Andrea Daltri - Maria Teresa Guerrini, *Presentation of ASFE: a database for the study of student mobility*, personal paper, Conference "New Tools in University History", Ghent (Belgium), October 2nd-4th, 2003

The project of the ASFE database originates from the research "The history on the walls", aimed at cataloguing, as Professor Brizzi has already pointed out in his speech, the mural decoration of the Archiginnasio palace. At first the project's aim was limited to the construction of an instrument that would enable the identification of the coat of arms' holders by using the documentary information contained in the already existing computerized archives. Then the main purpose became the creation of a more complex support, in that relational-oriented, capable of recording the student mobility. This strategy entailed the overcoming of several difficulties, due to both the re-organization of already treated data and, above all, to the choice of the way of presenting the information. The methodological assumption of the new relational structure lies in the will to create a display of the available data as integrated as possible. The assignment of a univocal identification code to each student has made it possible at first to select the various documentary information and later on to divide the homogeneous information into three subject areas: the biographical profile, the *curriculum studiorum*, the coats of arms preserved in the Archiginnasio palace.

Let's take a closer look on the screen at the database configuration. Although it has been created with Filemaker, we have preferred, in order to display the relational network, to use the apposite mask of the competitor Ms-Access software, which is certainly a more well-known and familiar layout. In order to ease the structure readability we have inserted only the main files into the mask and we have provided them with the indication of the most important relations and of the fields where they are based. Actually, the database currently includes eighteen related files and almost a hundred of relations. Right in the centre of the mask we have placed the three files corresponding to the three areas previously quoted. The "Biography" file contains the information about the biographical profile of the student. The frequent presence of variants and discrepancies in the student onomastic forms or in the indications about the student place of origin has brought about the need to face the problem of the hierarchy to be given to the data deduced from the various documentary typologies. When the degree registration was available, we always privileged the biographical information contained in the series of graduates. The hierarchical scale goes on with matriculation sources and with those produced by student colleges. The data concerning the student *curriculum studiorum* have been included in the "Studies" file: the matriculation in the ranks of the *Universitas scholarium* or of the *natio* of origin, the admission to a college and the graduation. Finally, the "Coats of arms" file includes the information on iconographic sources related to each student and preserved at the Archiginnasio palace. Without entering a subject that goes beyond our presentation it is however necessary to provide you at least with a piece of information: normally, each coat of arms belongs to a decorative cycle including the coats of arms of those students who, in representation of their *natio* of origin, held the post of *consiliarius* in the corporative body named *consiliatura* which was elected every year by the two Bologna *Universitates*. Currently the records stored are about 1,500 and concern only those students whose coats of arms have been identified.

Once the structure of the database had been defined, we decided to publish it on the web. That decision was determined, not only by the will to ensure a higher visibility to our project, but also by the awareness that, by being on the web, the potentialities of the information contained in the database would be fully developed. The web, in fact, provides the opportunity to make more complex and focused queries and to improve the surfing among the different sections. The version that we are presenting today, as it is also evident from the essential graphic layout, is a prototype

that at present can be exclusively accessed in local-host functionality. To construct the site we used a grammar that combines the traditional html format with a marking language owned by Filemaker and named cdml.

Some examples will help better deepen the knowledge of the structure and the functionality of the database. We will make reference to students of German origin, for whom, in addition to the data deduced from the Bolognese sources, we have relied on the information related to the attendance at other *Studia generalia* provided by the literature.

In the introductory screen two possible surfing options, named respectively "Students" and "Coats of arms", can be activated through links giving access to as many query masks. The first mask enables the user to make searches on student population on the basis of the combination of biographical parameters – such as first name, family name and, with regard to the place of origin, town, region and country – with variables concerning the *curriculum studiorum*. For each registration typology - matriculation, graduation or admission to a college - it is possible to specify the field of the search both by indicating a chronological reference, even in the form of a time interval, and by selecting one options referred to the *Studium*, the *Universitas*, the *natio*, or the college. The second mask makes it possible to make a query on the iconographic heritage preserved at the Archiginnasio palace using as a the biographical data, the *natio* represented by the students and the dating of the *consiliature*. In order to ease the formulation of the search expression, a select has been inserted in correspondence to the fields for the entry of the biographical parameters. This select allows the user to scroll the related authority file content and to select the desired term. Moreover, it has been provided the opportunity to resort to Boolean logical operators and to select the order criterion for the display of the results.

