

### A resource for research and teaching. The Online Portal of the Historical Dictionary of Italian Cartographers

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#### **Abstract**

The COFIN national project *Studi e ricerche per un Dizionario storico dei cartografi italiani* (*Studies and researches for a historical dictionary of Italian cartographers*) brought together, at the start of the 2000s, fourteen research units and a large group of scholars to prepare bio-bibliographical dossiers on the figures of those Italians (or non-Italians who had worked for many years in Italy) who had produced cartography. The mass of material then collected and sent to the organizers remained largely unpublished or published in different places, without a clear link for the general public. Recently a group of researchers at Rome Tre University have taken this material in hand and instigated its incorporation onto a portal, thus creating an open access, digital depository, organized in Italian and English, and accessible for consultation of its biobibliographical entries. The plan behind the portal, *Digital DISCI*, is the stimulation of research on Italian cartography and the cartographers of our country, but is envisaged as widening the research field to Europe and the rest of the world. The realization of several of the identified objectives depends upon making the project known to the scholarly and educational world. The work of university teachers and students can be a valuable means of spreading information locally and of increasing awareness.

Keywords: Biography, Cartographers, Cartography, Dictionary, Digitalization, Dossiers, Portal

#### 1. Introduction

Between 2017 and 2019 a small group of university teachers and students from Roma Tre University, in partnership with the Centro Italiano per gli Studi Storico-Geografici (Italian Centre for Geo-Historical Studies), worked to recover the material which had been sent, years before, to the central unit of the COFIN national project *Studi e ricerche per un Dizionario* 

storico dei cartografi italiani (Studies and researches for a historical dictionary of Italian cartographers). This project, known by the acronym DISCI (Dizionario storico dei cartografi italiani), had received funding in the period from 2003 to 2005 when the national research group, coordinated by Ilaria Luzzana Caraci, then on the faculty of geography at Roma Tre University, and with the support of Claudio Cerreti, was made up of fourteen local

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units spread throughout Italy. Each of these units brought together a number of shorter-term staff, associates, and contracted researchers to carry the research forward: over 150 officially recognized individuals were thus involved, to which should be added other young researchers<sup>1</sup>.

In the 20th century fundamental works were published on the history of cartography and historical cartography which indicated the need biographical information cartographers, for example, the series of the Monumenta Cartographica launched Almagià, in which biographical details were added to the historical-descriptive files that accompanied the iconographic and cartographic reproductions (Almagià, 1929, 1944-1955)<sup>2</sup>. Among these reproductive works the *Portugali*ae Monumenta Cartographica (Cortesao and Teixera da Mota, 1960; ed. facsimile, English and Portuguese, 1987) stands out: a collection of entries on the authors of the maps presented, ordered alphabetically and chronologically, with specific "elementos biográficos". In terms of proper dictionaries, the best known was and is Tooley's Dictionary of Mapmakers, with the number of entries increased in the revised edition (Tooley, 1979-1985; Tooley et al., 1999-2004<sup>3</sup>). Another very well known reference work is The Mapping of the World with entries ordered chronologically and alphabetically by author (Shirley, 1984, 2001).

None of these works, however, pay systematic attention to the wide range of individuals who brought about the realization of cartography.

From a scientific viewpoint, internationally, DISCI was an ambitious and innovative program to carry out a vast research project on all the figures of Italians (or non-Italians who had worked for many years in Italy) who, in various capacities, took part in the production of geographical maps and charts. The temporal arc under consideration, in the end, basically extends from the fifteenth to the nineteenth century.

This was the realization of an idea germinated some years earlier, which brought together the perceived scientific needs of those working on historical cartography and the history of map-making. A project was born with the intention of filling a void, particularly in our knowledge of those figures defined as "minor", not actually of the second level necessarily, but who nevertheless had until now received less attention from scholars (Cerreti and Taberini. 2001). The repertoires then available were few, unsystematic and lacking on the lesser known figures. Naturally the project had no intention of ignoring the "great" cartographers, for whom exhaustive dossiers were to be compiled, but limited in their size by making reference to the specialist published informative and monographs already existing.

All cartographic authors seemed to be fundamental for building a full and more accurate picture of the history of cartography, principally Italian but not solely because of the exchange-of people, techniques, and materials-which took place with other countries of the world. Even the very concept of cartography was meant in a broader sense, taking in a range of objects from manuscripts to printed materials, geographical or thematic, or even closer to iconography, terrestrial or nautical, survey or administrative, relating to Italy or her colonies.

We shall not dwell further on the genesis and earlier findings of DISCI, but move to the work then carried out on these findings in the last years and more recently (Cerreti, 2003, 2009a; D'Ascenzo, 2018). One final focus, however, on those aspects linked to education, which were important from the very start of the project. The teachers, who gave classes in the course of training and updating for the young researchers involved in the project, bore in mind the question of the theoretical and practical bases

<sup>&</sup>lt;sup>1</sup> For more details on the composition of the national group, local units and their distribution, names of the participants, see the page Researchers, https://www.digitaldisci.it/researchers/.

