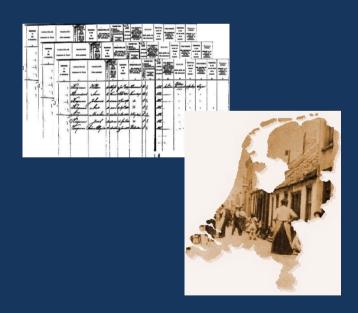
# HSN Annual Report 2014



## Historical Sample of the Netherlands

**Annual Report 2014** 

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The Historical Sample of the Netherlands (HSN) is an initiative of researchers from different disciplines within the social and historical sciences. The goal of the HSN is to create a representative database of nineteenth- and twentieth-century life courses. A sample of the birth certificates from the period 1812-1922 serves as the basis for the HSN database.

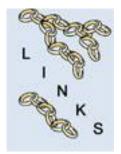
#### 1 The HSN in 2014 (summary)

Highlights of the year 2014 were the launching of the new journal of the EHPS network: *Historical Life Course Studies*, the successful defence by Marijn Schraagen of his thesis *Record Linkage*, the conference *Population Reconstruction*, which was attended by eighty scholars from all over the world and the inaugural address of Hilde Bras at Wageningen University.



Gerrit Bloothooft, organiser LINKS conference Population Reconstruction.

Besides on the continuous work on the extension of the HSN database, the HSN staff was engaged on five projects during 2014. Two of them were finished, LINKS and HSN LINKS Zeeland. One project was started: *Genes, Germs and Resource*. And the work on two other projects was continued: the EHPS-Net and the CEDA-R project.



At the end of the year the LINKS project was finished. LINKS entailed the development of software for a **LINK**ing **S**ystem for historical family reconstruction and was financed by the CATCH program of the Netherlands Organisation for Scientific Research (NWO). It aims to link all Dutch civil certificates into families and pedigrees from the 19<sup>th</sup> and early 20<sup>th</sup> century. In October 2014 the related project HLZ (HSN LINKS Zeeland) was also finished. The task of HLZ was to develop software for an integrated database from the LINKS and HSN data for the province of Zeeland (in IDS-format). The project is part of the CLARIAH-project

which is one of the projects of the Dutch roadmap.

The new project, *Genes*, *Germs and Resources*, studies the phenomenon of familial influences on early death and exceptional survival in the Netherlands between 1812 and 2015. It takes into account the simultaneous effects of resources, germs and genetic influences. The HSN will build two datasets for this project. One starts with the HSN basic set from the birth period of 1860-1875 and the other one starts with the LINKS dataset.

In 2014 we continued to work on two other projects: EHPS-Net and CEDA-R.



For quite some time several important databases with historical life course data have been working together to develop comparable datasets and joint software. In 2011, a grant of the European Science Foundation (ESF) gave this cooperation a strong impulse when the *European Historical Population Sample Network* (EHPS-Net) was founded. Within this network, we concentrate not only on the creation of common data structures and software, but also on education by way of summer schools, on developing new databases and on the publication of results in an E-

journal. The HSN is chair of this project in which over ten countries and twenty databases are cooperating. In 2014 several working groups were engaged on all kind of topics relevant for our kind of research and on data gathering and mining. We had summer courses in Cluj and Lund and the E-journal, *Historical Life Course Studies* started up with several articles.

The CEDA\_R project aims at the conversion of about 2,288 spreadsheets in which the Dutch censuses 1830-1947 were transcribed. For this period in the history of the census the results are available at the aggregative level of municipality or province. All spreadsheets were converted into one database in order to convert the data into the RDF structure. The team concentrated on the testing and developing the RDF system and the harmonization of those spreadsheets that contain population and dwellings for each location in the Netherlands.

In 2014 26 publications and 4 working papers in relation to the HSN database or using data from the HSN database were published. The number of lectures, presentations, interviews, and other promotional activities amounted to 34. In total 46 different researchers were involved in these activities. One of these publications was the book of Angelique Janssens Labouring Lives. Women, work and the demographic transition in the Netherlands, 1880-1960. Anthonie Knigge et al publiced two articles based on the LINKS dataset in American Sociological Review and in American Journal of Sociology.

Work on the HSN database itself has continued throughout the year on collecting and entering life courses and complementing the sample of birth certificates. We added 2,000 birth and 3,500 death certificates to the database, entered another 500 life courses and gathered data of another 1,500 life courses.

The number of HSN employees including volunteers had increased to 18 at the end of the year. Part of the employees work part-time and some of them work away from the institute, to collect data in various archives.

Chapter 2 of this report gives an overview of the HSN organization, of the development of the database during 2014 and of the outreaching activities. Chapter 3 contains a more detailed account of the five projects that we have worked on. Chapter 4 presents the composition of the staff and the several boards of the HSN.

An overview of the publications, presentations and working papers of 2014 will be given in respectively appendix A, B and C. Appendix D contains an overview of all projects undertaken by the HSN since the start in 1991.



HSN staff (3 April 2014)

From top to bottom and left to right: Jan Bartman, Kees Mandemakers, Ben Mouwes, Walfried Commandeur, Henk van der Gaauw, Marja Koster, Bert Schijf, Huub van Eijden, Behice Gül and Frits Nijstad. Not in this picture: Jos van Hees, Rolf Wasser and Inez de Vries.

#### 2 The HSN

#### 2.1 Organizational Structure

The HSN is governed by the HSN foundation. The members of the Board work at several Dutch universities. The purpose of the foundation is the construction of the HSN database and to make the HSN data available to scientific researchers in the Netherlands and abroad. The only restrictions concern preventing overlap of the research inquiries in question and the protection of data confidentiality.

Although the database of the HSN is a historical database of which most part of the included individuals is no longer alive, some still are. This implies that the HSN is bound to the regulations of the Dutch Personal Data Protection Act (*Wet Bescherming Persoonsgegevens*). Secondly, although most of the data are taken from records which are open to the public, some of the data have been made available by the archives for the HSN-database only for scientific research and under the condition of anonymous use of the data. The HSN privacy regulations (see <a href="http://www.iisg.nl/hsn/data/privacy.html">http://www.iisg.nl/hsn/data/privacy.html</a>) determines that the HSN data are only available for researchers after they have signed a license agreement.

In order to guarantee continued existence and accessibility of the HSN database, the HSN Foundation has linked itself by contract to the International Institute of Social History (IISH) in Amsterdam, which forms part of the Royal Netherlands Academy of Sciences (KNAW).

The IISH is an internationally renowned archive and research institute in the field of social history. It is devoted to the acquirement, management and accessibility of collections in that area.

The International Institute of Social History (IISH) provides housing for the HSN's activities and assumes the burden of the resulting costs. The IISH has guaranteed a permanent position for coordination tasks. The actual data gathering is done on the basis of projects, which are externally funded. The HSN is part of the IISH research department. Decisions regarding projects are made by the Steering Group which consists of members of the Board of the HSN and members of the management team of the

IISH (for the composition of these Boards, see chapter 4).