The result mask presents, in a table form, only the data contained in the fields that can be queried. The available information about the *curriculum studiorum* is shown in a synthetic form for each student in addition to the onomastic accepted form and to the indication of the place of origin. To have access to the various database sections that have been previously described and to the display of records in their complete form it is necessary to select the checkbox corresponding to the desired record (to automatically select all records it is possible to use the apposite button). Once the selection has been made, it is possible to continue to surf the database by using the "Biography", "Studies" and "Coats of arms" buttons.

The "Biography" link opens the mask that shows the complete biographical profile of the student. The data deduced from the sources are presented in correspondence with the various fields: first name, family name, father's name, title, condition and place of origin (town, diocese, region and country). On the left there is any possible variant found on the basis of the hierarchy that has been previously quoted; on the right the normalized form in the respective national languages once it has been determined. Each piece of information comes with its respective documentary or bibliographical references expressed in an abbreviated form. The "Bibliography" link enables the user to display the extended description in a window. The links to have access to the other database sections are placed close to each record and at the bottom of the mask.

By activating the "Studies" link the mask related to the student *curriculum studiorum* opens up. The available data, on the basis of their typology, have been divided into four areas structured in tables: "Matriculation (*Universitas*)", "Matriculation (*natio*)", "Graduation" and "College". Within each table, that appears in the mask only if some information is present, the lines correspond to as many homogeneous registrations chronologically ordered. For example, with reference to the second area and to the students of German origin, the matriculations in the *natio germanica* at different *Studia generalia* (Bologna, Padova, Pisa, Perugia, Siena) are placed in sequence. For each

registration all the information supplied by the respective documentary series is reported: the *Studium*, the *Universitas*, the *natio*, the date of matriculation, of graduation or of admission to a college; the subject studied and the relative *tutores*; the type of graduation; any possible post held within a *natio* or a college. As it has already been signalled with regard to biographical data, the punctual documentary and bibliographical references are placed close to each registration.

Finally, through the "Coats of arms" link, it is possible to have access to the mask that by synthesizing the results obtained in the identification of the heraldic decoration of the Archiginnasio palace connects the information gathered from paper sources with the iconographic ones. The mask, divided into two parts, combines each student with the pertinent coats of arms. At the top the information concerning each coat of arms (identified by the respective catalogue number) is chronologically ordered: the *Universitas* that commissioned the decorative cycle, the dating related to the academic year, the represented *natio* (that often does not coincide with that of origin) and any possible post held by the student (*prior* or *praeses*). By clicking on the apposite links placed on each line it is possible both to display the records of all coats of arms belonging to one *consiliatura* and to display in a table form the composition of the *consiliatura* itself, ordered on the basis of the sequence of the *nationes* that appears in the sources. The presence of records without any name means that the coat of arms holder has not been identified. At the bottom the iconic images of the coats of arms have been inserted for the double purpose: to check *a posteriori* the correctness of the identifications (some discrepancies can be actually attributed to the fact that some student had personalized his own coats of arms) and to appraise the alterations of the heraldic elements due to the passing of time or, more often, to clumsy restorations. By clicking directly on the icon or the link it is possible to have access to respectively to records related to each single coat of arms or to all those belonging to a student. The description of each coat of arms includes the data related to the placement in the palace rooms, the transcription of the present status of inscriptions that report the name, the student place of origin and *natio*, the normalized transcription which takes into consideration the different readings and interpretations proposed by the studies on the Archiginnasio palace decoration. Furthermore, the mask enables the user to enlarge the image of the coat of arms and to surf in different manners within the iconographic heritage.

In conclusion, we inform you that we have planned to enrich the database with another section devoted to the information contained in *Libri amicorum* or *Stammbücher* (limitedly to those that attest the student passage from Bologna): a documentary source of fundamental importance in studying the student mobility.