<sup>&</sup>lt;sup>2</sup> Although with different characteristics, there are many possible examples of these national projects: Kamal, 1926-1951; Svambera et al., 1938; Schilder, 1986-2013. In terms of nation states: Germany: Bonacker, 1966. Great Britain: Steer and Eden, 1975-1976; Worms and Baynton-Williams, 2011. France: Pedley, 1992; Pelletier, 1996. Spain: Cámara Muñoz, 2005 and 2016; Sanchez Rubio et al., 2014. Netherlands: Pflederer, 2012. Italy: Valerio, 1993.

<sup>&</sup>lt;sup>3</sup> The latter Dictionary contains about twenty thousand cartographers, engravers and publishers active from the earliest times until 1900. Both versions are currently available only in paper format.

the students needed to carry the work forward (see the special number of the *Geostorie* journal which brings together the texts of the operations: D'Ascenzo, 2004). Some of them, for example, provided the cognitive tools needed to tackle research on particular types of map, or illustrated the new possibilities for study and restoration work introduced by technology (Conti, 2004; Federzoni, 2004a, 2004b).

#### 2. The sources and dossiers of DISCI

The starting point for DISCI were the existing publications (monographs, encyclopedias, papers, articles in journals) together with the iconographic and cartographic materials produced in past centuries, which underwent appropriate research to discover the names of those who had produced them and any available biographical details. As an example, we have the maps of the Alexandrian and Gregorian Cadastes, outstanding sources from which to extrapolate long lists of the professionals working in fiscal enquiries and land registry operations over vast territories.

The most innovative and demanding part of the DISCI project was the next. As the research continued in archives, libraries and record offices it triggered the work of analysis and study of the sources which was in turn to produce a long list of results: over 60 titles among monographs, collected volumes, papers, articles, etc. (some examples: Polto, 2006; Quaini and Rossi, 2007; Valerio, 2007). The large series of publications from the individual local bodies, often responding to diverse publishing directions, represents, however, only one part of the research results. A great mass of material, for differing reasons, still awaited a definitive version and place of publication.

From these brief indications and the objective difficulties of the research, it is clear why the files uploaded onto the DISCI portal are so heterogeneous and varied.

The complexity of the material, the boldness of the project, the sheer quantity of results reached over a long period, have posed concrete problems of management for the central unit which actually held the physical dossiers sent to it. Those same concerns have motivated the present writer, because taking this material in hand was clearly complicated, given the time that had passed. But the dossiers collected and stored in a cupboard in the "Giuseppe Caraci" Laboratory of Roma Tre University were of enormous value. The information was already there, an enormous challenge had been met, and could be capitalized on by using the most appropriate current information technology tools. Favourable circumstances (a grant from the Department of Human Studies), and a good dose of obstinacy combined with a strong personal obligation, led to the launch of the online portal. As stated above, the main aim of Digital DISCI is that of giving new visibility to the work already carried out by so many researchers and making available the online depository which, in the field of geo-historical studies, is seen as increasingly important. A good beginning in sight for the realization of the "Tooley italiano" (Cerreti, 2003, p. 18).

## 3. The Digital DISCI portal. New frontiers for research and teaching

Digital DISCI, the portal that brings together the dossiers produced in its time for the *Studies and researches for a historical dictionary of Italian cartographers* is an open access, digital depository, organized in Italian and English, and accessible for consultation of its biobibliographical entries. All the entries contained, both those unpublished and those already published elsewhere, have been given ISBN numbers (given that they now appear in a new format, as electronic publications).

To place the scientific value of DISCI and its return as Digital DISCI in context, we need to observe that there is no other project known internationally that is similar in its breadth and depth, in spite of the limits mentioned as to the research studies carried out, let alone available online. There are interesting and rich collections of maps<sup>4</sup>, which give information on the authors,

<sup>&</sup>lt;sup>4</sup> Just as an example, as a support for teachers, we mention some portal: Europeana, Gallica, Library of Congress, Portal de Archivos Españoles (PARES) and Catálogo colectivo de la red de Bibliotecas de los Archivos estatales

but no ample biographical dictionaries and no open access<sup>5</sup>. A digital dictionary, freely available on the net and bilingual, combines the scientific knowledge with accessibility to the collected materials.

The system has the advantage of being continuously implemented: it is open to receive further materials that escaped attention, or dossiers produced after the early years of this century and more recently<sup>6</sup>.

The progressive, and voluntary, inclusion of new files by the authors (both those who are part of DISCI and those from outside) will allow continuous updating of the database, an important operation in at least three ways: those cartographers who have already been fully recorded, around 1,000, can be entered as an updated/expanded draft or in a new version (as happens with the Dizionario Biografico degli Italiani – Biographical Dictionary of Italians). For the other, over 6,000, Italian cartographers known only by name and with few details, further information will give body and substance to the research, so placing at the disposition of the academic community and of society as a whole-obviously including the world of education-a source which will enable cultural

and educational undertakings of ever greater dimensions.

An example in this sense is the entry already present on the military engineer "Odoardi de' Catilini, Odoardo" written by Giorgio Mangani (Figure 1). Recent research has produced new information, which has led to the upgrading and expansion of the entry (D'Ascenzo, 2019) (Figure 2).

