PROCEEDINGS OF THE

XIVth INTERNATIONAL NUMISMATIC CONGRESS

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A PROSOPOGRAPHY OF THE MINT OFFICIALS: THE *ELIGIVS* DATABASE AND ITS EVOLUTION

LUCA GIANAZZA

The increasing success of prosopographical studies applied to specific historical (e.g. *Prosopography of Anglo-Saxon England*), geographical (e.g. *Montaillou*, by E. Le Roy Ladurie) or social (e.g. *Les banquiers protestants*, by H. Luethy) contexts suggests starting an analogous research project on mint officials. Up to now, the word *prosopography* has been applied to the context of mint officials by Alan M. Stahl only, in his works on the mint of Venice.¹ Nevertheless, the field of interest is wider and should be extended to all the mints.

Many books and studies report a wide variety of data related to mintmasters, engravers and other workers of the different mints.² Generally, these data are presented without homogeneity inside the text or organized in simple lists, without any critical analysis. The traditional numismatic literature has never dedicated monographic essays to these people, with the result that such a research field is still substantially unexplored.³ If we exclude the analysis dedicated by the art historians to famous artists who also worked extemporarily as coin engravers (e.g. Benvenuto Cellini for the mint of Florence) and to the medallists, we do not have extensive works covering the life of the mint officials and their activity in the manufacture of coins, that is something that may be intended first of all as an economic object rather than a pure object of art. We also have to acknowledge that there may be a great confusion about their precise functions in the production of coins, due for instance to the huge varieties of roles recorded in the documents and to the evolution of production techniques: we have to be aware that the role and technical background of a *monetarius* working in a mint in early medieval times are totally different from those of a *monetarius* active during the sixteenth or seventeenth century, despite the same term being found in the documents.

This lack of homogeneity of the data and the need to investigate a multiplicity of aspects of the life and work of mint officials suggest the use of a new methodology, necessarily based on the most modern solutions offered by informatics and computer science. A pure list of names, even if accompanied by notes and indexes, is not adequate enough to achieve the desired level of knowledge, since its inevitable rigidity would not allow easy researches and the cross-correlation of the data. Moreover, its continuous updating – due to brand new data coming from unexplored documentary sources, but also from the joint analysis of the information previously stored in it – would lead to a huge number of new versions of such a list, making any printed edition useless and untenable from an economic point of view.

The relational databases, on the contrary, represent a more adequate and flexible solution for

updates have been annouced in the *Le zecche italiane fino all'Unità*, edited by L. Travaini, currently in press.

³ For the Spanish issues of the eleventh to twelfth century see, for instance, the work of Antonio Roma Valdés (2005). Despite not structured as a prosopography, the paper contains short notes concerning the social background of the *monetarii* and their private lives. An overview of the movings of *Münzmeister* among the mints in the south-western part of the Holy Roman Empire has recently been presented by Benedikt Zäch during the XIVth International Numismatic Congress in Glasgow (lecture *Die frühe Schilling- und Plappartprägung im Südwesten des Reichs: Anstösse und Auswirkungen*).

 $^{^{\}rm 1}$ The most extensive prosopographical research is Stahl 2000a, whereas a more schematic synthesis is proposed in the Appendix A (pp. 407-23) of Stahl 2000b.

² The bibliography concerning this point would be boundless. For the major mints of the Italian area during late medieval and modern times, for instance, see Promis 1841-42, Simonetti 1967-69 (House of Savoy); Biondelli 1884, Motta 1893-96 (Milan); Papadopoli 1893-1919, Stahl 2000a (Venice); Crocicchio 1989 (Piacenza); Bernocchi 1975 (Florence); Muntoni 1972-74 (Rome); Prota 1914 (Naples). None of these works – except Stahl 2000a – is structured as a modern prosopography, but they all represent dishomogeneous lists, widely incomplete. Relevant, extensive

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the purpose. Thanks to their *entity-relationship* approach, it is possible to distribute the heterogenous data into specific tables, mutually correlated. This solution has a triple advantage. First of all, the scalability: every table is basically independent from the others, and any addition or deletion would have minimum impact on the whole database.

