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MUSEUMS AND COLLECTIONS OF PISA UNIVERSITY: AN ARCHIVE OF ARTS AND SCIENCES

Abstract - After about twenty years of analytical investigations, co-ordinated by a special Commission, updated information on origin, history and role of museums and collections of Pisa University was produced. Drawing from this body of data, a synthesis is here offered about both the interesting and complex development of the Institutions, and the illustrious men of arts and sciences who devoted their life to academic purposes from Renaissance to present days. Starting from the first Botanic Garden in the world in 1543, a brief account is given for each of the 11 units that today conserve, under rigorous curatorial standards, the milestones of teaching and research, in both artistic and scientific fields,

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laid by the Athenaeum in four and a half centuries of history.

Riassunto - Musei e collezioni dell'Università di Pisa: un archivio di arte e scienza. Dopo un ventennio di studi approfonditi, coordinati da una apposita Commissione, sono disponibili notizie aggiornate sulla origine, la storia e il ruolo dei Musei e delle collezioni dell'Università di Pisa. Sulla base di questi recenti dati, gli autori presentano una sintetica ricostruzione dell'interessante e complesso sviluppo di queste istituzioni e un profilo degli illustri scienziati e artisti che hanno dedicato la loro vita alle attività accademiche, dal Rinascimento ad oggi. Cominciando dal primo Orto Botanico del mondo (1543), si illustra brevemente ciascuna delle undici unità che oggi custodiscono, secondo rigorosi criteri di conservazione e di cura, le pietre miliari dell'insegnamento e della ricerca, di ambito sia artistico sia scientifico, poste dall'Ateneo in quattro secoli e mezzo di storia.

Parole chiave - Musei, collezioni, Università di Pisa, storia.

«Holy relics, rare masterpieces, and marbles, and stones of admirable rarity, size and craftsmanship, can here be found as in no other Italian city».

So Michel de Montaigne wrote in 1581 (De Montaigne, 1774), during the Pisan stop of his *Voyage en Italie*. While attesting the city's dimension of century-old repository of artistic and antiques memories, the learned Frenchmen acknowledged Pisa's museal vocation and identity, already granted by History itself. Pisa as an open museum, therefore, with truly significant emblems, such as the candid monuments where art works of diverse cultures united in what was in fact a great collection of styles, languages, memories; like the Cemetery, where «holy relics», frescoes, «marbles, and stones» formed an extraordinary and fascinating gallery, a «nobile Musaeum» – as will be defined by

Christine of Sweden in 1658 (Garbari & Tosi, 2002; Milone, 1993) – unique in the world; like, also, the churches, monasteries and palaces, that were the jeal-ous custodians of a less visible, but equally precious patrimony of art works, handiworks, clothes and fabrics, codices, books, naturalistic findings.

Because, once left the «miracolous square» with the Cathedral, the Baptistere, and the Leaning Tower, the street dedicated to St. Mary marked the beginning of an itinerary that could impress even the most exacting traveller. The English Robert Dallington, during his travel in Italy in 1596 (Dallington, 1605), noted – above all – the curiosities conserved in the «Gallery» of the Garden of Simples: statues, paintings, medals, minerals, even a coral branch «born on a human skull» (a bizarre artefact still conserved in the Natural History Museum located in the complex of the famous Chartreuse of Calci, near Pisa). Likewise, young grand duke Peter Leopold, who visited Pisa in May 1766, admired the Specola, with its collection of instruments of experimental physics, and the Garden of Simples, with its rich Museum of Natural History (Luchetti, s.d.; Burresi, 1999).

In the history of Pisan collections, originating from ancient vocation, the University plays a central role. Probably, in the first centuries of life of the Pisan Athenaeum, there was no attempt to create museum collections: from 1343, when the *Studium* was founded, to 1543, when it was finally reopened (Tangheroni, 2000; Del Gratta, 2000), no trace is left of collections of items aimed at documenting any research or didactic activity.

All disciplines, speculative in character and taught according to the scholastic system, never involved any direct contact with natural objects or handiworks to display. Hence a knowledge exclusively theoric, preventing any attempt to check the real identity of plants, animals, minerals, fossils, *artificialia* and their possible uses.