Thirdly, the case of bringing about new dossiers on cartographers as yet unknown. There must be a treasure trove of names and information waiting to emerge from the various Italian and European record offices, or which simply need to be put into the system and online (Cámara Muñoz, 2005, 2016).

The groundwork towards this has already been laid (D'Ascenzo, 2017). A project is currently being drawn up to form an Italian-Spanish working party. The experiment will engage the present writer with the researchers who in the last years have worked and written much upon the Italian engineers transferred to Spain in the course of the seventeenth century. These were military personnel called upon to work on the defence campaigns in frontier strongholds and to map the borders engaged in warfare in the Iberian Peninsula and the Spanish Empire. The iconic figure in this situation is the Tuscan Lorenzo Possi who, between 1665 and 1677 or thereabouts, under Philip IV and Charles II of Spain, served in the monarchy's army in the battles being fought on its European and North African frontiers (Sánchez Rubio et 2014). Biographical information and references to much other material (maps, reports, various documents) on Possi that have been found in numerous record offices will be extrapolated to build dossiers on the group of Italian soldiers who worked with the Tuscan in his years of service outside Italy.

<sup>&</sup>lt;sup>5</sup> Although chronologically and thematically limited, an example close to Digital DISCI appears the list of 975 "oficiales del Real Cuerpo de Ingenieros del siglo XVIII": http://www.altorres.synology.me/01\_06\_siglo18.htm. Although the list is extensive, fewer than 40 military engineers have a biographical fact sheet available on the Web.

<sup>&</sup>lt;sup>6</sup> The setting of the project, at the moment, is clearly linked to the field of university education and teaching; in fact it requires bibliographic and archival research. But we think that the portal can provide future teachers in training with materials and ideas that can be used in their lessons. The personal history of a cartographer and the products made by him tell of the era in which he lived and the territory he observed, with the characteristics of the time. The teachers, together with their students, can look in local libraries and archives for maps of their area and can obtain digital reproductions. They can also carry out investigations into the authors of the maps, at least identifying their names and the years in which they were active. After having worked on the maps in class, analysing their contents, they can send their files and digital images to the site editors. These materials could feed into the Digital DISCI, possibly even in a new section dedicated to schools and educational projects.

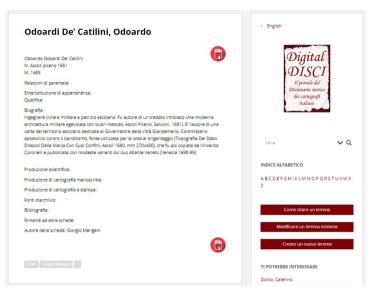


Figure 1. The entry on "Odoardo Odoardi de' Catilini" in Digital DISCI by Giorgio Mangani (Local unit of Chieti). Source: http://www.digitaldisci.it/odoardo-odoardi-de-catilini/.

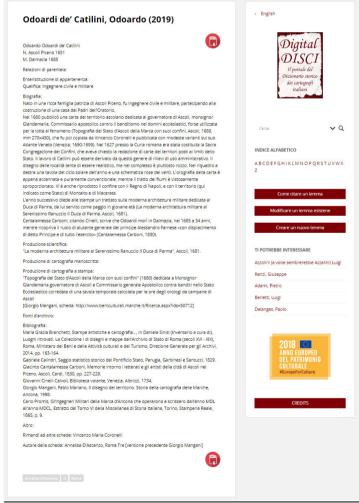


Figure 2. The new entry (2019) on "Odoardo Odoardi de' Catilini" in Digital DISCI by Annalisa D'Ascenzo (Local unit of Roma Tre). Source: http://www.digitaldisci.it/odoardi-de-catilini-odoardo-2019/.

A further example is that of another military engineer, Carlo Antonio Biancone, author of a small fund of maps of the territory of Teramo, and of Montorio al Vomano in particular, kept in the Archivo General de Simancas. These maps are extremely valuable for the study of the socio-economic situation on the border between the Kingdom of Naples, a constituent kingdom of the Spanish monarchy, and the Marche, which was part of the State of the Church (the Papal State) at the end of the seventeenth century (D'Ascenzo, 2013, 2019)<sup>7</sup>. The collection has as its object the banditry rooted in the mountains of the Abruzzi and particularly in the high valley of Vomano, between Montagna di Roseto, the Valley of San Giovanni and the Castellana Valley. Although Biancone was already known, along with other Italians whose work is held in the Spanish record office (Principe, 1982), he did not yet have a dedicated dossier.

All these new entries need to be built following the approach and structure of the DISCI files, the shared fruit of a long and complex work of standardization and identification of unavoidable fields. Nor are those files representing the summarised revision of more ample work on individual authors (cited in the bibliography) excluded.

Equally clearly, apart from entries on actual people, Digital DISCI collects and will continue to collect items on the bodies that produced cartography, whose cultural and educational value has been excellently outlined by Leonardo Rombai in his article detailing the history of the foundation of the collective technical bodies (institutional offices and magistratures) within the bureaucratic administration of the old Italian states, from the mid-fifteenth century up to the eighteenth and nineteenth century geometric cadastres, ranging from cartographic businesses

to the cartography of the state (Rombai, 2003) (Figure 3)<sup>8</sup>.

