

Research Networking Programme

European Historical Population Samples Network (EHPS-Net)

Standing Committee for the Social Sciences (SCSS) Standing Committee for the Humanities (SCH)



The European Historical Population Samples Network (EHPS-Net) brings together scholars to create a common format for databases containing information on persons, families and households. This format or Intermediate Data Structure (IDS) forms an integrated and joint interface between many European databases.

During the project period, the main databases will convert their material to the IDS format. In the meantime, data extraction programmes 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 an e-journal. Programming will be organised in research projects delivering demonstrators of extraction scripts and datasets for research.

The network creates a portal that provides access to the European databases, as well as to important non-European ones which have joined the network. On the portal site an overview will be given of all databases, their contents and the degree to which their variables have been structured to fit into the IDS. The portal will also centralise and systematise the data extraction software. The site will present the standardisation rules, metadata and documentation and make them downloadable. Thus, the existing expertise will be made available to the research community. Our activities include stimulating the creation of new databases and organising training sessions in participating countries where historical population databases are still scarce.

We focus on scholars who, by creating regional or national databases, have advanced the field of (historical) demography in their respective countries. The network allows them to proceed beyond the boundaries of their individual datasets, by creating a common interface for the history of the life course. In this way, we can understand the historical dimensions of the challenges faced by contemporary European (and global) populations.

The running period of the EHPS-Net Research Networking Programme is five years, from July 2011 to July 2016.

Background

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For almost half a century, population historians have created datasets on life courses from archival sources such as parish records, tax records, censuses and population registers. Their time span ranges from medieval times to the present day. These datasets are essential to understand how economic, social and cultural changes had an impact on the lives of ordinary persons and how these persons, in turn, shaped their surroundings and their destinies by strategies of survival and improvement. Recent developments in ICT facilities and methodologies have increased the scale and the analytic power of these individual level datasets significantly. Thus, in several countries, large regional or even national datasets have been made

available for research. New methods of record linkage and new statistical tools are being developed to improve the coverage of these datasets and to deal with the shortcomings of the sources by combining related pieces of information. European administrators have kept more detailed records than anywhere else in the world for centuries, but it is only now that the analytical power inherent in this uniquely rich source material is integrated in ways that bring out the comparative advantage for research on the history of the European population.

Mora Parish Records, Births, 1854-1873, Kopparberg, Sweden. © www.genline.se

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Aims

The logical next step in this development is to link all existing European datasets in a common format – the so-called Intermediate Data Structure (IDS) – in order to transcend the currently regional and national studies. By establishing the European Historical Population Samples Network (EHPS-Net) we aim to:

- Create a discussion forum;
- Realise an integrated and joint interface between the many European datasets containing information on individual persons, families and households in the past;
- Stimulate the further development of databases especially in those parts of Europe where these kinds of database are scarce (East and South-Eastern Europe).

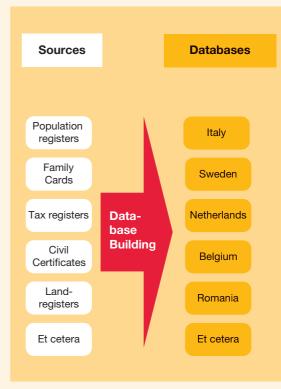
New and existing databases brought together will allow us to study regional diversity and similarity in the life course experiences of all Europeans. Interest from non-European colleagues leads us to expect the format to become the standard for all historical life course datasets in the world. Researchers from many disciplines will be given access through a network of distributed databases. Thus, the aim of the IDS is not to replace the individual databases by some central database, but rather to provide a common format for accessing datasets which are structured in the same way.

In this project we:

- Describe the logic and methods associated with the integration of a great number of European databases;
- Demonstrate the unique analytical power associated with the complex dimensionality of these European data;
- Elaborate the existing opportunities for and advantages of comparative analysis between several sites;
- Outline a plan for integrating the European data for the purposes of cross-national

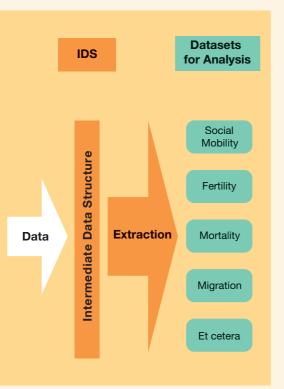
and cross-regional comparison;

- Develop an agenda for the investigation of some of the most important substantive questions in the fields of historical demography and family sociology, questions that resonate with a number of crucial contemporary issues (e.g., social mobility and immigrant incorporation);
- Set forth a concrete plan for the development of the organisational infrastructure for the promotion and support of European demographic-historical studies.