It is in the modern age that the awareness to be able to order knowledge develops. When Cosimo I reopens the *Studium*, he is faced with the need to satisfy the didactic requirements posed by the naturalist charged with not only the lecture of simples but also their *ostensio*, which from a practical standpoint implied the availability of a lot of ground for growing the pharmaceutical plants to show to students. In this requirement is rooted the birth of the first Botanic Garden in history,

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founded by Luca Ghini in 1544, when he came to Pisa, upon invitation by Cosimo I (Garbari & Tongiorgi Tomasi, 2002). In a letter sent to the grand duke's butler, Ghini discloses that the Garden's purpose is «to be useful to students» (Chiarugi, 1953), i.e. to serve as a didactic aid for University students of medicine, who had to learn to recognize the plants – the simples – whence curative substances were extracted. For this reason, collections were oriented to medicinal plants, confirming the close links between botany and medicine, already strengthened in the medieval tradition of monastery gardens (Garbari, 1993), which is likely to have influenced Ghini's vision, particularly since the original Garden's site was the claustral garden of St. Vito monastery, close to the Arno river, in the west side of the town (Garbari & Tongiorgi Tomasi, 2002).

The birth of the Garden is of primary importance also for the development of botany that, from a subsidiary discipline to medical sciences, gradually acquires its own identity. Andrea Cesalpino, Ghini's disciple and Garden Director from 1554 to 1558 and from 1563 to 1583, moves the first step in this direction, as for the first time in his work *De Plantis*, published in 1583 at Florence, the plants are classified based not on their pharmacological properties, but on the morphological characters of flowers and fruits, thus laying the foundation of modern systematic botany.

It is not by chance that the differentiation of didactic collections corresponded to the transfer of the Garden to another site, near the street presently dedicated to St. Martha (Fischer, 1998).

Such a decentralized location, though, will prove inadequate in consideration of the strong interest that the Botanic Garden aroused also outside the academic community, calling for a more central location, near the heart of the city's cultural life.

In 1591 the Grand duke Ferdinand I decreed a further move near St. Mary Street, where the Garden still stands today. The new position was shown to fulfil all needs both of students and researchers, and of citizens and foreign visitors, who found in the Garden a place of delight, *i.e.* a place whose beauty and suggestion encouraged serene exchanges of opinions, meditations and discussions on nature's wonders, enclosed in the collections in the Garden and in the annexed «Gallery», a showcase of *naturalia* and *artificialia*, and the embryonic stage of the future Museum of Natural History (Garbari & Tongiorgi Tomasi, 1993).

The creator of the third Pisan Garden was the Flemish Jodocus de Goethuysen (italianized as Giuseppe Casabona, *i.e.* Joseph Goodhouse) (Goethuys, 1995; Tongiorgi Tomasi & Garbari, 1991), who enriched the Garden's collections with numerous wild species collected during his expeditions in Italy and in various Mediterranean countries, particularly in the Island of Crete. The increase of exotic plants is also due to the numerous exchanges of seeds and bulbs that he made with other Italian and European botanists, *e.g.* with his fellow-countryman Charles Clusius, director of the Botanic Garden of Leiden in the Netherlands. A Persian plant, *Fritillaria imperialis*, was sculpted in bas-relief in the Garden's gate (Tongiorgi Tomasi & Garbari,

1995), still conserved in the historic-didactic section of the Pisan Garden.

Annexed to the Garden of Simples was an assemblage of naturalistic items, exotic objects, paintings, books and all kinds of curiosities. It was the grand duke's order that many objects of the Florentine collections be transferred to the Gallery for the sake of study.

Gathering and collecting *naturalia*, especially minerals, was a daily practice of the prefects in the first decades of the Garden: the overwhelming amount of naturalistic items versus the curious or exotic objects clearly emerges in the Gallery inventory compiled in 1626 by prefect Matteo Pandolfini, shortly after his appointment at the Garden's head (Tongiorgi Tomasi, 2002).

After a period of crisis and impoverishment, the history of University collections enters into an important and significant age, following the advent of the Lorraines, as successors to the Medici dynasty, who stimulated the sudden onset of a cultural milieu of extraordinary vivacity. The development of the *Studium* in compliance with modern didactic and experimental requirements is then matched by a marked interest towards the young scientific disciplines and, consequently, towards the creation of collections increasingly linked to new research visions.

The purchase of Niccolò Gualtieri's malacological collection, in 1741, promoted by Superintendent Gaspare Cerati, and the birth of the Natural History Museum in replacement of the old Gallery in the Garden of Simples, as well as the establishment of the chair of experimental physics and the first teachings of Chemistry, are important signs of a new organization of scientific knowledge (Tosi, 2002a).