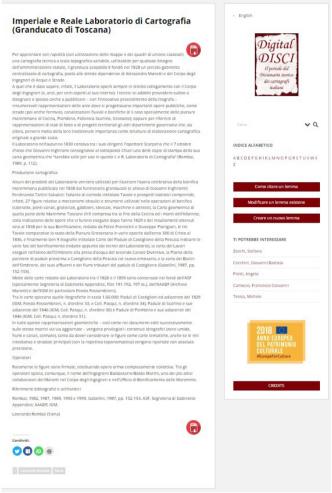


Figure 3. Entry on "Imperiale e Reale Laboratorio di Cartografia (Granducato di Toscana)" by Leonardo Rombai (Local unit of Siena).

Source: http://www.digitaldisci.it/imperiale-e-reale-laboratorio-di-cartografia/.

Every school could carry out research on local corporate bodies which, over a long period, have been important in the management of our country's territory: the administration of infrastructure and of assets both physical (roads, canals and embankments, bridges, fortifications, factories) and commercial (customs), of resources (water), of great estates (principalities, the Tuscan *Presidi*), land private and public (communities,

<sup>&</sup>lt;sup>7</sup> We are dealing here with pictures of the past, drawn in great detail and with attention to the aesthetics, which enable us to see, over and above the obvious contents, the space lived in by and organized with a view to its possibilities (economic, technical etc.) and the needs of the moment. Banditry was an ancient phenomenon against which the viceroy Don Gaspar de Haro y Gúzman (1683-1687), marquis of the Carpio, intended to wage a hard and radical war.

<sup>&</sup>lt;sup>8</sup> For informations on collective public entities see also Manzi, 2006.

municipalities, woods), controllers of surveys (cadastres and land registries, boundaries, rents, cultivation), lay or ecclesiastical congregations, consortiums, workshops, civil or military orders.

#### 4. Envisaged implementations

A record of DISCI's published productions is in preparation, but it will only be possible to have satisfactory results with authors' contributions. If they are prepared to share the list of their publications, an updated picture will emerge of the many research works carried out and published to date. At present, those directly involved in checking the materials have been the representatives of the local DISCI units, but an attempt will shortly be made to contact known researchers as well

Scrutiny of the files will also lead to the availability of a bibliography, exhaustive if not fully complete, which will be of great value, as a summation of the texts cited in each entry. The educational value of such a tool is obvious, for carrying out further research work, which could be particularly suited to graduate, master or doctoral dissertations. Work of this sort will most certainly feed into the *Digital dictionary of historical Italian cartographers*.

A further section of the portal, already designed, will take account of Italian cartographers' iconographic materials and cartographic productions already found elsewhere online. The links to digitalized documents from national or foreign record offices will be collected and supplied so that users can see this material. This part of the overall project, which aims to be a reference resource for students of cartography and the history of cartography, will also be open to the partnership of those who wish to add their own contributions. More importantly, we suggest that such research could be suggested to students enrolled in university courses, while the very nature of research on the Web also makes it suitable for groups of younger pupils or individuals, who, up to the end of compulsory schooling (in the medie superiori), could report on the digital reproductions found in archives

and record offices throughout the national territory and beyond.

One example of a cartographic production already loaded onto the *Digital DISCI* portal is the *Topografia del Stato d'Ascoli della Marca con suoi confini* (1680) of Odoardo Odoardi de' Catilini, cited above, which is interesting for various reasons, among which is its picture of the boundary between the Pontificate State and the Kingdom of Naples at the end of the seventeenth century (Branchetti, 2014, pp. 163-164) (Figure 4).

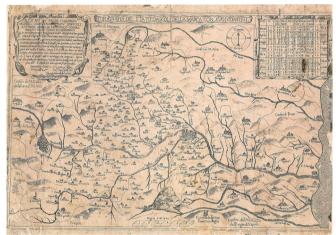


Figure 4. Odoardo Odoardi de' Catilini, *Topografia del Stato d'Ascoli della Marca con suoi confini (1680), dedicata a Monsignor Giandemaria governatore di Ascoli e Commissario generale Apostolico contra banditi nello Stato Ecclesiastico.* [Topography of the State of Ascoli della Marca with its boundaries (1680), dedicated to Monsignor Giandemaria, Governor of Ascoli and Apostolic General Commissioner in the Ecclesiastical State against outlaws.] Printed etching<sup>9</sup>.

#### 5. University teaching

In the preceding section a series of approaches were listed that have already been followed to feed into the *Digital dictionary of historical Italian cartographers*.

https://it.wikipedia.org/wiki/File:11\_-\_Topografia\_Del\_Stato\_D%27Ascoli\_Della\_Marca\_Con\_Suoi\_Confini,\_1680\_Odoardo\_Odoardi\_de%27\_Catilini.jpg.
Other examples: Archivio di Stato Roma, *CDM*, I, cart. 6, n. 247.; Istituto Geografico Militare, http://www.igmi.org/ancient/scheda.php?cod=13040.

Until now, given that the portal has only recently gone online, the possibilities of using the materials for teaching have been limited to a few known cases, all, at present, in the context of the academic world.