**IISH** building

#### 2.2 Data Collection: Starting point and sources

The Historical Sample of the Netherlands (HSN) strives to construct life histories as completely as possible for a representative portion of the nineteenth and twentieth century population in The Netherlands. The sample has been drawn from all persons born in The Netherlands between 1812 and 1922. Ultimately, the HSN database will include information on an individual level from about 85,000 persons on subjects like family structure, occupation, birth place, literacy, social network and migration history.

These characteristics make the data set a basic resource for historical research into the areas of demography, sociology, epidemiology, genetics, economy and social geography. The importance of the HSN for the researcher is fourfold:

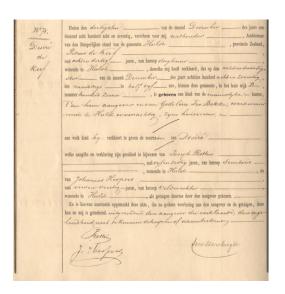
- The HSN provides a representative dataset with which research can be done into social developments in the 19th and 20th centuries.
- The HSN provides a control group or groups for researchers to compare with their own research population.
- The HSN is developing the expertise which individual researchers usually cannot acquire in the limited time at their disposal.
- The HSN offers the possibility for researchers to use the existing HSN dataset as a base for their own research projects.

Of course, this cuts both ways. Every researcher who wants to use the infrastructure and data of the HSN must agree that in return he or she will deliver his or her data to the central database, in accordance with the formal structure of this database. In this way the HSN has developed into a data centre that functions as a centre for quantitative research on life courses.

The sample is drawn from the birth certificates and stratified in periods of ten years. To achieve rather equally sized cohorts of persons from the age of twenty years, depending on

infant and child mortality on the one hand and the number of births on the other hand, it was decided to have two sample frequencies: 0.75% for the period 1812-1872 and 0.5% for 1873-1922. This results in a sample size that is large enough to make sound statistical conclusions for subpopulations of minimal two percent of the persons born in the Netherlands during the 19<sup>th</sup> and early 20<sup>th</sup> century (in total about 14,5 million persons) at the age of 20.

The basic dataset of the HSN contains the most important data from the life courses of the sampled persons The data about birth and death originate from the certificates of birth (see picture) and death. For the period after 1939 we use the personal cards instead of the death certificates. The certificates of death and also comprise marriage data occupational titles and places of living of the parents and other relatives. Marriage certificates contain data about place of living, occupation, age, illiteracy (whether or not being able to write a signature) of both bride and groom, their parents and four witnesses (usually relatives like brothers or close friends).



Birth certificate of Desiré de Kerf, Hulst 28 December 1878 (Zeeuws Archief).

Besides the certificates the data are drawn from the population registers. These sources are quite rich and deliver data about the occupational careers, the family structure and the migration patterns of the sample person and his or her relatives.

The Netherlands is one of the few countries in the world with a continuous population register starting as early as the mid-19th century. In the early registers each household was entered on a double page, with the head of the household first; he was followed by his wife, children, other relatives, and other members of the household. Date and place of birth, relation to the head of the household, sex, marital status, occupation, and religion were recorded for each individual. All changes occurring in the household were recorded in the register. Population registers remained in use until 1910 or 1920, after which a new form of continuous registration was introduced, consisting of single sheets, so-called family cards. From then on the registration unit was no longer the household, but the family.

In the late 1930s, the population register was replaced by the personal card; from that time on the individual person became the registration unit in all municipalities. Since then the population register in each municipality has consisted of a collection of personal cards, containing nearly the same information as the population register. All persons who were alive in July 1938 or were born after that year received a personal card. At the time of death, this card is removed from the files and sent to the Central Bureau of Statistics (CBS), where the data on the card are used for statistical purposes; and then it is sent to the Central Genealogical Bureau (CBG). Copies of the cards have been used for the data set. They contain the following information: name, municipality and date of birth of the person concerned, as well as those of his or her parents, marriage partner(s) and children. The nationality is given as 'Dutch' or 'Foreign'. Successive occupations, addresses and changes therein are also indicated.

#### 2.3 Content of the HSN Database

Figure 1 gives an overview of the data gathered for each RP since the start of the HSN in 1991. In the first ten years the HSN concentrated on the data entry of all birth certificates and the death certificates of children who died before the age of ten. After the year 2000 more and more marriage certificates were entered and the HSN also started entering data from the population register.

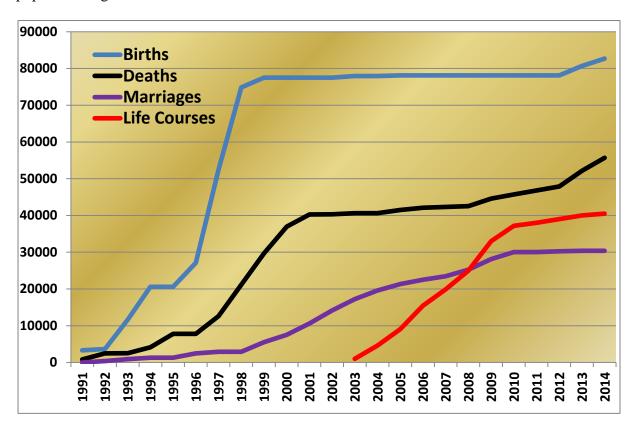


Figure 1 Development of the HSN-database, 1991-2014

In 2012 the HSN began to complete the sample of the birth certificates of the period 1903-1922. A main part of this sample was entered on the basis of a sample frequency of 0.25% instead of the aimed 0.5%. During 2013 and 2014 we added about 4,500 birth certificates. This means that we added all remaining ones except those of the provinces North- and South-Holland. After completing the period 1903-1922 the whole sample will contain about 85,000 births.

The maximum number of all sources to be entered for the cases is defined by the number of birth certificates. From figure 1 it is clear that for the life courses we are nearly half way and for the combination of death certificates and personal cards at about two thirds of the number of births. During the year about 3,500 death certificates were added to the database and about 500 life courses were entered.

The fact that the HSN is not yet complete poses a selection problem for each researcher. If and how the data are used depends on the research question and the selection the researcher will make from the dataset, see the following tables 1 and 2 for more detailed information.

Table 1 Number of birth and death certificates and personal cards in HSN dataset by period of birth, 31<sup>st</sup> of December 2014.

Period	HSN	Death (	Certificates	and Perso	nal Cards	(PK) and		
	Basic	Personal Lists (PL)						
	Sample							
	(Number	Death Certificates		PK's &	Death Certificates			
	Birth			PL 's	and PK's	's & PL's		
	Certif-		% < 16			% Basic		
	icates)	N	year	N	N	Sample**		
1812-1862	36,279	17,542	57.7	750	18,292	50.4		
1863-1882	16,502	8,732	61.7	5,351	14,083	85.3		
1883-1922 <sup>*</sup>	29,939	6,569	79.9	16,755	23,324	77.9		
Total 31-12- 2014	82,704	32,843	63.2	22,856	55,699	67.3		
Total 31-12- 2013	80,679	29,292	69.8	22,856	51,829	64.7		

<sup>\*</sup> Sampling frequency 0.5% (except North- and South-Holland with 0.25% for the period 1903-1922).