The growing prestige of the Garden, which the Linnaean systematic criteria begin to pervade, is accompanied by the fast development of museum collections of natural history, marked by significant purchases (for example the tables of *Storia naturale degli uccelli* by Saverio Manetti, a work printed in Florence in 1767-1776), and characterized by the personalities of Giorgio Santi and Gaetano Savi.

Under their direction, the Garden gradually lost its original partition, deeply rooted into the renaissance concept of microcosmic re-creation, to acquire a modular layout, more suitable for representing the new systematic theories of the plant kingdom (Garbari & Bedini, 2002).

Following this re-arrangement, in 1814, the Botanic Garden (directed by G. Savi) was definitively separated from the Natural History Museum (directed by G. Santi), thus matching the division of the relevant teachings (Botany and Plant Physiology, on one side, and Mineralogy and Geology on the other), and also putting on its way the modern history of University collections

Already in 1827, under the guide of young Paolo Savi, «more than five thousand animal specimens» were placed in the Museum's rooms, attesting the collections' size and quality, which will make the Pisan institution, in the course of the century, one of the most renowned in Europe (Tosi, 2002a).

In this time, many episodes occur that will leave deep traces in the history of the town and of its collections. Suffices it to mention the «French-Tuscan literary expedition» to Egypt and Nubia, in 1828-1829, sponsored by the government of Leopold II and jointly lead by Ippolito Rosellini and Jean François Champollion, who not only wrote one of the most exciting chapters of modern Egyptology, but also pioneered a research area which is still documented by the Egyptian collections of Pisa University (Bresciani, 2000).

Other significant events, leading to the creation of numerous and prestigeous collections, take place in a context dominated by the First Meeting of Italian Scientists, held in Pisa in October 1839 – well in advance of the national unification – and destined to influence to a great extent the very organization of science in the whole country (Rossi, 1989; Bargagna *et al.*, 1989).

So is the foundation of the Veterinarian Anatomy Museum, whose history begun in 1818 when Vincenzo Mazza, a veterinarian serving in Napoleon's army, arrives to Pisa, while he was in Prince of Canosa's retinue, and founds a private school in St. Martin Street, also with the help of botanist Gaetano Savi and physician Giuseppe Bianchi. Just three years later, upon Mazza's move to Naples, the school was ceased, but teaching was resumed in 1839, this time as a public school, with the formal establishment of the chair of Veterinary, held by Melchiorre Tonelli, within the Faculty of Medicine. Also this attempt failed shortly afterwards, and the chair was suppressed in 1851.

Eight years later, in 1859, following the advent of Marquis Cosimo Ridolfi to the Ministry of Public Instruction, the teaching is reinstated within the Faculty of Science; the following year (1860), it is flanked by the chair of veterinary Anatomy, Physiology and Surgery, entrusted to Luigi Lombardini, who will hold it until his death in 1898.

Afterwards, upon the annexation of Tuscan Grand duchy to the Kingdom of Italy, the Royal Veterinarian School was created in Savi Street (in the building that presently is home to the Otorhinolaringohyatric clinic), where all facilities and equipments of the Veterinary chairs were moved in 1874, separating the veterinary studies from the Faculty of Sciences. To Lombardini is entrusted the Institute of general and descriptive Anatomy of domestic vertebrates, furnished with appropriate rooms -i.e. dedicated to be a museum for the conservation and display of anatomical specimens - where the preparations made by Lombardini himself and by his successors Virginio Bossi and Ugo Barpi were arranged, along with the heirloom from past experiences. The preparation of specimens goes on intensely in the last part of the XIX century and at the beginning of the XX, giving rise to a numerous series of anatomical pieces representing all domestic species of mammals, particularly horses, in rich details (Benvenuti & Coli, 2002).

Paleethnological collections originated in 1867 with materials coming from the excavations made by physician Carlo Regnoli and geologist Carlo D'Achiardi in grottoes situated in Versilia and on Monte Pisano. Specifically, the research took place at Grotta all'Onda,

Grotta del Tanaccio, Grotta della Guerra (Camaiore and Collemandina, province of Lucca), and Grotta del Castello (Vecchiano, province of Pisa).