In the academic year 2018-2019, example, a group of students from Roma Tre University, enrolled in the workshop "GIS for cultural heritage" in their course of study in historical sciences and international cooperation, worked on Montorio al Vomano. Our colleague Arturo Gallia structured a proportion of the classes around the study and evaluation of the outstanding historical cartography which smaller towns can lay claim to in the regional picture. Of all the illustrations gathered, those of the greatest value are certainly the maps and plans drawn up by the known military engineer Carlo Antonio Biancone, which depict, in great detail, the country at the end of the seventeenth century (D'Ascenzo, 2010, 2013). Elements of the urban fabric, today lost or forgotten (walls, gates, fountains), emerge from the historical maps and restore a memory of places lost over the course of the last three centuries. Such elements, together with those places currently important for its present population, have been analysed and restored in a tourist map by the participants in the workshop (Figures 5 and 6). The students were able, after a field trip on site, to evaluate the changes which the ancient town had undergone and the town's current problems (not least the damage caused by the earthquake of 2009, still visible today) experienced by its inhabitants. The students could therefore propose those items from the town's natural and cultural heritage which would be of interest to visitors wishing to learn of the geo-history of Montorio and its identity in the modern age.

The Alexandrian and Gregorian Cadastres are often used by a group of historical geographers from Roma Tre both as the starting point for historical-geographic research, in particular on the region of Roma (Master's thesis), and also in their classes<sup>10</sup>. There are several courses which

find in historical cartography a solid support for helping students to understand the evolution of the techniques and the continuance of requirements that the map reveals and conserves. Furthermore, the teachings want to show over and above its fundamental role (or rather necessity) in the knowledge, organization and administration of the territory. As we have learnt, as well as their value in confirming earlier territorial assets, maps add evidence of the mentality and cultural footprint of society of the past (for the cultural and applicative aspects of the most recent geo-historical studies we cite for example: Dai Prà, 2018; Dai Prà and Alaimo, 2013; Dai Prà et al., 2018; Mastronunzio and Dai Prà, 2017).

The courses mentioned above are offered at all levels of the teaching programme: from the workshops cited to curricular courses for both the three year degree course and the master's course. For doctorates<sup>11</sup> there are the doctoral seminars organized by the geographical historians attached to the Faculty for those enrolled in the various on-going courses<sup>12</sup>, in addition to the annual seminars, "Dalla mappa al GIS" (From the map to GIS)<sup>13</sup>, which centre on cartographical documentation, historical and current, and the epistemological and theoretical thinking on use of the instruments of geographical enquiry in analysis of the relationships between people and territory. On the latter we have, for many years now, benefited from the active participation of our colleagues from the Capitoline Superintendency of Cultural Heritage, Directorate of operations on monumental buildings.

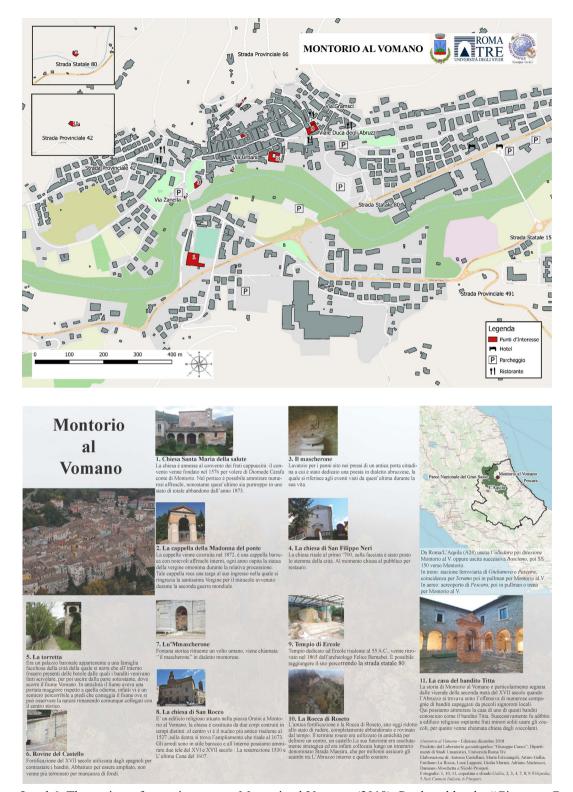
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<sup>&</sup>lt;sup>10</sup> On the multiple importance of the Cadestre and archive sources we cite we cite the collective volumes edited by Gallia (2016) and Carallo (2017), which collect the results of the Seminars *Dalla mappa al GIS*: http://www.labgeocaraci.it/category/pubblicazioni/mappagis/. See also Sinisi, 2014.

<sup>&</sup>lt;sup>11</sup> Doctorate in "History, territory, cultural heritage" earlier entitled "History (Politics, Social Culture, Territory)".

<sup>&</sup>lt;sup>12</sup> In March 2019 the Doctoral Seminar of Geography hosted a series of lectures by Gianluca Casagrande (European University of Rome), "Low-cost technology for the recognition and documentation of minor landmarks", and by Nicola Gabellieri (University of Trento), "A historical-geographical approach to integrated sources through the study of rural landscapes: the case-study of Val Bisagno between abandonment and hydro-geological vulnerability".

