

## CALL FOR PAPERS

### SIDES - Italian Society of Historical Demography

#### Triennial Conference

#### Population, environment, health: shadows and discontinuities

Alghero, 24-26 September 2012

The Italian Society of Historical Demography (SIDES) invites all its members and other scholars interested in the subject to submit a proposal for its next triennial conference «Population, environment, health: shadows and discontinuities», which will take place in Alghero (Sardinia) in the period 24-26 September 2012.

Scholars with different specializations have shown an increasing interest in the consequences of changes of the environment, both physical and biological, for human populations. Particularly from the aftermath of World War II, the quick growth of the world population led to reflect on the carrying capacity of planet Earth, and later led to investigate the existence of ecological constraints that, if violated, have (or might have) consequences on a wide scale, even a global one. In time, the new awareness of the importance of environmental variables, in a broad sense, led to investigate aspects until then neglected of the Industrial Revolution, and even to look from a new perspective to the long 'preindustrial age' which was also marked by crucial environmental discontinuities.

The conference aims to explore the demographic aspects of the humans-environment interaction, both from the perspective of long-term changes (the biological discontinuities determined by the appearance of new diseases; the impact of climate change on human populations; and so on), and comparing synchronically the demographic characteristics of different environmental contexts. The capacity of the environment to influence human populations will be analyzed from many different perspectives, including the wholesomeness of the physical environment and the living context (and consequently, the population health); the adaptation of man to specific environments or to environmental changes, also by means of the adaptation of the social structures and the institutions; the importance of anthropic factors in triggering environmental changes. Particularly with regard to the last two centuries, a fundamental variable that will be analyzed in detail is the consequences of discoveries in medicine, which with time were able to deeply alter the ways of interaction between human beings and the environment.

The conference will be divided into six sessions, described in the following pages:

- *Biological discontinuities in the preindustrial period* (organized by Guido Alfani)
- *Environmental discontinuities in the industrial age* (organized by Simonetta Grilli and Paolo Viazzo)
- *Population and climate. The influence of climatic factors on demographic processes* (organized by Alessio Fornasin and Matteo Manfredini)
- *Health, morbidity and mortality, between built-up space and living environment* (organized by Luigi Lorenzetti)
- *Population and medical discoveries. The impact of scientific and technological innovations on population/environment relationships (19th -20th centuries)* (organized by Lucia Pozzi)
- *Demographic Thought, Medicine and Eugenics in the Age of Positivism* (organized by Giovanni Favero)

The proposals, which should include a short abstract, have to be sent directly to the organizers of each session, before 15 October 2011. Notice about acceptance of the proposal will be given before 15 November 2011. Papers are required in advance and will have to be submitted, according to the specifications that will be communicated at a later time, before 15 June 2012.

## ***Biological discontinuities in the preindustrial period***

(Organization: Guido Alfani [guido.alfani@unibocconi.it](mailto:guido.alfani@unibocconi.it))

The return of plague to Europe in the fourteenth century marked a crucial moment of discontinuity both from the biological, and from the demographic point of view. After the first epidemic which began in 1347, plague stayed in the European continent deeply influencing its population dynamics. Analogously, the disappearance from the continent of endemic plague, which probably happened, at least in the West, during the second half of the seventeenth century (later plagues were due to re-infection from outside this area), was one of the pre-conditions of the eighteenth-century demographic growth beyond limits of population that until then seem to have been impossible to exceed.

The session aims to explore the demographic consequences of some fundamental discontinuities in the Italian and European biological environment. Apart from plague (to be considered both at the time of its return to Europe, and at that of its disappearance during the seventeenth-eighteenth centuries), other “new” diseases were able to deeply affect demographic and social-economic dynamics, for example typhus (which, according to the famous doctor Girolamo Fracastoro, made its first appearance in Italy in 1505) or syphilis. The latter, when it arrived in the Old World coming from the New (an hypothesis of diffusion that is admittedly the object of animated discussions) acquired for some decades the characteristics of a pandemic. Also cholera, the great new disease of the nineteenth century, when it entered the Italian peninsula for the first time (1835) marked an important biological discontinuity in what basically was still a preindustrial society. With regard to the most ancient epochs, 1347 is not to be considered an impassable limit as, for example, the disappearance of plague from Europe after the sixth-century pandemic known as “the Justinian plague” had demographic consequences which are worthy of specific analyses.

