Scientific report of the EHPS-Net International Summer School in Historical Demography - Introductory course, 29 June - 8 July 2014, Cluj-Napoca, Romania

Summary

During the period 29th of June – 8th of July 2014 the European Historical Population Samples Network (EHPS-Net) and the Babeş-Bolyai University (Cluj-Napoca, Romania) organized the second edition of the International Summer School in Historical Demography at the Babeş-Bolyai University, Cluj-Napoca, Romania.
Like the foregoing one in 2013, the summer school was open for post-doctoral researches, PhD students and MA students, from socio-economic sciences, humanities, geography and medical sciences. Nineteen students attended to the summer school, coming from Croatia, Germany, Poland, Romania, Russia, Switzerland, Spain, Belgium and The Netherlands. The teachers of the summer school were very well-known scholars in the field of historical demography and their specific research area (Kees Mandemakers, Jan Kok, Siegfried Gruber, Peter Teibenbacher, Peter Ori) and two young researchers, Christa Matthys and Levente Pakot.
Based on the experience gained after the first edition and keeping in mind the evaluation reports delivered both by the students and the teachers, the program was organized in sessions addressing theoretical and methodological issues in the mornings and practical exercises in the afternoon. All students ended the course with sufficient results to receive the certificate.

Scientific content and discussions at the event

The summer school opened on Sunday, 29th of June with a welcome speech addressed by Dr. Ioan Bolovan, vice-rector of Babeş-Bolyai University and Luminița Dumănescu, the organizer of the summer school, and a short keynote speech on the purposes of EHPS-Net and scientific background of the workshop, presented by Kees Mandemakers, the chair of EHPS-Net. A welcome reception was offered to the participants in the evening.

The first day – 30th of June - was dedicated to an overview of historical demography – in the morning, and to an introduction into ACCESS, in the afternoon. Peter Teibenbacher, from University of Graz, Austria, shared the morning with Siegfried Gruber, for Max Plack Institute in Rostock, Germany. They split de morning into two sessions: in the first one, Peter Teibenbacher taught basics in family and household history in a more theoretical way, addressing issues like terms and definitions (family and household in changing historical meanings, sources, analysing methods (family/household pattern), family and household transition from premodernity into modernity. In the second one Siegfried Gruber dealt with the different kinds of sources which can be used in historical demography: census lists, register-type sources, census type church listings (status animarum), and vital registers. Their legal background and reasons for being were discussed and a set of examples of each source were shown to the students so that they recived an impression of their outlook and contents. This part also showed them the diversity in style of teh same type of sources for various countries in different centuries.

The Monday afternoon sessionhad two goals: An introduction into database design and a first try of data entry by way of Access. The starting lecture introduced Entity Relationship Diagramming, the first three Data Normalization Rules and the definition and concepts of databases (records, primary key etc.). The students were divided into small groups to make their own design from a sheet of the New York Census 1889. After the results were presented, the teacher selected the best solution to be used for data entry. After a short explanation the students started to enter the data of the first five families on the sheet. This worked well with the minor that the copies of the census sheet were not well readable ar some parts, this should be improved next time. The results of the data entry were checked and discussed next day and were sufficient to good.

The morning session of the second day, 1st of July, was dedicated to the sources and methods in historical demography. Peter Teibenbacher and Peter Ori shared the first lesson, organized around the construction and use of life tables. The lesson was gradually proceeding towards the necessity of the use of life tables. First the concept of mortality was demonstrated then the possible historical sources were shown. By discussing the problems of constructing and using crude death rates the methods of standardization were also taught. Then the concept and aim of constructing life tables were demonstrated and the necessary sources were determined. The different life table functions, the meaning of the columns and the way of calculation and construction of the tables and their interpretation were all discussed. Using the example of a concrete case (county Pest and Budapest city in 1900-1901), the characteristics of mortality during the demographic transition were shown and it was compared to contemporary life table experiences.

The afternoon session had the goal to practice query-language. Kees Mandemakers explained teh concept of queries and what kind of queries you can expect and how they appear in Access. The lecture included logical and relational operators and the linking of tables by way of the primary keys. The practical step for the students was to make and run their own queries on the basis of a dataset from the Historical Sample of the Netherlands. They made queries like 'How many male persons were married and over the age of 60 years". The day was closed with a lecture about occupational classifications and HISCO.