Regnoli deposited these materials at the former University Museum of Geology, but after WWII they were transferred to the Institute of Anthropology and Human Paleontology. Sadly, as with the veterinary anatomy objects, many specimens were lost to bombing, and accession documentation is missing: for many objects, the only trace left is a catalogue, showing their presence in some showcases.

Regnoli's collection was augmented also through exchanges and donations, following the epoch's use, thanks to which objects from Grotta all'Onda were exchanged, on the occasion of congresses and symposia, with materials from different parts of Italy and Europe, including several moulds.

Grotta all'Onda had gained international reputation, as one of the first grottoes yielding materials from middle palaeolithic and neolithic age.

Only a list is left attesting these exchanges, in Regnoli's handwriting and without notes on the single objects' provenance. The importance of this collection lies mainly in its historical value, for a discipline yet in its beginnings. The researches were carried out mainly in northern Italy, with particular attention to the excavations in the terramare, in a period when very few scholars followed such investigations in other regions. Tuscan naturalists (especially Igino Cocchi) must therefore be praised for the development of this research that in mid-XIX century had Florence and Pisa as centres of excellence, with interdisciplinary methods involving geologists, paleontologists, paleethnologists, ethnologists, etc. (Grifoni Cremonesi, 2002).

The Museum of Human Anatomy, today in the Medicine and Surgery School of Pisa, in the Human Anatomy Section of the Department of Human Morphology and Applied Biology, is rooted into a long tradition of anatomical studies, initiated in Pisa by Andrea Vesalio (1514-1564) and prosecuted by other illustrious masters like Gabbriello Falloppio (1523-1563), Lorenzo Bellini (1643-1704), Paolo Mascagni (1724-1815) and Filippo Pacini (1812-1883), who set the premises for the creation of a Museum. A large number of anatomical preparations, admirable in crafting and of unquestionable scientific interest, had been executed during three centuries and were waiting for a proper collocation.

The Museum was *de facto* instituted as «Anatomic Cabinet» by Tommaso Biancini, dissector and anatomy professor under the government of Leopold II of Lorraine. Inaugurated on 15 November 1832, its initial arrangement resulted rather modest. It was Biancini's successor, Filippo Civinini, who continued the task to arrange the Museum in a very proficient way. Between 1834 and 1835, badly kept specimens were eliminated and new ones added. Civinini has the merit of the adequate description of specimens and of the compilation of a catalogue with a numeric reference to the specimens described. In that period, around 120 specimens were conserved, but in 1841 they were increased to 1327, according to the *Index of items of the Physiological and*

Pathological Human-Compared Anatomy of the Imperial and Royal University of Pisa, published in 1842.

In the following years, the Museum was enriched with many other specimens, thanks to the commitment of Civinini's successors. In January 1856 a new Index was published, probably by Pietro Duranti, professor of Normal Human Anatomy from 1851 to 1886, whose contribution was so summarized by Fedeli (1926): «The reordering of the great Museum must be fully acknowledged to him, who therefore made the study of dry preparations easier to students».

The Museum occupied the ground floor of the anatomical section of the Medicine and Surgery School until the end of the 1960s, and was then transferred to the second floor of the same building, where it is still located. Due to its original location, the Museum was devastated by a flood in 1944: in November, the retiring German troops had mined and blown up the Arno river's banks while it was in flood, provoking a disastrous inundation. A massive body of water, mud and debris flowed through the Museum's locales, inflicting irreparable damages to preparations displayed in shelves and showcases.

As well known, the Human Anatomy Museum conserves a notable collection of precolumbian vessels. Also mummies, skulls and funerary equipment of high medical and scientific interest, belong to this collection. It is not exactly known how all this precious material came into the Museum's holdings. It seems that part of the collection derives from excavations made in Peru, between 1860 and 1870, by Carlo Regnoli, the researcher who started the paleethnologic collections in 1867, probably on the wave of enthusiasm generated in the cultural milieu by the studies of Anthropology and Ethnology that, thanks to the fascinating positivist theories of Charles Darwin and Paolo Mantegazza, so much attracted the scholars' attention and the public's curiosity. In 1894 Baroness Elisa de Boilleau, on behalf of Baron Charles, donated to the then Civic Museum three crates containing Peruvian mummies and other precolombian material. Charles de Boilleau was likely to be in possession of material coming from Peruvian excavations, in his acting as French consul in Lima, during the reign of Napoleon III. In 1877, after the collapse of the second empire, he settled in Pisa, precisely in the palace still known by his name. Probably, the precolombian material was incorporated to the already extant Regnoli fund of the Human Anatomy Museum. Even more uncertain and fragmentary evidence can be found regarding the presence of two Egyptian mummies in the Museum. One is probably linked to the expedition to Egypt made at the beginning of XIX century by Ippolito Rosellini. Egyptian findings first reached the Zoology Museum, then located in the Gallery annexed to the Botanical Garden in 1830; later, a few objects were passed to other structures, among which the Human Anatomy Museum (Natale, 2002). This ends the historic framework of the University collections. But there is history yet to be written and equally fascinating. It is the history of the XX century, assisting to the birth, in Pisa, of a prestigious University