Secondly, it is the easiest and most flexible way to implement the concept of *factoid*, well-known by modern prosopographers, and the linking among people, allowing the extraction of a set of new information from a multiplicity of uncorrelated data. Finally, the use of customized queries, built using the SQL languange – the 'search engine' of the relational databases – allows easy examination of the stored data, with a speed and an accuracy impossible in a paper book, even if provided with excellent indexes.

On this basis, the *Eligivs* database – so named in honour of Saint Eligius, the patron saint of goldsmiths, metalworkers, and coin collectors – has been designed and implemented. Originally developed in 2002 during a research project about the mint of Maccagno Inferiore (Italy),⁴ in order to classify the names of the mintmasters who worked there and follow their presence in other mints, it was then widened to all the mints, allowing the management of the information concerning the world-wide mint workers from ancient times until today. It consists of a relational database specifically built to collect the personal data of people who operated in mints, providing an easy access on the Internet for the remote inquiry.

The basic idea consists of a solution allowing the collection of all the *factoids* related to a single mint worker, from the mints where he operated to his religion, from the role he played in the production of coins to all the peculiar aspects of his private life. All the data referred to a given person are distributed into thematic tables: name, variants of the name recorded in the written sources (e.g.. *Magnavacca* for *Magnavacchi*, *Levardina* for *Lecardina*...), roles played in the mints, marks put on the coins, together with much other biographical information such as religion, education, public offices, trials ... This approach provides a detailed and synthetic knowledge of all the men working inside the mints, allowing a more precise understanding of their technical and social background.

The core concept of the *Eligivs* database is the possibility to specify 'correlations' among people. Every single mint worker can be linked to other workers. Besides keeping trace of the societies of workers in the management of a mint, it is possible to record the parental relations, to have a clear view of the role in the production of coins not only of the single man, but of other members of the family to which he belongs. Moreover, other generic links can be easily set up, for instance to trace events involving two or more persons (e.g. trials, accusations, crimes...), but also in case there is the suspicion that two people recorded with different names may actually be the same person (e.g., *Giovanni Battista Borgatti* and *Giovanni Battista Bargata*, documented in the same period in mints of Piedmont, Lombardy and Emilia).

⁴ The version 1.1 of the *Eligivs* database has been presented during the congress *Monete in rete* (Bologna, 22 May 2003). See Travaini / Gianazza

2004 for further details and illustrations.

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Fig. 1. Eligivs 2.0, example of an individual sheet for a mint worker.

Fig. 2. Eligivs 2.0, example of an individual sheet for a mint worker, edit mode.

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All the data are easily managed through a set of user-friendly interfaces. Each mint worker is recorded on an individual sheet (Fig. 1). Name (1), period of activity (2) and sex (3) represent the basic set of information. All the details are distributed in specific sub-forms, the view of which is organized in tabs (4): presence in mints, joint conductions together with other mint workers, recorded variants of the name, parental relations, plus a flexible (i.e. extensible) choice of *factoids* such as religion, occupation, nobility... To avoid repetition of the same character with different names, *Eligivs* includes specific mechanisms of cross-check (5). The database allows the management of bibliographical references and abbreviations (6), for a systematic and scientific documentation of all the stored data.

The links among the sheets can easily be followed by double clicking on the names of the other workers reported inside. With the same mechanism it is possible to get further details on specific data, such as the notes corresponding to a recorded activity in a mint or the mint marks associated with a given conduction.

The database comprises a set of predefined queries for the research (6) – also with multiple keys – on the mint workers, together with the listing of the entire staff of a mint and the presence of the same workers among different mints. All these mechanisms are specifically intended to investigate aspects still little explored, such as the movements of skilled workers among the mints, or the numbers of the staff of a given mint and their correlation to the volume of coins produced there.