The entire morning session of the third day, the 2nd of July, belonged to Siegfried Gruber who split his lecture in four different sessions: the first one was an "Introduction to cross-sectional data", continuing the teaching from the day before focusing on the characteristics of microdata. The students were reminded to be critical about this kind of data as about any other data used in research (e.g. what is the intention of the people creating this source?). In the second part the challenges of these data (e.g. incomplete or fuzzy data) were discussed and the possibility to analyze demographic events with cross-sectional data. The importance to include the geographic dimension in historical demography was mentioned as well as the challenges to analyze household structures from a strict household perspective. The third and major section was about possible research questions and how to deal with them. A whole range of analyses using census-type data was shown to the students in the form of graphs (e.g. age pyramids, sex ratios, fertility levels, singulate mean age at marriage etc.). The forth and final part introduced to them major data bases of census-type data: IPUMS-USA, NAPP, and Mosaic. Their common features were presented and we visited these portals to see where to find necessary information.
The third section was about "Measurement and classification systems of households". The major possibilities are to classify households by size, generations, or structure respectively composition. The most important systems are the one introduced by Eugene A. Hammel and Peter Laslett for historical demographers and the one suggested by the United Nations and Eurostat for contemporary censuses and surveys.
The fourth section was a hands-on computer workshop on downloading and setting up census data and classifying households. The students were shown how to download census and census-like data from the portals of the North Atlantic Population Project (NAPP, www.nappdata.org/napp) and Mosaic (www.censusmosaic.org). The next step was to explain them how they can set up this data to use it. In the second part in the workshop the students had to classify households from two different censuses (Rostock in 1900 and Serbian villages in 1884) into the scheme advocated by Eugene A. Hammel and Peter Laslett and to draw anthropological diagrams of these households.
In the afternoon practicals, Siegfried Gruber let students download data from the MOSAIC [IPUMS] website and import them into Access to classify the Households structures (with queries in Access). In

the meantime Kees Mandemakers discussed with each student his or her results from the assignments of the day before. During the evening session Kees Mandemakers delivered an introduction about Database structures and the Intermediate Database Structure (IDS).

In the morning session of the 3th of July Jan Kok split the session into three parts: The first part started with theories of fertility decline, in which Jan Kok offered an overview on the classic theories (demographic transition theory of Notestein and other, European Fertility Project and diffusion theory, views on supply and demand (Easterlin, Reher & Sanz Gimeno), new research of the social context of fertility decision-making (social mobility context, N. Cummins), communicating communities, S. Szreter, extended kin, spousal relations and female bargaining power). Then, he discussed economists' views on the interrelation between demographic transition and industrial revolution (Unified Growth Theory) and the critique of this approach. Jan Kok finished this part with a synthesis of the fertility transition of Therborn. In the second part, he discussed how different types of sources allow for different methodologies. Discussion and examples of child-woman ratio, CBR, GFR, age-specific fertility and TFR, own-children method, McDonald's stepwise destandardization, stopping analysis with logistic regression, and spacing&stopping with event history (simple explanation of how survival curves can apply to fertility) were delivered to the students. Finally, in the third part, he discussed hypotheses and examples of research in several topics: religion and fertility (how can religious norms and social control affect the proximate determinants of fertility), childlessness, premarital pregnancies, extramarital fertility.

The afternoon was also divided in three parts: the first one was the last section of the ACCESS Practical's focusing on building a dataset out of the IDS for Fertility Research. The goal was to practise t the use of extraction software. The data originated f from the Historical Sample of the Netherland, and consisted of family reconstitution type data in which the only observed events were births, marriages and deaths. The students got at first an introduction by Levente Pakot into the special challenges that family reconstitution data poses for researchers and the possibilities to deal with such kind of data. Before the programming part, Levente Pakot tried to explain the nature of longitudinal data in general and the different type of variables that can be generated from it. After that he showed the sequence of SQL statements that extracts data from an Intermediate Data Structure to create a table of episodes for analyzing birth intervals. Through the SQL statements students got an introduction to the process of dataset buildings using different ACCESS queries (make-table, update, append and aggregate queries) and functions (date functions).
The next section consisted in a short introduction to STATA, delivered by Christa Matthys, who learned the students to work with the different components of the Stata-screen, different ways to load data , the basic syntax and different types of data files. The practical session on Stata were scheduled in the next days under Matthys and Pakot co-teaching.
The last point on the program was reserved to the presentation of the Historical Population Database of Transylvania, a new project of Centre for Population Studies. Ioan Bolovan stressed that the project proposal was born as a consequence of Cluj involvement in EHPS-net project. Asking the participants to offer their feedback a lively discussion developed that will help the team with the unfolding of the project. On the 4th of July Christa Matthys started offering an introduction into the concepts and literature of life course analysis. She explained the benefits of using life course analysis compared to aggregate or cross-sectional analysis: broad range of research possibilities, complexity of social processes, the study of 'deviant' behaviour. The students learned about the organisation of dat (from event to episode file), about the conceptual framework, data requirements and possible datasets.