Making Datasets Comparable

Making sets of microdata comparable is the necessary first step towards a 'European life course history'. Each database consists of widely varying variables, due to the diverging sources from which individual lives are reconstructed. These sources range from censuses, tax records and land registers, through church records and civil records (recording birth, marriage and death) to dynamically updated population registers. Furthermore, each database has its own problems of sampling, selection biases and 'loss to observation', that are documented extensively. The diversity in content means that not all research questions can be addressed to all databases. The tasks of the network are fourfold:



- Mapping the diversity of data contained in European historical micro databases into a common interface based on an already established format (IDS), including metadata and documentation;
- Bringing together programmers and researchers in projects to write data extraction programmes for a number of research fields such as migration, fertility and social mobility;
- Enhancing dissemination by educating scholars in the use of the IDS and data extraction programmes;
- Encouraging the development of new databases in parts of Europe where historical population databases are scarce.

Figure 1 presents the outline of our strategy. The main idea is that all relevant databases. will transfer their data into the common data format of the IDS. Databases with not yet linked data, like census databases, can easily be included in this format because they have the same kind of data and ultimately they will develop into longitudinal databases. On the left side of the diagram you find the various types of sources included in historical longitudinal databases. Because each database captures and stores data in a different way, it is impossible to create a single data management structure that will work for every situation. On the right side of the diagram are the data files that researchers require for analyses. These files are made by the extraction software using the date from the IDS of each database in the same way. Standardised data extraction, metadata and documentation make for large gains in efficiency.

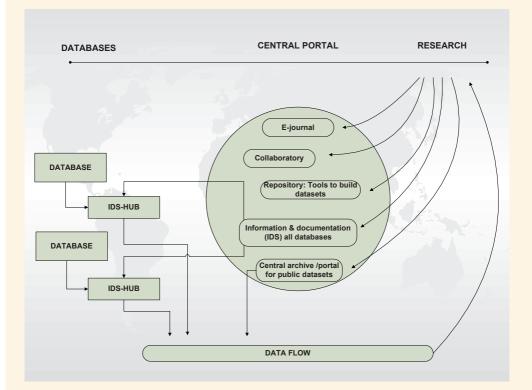
Figure 1. Basic scheme of the data extraction structure

Central EHPS Portal

Central in our network is the portal that provides access to the European databases (see figure 2). On this website an overview will be given of all databases, their contents and the degree to which their variables have been structured into the IDS. The site will also present the standardisation rules. metadata and documentation and make them downloadable. In this way the existing expertise is made available to the research community in a systematic way. Expert knowledge will be transmitted through courses designed to clarify the IDS and through accompanying software tools for interested researchers.

The EHPS-Net functions as a collaboratory in which the portal will be

the centre of all activities. The portal also offers facilities to archive and disseminate datasets from databases not equipped to handle dissemination on their own website. And, finally, the portal offers facilities to download software tools uploaded by researchers and programmers. To encourage the sharing of programmes and scripts, an e-journal will be hosted on the website in which researchers and programmers may put their products in the form of articles. This will stimulate software sharing and it promotes a careful documentation of programmes and scripts. The databases and projects involved in the network stand to gain through improved, standardised documentation, improved visibility and accessibility, and through the



possibility to compare directly with other datasets. Because of privacy regulations and/or specific regulations of databases, access to the data will be partly public and partly restricted (for example, by way of remote access).

The data extraction software will provide a type of structured data mining whereby data from the IDS are moved into file formats designed for analysis. Since the requirements of each type of analysis vary, we expect to have many specialised extraction programmes. This approach has important benefits. It is open, scalable and extendable. Any database can transfer its data to the IDS which will be documented systematically in the metadata registry.

New forms of analysis can be introduced by adding new extraction modules. Anyone can contribute an extraction module, which will be peer-reviewed. Methodologies can be examined, discussed and tested, and research results will be reproducible. This programming will be organised in pilot research projects delivering demonstrators of extraction scripts. These pilots (including datasets for the analysis of migration, fertility and social mobility) will be essential for the fine tuning of the IDS. Moreover, they will explore the potential and expand the outreach of the IDS for Europe-wide and even global comparisons of demographic processes. An online platform for teams of distributed researchers is already available at www.iisg. collab.nl.

Figure 2. Central portal as a spider in the web.