Table 1 presents the databases for three periods. We see that for the period 1863-1882 the percentage of found death records is about 85%, due to the ongoing data entry of birth certificates for the period 1903-1922 and to the fact that from the birth cohort 1913-1922 persons are still alive the percentage for 1883-1922 is about 7% lower. In the early years of the HSN the focus was on the data entry of death certificates of infants and children. This means that these deaths are still overrepresented in the HSN database.

Table 2 presents the number of life courses that we have taken in production during the period 2000-2010 (mainly by way of the NWO investment program *Life Courses in Context*), all in all 44,252 cases. We used schemes based on a) a distinction in birth period: 1863-1882 and 1883-1922 in which we prioritized a large part of the sample and b) region: the provinces of Utrecht, Zeeland, Friesland and the city of Rotterdam which acted as spearheads. For these areas we did not prioritize the sampled persons but completed all of them, we also included the life courses for the period 1850-1862 and we put the sample size for the period 1903-1922 on the necessary 0.5%.

The actual data release comprises a number of 37,173 life courses. Table 2 presents a bifurcation of the life courses by region and period. Almost 2.3 of the included cases have a complete life course which means that we could follow them from the cradle to the grave or till the year 1940 when the personal card became the only form of population registration. We are still working on the incomplete cases. However, due to emigration, loss of registers (damage by water or fire), loosing track of persons, quite a lot of these cases will never have a complete recording of their life course.

Most of the 7,000 persons who are not included in the release, originate from the birth period 1863-1882. From this total 2,500 persons have been collected and entered into the database of which 500 in the report year. So far, a number of 1,000 persons could not be tracked in the registers (mostly because of the incompleteness of the registers). The resulting number of

<sup>\*\*</sup> The percentages of deaths exclude double counting (of certificates and personal cards).

3,000 is in different stages in the process of data collection and data entry. Besides we already are working on the extension of the life course dataset, especially for Amsterdam and the province of Noord-Brabant for persons from the birth period 1850-1862 (not included in table 2). So, for the life courses we concentrated on collecting and data entry. We need to wait for new funding before we can start correcting them and complete for a new release.

Table 2 Number of Life Courses by region, date of birth and priority of data entry, HSN Release 2010.01.

Region	Priority	Period of	Total	In release		Complete Life	
		Birth				Course	
				N	%	N	%
Spearhead Regions	X	1850-1882	6,208	5,827	93.9	4,179	67.3
Rest of Netherlands	X	1863-1882	6,795	5,608	82.5	4,009	59.0
Rest of Netherlands		1863-1882	5,931	2,159	36.4	1,785	30.1
Spearhead Regions	X	1883-1922	6,528	6,309	96.6	4,805	73.6
Rest of Netherlands	X	1883-1922	14,150	13,185	93.2	10,113	71.5
Rest of Netherlands		1883-1922	4,640	4,085	88.0	3,081	66.4
Total			44,252	37,173	84.0	27,972	63.2

<sup>\*</sup> Spearhead regions are the provinces of Friesland, Utrecht and Zeeland and the city of Rotterdam. For these regions the life courses from the period of birth 1850-1862 are also included. And for the three provinces the life courses from the oversampling 1903-1922 (from 0.25 to 0.5%) are included as well.

Since October 2010 the HSN has worked on the implementation of the *Intermediate Data Structure* (IDS). The work started within the context of the Alfalab project for just the population registers. During this project it was decided that the work would include all types of HSN-data. This implied that work on the IDS as a whole was brought under the umbrella of the HSN main activities. The IDS is built in several parts: an IDS for the population registers till 1940, an IDS for the civil certificates and an IDS for the personal cards (population register after 1940). In a second stage the three IDS-systems are integrated into one system. At the end of 2014 all software has been developed but parts of it still needed to be tested thoroughly.

#### 2.4 Promotional activities, lectures and publications

In addition to the work directly connected to the database, activities were developed to raise our profile at home and abroad. One of the tools to achieve this is the HSN website. In 2014 this website was visited 6,546 times (2013: 7,070), the number of pages visited was 15,931, and there were 3,380 unique visitors. Apart from our website and the website of the *Life Courses in Context* project (LCC), launched May 2004, the HSN has also been responsible since December 2005 for the renewed website of the *International Commission for Historical Demography* (ICHD). This website offers, besides general information about the ICHD, information on international meetings, publications and links related to historical demography. The LCC website received 9,819 visitors (2,399 unique visitors), with 12,341 page views. The ICHD website received 14,677 visitors (4,675 unique visitors), with 26,227

page views. At the end of 2012 the portal of the <u>European Historical Population Samples Network (EHPS-Net)</u> was launched. Part of this portal is a <u>collaboratory</u> in which about eighty researchers participate. In 2014 the portal generated 2,375 visitors and 2,545 page views.

In 2014 26 HSN related articles and books were published (see appendix A for an overview). This is a substantial increase from the, exceptionally low, number of publications in 2013 (see figure 2). However, it is still not at the same level of the peak years 2010 and 2011. Above this 4 working papers were published.

In 2014 34 presentations and papers were written, both in the Netherlands and abroad (please refer to appendix C for an overview). As usual, with seven presentations HSN was well represented at the *European Social Science History Conference Conference*, held in Vienna this time. With four lectures, HSN also had a strong presence at the first conference of the *European Society of Historical Demography* (ESHD) in Alghero. As part of the CLARIAH project (see paragraph 3.3) a promotional <u>video</u> was made featuring, among other projects, the HSN.

In the publications and presentations 46 different researchers were involved (in 2013 36 researchers).

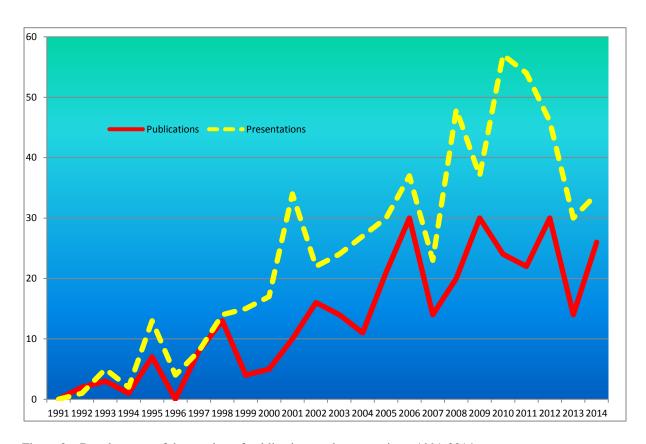


Figure 2 Development of the number of publications and presentations, 1991-2014

In addition to functioning as an important source for research and as a source for control groups for interpretation of research into specific groups, the HSN database serves as the basis for collecting new data. In practice this is realized through:

- a) Designing and maintaining a data structure for use by individual researchers;
- b) Taking the database as a starting point for further research, both through increasing the number of individuals included (oversampling) and by adding supplementary variables for a specific group of research subjects.

Scholars thus kill two birds with one stone. They can use both the data already recorded, and the software and expertise developed by the HSN. This expertise is an important byproduct of the data entering of the past ten years. For these wanting to use its software and already recorded data, the HSN sets the precondition that new data must be added to the data set, so that these data will eventually become available to other researchers too.