The second teachef of the morning, Peter Ori, focused on migration. He dealt with the migration definition and possible classification of migration, demonstrated the possible sources by which demographic phenomena can be studied. The basic opportunities for measuring migration were also discussed. The very common shortcomings of migration statistics in the past and present were also demonstrated. Some basic problems concerning migration, for instance the integration of immigrants, the important theories of international migration were also dealt with. Some concrete examples were also shown: over-sea migration with the demonstration of sources and the difficulties of analysing them and short distance migration in Hungary in the neighbourhood of Budapest in the 18th century and on the basis of the Hungarian MOSAIC sample from 1869.

The afternoon session was dedicated entirely to Stata computer workshop. Pakot Levente introduced the process of generating and labeling the variables of interest and data analysis and learned the students how to transfer data from Access into STATA using the Stat Transfer Data Conversion Software Utility. After that he gave a brief introduction about several STATA commands and functions in order to construct and label variable of interest for fertility research. Christa Matthys practiced the actual use of commands and syntax, using census data and yearly vital registration data. For example, the students calculated crude death rates and plotted them, generated age-groups, etc. In the final workshop students were instructed on how to combine datasets, check for duplicates, convert variable types, count the number of individuals per household, calculate weighted means, etc.

On Saturday the 5th of July, the morning session belonged to Jan Kok and Christa Matthys who taught about mortality. Jan Kok started with a case of very high infant mortality, St Kilda in outer Hebrides, which allowed him an effective connection with more theoretical parts later on, such as Mosley and Chen's conceptual framework of the proximate determinants of infant and child mortality. He briefly discussed definitions and measures, and showed some overall trends and variation in mortality. Matthys discussed social differences and the timing and patterns in mortality decline. Like the day before, the afternoon was dedicated to practical exercises in STATA. Students were reminded the nature of longitudinal data and especially the nature of the data that can be used in survival analysis. The major issue was about constructing age-specific marital fertility rates from the datasets using several STATA commands (like *generate*, *replace*, *stset*, *stptime*) and functions (*by*, *at* etc.).

On Sunday, July 6th, the teachers and students were working on assignments. Students had to generate new variables (like birth cohorts) and to construct age-specific marital fertility rates by birth cohorts using the "HSN birth interval episodes" database or to calculating rates within households of a microcensus.
Eventually, on the last day of the summer school, the student's assignments were evaluated by Christa Matthys and Levente Pakot. All the students succeeded to accomplish the tasks and, as a consequence, they all received certificates hand over by Luminita Dumanescu during the last meal together.

Assessments of the results and impact of the event on the future directions of the field

All in all, according to the reactions of the students and the teachers the workshop was successful. The evaluation resulted in several suggestions with the aim to improve a possible succeeding course of which all agreed that this should be realized in the following year.
Main problems encountered during the courses came from the practical exercises. While some students were already familiar with Access and Stata, most of them had no background. More than that, students worked with different language versions of Access which made it difficult for some of them to implement the query like an Apple using Irishman working with a Rumanian version because Apple itself has no Access. Care should be taken that enough English versions are available next time. Unknown languages are also a problem for the teachers in handling problems in an efficient way. About half of the queries were realized by the students within the available time, next time we can expect 2/3 after repairing some mistakes in the assignments. Although very well structured some of the tasks were too difficult for the students, for example like restructuring day, month and year numbers into a date format by way of the date function. These tasks took a lot of time for which reason only the first three or four tasks were fulfilled. Next time this practical should take a step down and avoid complex functions to start with. However, the idea to work with a dataset structured in IDS was appreciated .
General opinion was that the course was too condensed and the time allocated for some specific issues too short; especially the practices where they learned to work with software Access and Stata. The students claimed more time for exercise since, in their opinion, working with the specific software is the easiest way to learn theory. Also, they suggest for the next edition to concentrate on one only one data program, since it is hard to learn two or more programs in a such short time.
As for the language, due to the preliminary step based on the Skype interview, the language was not a problem this year, all students were on sufficient level.
Relation with advanced courses: It is necessary to specify the start levels of the advanced courses. That should be the output levels of the introduction course.