The session welcomes both wide-ranging papers about the demographic and social-economic consequences of fundamental biological discontinuities (also in terms of the construction of specific bio-demographic *scenarios*), and case studies or focussed enquiries aiming to analyze, for example, the impact of said discontinuities on the structure of the population per age and sex, on the potential for growth and for the reproduction of the generations, on the marriage strategies or more generally the strategies of social relation, and on social-demographic behaviours in a broad sense.

Furthermore the session is not interested solely in the consequences of the appearance of a new disease in a virgin-soil population, but also in biological discontinuities that developed, synchronically, between different areas. For example, during the seventeenth century plague struck much more severely Italy and other parts of the Mediterranean compared to north-western Europe, while cholera had, in its different pandemic phases, a much varied territorial impact. The session intends to reflect on the measure in which, according to the cases, these discontinuities were due to factors which are the result of the biological environment strictly speaking, or also to anthropic factors (behaviours, institutions) and to physical factors (morphology of the terrain; differences in climate; etc.).

## *Environmental discontinuities in the industrial age*

*Organization:* Simonetta Grilli, [simonetta.grilli@unisi.it](mailto:simonetta.grilli@unisi.it); Paolo Viazzo, [paolo.viazzo@unito.it](mailto:paolo.viazzo@unito.it))

An *environmental discontinuity* occurs when a territory experiences an acceleration or a sudden and permanent change in its ecosystem; in a broader sense, however, it also occurs when a territory undergoes radical transformations – be they demographic (changes in vital rates, or the arrival of new populations), social (new family forms, changes in the relations between genders and generations), economic (new job opportunities, transformations of the occupational structure), or having to do with political conditions and the governance of resources – which affect health standards and more generally the quality of life. Either at the origin or as a result of such discontinuities, one often comes across forms of geographical and occupation mobility (short- and long-distance movements, internal and external migrations) that turn the event from which the discontinuity originates into a chronological marker in the territory's long-term history. Since the beginning of the industrial age, and throughout the current post-industrial period, significant cases of environmental discontinuity have become visible in the Italian territory: we may name the discontinuities brought about by land reclamation schemes, especially in the first half of the twentieth century, those related to the vicissitudes of mining districts, or the discontinuities connected with the crisis of the production and settlement patterns which had been distinctive of a predominantly agrarian economy. They have all caused the depopulation and the consequent marginalisation of some environments and favoured the repopulation and consequent valorisation of others, and these processes have in turn frequently entailed the decline, and possibly the social devaluation, of some economic sectors and trades and professions again in favour of others.

The aim of this session is to investigate these discontinuities, and in particular their socio-cultural aspects, by focusing on a set of major issues that may shed revealing light on the relationships between environment and populations when people move, or are moved, with their occupational skills and their ways of life to contexts that are “discontinuous” either socio-economically or physically, or both. The first issue concerns the relationship between work activities and environmental compatibility when these activities are transferred to new physical and social milieus: case-studies may range from the hiccups of population growth and decline typical of mining districts to the grafting of pastoral groups onto new areas, to the peopling of reclaimed areas. A second major issue, and one actually quintessential to the industrial age, is the polarity between town and countryside, or between flatlands and mountains, conceived of respectively as attraction poles and demographic reservoirs. A third relevant issue might be represented by the tensions between modernisation and stagnation, themselves related to economic and political change, which are intertwined with the migratory flows which are part and parcel of our time.

These discontinuities can be studied at different levels and from different vantage points. Historical demography has mostly privileged a statistical and quantitative perspective. This session proposes to complement such a perspective with others approaches coming from different disciplinary traditions, notably socio-anthropological and historical-geographical approaches. In particular, the analytical tools of anthropology, owing to the attention this discipline pays to the local point of view and the social actor's perception, may help explore the relation between the way in which such discontinuities are, or have been, represented (both by the social actors and by external observers) and factual reality such as it can, at least in principle, be measured economically, demographically and epidemiologically.