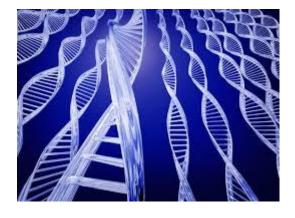
#### 3 Projects

In this chapter all current projects and the activities during 2014 are presented. For a list of all HSN-projects we refer to Appendix D and for a complete overview to the HSN website (<a href="http://www.iisg.nl/hsn/projects/index.html">http://www.iisg.nl/hsn/projects/index.html</a>).

#### 3.1 Genes, Germs and Resources

This infrastructure proposal involves the creation of new longitudinal databases named *Long Lives* and *Linked Families*. The project itself researches the role of the family and the disease environment in mortality and longevity in the Netherlands, 1812-2015. The project is granted by the Netherlands organization for Scientific Research (Free Competition Humanities and is supervised by Angélique Janssens (Radboud University Nijmegen) and Eline Slagboom (Leiden University Medical Center).

This research project proposes to study the phenomenon of familial influences on early death and exceptional survival in the Netherlands between 1812 and 2015 taking into account the simultaneous effects of resources, germs and genetic influences. 'Resources' are defined in socio-economic. and cultural 'germs' refers to the disease environment, and 'genetic influences' refers to an individual's genetically determined prediposition for exceptional survival or the lack thereof. The influence of these factors will be studied through a multigenerational approach in which families are followed over a time span of 200 years. The goal is to uncover the role of familial



influences on survival and the changing interactions between social-structural and biological-genetic factors in mortality and longevity within changing disease environments from the nineteenth and twentieth centuries until today.

The project has several innovative aspects, among which the introduction of genetics into the study of historical mortality as recent advances in human genetics have shown the relevance of the genetic component for longevity and mortality.

The HSN will build two datasets for this project. The database 'Long Lives' starts with the HSN basic set from the birth period 1860-1875. Two groups will be distinguished: A) Persons who reached the age of 80 years or older and B) a control group with persons who died before the age of 65. From these persons data about their off-spring will be gathered from the population register (second, third and fourth generation). The database 'Linked Families' will contain data from the LINKS project in a GGR-project related format.

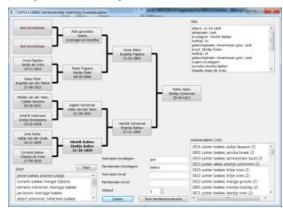
The project started in July 2014 and will continue till the end of 2016. In the second half 2104 about 2,000 Personal Cards were collected and entered.

#### 3.2 LINKing System for historical family reconstruction (LINKS)

For more than fifteen years volunteers have been indexing civil records at the Dutch provincial archives, insofar these records are accessible to the general public. Since 2012 the Central Agency of Genealogy (CBG) has taken over the organization collecting all the indexes from the provincial archives in one big data base (previously GENLIAS) and it maintains the website that makes the data accessible to the general public (https://www.wiewaswie.nl/en/home/). Nowadays the index contains names from more than 7,000,000 birth certificates of the period 1812-1912, names from more than 3,500,000 marriage certificates of the period 1812-1937 and names from more than 10,000,000 death certificates of the period 1812-1962. These indexed names are a multiple of the number of acts, because the acts are indexed for more than just one name; for marriage acts e.g. not only the names of the bride and groom are indexed, but also the names of both parents.

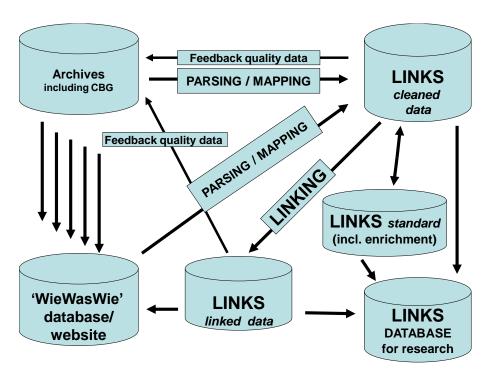
The LINKS (**Linking system** for historical family reconstruction) project is a cooperation of LIACS, NIDI, the Meertens Institute, the CBG and the organizations behind GENLIAS/WieWasWie (mainly Dutch regional archives) granted by the CATCH-program (Continuous Access To Cultural Heritage) of the Netherlands Organization for Scientific Research. The project started in June 2009 and was finalized at the end of 2014.

In February 2014 we organized a workshop on record linkage, Population Reconstruction which was attended by about 80 researchers from all over the world. Key note speakers were Peter Christen, Kris Inwood and Arno Knobbe. About 20 different papers were presented in this two day workshop. In October 2014 we participated in the Famillement, the bi-annual day for Dutch genealogists, with several presentations. On this day Marijn Schraagen also published the demonstrator application LINKS\_DEMO. This demo offers the opportunity to search for persons in the marriage certificates of Groningen and Drenthe from the 19th and early 20th century.



Result page of LINKS\_DEMO

The planning of a scientific conference exploiting the linked dataset of marriages awaits a definitive release of linked certificates. In 2013 we delivered two files with standardized occupations including HISCO, SOCPO, HISCLASS and HISCAM codes and standardized locations (including latitude and longitude coordinates).



Dataflow LINKS project

LINKS has generated a sophisticated, fast and general family reconstitution programme on the basis of the combination of birth, death and marriage certificates. As far as possible other sources such as church registers (baptism, funeral and marriage) are included as well. The programme was delivered at the end of 2014, although parts of the software still have to be improved to handle the reading and matching within acceptable time limits.

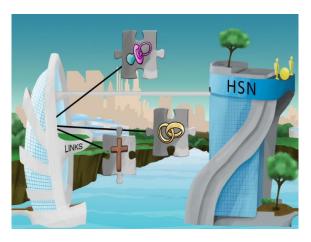
Nevertheless, scientific research based on the data of GENLIAS is flourishing. This was done on the basis of an already linked dataset by trainee Maarten Oosten who built a first version of a program linking the parents of brides and grooms in marriage acts to their own marriage acts. The work was done for five provinces where occupational titles were included in the index (Groningen, Overijssel, Gelderland, Zeeland and Limburg). Other datasets for research goals were created by Kees Mandemakers (linking birth, death and marriage certificates for the provinces of Groningen and Zeeland). Among others Frans van Poppel, Hilde Bras, Jan Kok, Christiaan Monden, Peter Ekamper, Roel Jennisen and Kees Mandemakers analyzed the relation between the ages of mother and daughter at the moment of their marriage, the development in geographical distances between spouses, the occurrence of marriages between nieces and nephews, aunts/uncles with nieces and nephews and other topics. In 2014 Antonie Knigge et al published two articles about siblings and status attainment in the American Sociological Review and the American Journal of Sociology.

#### 3.3 HSN LINKS Zeeland (CLARIAH seed)

The HSN LINKS Zeeland project aims at extending and combining the HSN database with the LINKS database for the province of Zeeland. The project is financed by € 100,000 of seed money from the <u>CLARIAH project</u> (Common Lab for Research in the Arts and Humanities). The project will demonstrate the possibilities of extending and combining the HSN database with the LINKS database for the province of Zeeland. The project started in 2013 and ended on 1 of October 2014.