The stored data can be exported in several ways. For any of the predefined queries mentioned above it is possible to choose if the output should be a browsable list on the screen, rather than a customised report that can be printed on paper or saved as a file. Alternatively, *Eligivs* offers a set of recapitulary reports (8), for an extensive export of a large amount of data with predefined aggregations, as well as the export of a single sheet referred to the mint worker currently viewed on the screen (10).

The insertion of new data and the updating of the existing data can easily be achieved through the same approach, with other user-friendly interface forms (9, 11; Fig. 2), where the management of the lists of mints (12), roles (13), parental relations (14), other factoids in general (15), as well as the mint marks (16) is also possible.

Eligivs can be remotely interrogated on the Internet. The database can be accessed at the web site www.sibrium.org/Eligivs. The web portal currently allows both simple and advanced searches on the entire set of data stored in the database. The access to the website is currently resticted to authorised users through a mechanism of login and password with different levels of authorisation, but a demo section with free simple searches is open to the public.

Currently the database contains 6,558 names, 10,062 relations between workers and mints and 1,403 mint marks (last update: 17 April 2011), mainly related to the Italian area during the eleventh to twentieth centuries. Its completeness grows days after day, thanks to the continuous operations of data entry.

During the XIVth International Numismatic Congress the new version 2.0 of the database has been officially presented, widely improved with new search criteria and a much more efficient storing system for the different factoids, to facilitate the study of the different aspects of the lives and works of the mint officials.

Eligivs is a private project, privately managed by its author. It is available on the Internet by subscription: a temporary account can be activated after a minimum donation of $3 \notin$ to an ONG, without any profit for its author, following the instructions available on www.sibrium.org/Eligivs. Everybody can support the *Eligivs* project: all the institutions and the researches are welcome. This can be done by providing lists of names not included in the database, giving technical feedbacks on new functionalities to be implemented, or simply promoting the use of *Eligivs* for new research projects.

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BIBLIOGRAPHY

Bernocchi, M. (1975), Le monete della Repubblica Fiorentina. II. Corpus Nummorum Florentinorum, Firenze.

Biondelli, B. (1884), 'Prefazione', in: Gnecchi, F. / Gnecchi, E. 1884, III-LXXXIV.

Crocicchio, G. (1989), Le monete dei Farnese. La zecca di Piacenza 1545-1731, Piacenza.

Gnecchi, F. / Gnecchi E. (1884), Le monete di Milano, Milano.

Motta, E. (1893-96), 'Documenti visconteo-sforzeschi per la storia di Milano', *Rivista Italiana di Numismatica* 6-9.

Muntoni, F. (1972-74), Le monete dei Papi e degli Stati Pontifici, Roma.

Papadopoli, N. (1893-1919), Le monete di Venezia, 4 vols., Venezia.

Promis, D.C. (1841-42), Monete dei Reali di Savoia, 2 vols., Torino.

Prota, C. (1914), Maestri ed incisori della zecca napolitana ricavati da documenti del R. Archivio di Stato di Napoli. Contributo alla storia delle numismatica napoletana, Napoli.

Roma Valdés A. (2005), 'Monederos lombardos y franceses en las primeras emisiones monetarias de Léon, Castilla, Aragón y Navarra (1076-1126)', *Numismatica e Antichità Classiche* 34, pp. 377-96.

Simonetti, L. (1967-69), *Monete italiane medioevali e moderne. volume I - Casa Savoia*, 3 vols., Firenze.

Stahl, A.M. (2000a), 'A prosopography of medieval Venetian mint officials', *Medieval Prosopography* 21, pp. 41-131.

Stahl, A.M. (2000b), Zecca. The Mint of Venice in the Middle Ages, Baltimore.

Travaini, L. / Gianazza, L. (2004), 'Un *database* per il personale di zecca: il progetto *Eligivs* e la *Guida per la storia delle zecche italiane*', in: Giovetti, P. / Lenzi, F. (eds.), *Monete in rete. Banche dati, CD-ROM e Internet nella numismatica italiana*, Bologna, pp. 78-88.