Museum system, bringing to life initiatives on the forefront in the whole country, with protagonists of undisputed fame.

Suffices it to mention here but a few names.

Carlo Ludovico Ragghianti, who at the end of the 1950s, after receiving the generous donation of the graphic collection assembled by eminent scientist and science historian Sebastiano Timpanaro, founded the Drawing and Print Cabinet, the first public collection of contemporary arts in Italy (Tosi, 2002b).

Silvio Ferri, who in 1950s promoted the birth of the Archaeological Antiquarium, associated to the chair of Archaeology and History of Greek and Roman arts (Massa, 2002).

Ezio Tongiorgi, whose scientific stature and strong commitment toward the city and its University made possible the creation of the Museum of Natural History and Territory which today, in the suggestive stage of the Chartreuse of Calci, near Pisa, represents an institution on the forefront of the museum horizon (Battaglini *et al.*, 2002).

Today, all Museums and collections, co-ordinated as Museum system by a special University Committee, are fulfilling the prestigious role as didactic facilities and scientific centres bequeathed by a long-standing tradition.

True, some collections are still waiting for a proper place in which to be kept according to the safest conservation techniques and displayed to public in the most engaging way: but the Committee especially set up by the University is actively working towards a solution of this problem, particularly through a cooperation with public local administrations and agencies (Municipality, Civic Museums, Fine Arts Superintendence). The road ahead is already paved, to ensure that the old fame of University Museums and collections be matched by a safe and bright future.

REFERENCES

Bargagna B., Moscatelli E., Tamburrini R. (eds.), 1989. Atti della prima riunione degli scienziati italiani (Pisa, 1839). Ed. Giardini, Agnano, anastatic reprint.

Battaglini S., Bianucci G., Cerri M., Dellacasa M., Iacopini A., Nocchi C., Orlandi P., Palagi E., Strumia F., Zuffi M., 2002. Il Museo di Storia Naturale e del Territorio. In: AA.VV., Arte e Scienza nei musei dell'Università di Pisa: 97-140. Ed. Plus, Pisa.

Benvenuti C., Coli A., 2002. Il Museo Anatomico Veterinario. In: AA.VV., Arte e Scienza nei musei dell'Università di Pisa: 143-159. Ed. Plus, Pisa.

Bresciani E., 2000. Il richiamo della piramide. J.F. Champollion e Ippolito Rosellini in Egitto. In: Bresciani E. (ed.), La piramide e la torre. Due secoli di archeologia egiziana: 15-90. Ed. Cassa di Risparmio, Pisa.

Burresi M. (ed.), 1999. Alla ricerca di un'identità. Le pubbliche collezioni d'arte a Pisa fra Settecento e Novecento. Catalogo della mostra. Bandecchi & Vivaldi, Pontedera.

Chiarugi A., 1953. Le date di fondazione dei primi Orti Botanici del mondo: Pisa (estate 1543); Padova (7 luglio 1545); Firenze (1 dicembre 1545). Nuovo Giorn. Bot. Ital. 60: 783-839.

Dallington R., 1605. A Survey of the Grand Duke State of Tuscany in the year of our Lord 1596. London.

De Montaigne M., 1774. Journal du voyage de Michel De Montaigne en Italie par la Suisse et l'Allemagne en 1580 et 1581. Le Jay, Rome and Paris.