The HSN database is largely based on municipal population registers. A weakness of this source is that it does not provide information on the wider kin network of the sampled individuals and sometimes gives conflicting information or —especially in the early registers-simple does not contain the expected information. By combining the information from the HSN with that from another database, called LINKS, we will try to find out whether and how the integration of both databases offers a way to improve the quality and completeness of the HSN database.

On 11 September 2013 early results of the project were presented in the Trippenhuis Amsterdam. To bring out cornerstones of this proposal a video was made of three projects, including the HLZ. You can find the programme of the presentation (including the slides of the presentations) and the video at CLARIAH website (please click the bottom on the right to activate English subtitles). The project was finished in the end of the third quarter of 2014. developer. The creation of the final database is awaiting the completion of the LINKS-IDS database.



Still from the HSN CLARIAH Video

#### 3.4 European Historical Population Sample Network (EHPS-Net)

The European Historical Population Samples Network (EHPS-Net) brings scholars together to create a common format for databases containing non-aggregated information on persons, families and households. This format or Intermediate Data Structure (IDS) forms an integrated and joint interface between many European databases. In June 2011 the *European Historical Population Sample Network* was launched in Strasbourg. Fourteen countries agreed to cooperate and fund the project. Kees Mandemakers was appointed as chair and Marja Koster as programme coordinator.

In January 2012 the first conference was held in Amsterdam and in September 2012 the second one in Budapest bringing together about 40 scholars and database administrators from all over Europe and Northern America. In September 2014 the third one was held in Alghero as a preconference of the first conference of the *European Society of Historical Demography* during which an equal number of scholars had gathered.



EHPS-net at the meeting in Alghero, 24<sup>th</sup> of September 2014.

During the project period, 2011-2016, the main databases convert their material to the IDS format. In the meantime, data extraction programs for different types of studies (e.g., on migration and fertility) are being prepared in close collaboration between researchers and programmers. The intended system is open, scalable and extendable. New types of analysis can be introduced by adding new extraction modules. Anyone can contribute an extraction module, which will be peer-reviewed and published.

In 2014 a new version of the IDS structure (version 4) was published as the first article in the newly established E-journal Historical Life Course Studies.

The work of the EHPS is structured in ten working groups:

- 1 Development Portal (chair Kees Mandemakers)
- 2 E-journal Editorial Board (chair Koen Matthijs)
- 3 IDS Clearing Committee (chair Kees Mandemakers)
- 4 Extraction software for IDS (chair Anders Brändström)
- 5 Developing proposals for historical micro data infrastructure within European and national call structures, (chair Kees Mandemakers)
- 6 New Database (chair Gunnar Thorvaldson)
- 7 Education (chair Ioan Bolovan)
- 8 Standards for documentation about databases (chair Nanna Floor Clausen)
- 9 GIS (chair Diego Ramiro Fariñas)
- 10 IDS Extended (chair Tommy Bengtsson)

Group 3, 4 and 10 act as one group in practice.

In June 2013 we had a Summer Course in Cluj, in July 2014 the second one and we had a more advanced course in Lund. All working groups met each other at least once. The journal started this year with the first articles (expected total of five articles). Extraction software will be released in the course of 2016.



Kees Mandemakers teaching at the Cluj Summer Course.

The program runs for five years till mid 2016. In the final quarter of 2014 we hired a technical writer, Tatyana Moisseenko, to improve the documentation in the website about the databases and write (extraction) software documentation.

#### 3.5 CEDA\_R project

The project Census data open linked - CEDA\_R - From fragment to fabric - Dutch census data in a web of global cultural and historic information, focuses on a better dissemination structure of the census data from the last two centuries at aggregated levels like municipalities and provinces (www.volkstelling.nl).



The project is part of the Computational Humanities programme of the Royal Academy of Arts and Sciences (KNAW), under supervision of Sally Wyatt. The project is cooperation between DANS (Peter Doorn, Andrea Scharnhorst), IISH (Kees Mandemakers) and VU University Amsterdam (Frank van Harmelen, Rinke Hoekstra) and is in line with earlier launched initiatives in the realm of the semantic web such as *Data2Semantics*. The project offers a new impulse to the dissemination of the census data after the successful cooperation of the HSN and DANS in the NWO Large Investment project *Life Course in Context*. In this project most of the census data were entered in Excel spreadsheets. The project started on 1 December 2011 and will continue untill the middle of 2016.

With the project two PhD's (Ashkan Ashkpour and Albert Meroño- Peñuela) and a postdoc (Christophe Guéret) work together to improve the availability of the existing 2,288 spreadsheets with aggregate data from the censuses from the period 1830-1948 for

researchers by way of semantic technology. Promotors of the PhD's are Frank van Harmelen (VU University Amsterdam) and Kees Mandemakers (IISG/Erasmus University Rotterdam).

The semantic valorization will be done in two steps: a) a structural improvement of the storage of the data (from spreadsheets into one dataset) and b) harmonizing and disseminating the data by way of RDF-techniques. RDF stands for Resource Description Framework technology. All data from the censuses will be accessible at the level of the cell by way of RDF coding. This will make all kinds of pattern recognition feasible and a much better querying of the dataset (it will be possible to collect for example the number of inhabitants of the village Besoyen for all census years between 1795 and 1947).

During 2014 several papers were written, including one for *Historical Methods*. In the meantime two mini projects were worked on. Until now, main findings are that converting all data into RDF is not as easy as one might expect. The structures of the 19<sup>th</sup> century census tables are quite inconsistent, sometimes in a very surprising way (like having the same categories in the rows and the columns).

#### 4 Staff and Boards HSN

#### 4.1 Staff HSN

The HSN is led by Kees Mandemakers. Marja Koster functions as office manager of the HSN and coordinates the EHPS program. Coordination between the steering committee and the research department of the IISH is managed by Karin Hofmeester.

Four workplaces were available for the work in the archives and the data entry in the office (one ID workplace, one WIW workplace and two SWV workplaces). The second WIW workplace was cancelled after Henk van der Gaauw left the project in February. Two trainees worked at HSN in 2014: Rolf van Benthem and Elisa Rodenburg. Tatyana Moisseenko joined the EHPS-Net project for 6 months to add content to the database section of the EHPS-Net website. In April Cor Munnik started work on the HSN software and in June Fons van Laan began his work on LINKS.

At the end of 2014 the staffing of HSN, directly and in cooperation with other organisations, numbered to 18 persons (2013: 14 persons). During the year, a total of 19 people worked for HSN, among whom 5 volunteers, who were engaged in collecting material in archives.