<sup>&</sup>lt;sup>13</sup> The list of publications is available at the link on note 10.

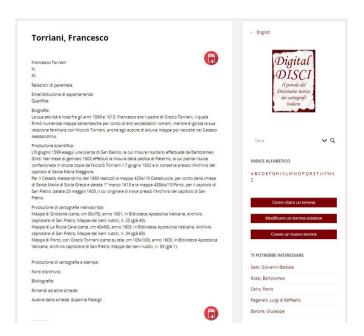


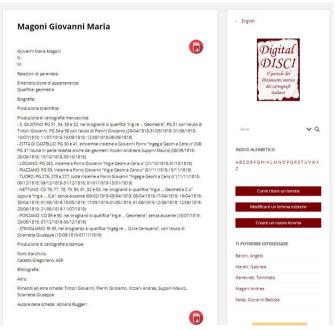
Figures 5 and 6. The project of a tourist map on Montorio al Vomano (2018). Produced by the "Giuseppe Caraci" geocartographic Laboratory, Department of Humanities, Roma Tre University. Elaboration of: Antonio Castellani, Marta Feliciangeli, Arturo Gallia, Emiliano La Rocca, Luca Lapponi, Giulia Marani, Adriano Marinucci, Damiano Moschetta and Nicolò Prosperi.

As regards the Master's degree, for some years this has combined lectures<sup>14</sup> with further study wherever original materials have been preserved: of particular importance is collaboration with the Roman archives, including, thanks to the directors, the State Archive. In the central locality, Sant'Ivo alla Sapienza, and in that at Galla Placidia, series of theoretical and practical classes are held<sup>15</sup>.

On the subject of teaching, attention must be drawn to the in-depth analysis of original materials carried out in the State Archives by Susanna Passigli. In an article she emphasises the importance of work on the inventory of the archive offices of the *Trenta Notai Capitolini* preserved in the Archive of the State of Rome (Verdi, 2009) as a contribution to the inventory of the older plans of the agricultural hamlets of the Agro Romani drawn up by Jean Coste (Coste, 1969, 1973). Passigli points out the cultural and didactic value of such research on the maps of these hamlets linked to notarial deeds in the modern age, which she uses in her university teaching <sup>16</sup> (Passigli, 2018).

To underscore further the value of these geohistorical studies, we should not forget that we owe to Susanna Passigli the many files uploaded onto Digital DISCI on the 'land-surveys' included in the Alexandrian Cadastre (Figure 7). The many entries, on the other hand, on the 'cartographer' authors of the maps of the Gregorian Cadastre (Figure 8) are thanks to Adriano Ruggeri<sup>17</sup>.





Figures 7 and 8. Examples of entries on cartographers working on the preparation of the "Catasto alessandrino" and the "Catasto gregoriano" by Susanna Passigli and Adriano Ruggeri (Local unit of Roma Tre). Sources: http://www.digitaldisci.it/francesco-torriani/; http://www.digitaldisci.it/magoni-giovanni-maria/.

<sup>&</sup>lt;sup>14</sup> Interdepartmental Master at level II in "Digital Earth and Smart Governance. Strategies and GIS tools for the management of territorial and cultural heritage". We highlight particularly the modules "Cartography and historic-environmental analysis" 1 and 2 (taught by Carla Masetti and Annalisa D'Ascenzo, M-GGR/01).

<sup>&</sup>lt;sup>15</sup> Thanks are due to Doctor Luisa Falchi, a splendid and enthusiastic scholar and guide through the marvellous original materials and in the fields of document conservation.

<sup>&</sup>lt;sup>16</sup> Storia della città e del territorio (M-STO/02) [History of the city and territory].

<sup>&</sup>lt;sup>17</sup> Researchers with extensive archival research experience (Passigli and Ruggeri, 2014).

# 6. New developments. The Digital dictionary of historical Italian cartographers in schools

As in the preceding section, this section reports a number of future projects which have been considered. These revolve in particular around the school world, or rather, and better, to the teaching of geography to the teachers of the future.

The group of teachers promoting the research for DISCI and Digital DISCI have direct knowledge, through their own teaching experience, particularly at universities, of the success historical-geographical ofdocumentation and historical cartography in capturing the attention and curiosity of the young. In addition to the educational success among students of the humanities and courses for future teachers, we have been encouraged by the positive experiences recorded on public occasions of meeting younger boys and girls. For example, those who are enrolled at secondary schools and attend meetings for prospective college or university students, or the children who take part in extra-curricular events (GeoNight, exhibitions, seminars). There is actually little bibliography on such educational projecyts; it is a frontier still to be explored. We note, however, that the theme of using historical cartography for educational purposes has been discussed in Spain (León Guerrero, 2011, 2019). Not surprisingly, Italy and Spain are two countries with a great tradition of historicalcartographical studies and an abundance of archive material<sup>18</sup>. The launch of a speech in this direction was addressed in the summer courses of the Petrus Apianus' Academy, open to the international participation of teachers and

<sup>18</sup> In corroboration of the didactic use of this documentation, we can cite the exhibitions *Cartografias de lo desconocido*. *Mapas en la BNE* (Madrid, 2017-2018) and *Quand les artistes dessinaient les cartes. Vues et figures de l'espace francais Moyen Age et Renaissance* (Paris, 2019-2020). A recent Italian project which supports the educational value of such materials is the work-group AGeI "Musei di Geografia: organizzazione della conoscenza, valorizzazione e divulgazione del patrimonio geografico accademico" (GEOMUSE; https://www.ageiweb.it/gruppi-dilavoro/geomuse/).

researchers attentive to the world of school (Seimplatton, 2013, 2019).

