

The Relevance of Digitalization for the Auxiliary Sciences of History

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ABSTRACT

The nature and importance of the auxiliary sciences of history are briefly outlined. The online status of some of these disciplines is described and some possible trends and evolution lines linked to digitalization are identified or suggested.

KEYWORDS

Auxiliary sciences, digitalization, biography, genealogy, chronology, historical cartography

1. INTRODUCTION

The expression “auxiliary science of history” applies to a wide variety of disciplines. In the present context we shall focus on a restricted set of sciences, including biography, prosopography, genealogy, heraldry, onomastics, chronology, historical demography, historical cartography and toponymy. A more complete list would involve archival science, diplomatics, palaeography, epigraphy, codicology, numismatics, sigillography, vexillology, phaleristics, cliometrics and probably several other sciences, but our personal experience involves only the first group.

Unfortunately, the adjective "auxiliary" is often declined in the sense of "ancillary", in a hierarchical vision of the sciences that has illustrious antecedents, from the "*philosophia ancilla theologiae*" of a medieval tradition, to the Comtian classification of disciplines and to the physicalism preached by logical positivism. Instead, we think that the "auxiliary sciences" have full dignity and conceptual autonomy, being endowed with their own epistemological status, their own methodology, with specific technical languages and with their own communicative codes.

In particular, we think that Digital Humanities can make a strong specific contribution to the development and knowledge of these disciplines, for some good reasons that we are going to analyze.

2. PRESENT AND FUTURE OF DIGITALIZATION

First and foremost, we note that these disciplines are almost always characterized by strong classificatory systems, and therefore they are particularly suitable to be organized and described by the use of digital tools, and especially by databases, possibly relational ones (but we will come back to this point). We also note that these are often matters characterized by a large amount of data, that the traditional conservation tools (libraries, archives) often make it difficult to access and compare, as it is hard to imagine physical locations where the relative documentation could be easily collected in a complete (as far as possible) version and could be analyzed in a "reasonable" amount of time. We will see with concrete examples which possibilities are already offered by Internet for some of these disciplines, and above all which perspectives can be imagined for the near future both for research as such and above all for research support activities (creation of portals, construction of relational databases, and so on).

The first interesting case is Biography, understood as a discipline separate from the narration of historical events in which the subject was involved and focused on personal, familiar and professional events. Clearly, the first basis for biographical documentation are archival documents (marital status, land registry, parish and notary registers, contemporary local chronicles, etc.) from which it is often difficult to obtain information.

In this sense, the creation of the portal *Antenati*¹ of the MIBACT (Ministry of Cultural and Environmental Heritage and Tourism), which contains images of the civil status registers of several Italian cities, accompanied by a reasoned index of names, is meritorious. Unfortunately, only slightly more than half of the provinces are covered at present, and for recent times there are obvious limitations related to privacy.

¹ <http://www.antenati.san.beniculturali.it/>

Limiting ourselves to secondary sources, an obvious reference is the *Dizionario Biografico degli Italiani* by the *Istituto dell'Enciclopedia Italiana*, now almost completed (at present volume 97 and letter V are published) after a troubled journey, now sixty years long.

Over thirty thousand biographies are accessible online² with usually very exhaustive entries and extensive bibliographies. Unfortunately, not all areas have been explored with the same accuracy, so it is easier, for example, to find information on even minor personalities of the literary world than on scholars of scientific disciplines, sometimes even relevant ones. Among the most relevant foreign experiences, the German portal³ *Deutsche Biographie* deserves to be mentioned, which offers access to numerous links (including the articles of the *Neue Deutsche Biographie*) and could represent a replicable model. The volumes of the *Nouvelle biographie générale* (46 volumes published between 1852 and 1866) are also available online, with an obvious chronological limitation. The *World Biographical Information System Online*⁴ (with information on over 6 million individuals) is a privately-owned system that requires institutional access (and in Italy only the Venetian University Ca' Foscari is providing it).

Prosopography consists in the collective study of the lives of groups of characters, typically linked to a definite period and territory, or to a specific discipline. Also in this case, as in that of biography, the use of digital tools can be valuable, not only for the collection and presentation of materials, but also and especially for the opportunity to create relational databases that facilitate the search for physical and logical links between the subjects.

