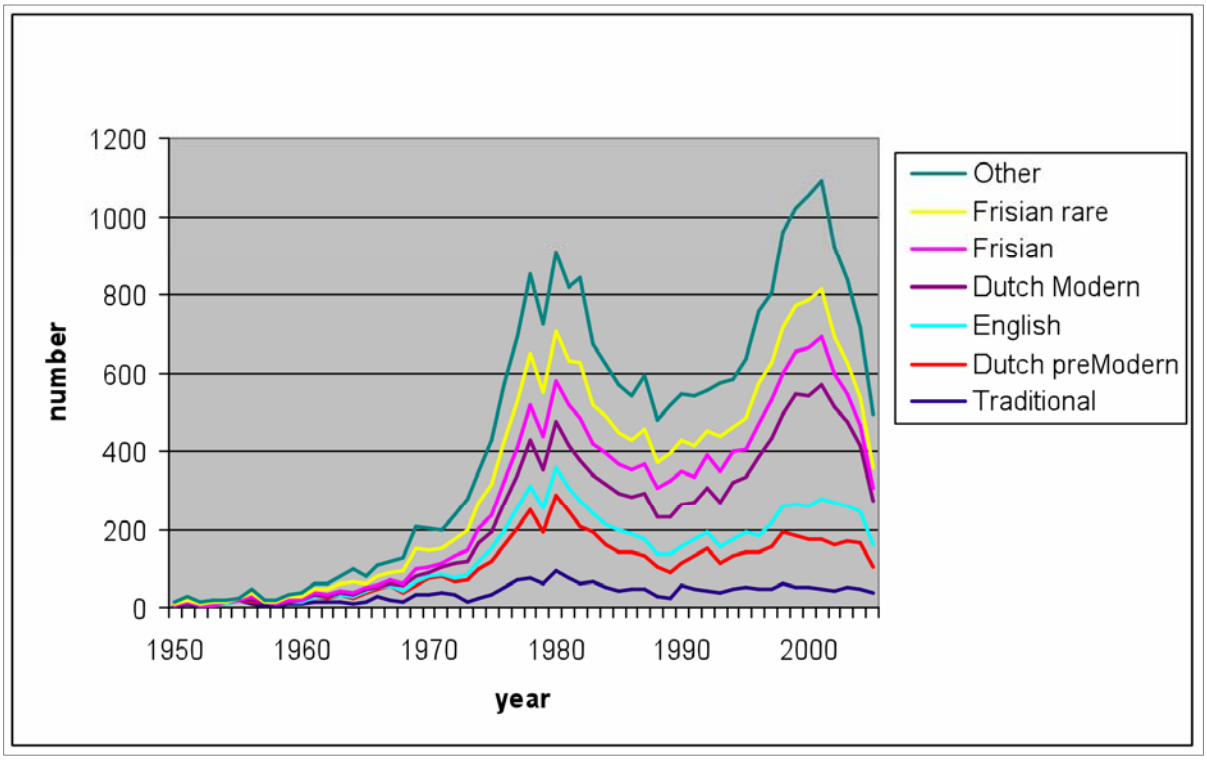


Figure 8. Names of siblings of Femke, counted per name group.

Dutch and Frisian name groups dominate the names of siblings of *Femke*. This agrees with the classification of *Femke* in the Frisian name group, while the Frisian name group is central in the area of Dutch names (compare figure 5). The difference between the first and second peak in figure 8 is mainly due to a slightly higher number of Dutch pre-modern names around 1980, and a higher number of Dutch modern names around the year 2000. However, this is the same trend as found for all names, and is not specific for *Femke* (compare figure 4).

The conclusion at this point is that the names of siblings of Femke do not indicate that the parents of Femke have a very different taste in the first and second period of popularity, other than the general change in preference for the full population.

V.3 Friends of *Femke*

A final attempt to identify specific backgrounds for the *Femke*'s from the first and second period is to look into the names of the friends of Femke. For this we gathered 753,000 names of friends of Femke from the social media network Hyves. Figure 9 shows their age distribution, which corresponds with (the reverse of) the popularity of Femke at birth (figure 6).