- Del Gratta R., 2000. L'età della dominazione fiorentina 1406-1543. In: AA.VV., Storia dell'Università di Pisa 1: 33-78. Ed. Plus, Pisa.
- Fischer P. D., 1998. I giardini di età medicea e lorenese. In: Giusti M.A. (ed.), Giardini di Pisa: storia, conservazione, progetto: 49-90. Edifir, Firenze.
- Garbari F., 1993. Le ricerche sui giardini dei semplici nella storiografia nazionale. In: Ferri S., Vannozzi F. (eds.), I Giardini dei semplici e gli Orti Botanici della Toscana: 17-32. Ed. Quattroemme, Perugia.
- Garbari F., Bedini G., 2002. Architetture, spazi, tempi e piante nell'Orto Botanico di Pisa: un'evoluzione simpatrica. In: Piva A., Galliani P. (eds.), Nuovi paesaggi. Storia e rinnovamento del giardino botanico in Italia: 115-124. Ed. Marsilio, Venezia.
- Garbari F., Tongiorgi Tomasi L., 1993. Il Giardino dei semplici. In: AA.VV., Storia dell'Università di Pisa 1 (1343-1737): 363-373. Ed. Plus, Pisa.
- Garbari F., Tongiorgi Tomasi L., 2002. The origins of the *Giardino dei Semplici*: from the herbal garden at the *Arsenale* to the *«Orto novo»* in Via Santa Maria. In: Garbari F., Tongiorgi Tomasi L., Tosi A., Giardino dei Semplici Garden of Simples: 101-106. Ed. Plus, Pisa.
- Garbari F., Tosi A., 2002. Le memorie delle arti e delle scienze. In: AA.VV., Arte e Scienza nei musei dell'Università di Pisa: 15-25. Ed. Plus. Pisa
- Goethuys B., 1995. Giuseppe de' Casabona, alias Jodocus De Goethuysen. Ca. 1515-1595. Een vlaams Plantkundige in Italie. Private edition, Tielt-Winge.
- Grifoni Cremonesi R., 2002. Le collezioni paletnologiche. In: AA.VV., Arte e Scienza nei musei dell'Università di Pisa: 163-173. Ed. Plus, Pisa.

- Luchetti J., s.d. Notizie di fatti pubblici della nostra città di Pisa e delle città circonvicini, scritte da persona ben affetta a' posteri. Biblioteca del Seminario di S. Caterina, Pisa
- Massa M., 2002. Le collezioni archeologiche Antiquarium. In: AA.VV., Arte e Scienza nei musei dell'Università di Pisa: 203-214. Ed. Plus, Pisa.
- Milone A., 1993. Il Camposanto, museo immaginato, tra Seicento e Settecento. In: Baracchini C. (ed.), I marmi di Lasinio. La collezione di sculture medievali e moderne nel Camposanto di Pisa. Catalogo della mostra: 19-36. Ed. SPES, Firenze.
- Natale G., 2002. Le collezioni di anatomia umana. In: AA.VV., Arte e Scienza nei musei dell'Università di Pisa: 245-270. Ed. Plus, Pisa.
- Rossi G. (ed.), 1989. La situazione delle scienze al tempo della prima riunione degli scienziati italiani. Ed. A.I.TO.M., Pisa
- Tangheroni M., 2000. L'età della Repubblica (dalle origini al 1406).
 In: AA.VV., Storia dell'Università di Pisa 1: 5-32. Ed. Plus, Pisa.
- Tongiorgi Tomasi L., 2002. Art and nature in the *Giardino dei Semplici*: from its origins to the end of the Medici dynasty. In: Garbari F., Tongiorgi Tomasi L., Tosi A., Giardino dei Semplici Garden of Simples: 149-188. Ed. Plus, Pisa.
- Tongiorgi Tomasi L., Garbari F., 1991. Carolus Clusius and the Botanical Garden of Pisa. In: Tjon Sie Fat L., de Jong E. (eds.), The Authentic Garden. A Symposium on Gardens: 61-73. Ed. Clusius Foundation, Leiden.
- Tongiorgi Tomasi L., Garbari F., 1995. Il giardiniere del Granduca. Storia e immagini del Codice Casabona. Ed. ETS, Pisa.
- Tosi A., 2002a. Art and science between neoclassicism and romanticism: the Botanical Garden in the modern age. In: Garbari F., Tongiorgi Tomasi L., Tosi A., Giardino dei Semplici Garden of Simples: 189-209. Ed. Plus, Pisa.
- Tosi A., 2002b. Il Gabinetto Disegni e Stampe. In: AA.VV., Arte e Scienza nei musei dell'Università di Pisa: 313-327. Ed. Plus. Pisa.

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