In our opinion, historical-geographical documentation and historical cartography have enormous communicative value. In general are drawn in stages and with intelligible symbols, not too technical or complicated, which can therefore be read and understood with a minimum of preparation. They can be drawn by hand – the ease of graphic rendering, with a range of colours, which appeals to so many young. They can take various formats, from the more manageable "cabreos" maps of private properties, right up to the great cadastres, and have therefore the ability to strike the imagination and remain in the memory.

Although we have not had wide educational experience with children and adolescents, we know that comparison with the maps of the past helps younger people to understand the two fundamental dimensions of time and space. To understand how the shape and dimensions of the globe has been pictured and measured, from ancient times to modern times and to our present day. How and why, for what erasons, knowledge of the planet or of its many parts has been modified and increased over the centuries. How the cultural context is important to reconstruct ancient knowledge. to understand relationship with others and with diversity, people's fears. The concept of borders. How much near and far depends on technology and the means of communication. The basic explanations are already all there for the most ancient representations of the oecumene (the known world), the mediaeval and modern planispheres, the atlases and chorographies (De Vecchis and Morri, 2010, pp. 54-57, 102-109).

In this first phase of the project we hope first of all to make the depth and validity of historical cartographic sources clear to all teachers, together with the many analytical connections that they allow to be drawn between the disciplines: geography, history, literature, economics, politics, history of religion etc. The question of teaching how to teach remains open. As Lévy wrote, with reference to France but the argument applies equally to Italy:

Siamo ancora lontani da una formazione all'analisi di un oggetto grafico come realtà globale... Per gli attori del sistema educativo, la posta in gioco consiste, nel contempo, nel mantenersi quanto più sensibili è possibile all'ascolto delle innovazioni e a considerarsi responsabili della costruzione negli allievi di competenze aperte alle esperienze future. Insegnare la carta è anche imparare ad imparare, per rendere possibili gli apprendimenti alla lettura e anche alla concezione delle carte, i cui principi non esistono ancora (Lévy, 2007, pp. 59-60).

Currently the aim is to involve teachers in training, preparing them adequately and encouraging them to work on and with the historical maps within the obligatory internship which is an integrated part of the course of "Geography and Geography-Teaching" in the current graduation course in Primary Education at Roma Tre University.

Teachers can therefore work with their students on limited areas directly known to the children, by choosing maps with details of the areas in which the schools are situated. Or to widen the vision to the province or to the region as a whole, by focusing on analysis of what has remained and what has changed in the area, for example in the field of toponymy and "odonymy" - the renaming of places - on the use of the soil, the construction and use of green spaces-the increasingly important "lungs" of our modern cities.

At the neighborhood level, on this topic, an article published in the Rivista geografica italiana by Marco Maggioli and Massimiliano Tabusi comes to mind (Maggioli and Tabusi, 2016). Starting from a different subject, the writers drew the scientific community's attention to a "natural" lake created following building operations in the area of Portonaccio. The obvious question which the geographical historian and scholar of cartography poses is this: do documents exist which bear witness to the existence of something similar in a lacustrian basin in the area before the present day? This curiosity, not yet fully resolved<sup>19</sup>, does however find an early historical foundation in the Alexandrian Cadastre map of  $1600^{20}$ .

Such evidence opens up the possibility of the "casually" appearing lake entering the realm of history and can support-through the testimony of the past-its previous existence, the recovery of memory, its identity, the ability to protect the basin and surrounding area. Territorialization, just as narration and illustration, can find support and furtherance in historical cartography. "Social energy" can benefit from knowledge of the past.

Finally, carrying our example to a regional scale, let us draw attention to a recent initiative organized by our colleagues in the University of Trento, led by Elena Di Prà and the recently founded Geo-Cartographical Centre for Study and Documentation (GeCo). Their work has led to the preparation of the exhibition at Rovereto. "Imago Tridentina: The historical cartographic manuscripts of Trentino in the territorial archives". As the title explains, this is an exhibition of hand-drawn maps produced between the sixteenth and twentieth centuries, preserved in several provincial archives, and now finally seen together, forming a unitary picture. The exhibition is intended not so much as a point of arrival as a moment for scientific reflection and above all of sharing with the community at large the rich texture and complex nature of cartographic production with the aim of showing Trentino as it was and is. Organized in seven thematic sectors, it presents Trentino as great cartographic laboratory over the centuries<sup>21</sup>. A diachronic journey in which the historical maps are placed as a true album of

<sup>&</sup>lt;sup>19</sup> It is proposed here shortly to develop the research on historical cartographic material in greater detail and for longer periods; in the certainty that the cogni-

tive implications will give further and interesting background information and points for discussion to the population and the administrators.