Annexes

Schedule

29 June	
09:00 -	Arrival and accommodation of the trainees and trainers
20:00	Welcome and introductory briefing - Universitas Cafeteria
30 June	INTRODUCTION HISTORICAL DEMOGRAPHY AND ACCESS
09:00-11:45	Family and Household Systems, Regional Patterns and Transition, 18th to 20th century (Peter Teibenbacher) • Hajnal • Laslett and Wall • The French School
12:00 -13:00	Sources Historical Demography (Siegfried Gruber) • Parish registers and civil registers. • Status animarum • Census lists • Population registers
	Breaks from 10:15-10:30 and 11:45-12:00
13:00-14:30	Lunch
14:30-15:30	DATABASE DESIGN (Kees Mandemakers)
15:45–18:30	Access: Creating Tables, Simple Queries (Kees Mandemakers and Siegfried Gruber)
	Breaks from 15:30-15:45 and 16:45-17:00
1 July	SOURCES AND METHODS
09:00-13:00	• Life and mortality tables (Peter Teibenbacher and Peter Ori) • Family Reconstitution
	Breaks from 10:15-10:30 and 11:45-12:00
13:00-14:30	Lunch
14:30-17:15	Database Tools (Kees Mandemakers and Siegfried Gruber) • More complex queries • Joining tables
17:30 – 18:30	Social stratification and mobility (Kees Mandemakers) (social class, social position, social structure, HISCO, structural and

	cyclical mobility)
	Breaks from 15:30-15:45 and 16:45-17:00
2 July	CROSS-SECTIONAL DATA
09:00-13:00	Introduction to cross-sectional data: sources, uses of cross-sectional data, challenges (Introduction to IPUMS, NAPP and MOSAIC) (Siegfried Gruber) Household classification systems (measurement, different systems and methods for applying to household listings (Siegfried Gruber).
	Breaks from 10:15-10:30 and 11:45-12:00
13:00-14:30	Lunch
14:30-17:00 Database tools	Hands-on computer workshop (Siegfried Gruber and Kees Mandemakers) • Downloading and setting up data (census) • Classifying households
	Breaks from 15:30-15:45 and 16:45-17:00
17:30 – 18:30	Database structures and the IDS system (Kees Mandemakers)
3 JULY	FERTILITY

09:00-13:00	• Fertility transition (Jan Kok)
	• Geographic diffusion, socio-economic gradients
	• The Natural Fertility Model
	• The Princeton European Fertility Project
	• Adaptation versus Innovation
	• Unified Growth Theory
	• Marital and non-marital fertility
	• Theories: Malthus, Coale, Becker,Easterlin
	• Measuring Fertility
	  • Introduction and motivation
	  • Aggregate measures
	  • Own-children method, Mc Donald's decomposition
	• Event history methods
	• Select research topics: religion and fertility, childlessness, pre- and extramarital fertility

	Breaks from 10:15-10:30 and 11:45-12:00
13:00-14:30	Lunch
14:30-16:45	Building datasets out of IDS for Fertility Research (Kees Mandemakers and Levente Pakot)
	Breaks from 15:30-15:45 and 16:45-17:00
17:00 – 18:30	Introduction into STATA (Christa Matthys)

18:30 – 19:00	HPDT presentation – (Ioan Bolovan, Vlad Popovici)
4 July	LIFE COURSE TRANSITIONS
09:00-13:00	• Life course transitions (Christa Matthys) • Nuptiality (aggregate measures, event history analysis, age at leaving home) • Migration (Peter Ori) • Micro and Macro theories • Types of migration (single - group, circular - permanent etc.) • Migration Records
	Breaks from 10:15-10:30 and 11:45-12:00
13:00-14:30	Lunch
14:30-18:00	• Stata Computer workshop (Christa Matthys and Levente Pakot)
	Breaks from 15:30-15:45 and 16:45-17:00
5 July	MORTALITY
09:00-13:00 Issues, Sources & Methods in historical demography	• Child Mortality (Chrysta Matthys and Jan Kok) • Death clustering, households and mortality, infanticide • Life Chances • Social Gradient Mortality • Timing and Patterns Life Mortality Decline
	Breaks from 10:15-10:30 and 11:45-12:00
13:00-14:30	Lunch
14:30-18:00 Workshop	Stata Computer workshop (Christa Matthys and Levente Pakot)
	Breaks from 15:30-15:45 and 16:45-17:00
6 July	WORKING ON ASSIGNMENTS
09:00 – 10:00	Instructions Assignments (Christa Matthys, Levente Pakot))
10:00 – 12:30	Working on Assignments
13:00-14:30	Lunch
14:30 – 18:00	Working on Assignments
18:00	Intake Assignments
7 July	
09:00-12:00	• Evaluation Assignments / Evaluation Summer School (Christa Matthys, Levente Pakot)