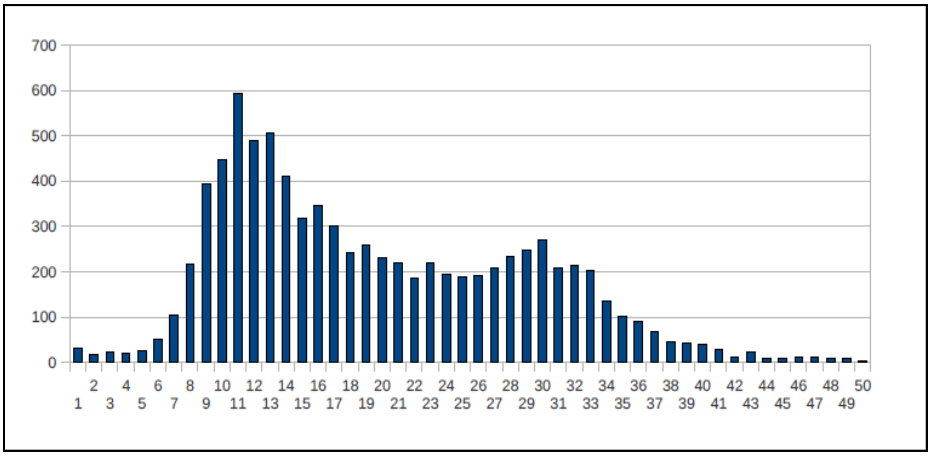


Figure 9. Age of the friends of *Femke* (in 2011). The first peak at 12 years old corresponds with the maximum in popularity of *Femke* in 2000, the second minor peak at 30 years with *Femke*'s popularity around 1980.

The dominating name groups of friends of *Femke* according to their high relative presence are shown in table 1. It shows that the preference of parents for the Frisian name *Femke* is also reflected in the friends of Femke herself (compare figure 5). This suggests that this kind of preferences exceed generations. But again, we could not find significant differences between the names of friends of the older and younger *Femke*s.

Table 1. Factor by which a name group is more present as friend of *Femke* than average.

name group	**factor**
Frisian	2.6
Mixed-Nordic	1.6
Dutch modern	1.3
Elite	1.2
English	1.2

V.4 Additional explanations

Before 2000 there was no well-known media star, sportswoman or politician who can explain a boost in popularity. No effect had a well-known politician, *Femke Halsema*, who only came into play after 2000. Also difficult to trace is the effect of the association of *Femke* with French 'femme' (woman), which likely had some role. This may hold for a link to the term feminism in the sixties and seventies as well. It is without doubt that most parents do not know the

etymology of the name (from *Femme*), while some may wrongly associate the name to Famke, the Frisian word for girl. Most parents just like the name.

Femke does not stand alone. Other names with the suffix *–ke* show, although less clear, a comparable, behavior. Figure 10 shows the popularity of another Frisian female name, *Nienke*. The morphological composition of the name indeed may play a role in the parents' preference, although certainly not all names on –ke show a similar popularity.

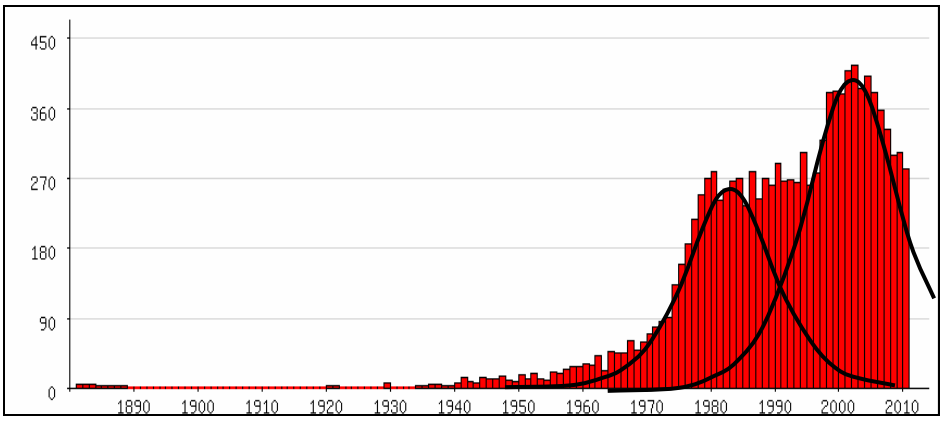


Figure 10. Popularity (%) of *Nienke* in The Netherlands, fitted with two logistic curves.

VI. Discussion

The popularity of a name over time often has a complex character. We showed cases where a combination of logistic curves could well describe its overall shape. This could be interpreted in terms of a model that assumes social classes that follow each other after some years in the preference for a name. However, our search to find such a background for multiple peaks entirely failed for the case of *Femke*, even though for that name two peaks are neatly distinct in time, which provides as such excellent options for investigations. Geographic diffusion, names of brothers and sisters of *Femke* during the two periods, and also in a later stage: the names of friends of *Femke*, did not show clear differences.

Our failure to find explanations leads to the hypothesis that the two peaks for *Femke* may originate in the same social group. A particular first name could be subject to a recurring fashion trend within the same group, perhaps driven by different motivations. Another option could be that other names temporarily attracted parents, which interrupted the long term attraction of *Femke*. There obviously is room for more research.

References

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