Interesting experiences have been made also in Italy, in particular with reference to specific academic disciplines. We recall the portal *Scienza a due voci*⁵ connected to the *Dizionario delle Scienze Italiane*, the biographies of Italian mathematicians⁶ on the *MATEpristem* website of the Bocconi University, the pages on Italian astronomers in the INAF website⁷ and the dictionary of Italian physicists⁸ associated with the volumes *I Fisici Italiani* published by SIF.

Genealogy is, among the auxiliary sciences of history, the one that certainly attracts the greatest interest among those who carry out non-professional online research, and unfortunately also among those who publish the results of their research online. As a consequence, an enormous amount of material indexed by search engines has been produced, among which it is often extremely difficult to identify truly reliable information, also because data are often "copied" from other online sources which in turn are almost always originating from secondary sources, rarely specified and identified.

Consequently, one may easily understand the "bad reputation" enjoyed by this discipline, which has always been associated with the often unjustified ambition of being able to boast illustrious ancestors and to the consequent ample space left for mystification, sometimes involuntary but not rarely dictated by the lack of scruples of self-declared "experts".

There are already portals, especially in the Anglo-Saxon world, which report and sometimes review part of the material accessible online, and there are sites characterized by a fair degree of reliability. A couple of sites whose quality is better than average are *Genealogics*⁹, by the late Leo van de Pas, and *Roglo*¹⁰, by Daniel de Rauglaudre and collaborators.

However, in our opinion what is completely missing is an effort by the academic world aimed at building an "institutional" network of genealogical information, and this is particularly true in Italy, for historical and cultural reasons already investigated elsewhere [1].

We would like to underline the importance of a reassessment of genealogy as an autonomous science, recalling in particular its close connection with genetics, of which it could be fully considered "auxiliary science" [2]. As for the relevance of the use of digital tools not only in the presentation of results, but also, and perhaps above all, in research activities, in addition to referring to what has already been said about biographies, we would like to underline the important connection with onomastics (and in particular with anthroponymy), exalted by the creation and use of the relative databases, and exploited in a particular way in recent times by scholars such as Christian Settapani¹¹ (not surprisingly a professional computer expert).

² <http://www.treccani.it/biografico/index.html>

³ <https://www.deutsche-biographie.de/>

⁴ <https://wbis.degruyter.com/>

⁵ <http://scienza2voci.unibo.it/>

⁶ <http://matematica.unibocconi.it/i-matematici>

⁷ <http://www.astropa.inaf.it/enforcement-storico/astronomi/>

⁸ <http://osiris.df.unipi.it/~rossi/Dizionario.pdf>

⁹ <https://www.genealogics.org/>

¹⁰ <http://roglo.eu/roglo>

¹¹ https://it.wikipedia.org/wiki/Christian_Settapani

Chronology deserves a separate chapter, being a subject as vast as the whole of human history, and as such particularly complex and difficult to manage with traditional (paper) documentation tools, being moreover characterized not only by a temporal coordinate (diachrony) but also by spatial coordinates (synchrony), often linked together by events that are not strictly localized. In this sense, the potential of digital tools can be decisive in the organization of the data and in the explanation of the relationships that exist among the data. While on the one hand there is a large number of chronological printed works, both relating to individual countries and also of a "universal" character, on the other hand we are not aware that there is any portal or site that can be qualified as "scientific" dedicated to the systematic presentation of historical information on a chronological basis. Again, data digitization projects and the organization of data in relational databases, even only on a local and regional basis, could significantly expand the sphere of availability compared to the current methods of retrieving chronological information.

The situation is slightly better with regard to historical cartography, but even in this case the digital tools have not yet been fully exploited. In particular, the existing online repertoires almost always make use of static images, either taken from traditional historical atlases or even newly created. In the *Fastweb* site one may find a portal¹² dedicated to online historical atlases. Other interesting sites presenting historical maps can be easily found by the use of search engines.

In a future perspective, the creation of dynamic maps, able to show diachronically the evolution of historical processes (migrations, expeditions, territorial conquests, diffusion of technologies, and anything else that could be usefully represented on a map) would represent a real and positive evolution of historical cartography.

Historical demography is another issue that would strongly benefit from digitalization. There is a large amount of scientific literature on the subject of demography, but we are not presently aware of any scholarly sources easily available online.

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¹² <https://www.fastweb.it/web-e-digital/i-migliori-atlanti-storici-online/>