## **Population and climate. The influence of climatic factors on demographic processes**

(Organization: Alessio Fornasin, [fornasin@uniud.it](mailto:fornasin@uniud.it); Matteo Manfredini, [matteo.manfredini@unipr.it](mailto:matteo.manfredini@unipr.it))

The aim of this session is to stimulate contributions addressed to investigate the role played by climatic factors and weather conditions on demographic processes, from antiquity to the first decades of the 20<sup>th</sup> century.

Recently, the attention of researchers on the effects of global warming and climate change has been increasing. Plenty of studies have been published on the repercussions of such climate change especially on mortality and migrations of contemporary human populations.

As for historic populations, studies have emphasized long-term changes of peopling in connection with global climate modifications, paying few attention to the influence of climate on demographic mechanisms. Difficulties in retrieving reliable data represent perhaps the most important reason for this limited attention. At present, studies on these issues have been primarily focused on mortality. Particularly interesting and stimulating are the analyses, unfortunately still quite a few, that have been addressed to investigate the causal chains and causal mechanisms – physiological, social and/or cultural – behind the relationship between climate and mortality. As for infant mortality, surely the most studied issue, the research is mainly focused on its relationship with the season of birth, especially the analysis of the association between maternal malnutrition, neonatal mortality and winter season on the one hand, and between weaning and summer season, on the other hand. Similar concepts are the ground of the studies concerning the association between climate and old-age mortality. The elderly constitutes a definitely minority component in historical populations, but also in this case it would be useful to analyze the causal chain of the mechanisms linking mortality in old age and hot climate.

Another important topic strongly related to weather and environmental conditions is epidemics. Few studies have highlighted the etiological aspects of an epidemic connected to climatic factors. Climate conditions may in fact favor both the genesis and the diffusion of viruses as well as they might influence indirectly the nutritional status of individuals by, for instance, affecting the amount of crop and the availability of food.

If studies stressing the relationship between mortality and climate are not rare for historical populations, much fewer are the studies on the influence of climate on fertility. Notwithstanding many works have already proved the key role of temperature and photoperiod on the biological capacity to conceive in contemporary populations, very little is known about the same association in historical settings, at least for Italy. And this is surprising because especially the populations of *ancien régime* should suffer mostly from the effects of climatic conditions due to their natural fertility model and jobs which were prevalently executed outside, and therefore much more affected by climate.

A last element concerns the demographic consequences of extreme weather conditions and weather events such as floods and droughty years. Such events could affect, besides the obvious consequences on mortality and fertility, also migrations and marriages, the former characterized by people and families forced to leave their houses, the latter postponed awaiting better times.

All the topics here proposed can then be deepened by investigating the interaction between climate and socioeconomic status. It is in fact undoubted that many of the possible effects that climate might have on demographic events could be mitigated by the social status and economic conditions of individuals and families. Just to give an example, nutritional issues connected with infant mortality as well as the material and cultural ability to cope with mortality crises and epidemics are only two of the most important elements that could give rise to mortality differentials between the well-off and the poorest strata of the population.

## ***Health, morbidity and mortality, between built-up space and living environment***

(Organization: Luigi Lorenzetti, [luigi.lorenzetti@usi.ch](mailto:luigi.lorenzetti@usi.ch))

Research in historical demography has often highlighted the influence of environmental conditions on health and levels of morbidity and mortality of the populations living in the past. In particular, numerous studies have stressed the importance of living conditions in cities, often characterised by high density of housing and precarious hygienic-health conditions, therefore especially vulnerable to the recurring epidemic crises which are a main feature of the old demographic regime.

On the basis of many contributions to these topics and exploiting the methodological progress in qualitative and quantitative analysis made in recent years, this session, open both to contributions of synthesis (if possible with a comparative approach) and to the presentation of case studies, intends to deal with some thematic knots regarding the relationship between the town-planning housing conditions of built-up spaces, both urban and rural, and the population's levels of health. The session intends to highlight the environmental factors of settlement (structures of the built-up areas, localisation, ecological context, hygienic conditions in workplaces,...) and of housing (quality and types of houses, organisation of the household spaces, density of housing, solutions for heating and ventilation, ...), which may influence the levels of morbidity and mortality and give rise to specific etiologic profiles.