#### Staff in 2014:

J. Bartman	0,4 fte	Jan.	-	Dec.
R. van Benthem, MA	0,4 fte	Aug.	-	Dec.
W. Commandeur	0,3 fte	Jan.	-	Dec.
H.J. van Eijden	1,0 fte	Jan.	-	Dec.
H. van der Gaauw	0,8 fte	Jan.	-	Febr.
B. Gül	0,8 fte	Jan.	_	Dec.
drs. J. van Hees	0,2 fte	Jan.	-	Dec.
prof. dr. K. M. Hofmeester	0,1 fte	Jan.	-	Dec.

drs. M. Koster	0,6 fte	Jan.	-	Dec.
drs. F. Laan	1,0 fte	June	-	Dec.
prof. dr. C.A. Mandemakers	1,0 fte	Jan.	-	Dec.
drs. B. Mouwes	0,3 fte	Jan.	-	Dec.
T. Moisseenko, MA	0,4 fte	Oct.	-	Dec.
drs. C. Munnik	0,3 fte	April	-	Dec.
drs. F. Nijstad	0,1 fte	Jan.	-	Dec.
E. Rodenburg, MA	1,0 fte	Nov.	-	Dec.
dr. B. Schijf	0,2 fte	Jan.	-	Dec.
drs. I. de Vries	0,1 fte	Jan.	-	Dec.
drs. R. Wasser	1,0 fte	Jan.	-	Dec.

#### 4.2 Board Foundation HSN

Two members of the board, Ineke Maas and Hilde Bras, have accepted a new term. Because of his appointment as research director IISH Leo Lucassen resigned while staying in the steering committee. At the end of 2014 the board consisted of (the year of resignation is between brackets):

Prof. dr. F.W.A. van Poppel, Netherlands Interdisciplinary Demographic Institute (NIDI), Utrecht University, chair (2017)

Prof. dr. H.A.J. Bras, Wageningen University, member (2019)

Prof. dr. A. F. Heerma van Voss, Utrecht University, director Huygens ING, member (2017)

Prof. dr. J. Kok, Radboud University Nijmegen, IISG, member (2015)

Prof. dr. M.H.D. van Leeuwen, Utrecht University, vice chair (2015)

Prof. dr. W.A.F. Maas, Utrecht University, secretary (2018)

Dr. F.R.M. Portrait, VU University Amsterdam, treasurer (2016)

Dr. P.G. Tassenaar, University of Groningen, member (2016)

Official secretary: prof. dr. C.A. Mandemakers.

The board held their meetings on 23 January, 23 June and 17 September 2014. Main item on the agenda was the progress of the projects.

#### 4.3 Steering Committee HSN

The steering committee of the HSN is the decision-making body regarding the implementation of the work of the HSN. The steering committee was established to integrate the HSN into the structure of the IISH and to carry out the work related to the NOW investments.

The steering committee consists of the members of the HSN board (see 2.4.1) and, on behalf of the IISH, prof. dr. L.A.C.J. Lucassen who succeeded prof. M. van der Linden as head of the research department of the IISH (which the HSN is a part). The secretary of the steering committee is prof. dr. K.M. Hofmeester. Advisor to the steering committee is prof. dr. C.A.

Mandemakers, head of the HSN. The steering committee held their meetings on 23 January, 23 June and 17 September 2014.

#### 4.4 Scientific Advisory Board

Task of the Scientific Advisory Board is to provide the board with solicited and unsolicited advice. Prof. dr. J. Gierveld, em. university lecturer at VU University Amsterdam, withdrew from the Scientific Advisory Board. Chair is prof. dr. J. Dronkers. In the course of the year there were several informal contacts.

The Scientific Advisory Board consists of:

Dr. P.K. Doorn, head DANS

Prof. dr. J. Dronkers, Maastricht University

Prof. dr. M.G.J. Duijvendak, University of Groningen

Prof. dr. H. van Dijk, em. university lecturer Erasmus University Rotterdam

Prof. dr. W.Th.M. Frijhoff, em. university lecturer VU University Amsterdam

Prof. dr. H. Knippenberg, em. university lecturer University of Amsterdam

Prof. dr. P.Th. van de Laar, Erasmus University Rotterdam

Prof. dr. C.H. Mulder, University of Groningen

Prof. dr. J. Plantenga, Utrecht University

Prof. dr. F. N. Stokman, em. university lecturer, University of Groningen

Prof. dr. W.C. Ultee, em. university lecturer Radboud University Nijmegen

Prof. dr. J.L. van Zanden, Utrecht University

#### 4.5 International Advisory Board

The HSN is advised by the International Advisory Board convening on an annual basis. Chair of the Board is prof. dr. A. Brändström. There were no mutations in the Board during 2014. The composition of the Board was as follows:

Prof. dr. A. Brändström, University of Umeå, director Demographic Database Umeå

Prof. dr. L. Dillon, Département de Démographie, Université de Montréal

Prof. dr. K. Inwood, University of Guelph

Dr. D. Ramiro-Fariñas, Instituto de Economía, Geografía y Demografía, Madrid

Prof. dr. K.R. Smith, University of Utah.

Prof. dr. H. Vézina, l'Université du Québec à Chicoutimi (UQAC)

The Board met in Toronto on 6 November 2014 during the annual conference of the *Social Science History Association* (SSHA). The various projects of the HSN and the future of the HSN were discussed.

#### **Appendix A Publications**

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- Angélique Janssens, *Labouring Lives. Women, work and the demographic transition in the Netherlands, 1880-1960*, Bern: Peter Lang 2014, 314 pp.
- Marijn Schraagen, Aspects of Record Linkage, Dissertation Leiden University (2014), 198 pp.
- Antonie Knigge, Ineke Maas & Marco H.D. van Leeuwen, 'Sources of sibling (dis)similarity: total family impact on status variation in the Netherlands in the nineteenth century', *American Journal of Sociology* 120 (2014), 11-40.
- Jan Kok, 'Historical demography. Understanding temporal change, individual variation and regional persistence', *Tijdschrift voor Sociale en Economische Geschiedenis*, 11 (2014), 2, 237-259.
- Marinus J.C. Eijkemans, Frans van Poppel, Dik F. Habbema, Ken R. Smith, Henri Leridon & Egbert R. te Velde, 'Too old to have children? Lessons from natural fertility populations', *Human Reproduction*, 29 (2014), 6, 1304-1312.
- Antonie Knigge, Ineke Maas, Marco H.D. van Leeuwen & Kees Mandemakers, 'Status attainment of siblings during modernization', *American Sociological Review* 79 (2014), 3, 549-574, DOI: 10.1177/0003122414529586.
- Hilde Bras, 'Structural and diffusion effects in the Dutch fertility transition, 1870-1940', *Demographic Research* 30 (2014) 151-186.
- Julia A. Jennings & Clark L. Gray, 'Climate variability and human migration in the Netherlands, 1865–1937', *Population and Environment* 36 (2014), 3, 255–278.
- Gary Y.C. Yeung, Gerard J. van den Berg, Maarten Lindeboom & France R.M. Portrait, 'The impact of early-life economic conditions on cause-specific mortality during adulthood', *Journal of Population Economics* 27 (2014), 895-919, DOI: 10.1007/s00148-013-0497-1.
- Marijn Schraagen & Walter Kosters, 'Record Linkage Using Graph Consistency', in: Petra Perner (ed.), *Machine Learning and Data Mining in Pattern Recognition. 10th International Conference, MLDM 2014, St. Petersburg, Russia, July 21-24, 2014. Proceedings* (2014), 471-483.
- Richard Zijdeman, Marco H.D. van Leeuwen, Erik Buyst & Bart van der Putte (eds.), 'Women at work in changing labour markets', Special Section in Special issue of *The History of the Family* 19 (2014), 4, with the following articles:
  - Marco H.D. van Leeuwen & Richard Zijdeman, 'Digital humanities and the history of working women: a cascade', 411-425, DOI: 10.1080/1081602X.2014.955517.
  - Wiebke Schulz, Ineke Maas & Marco H.D. van Leeuwen, 'When women disappear from the labour market: Occupational status of Dutch women at marriage in a modernizing society, 1865-1922', 426-446, DOI: 10.1080/1081602X.2014.955516.
- Gerrit Bloothooft & Kees Mandemakers, 'Exploring co-variation in the (historical) Dutch civil registration', *Names in daily life. Proceedings of the XXIV ICOS International Congress of Onomastic Sciences 2011 (Generalitat de Catalunya, Departament de Cultura 2014)* (2014), 271-282, DOI: 10.2436/15.8040.01.32.
- 326 Gen.magazine. Dossier Famillement (2014), 3, with the following articles:

- D.P. Huijsmans, 'Op zoek naar de drie G's hoe vind je de juiste?' ['In search of the three G's. How does one find the right one?'] 32-35.
- Gerrit Bloothooft, 'Namen: echte varianten en fouten' ["Names: real variants and errors"], 44-46.
- George Alter & Kees Mandemakers, 'The Intermediate Data Structure (IDS) for Longitudinal Historical Microdata, version 4', *Historical Life Course Studies* 1 (2014), 1-26, PID: http://hdl.handle.net/10622/23526343-2014-0001?locatt=view:master.
- Bianca Suanet & Hilde Bras, 'Sibling Position and Marriage Timing in the Netherlands, 1840-1922: A Comparison across Social Classes, Local Contexts, and Time', *Journal of Family History* 39 (2014), 2, 126-139.
- Paul Puschmann, Nina Van den Driessche, Per-Olof Grönberg, Bart Van de Putte & Koen Matthijs, 'Migratie en sociale in- en uitsluiting in Noordwest-Europese havensteden. Partnerkeuze en huwelijk onder migranten in Antwerpen, Rotterdam en Stockholm, 1850-1930' ['Migration and social in- and exclosure in Northwestern-European seaports'. Partner choice and marriage of migrants in Antwerp, Rotterdam and Stockholm, 1850-1930], in: Isabelle Devos, Koen Matthijs & Bart Van de Putte (eds.), *Kwestbare groepen in/en historische demografie. Jaarboek Historische Demografie 2014*, Leuven: Acco 2014, 115-153.
- Jan Kok, Kees Mandemakers & Bastian Mönkediek, 'Flight from the land? Migration flows of the rural population of the Netherlands, 1850-1940', Espace, Populations, Société 1 (2014), 1-18, special issue: Les populations rurales en Europe occidentale du 18ème siècle aux années 1960-1970, <a href="http://eps.revues.org/5631?lang=en">http://eps.revues.org/5631?lang=en</a>.
- Peter Ekamper & Frans van Poppel, 'Crossing the Dutch borders in the past: Lessons from marriage registers', in: Harry van Dalen & Ingrid Esveld (eds.), *Nico van Nimwegen: The resourceful demographer. Liber Amicorum*, The Hague: ANDO 2014, 102-109.
- Wiebke Schulz, Ineke Maas & Marco H.D. van Leeuwen, 'Employer's choice Selection through job advertisements in the nineteenth and twentieth centuries', *Research in Social Stratification and Mobility* 36 (2014), 49-68, DOI: 10.1016/j.rssm.2014.01.003.
- Onno Boonstra, Hilde Bras & Marjet Derks (eds.), 'Cultural Life Scripts', Special issue of *Historical Social Research/Historische Sozialforschung* 39 (2014), 1, with the following

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articles:

- Onno Boonstra, Hilde Bras & Marjet Derks, 'Historical Research on Cultural Life Scripts. An Exploration of Opportunities and Future Prospects', Introduction to the special issue on 'Cultural life scripts', 7-18.
- Angélique Janssens & Ben Pelzer, 'Lovely Little Angels in Heaven? The Influence of Religiously Determined Cultural Life Scripts on Infant Survival in the Netherlands, 1880-1920', 19-47.
- Hilde Bras, 'The Influence of Popular Beliefs about Childbirth on Fertility Patterns in Mid-Twentieth-Century Netherlands', *Historical Social Research* 39, 76-103.
- Jan Kok, "At age 27, she gets furious". Scripts on Marriage and Life Course Variation in The Netherlands, 1850-1970', 113-132, DOI: 10.12759/hsr.39.2014.1.113-132.
- Ineke Maas, 'Ontwikkelingen in sociale openheid en sociale uitsluiting', ['Developments in social openness and social exclosure'], *Mens & Maatschappij*, 89 (2014), 85-100.

For the publications in foregoing years see the HSN website: www.iisg.nl/hsn/products/publications

#### Appendix B Lectures, symposia and other promotional activities

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- 581 39<sup>th</sup> Annual Meeting of the Social Science History Association, Toronto, Canada, 6-9 November 2014, with the following contributions:
  - Kees Mandemakers, Jan Kok & Bastian Mönkediek, 'Staying or leaving? A competing-risk analysis of migration destinies of farmers' children, the Netherlands 1850-1940'.
  - Kees Mandemakers, 'The European Historical Population Sample Network (EHPS-Net)'.
- Frans van Poppel (met Evelien Walhout & Jornt Mandemakers) 'High infant mortality in late nineteenth- and early twentieth-century North-Brabant: did religion play a role?', *Conference Religious Denomination as a Factor of Behavior*, 21. Herbsttagung des Arbeitskreises 'Historische Demographie', Münster, Duitsland, 31 oktober -1 november 2014.

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- On October 8th 2014 the Op 8 oktober 2014 the *Famillement* took place in Leiden, with the following contributions:
  - Kees Mandemakers, 'Het LINKS project'.
  - Gerrit Bloothooft, 'Namen: echte varianten en fouten'.
  - Marijn Schraagen, 'Demonstratie kwartierstaten'.
  - Nies Huijsmans, 'De 3 G's automatisch persoonskoppelingen leggen tussen akten van de Burgerlijke Stand'.
- 575 Marijn Schraagen, 'Algorithms for Historical Record Linkage', *Gaenovium Workshop*, Leiden, 7 October 2014.

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- Conferentie van de *European Society of Historical Demography* (ESHD) in Alghero, Italy, 25-27 September 2014, with the following contributions:
  - Angélique Janssens, 'Labouring Lives. Women, work and the demographic transition in the Netherlands, 1880-1960'.
  - Kees Mandemakers, Jan Kok & Bastian Mönkediek, 'Between economic opportunities and family pressures. Migration decisions of farmers' children, The Netherlands 1850-1940'.
  - Jan Kok, 'Life courses and the history of the European family'.
  - Frans van Poppel (met Evelien Walhout & Jornt Mandemakers) 'High infant mortality in late nineteenth- and early twentieth-century North-Brabant: did religion play a role?'.