<sup>&</sup>lt;sup>20</sup> Archivio di Stato Roma, Catasto Alessandrino, *Sviluppo delle strade Prenestina e Casilina fuori Porta Maggiore e fuori Porta S. Giovanni*, 430/1 [Development of the Praenestine and Casiline roads outside the Porta Maggiore and Porta S. Giovanni].

<sup>&</sup>lt;sup>21</sup> The Exhibition in the Palazzo Alberti Poja di Rovereto (TN), will remain open, at the request of local businesses, from 10 October 2019 until 15 May 2020. The seven thematic sectors are: Rovereto and the Vallagarina; Woods and forests; Water and hydraulic operations; Borders, territories and estates; Cities and settlements; Military cartography; Cartography of the nobility.

memories, to leaf through in order to recontruct the biography of the territorial context.

A further means towards public knowledge and empathy will certainly come from the biographical research on the actual authors of these maps, interpreters and protagonists in a time of gaining knowledge of and working in the territory, witnesses to the intelligence and operational competencies that merit added recognition. Our colleagues, conscious of and convinced by this opportunity, are working to build the files for the Digital DISCI.

It seems, to the current writer, that these reflections and researches, like the initiatives behind the exhibitions, which can spread quality knowledge to the public, are extremely important. Cultural proposals that exhibit materials that can be read at various levels bring about community awareness. The historical maps, if correctly contextualized and interpreted, are intelligible to a range of ages and educational levels and have, in our opinion, much to do with the public role of geography and hence of geographers. They bring people close to geography and its sources, they show the usefulness of knowledge and the specialists, and they create communities, a sense of places, recognisable and to which everyone can belong.

#### 7. Conclusions

The Digital DISCI portal is ready to receive the contributions of all those who would like to provide new information on Italian cartographers, in a variety of forms.

As has already been said, the project idea on which the Digital DISCI portal rests is the stimulation of research on Italian cartographers and the cartography of our country, but with the intention of expanding our field of operations to Europe and the rest of the world. With the preparation of a rich repository, the intention is participation in the creation of national interconnected poles of study, which will allow the reconstruction of the history of the flow of people, techniques and knowledge in the field of how the land is drawn and represented. To achieve many of the objectives identified, wider knowledge of the project in the academic world is important, but not only. The work of

university teachers and students can represent a valid means of diffusion of information locally and of an increase in awareness.

The Digital DISCI is a useful tool, historical, cultural and cognitive, but above all forwardlooking for the study of the territorial practices adopted in the past, for the safeguarding, improvement and management environmental and socio-economic resources of the territories. This knowledge, however, will only gain social importance and function if it is communicated, explained and transmitted to vounger generations. Education, at all its levels. still has this task today; both compulsory school and then the higher levels can only become involved with the conscious and active participation of teachers. The work of university teachers is fundamental in making available to society all the knowledge that has been realized in the universities and which, through children and young people, can enter the families and be part of the instruction and upbringing of the next generations. The portal of the Historical Dictionary of Italian cartographers is only one example among many recently arising in the field of geography.

As the work is being reviewed for publication, the world is on high alert in the struggle against a medical emergency of unknown magnitude.

Many other questions should have been addressed to give a potentially more exhaustive and interesting picture which would make this paper more useful as a source for researchers or students who want to explore these topics. Certainly the relationship between historical cartography and WebGIS, in an educational context, merits a deeper examination, but the space available oblige us to leave this to another occasion. In conclusion, howver, the contingent situation obliges us at least to mention the question of the digital divide which now shows itself as dramatically real, not only for updating and deeper examination, but also for the very operation of teaching activities now that the schools have been closed.

In Italy, on 6 April 2020, Istat published the research paper, *Spaces at home and availability of computers for children and young people*, from which emerges data that are not surprising,

but give no comfort<sup>22</sup>. At a national level, in the two year period 2018-2019, 33.8% of families did not have a computer or tablet at home (41.6% in the South), a percentage which drops to 14% if there is at least one minor in the house. However, only 22% of families have a PC or tablet for every family member (14.1% in the South). If the parent needs to use the PC for his or her work, how can the child be given the possibility of following the e-learning lessons?

More specifically, we learn that 12.3% of young people between 6 and 17 years do not have a PC or tablet at home (around 20% in the South), and only 6.1% live in houses in which each person has one. Moreover, only 6 out of 10 minors have a space suitable for them to follow the distant-learning lessons.

The imbalance is confirmed between North, Centre, and South, and between large centres and small towns.

But it is clear that the problem is not only whether the child possesses a PC or tablet, but is also about access to the Web, about having a stable connection that is adequate for supporting all the family's needs.

There are educational, economic and infrastructure challenges that raise questions for the whole community. They perhaps show the road that must be followed, with investments, to try to prepare the country – the public sector – for the challenges of today and tomorrow, for the age that will emerge after the Covid-19 pandemic. Technological facilities, individuals, computer-literacy, infrastructure, and access to the Web present us with the tests by which we must measure ourselves. Both before and well beyond the sector's educational projects on specific historical-geographical materials.

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