At the same time the session wishes to analyse the role of the housing practices and solutions put into operation to guard against the risks of morbidity and mortality, especially in the first phases of life, when environmental conditions can influence the probability of survival in a decisive way. In this perspective the comparative approaches hinging around various socio-economic groups belonging to a urban or territorial context or, vice versa, around identical socio-economic groups, which belong, however, to different territorial situations, can offer useful indications about the management of the vulnerability of life by the population and family groups. The discontinuity of the ways of life represented by urban immigration can also provide interesting points for analysis of the ability/possibility of "adaptation" to the environmental and housing conditions of the city.

Finally, a further field of investigation opens up thanks to the many surveys dedicated to the living conditions of urban as well as rural populations carried out in Italy and Europe by communal, regional and state authorities, especially from the 19<sup>th</sup> century onwards. As well as the ample, direct cognitive contribution on health and the quality of life of the populations of the time, these surveys enable the impact of the sanitisation policies of housing spaces to be assessed in the process of health transition and in the creation of social and geographic inequalities when faced with the risks of morbidity and mortality. Moreover, they offer a starting point for an analysis of the attitudes and behaviour of urban populations towards health when faced with the transformations "imposed" by urban authorities.

***Population and medical discoveries. The impact of scientific and technological innovations on population/environment relationships (19<sup>th</sup> -20<sup>th</sup> centuries)***

(Organization: Lucia Pozzi (lpozzi@uniss.it))

This session aims at discussing the role played by medical, scientific and hygienic improvements in the control and modification of the environmental determinants of the population's health in the past.

The attention will be focused on the whole range of discoveries, scientific improvements and cultural novelties which radically renewed medicine between the 19<sup>th</sup> and 20<sup>th</sup> centuries, its scientific contents as well as health actions and sanitary interventions.

Thanks to the advancements achieved during the last decades of the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup>, the health strategy became one of the most innovative factors, which affected the relationship between population and environment.

With the development of the microbial theory and the bacteriological technique it was possible to formulate a general theory on infectious diseases. The knowledge relating to the etiology and the transmission mechanisms of infectious diseases, besides permitting, decades later, the introduction of antimicrobial chemotherapy and immunology (truth drugs and vaccines), allowed a complete reorganization of the hygienic and public health measures for prevention (water supply and sewage systems, food quality control and preservation techniques, etc.) built upon scientific and experimental principles instead of empirical ones.

In parallel to the microbiology and bacteriology theory, with the creation of institutes and laboratories of hygiene, experimental methods of research in hygiene and public health were developed. These laboratories favoured the application of instrumental physical and chemical methods to the analysis of food, water, and ventilation.

To fully achieve scientific development, public hygiene could not get limited to the physical, chemical or biological analysis. It was also necessary to examine, with the contribution of social sciences, the economic, cultural and social effects of the different contexts where the individuals were born, lived, worked, have children, got sick and die. During the whole 19<sup>th</sup> century and in the first decades of the 20<sup>th</sup> the statistical analysis of the relationships between social status and disease became an integrant part of medical research, inspiring health interventions and measures.

The issue of a social significance of disease encouraged the birth and development of community medicine in the first decades of the 20<sup>th</sup> century. In those years, indeed, in many Italian and European cities various health institutions and services were established: milk depots ("gouttes de lait"), mother and child health care dispensaries, school inspection and school meals, antitubercular dispensaries, disinfection services, popular canteens, etc. The staff of these centres consisted of various health and sanitary professionals and technicians (hygienists, paediatricians, physiologists, puericulture and visiting nurses, teachers, etc.); from the 1930's and 1940's the first nutritionists were included into this group.