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- 4e meeting van het European Historical Population Samples Network (EHPS-Net), Alghero, Sardinië, 24 september, with the following contributions:
  - Kees Mandemakers, 'Report Working Group 1 Development Portal'.
  - Kees Mandemakers, 'Presentation Working Group 5 Looking into European and national call structures, developing proposals for historical micro data infrastructure'
- Gerrit Bloothooft, 'Large-scale harvesting of variants of proper names', 25th International Conference of Onomastic Sciences, Glasgow, UK, 26 August 2014.
- Marijn Schraagen, 'Record Linkage Using Graph Consistency', International Conference on Machine Learning and Data Mining, St-Petersburg, Russia, 21 July 2014.
- Kees Mandemakers, 'LINKS. LINKing System for historical family reconstruction', CATCH Event *Digital Cross-over in humanities*, Rijksmuseum, Amsterdam, 6 June 2014.
- Paul Rotering & Hilde Bras, 'With the help of kin? Household composition and reproduction in the Netherlands, 1842 1920', *N.W. Posthumus Conference*, Leeuwarden, 6 June 2014.

- Kees Mandemakers, 'Several Issues on Documenting Historical Population Databases', *Meeting EHPS-Net working group on Documentation*, National Archive Copenhagen, Denmark, 19-20 May 2014.
- Wiebke Schulz, Ineke Maas & Marco H.D. van Leeuwen, paper 'What happens if women disappear from the labor market? Occupational status of women at marriage in a modernizing society', *ISA rc 28 Social Stratification and Mobility*, Budapest, Hongarije, 8-10 May 2014.

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- 556 10<sup>th</sup> European Social Science History Conference te Wenen, Oostenrijk, 23-26 April 2014, with the following contributions:
  - Kees Mandemakers, 'The European Historical Population Sample Network (round table EHPS-Net)'.
  - Paul Rotering & Hilde Bras, paper 'With the help of kin? Household composition and reproduction in the Netherlands, 1842 1920' bij sessie 'Family Systems, Family Relations and Fertility'.
  - Angélique Janssens, paper 'Labouring Women. Women, Work and Fertility during the Fertility Decline in the Netherlands' bij sessie 'Individuals' Reproductive Careers in Modern Europe'.
  - Marco H.D. van Leeuwen, paper 'Comparative Historical Analysis of Occupational Change across Europe, 1840–1940' bij sessie 'A Comparative Historical Analysis of Occupational Change across Eurasia, 1840–1940'.
  - Ineke Maas & Marco H.D. van Leeuwen, paper 'Social Homogamy in the Netherlands: Explaining Trends and Regional Differences' bij sessie 'Social Homogamy'.
  - Ashkan Ashkpour, Albert Meroño-Peñuela & Kees Mandemakers, 'CEDAR: Harmonization of Historical Dutch Census Data'.
  - Kees Mandemakers, Discussant round table 'Longitudinal Databases and Life Sciences: New Challenges and Novel Perspectives'.
- Kees Mandemakers, 'Historical Sample of the Netherlands', *Kick-off meeting Genes, Germs and Resources*, Utrecht, 10 April 2014.
- Kees Mandemakers, 'Standardizing, classifying and disseminating Dutch 19th and 20th century occupational titles', *CEDAR minisymposium*, *KNAW e-Humanities*, Meertens Institute, Amsterdam, 31 March 2014.
- Kees Mandemakers, 'Working with Longitudinal Databases and the Intermediate Data Structure (IDS)', invited lecture by the *Faculteit Sociale Wetenschappen*, KU Leuven, België, 26 March 2014.

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- Internationale workshop '*Population Reconstruction*', International Instituut voor Sociale Geschiedenis, Amsterdam, 19-20 February 2014, met hier de volgende bijdragen:
  - Gerrit Bloothooft, 'Learning name variants from true person resolution'.
  - Marijn Schraagen, 'Historical record linkage using event sequence consistency'.
  - Kees Mandemakers, 'Opening'.
- Rob van Drie en Kees Mandemakers, 'WieWasWie en LINKS', *Kick Off Catch Valorization*, NWO 's Gravenhage, 31 January 2014.

For the presentations in foregoing years see the HSN website, www.iisg.nl/hsn/products/presentations.html

#### **Appendix C** Reports and Working papers

This list includes internal (HSN published) and external HSN related papers.

- Rolf van Benthem, 'Standaardisering van plaatsnamen. Veel voorkomende problemen en mogelijke oplossingen' [Standardization of locations. Frequent problems and possible solutions], (trainee report IISH, December 2014).
- D.P. Huijsmans, 'A comparison of Spatio-Temporal and Dual-Name linking strategies with results for 2 ground truth test sets', LIACS internal report NWO Catch LINKS project (28 November 2014).
- Lianne van Breukelen, 'Sociale en ruimtelijke mobiliteit in Nederlands-Indië. Een haalbaarheidsonderzoek' [Social and special mobility in Dutch East Indies. A feasibility study], (trainee report IISH, 17 July 2014).
- Corinne Boter, 'Before she said "I do". The impact of industrialization on unmarried women's labour force participation 1812-1932', working paper CGEH series Utrecht (nr. 56).

#### Appendix D Project history

During the foregoing twenty years several projects were undertaken by the HSN, The following lists these projects; most of them delivered specific datasets. For more information on these projects we refer to our website.

Acronym	Project title	
MUT/ASG	Migration in the province of Utrecht	
OVF Reduced fecundity because of maternal high-risk conceptions		
RDN	Regional differences in demographic behaviour, the Netherlands, 1900-1960	
AKON	General index of death certificates in the Netherlands	
TTA	Textile industry workers in Twente	
MFZ	Geographic and Social Mobility of Female Domestic Servants in Zeeland, 1850-1950	
DUM	Germans in Utrecht: a temporary minority in the 19th century	
RCM	Religious differences in infant and childhood mortality, The Hague, 1860-1920	
DVI	Settlement determinants for immigrants and their descendants in the Netherlands,	
	1853-1960	
GBW	Family formation and living strategies in the western parts of the Netherlands 1830-	
	1940	
ESM	Early-life conditions, social mobility and longevity	
RAM	Living Strategies of Born Rotterdammers	
VBA	On the move in Amsterdam. Mobility of the Amsterdam poor 1900-1940	
LCC	Life Courses in Context (NWO Large investment)	
MNI	European migration to the Dutch East Indies	
HVL	Marriage certificates Pupils of Dutch Higher Secondary Education	
LINKS	LINKing System for historical family reconstruction	
LMP	Long Term Mortality Effects of Potato Crisis	
JDJ	Jewish Dutch or Dutch Jews?	
LHL	Linking Historical Lives (Linked Lives)	
MOSAIC	MOSAIC - the Netherlands	
EHPS-net	European Historical Population Samples Network	
CEDAR	Census Data Open Linked	
HLZ	HSN LINKS Zeeland	
GGR	Genes, Germs and Resources	