Scientific Impact

Already, databases with microdata have stimulated the fields of family and community history in their respective countries. The IDS structure provides considerable added value by offering a common template for existing and new databases to:

- Link a large number of data elements (e.g., church with tax records) relating to individuals, thus enhancing the richness of the data;
- Reconstruct the family setting of individuals, allowing for the study of intergenerational processes such as the transmission of social status, health and cultural characteristics;
- Supplement information on individuals with contextual data, creating opportunities for multilevel research;
- Implement a longitudinal or life course perspective, in order to compare, for instance, socioeconomic and demographic careers of migrants and non-migrants or urban-, semi-urban and rural dwellers;
- Compare findings based on compatible datasets across Europe and across the globe.

Comparative historical demography can play an important role in understanding the challenges faced by contemporary European (and global) society. Currently, there is an intense discussion about the nature of recent changes in family life. Everywhere, we witness a decline in marriage and remarriage rates, an increase in divorce, a rise in the age at first marriage, an increase in cohabitation, a severe fertility decline, higher levels of education and salaried employment of women. According to some scholars, these are 'new' developments, representing the demographical shadow of the genesis of a new society (risk society, post-modern society, reflexive modernity). According



to others, these new trends should not be exaggerated because continuity is more important than the differences. Processes such as the privatisation of family life, the formation and weakening of group identities, the development of new cultural identities, the reevaluation of women's role and their position in family and society, were already visible in the second half of the nineteenth century.

To understand what is occurring in contemporary European society, we need not only good *contemporary* data (which can be fitted to our standard), but also detailed and regionally diversified data on *historical* life events such as marriage, family formation, mobility and mortality. Our network and the interface between regional databases will prove a valuable tool for illuminating the role and conditions for endurance of regional family systems in an integrated Europe. Emigrants landing at Ellis Island, New York © Thinkstock

Another example of a research field that will benefit from the IDS is migration studies. We need to know more about the conditions for and the nature of (successful) integration in receiving communities, preferably also for second and third generation immigrants. The IDS will allow us to compare the fate (in terms of marriage, family formation, health, careers) of immigrants in major cities across Europe, as well as the fate of their children. IDS will strengthen a new historical research agenda emerging from the analyses of individual migration trajectories including local moves.

Our network explicitly aims to facilitate collaboration between leading experts on large databases across all continents. Comparing life courses between cultures

opens up a fascinating new field of research. A pioneering effort in this field was the Eurasia Project, sponsored by the ESF. In this project, longitudinal village reconstitutions from Belgium, Sweden, Italy, Japan and China were compared. The group studied mortality across family systems, revealing differences in internal redistribution of food, differential protection in times of economic stress, and differential power relations between generations and sexes. When more datasets are made comparable, it will become feasible to study variation in family life, in family ties and in individual behaviour by religion. by level of urbanisation and economic specialisation, by system of communal support, etc. Understanding variation and different responses to similar economic conditions or processes (modernisation. globalisation) will provide important historical reflections on present-day challenges.

In sum, the network brings together scholars who, by creating and exploiting regional or national databases, have markedly advanced the field of family history and historical demography in their respective countries. The network allows them to proceed beyond the boundaries of their individual datasets, by creating a common interface for a truly European and even global history of the life course.

Activities

The activities of EHPS-Net will follow a scheme of biannual meetings where the progress of the diverse activities will be discussed. The meetings of the steering committee will be held in connection with these meetings.

Key targets will be:

- Building the EHPS-Net portal, to be maintained by the International Institute of Social History;
- Including all main European longitudinal databases in the IDS;
- Sharing meta-knowledge about the data and work on documentation, publications and other forms of research output;
- Setting up projects for developing data extraction software (migration, fertility, etc.) and support teams of peer researchers that will create and test extraction programmes;
- Developing proposals for strategic enlargements of existing databases like census data;
- Assisting in the creation of new databases, especially in Eastern and South-Eastern Europe.

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- Suomen Akatemia/Finlands Akademi Academy of Finland, Finland
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German Research Foundation, Germany

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- Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) Netherlands Organisation for Scientific Research, The Netherlands
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National Council for Scientific Research, Romania

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Wedding picture of Marinus Bek and Aleida Gerharda Oldenhof, Zwolle 1906. © www.marechausseesporen.nl/Mrs R. Oude Vrielink van Zuidam

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For the latest information on this Research Networking Programme consult the EHPS-Net website: www.esf.org/ehps-net

Cover:

Population by age-groups, 1840, Brepols publishers © SGKJ/AGJMBorms

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