The health campaigns became working methods of a new medical speciality whose priority objectives were the surveillance of population groups at risk, the sanitary education, and the necessity of an early diagnosis of health and diseases problems. The groups at risk were defined on the basis of demographic or socio-cultural criteria (women, students, industrial workers, etc.) or as carriers of degenerative or prejudicial conditions to the community health (tubercular, syphilitic, alcoholic patients).

In addition it should be mentioned that in the last decades of the 19<sup>th</sup> century paediatrics became an independent discipline, a part from obstetrics and internal medicine; whilst puericulture was transformed in a medical speciality dedicated to the study of infant's physical and psychological development. The enhancement of both disciplines was a consequence of the progressive knowledge in the respective fields, but represented also an answer to the social concern caused by the excessive infant and child mortality.

The topics proposed here cover only the main thematic issues, which will be discussed in the session; proposals addressing other aspects of the so-called "health care transition" may be accepted.

## ***Demographic Thought, Medicine and Eugenics in the Age of Positivism***

(Organization: Giovanni Favero, [gfavero@unive.it](mailto:gfavero@unive.it))

This session is open to contributions on the connections and intersections between demography and medicine in the age when eugenics was considered a scientific discipline useful for the “improvement of human material” (Cassata 2006).

A first question is whether and how the application of medical concepts to the study of population fostered the emergence of the idea that heredity was the determining factor in the evolution of human societies; but the focus is also on the role a statistical approach to medicine had in the change that affected “biopolitics” between the 19<sup>th</sup> and 20<sup>th</sup> Centuries, transforming traditional population policy into sort of a health policy for the collective body of the nation (Jorland-Opinel-Weisz 2005). From the convergence between a focus on heredity and an interventist ideology, eugenics was indeed born as a discipline that was able, as other emerging social sciences, to couple a strong political significance and a relatively high level of formalization.

Since the early 19<sup>th</sup> Century, debates on the physical, biological or racial characteristics of human beings were part of the evolution of population studies from a description of the population of a State to a science of the laws regulating the state and movement of human populations. The first course in demography was taught in 1876 at the Ecole d'Anthropologie de Paris that was part of the Faculty of Medicine, and the series of International Congresses of Demography, opened in Paris in 1878, was soon merged with that of hygiene in 1882. In this context, the emergence of anthropometry was directly connected to the definition of “normal” as opposed to “pathological” (Donato-Berlivet 2011), and the research on individual features for purposes of identification, control and social intervention went hand in hand with the development of vital statistics (Schweber 2006; Higgs 2004). The link between physical (and racial) attributes and social (class) behaviours became at the end of the 19<sup>th</sup> Century the privileged object of study for British mathematicians and statisticians: Francis Galton and Karl Pearson (Porter 2004) fully established eugenics as a science through the introduction of universal mathematical tools (the correlation and the regression) specifically developed to measure the relationship between the physical and intellectual characteristics of living beings and humans in particular (Mazumdar 1992). During the first decade of the 20<sup>th</sup> Century, scientific journals specialized in eugenics multiplied; national societies of eugenics were established (sometimes preceded by special committees for the study of eugenics inside other scientific societies) in the UK in 1907, in the US in 1911 (1906), in Sweden in 1909, in France, Austria and Holland in 1912, in Italy in 1919 (1913), in Hungary in 1914; in 1912 the first International Congress of Eugenics was held in London, and the second followed in New York in 1921 (Langford 1998). Eugenic studies spread in the interwar period in all Western countries, but the policy recommendations that followed from them had very different features depending on the context, placed on a broad spectrum ranging from the application of hygiene to maternity and child care to “preventive” measures as forced sterilization, up “repressive” interventions for the isolation and elimination of the individual carriers of undesirable traits. After World War II, academic continuity in social sciences and the cross-culturality of the eugenic paradigm explain somehow the difficulties the international scientific community encountered in abandoning the concept of race. This was officially discarded only in the late 1960s, starting the ongoing debate on bioethics (Pogliano 2005).

The session welcomes participants who are interested in challenging, complicating and deepening this quickly outlined framework, through an international and comparative analysis of the scientific and institutional evolution of the knowledge involved in the “eugenic utopia”, but also through scientific biographies of individuals or groups, or through the examination of surveys, research projects and “human engineering” interventions.