12:00 – 13:00	• Closure and official hand over certificates
13:00-14:00	• Lunch, departure

Full list of instructors

Siegfried Gruber, Max Plank Institute for Demographic Research, Konrad-Zuse-Straße 118057 Rostock, Germany Germany, gruber@demogr.mpg.de
Jan Kok, Radboud Universiteit, Comeniuslaan 4, 6525 HP Nijmegen, The Netherlands, j.kok@let.ru.nl
Pakot Levente, Hungarian Central Statistical Office. Demographic Research Institute. 1-3. Budai László u., 1024 Budapest, Hungary, pakot@demografia.hu
Kees Mandemakers, International Institute of Social History, EHPS-Net, Cruquiusweg 31, 1019 AT Amsterdam, The Netherlands, kma@iisg.nl
Chrysta Matthys, Max Plank Institute for Demographic Research, Konrad-Zuse-Straße 118057 Rostock, Germany Germany, Christa.Matthys@UGent.be
Ori Peter, Hungarian Central Statistical Office. Demographic Research Institute. 1-3. Budai László u., 1024 Budapest, Hungary, ori@demografia.hu
Peter Teibenbacher, Karl-Franzens Universitat Graz, Universitaetsplatz 5, 8010, Graz, Styria, Austria, peter.teibenbacher@uni.graz.at

Full list of students

Name	Affiliation	Education	Email
ANGELOVA DANIELA (F)	Center for Population Studies - BAS	PhD, Chief Assistant	dani_savova@yahoo.com
BANJAMIN MATUZAK (M)	Martin Luther University, Halle	PhD candidate in Economic and Social History	bmatuzak@gmx.net
BEZVERBNY, VADIM (M)	Moscow State University, Socio-political research institute Russian academy of Science	PhD. Lecturer, research associate. Economics and sociology	vadim_ispr@mail.ru
CAPPON GERY (M)	University of Ghent	PhD	gerycappon@telenet.be
COROIAN IZABELA GEORGIANA (F)	Babes-Bolyai University, Romania	Master student, will probably apply for a PhD position	georgiana.izabela.coroian@gmail.com
ELENA CRINELA HOLOM (F)	Babes-Bolyai University, Romania	PhD, reseacher in History	elena_crinela@yahoo.com
FOLDES IONUT (M)	Faculty of Sociology and Social Work, BBU, Cluj, Ro-	MA Student	ionut.foldes@gmail.com

	mania		
IGNAT ELENA IOANA (F)	Babes-Bolyai University, Romania	PhD, reseacher in History	ioanaeignat@yahoo.com
KATUSIC MAJA (F)	Croatian Institute of History	Senior research assistant, PhD in History	m.katusic@isp.hr
KLAGES, STEPHANIE (F)	University of Munster, Germany	Master student, will probably apply for a PhD position	s.klages@uni-muenster.de
KUZNETSOVA (F) INGA	Higher School of Economics, Moscow	Postgraduate Student	ibkuznetsova@hse.ru
LICZBINSKA GRAZYNA (F)	Adam Mickiewicz University, Poznan	PhD, Researcher	grazyna@amu.edu.pl
MARCO GRACIA FRANCISCO JOSE (M)	University of Zaragoza	PhD in Economics	fran.marco.gracia@gmail.com
MIHAELA MEHEDINTI (f)	Babes-Bolyai University Cluj	Postdoctoral student	mihaela_mehedinti@yahoo.com
OISIN GILMORE (m)	Groningen, Netherlands	PhD student	o.h.gilmore@rug.nl
RAFTAKIS MICHAIL (m)	University of Newcastle, United Kingdom	PhD in History	m.raftakis@newcastle.ac.uk
RUSTERHOLTZ CAROLINE (F)	University of Fribourg, Switzerland	PhD student in History	caroline.rusterholtz@unifr.cz
YOKOTA TIENE DE CARVALHO, RENATA (F)	Free University, Brussels	PhD stud in Sociology/demog	Renata.Yokota@wiv-isp.be