

The Medici Collection

The history behind the formation of the Medici Collection is an extremely fascinating subject. Through examining its origins and past prior to being on display in the Museo Galileo, much can be learned about the history of collection in the renaissance era, the history of science and importantly the political, cultural and economic history of the Grand Ducal family. The collection has many aspects that can be studied, including the provenance of the items included, the reasons why they were collected, their importance to the collection and what the various Medici family members were attempting to achieve through the original display and organisation of the collection. The beginning of the collection under the patronage of Cosimo I, the original collection was intended to demonstrate the use of science in warfare, illustrating its importance and success. Arguably it was also created to highlight the intelligence and military prowess of the Medici in the defeat of the Sieneese following Montalcino in 1559 especially. However Silvio A. Bedini writes that the collection of scientific instruments had its beginnings rather as part of the great assemblage of art formed by Cosimo in the Palazzo Vecchio.¹ The Medici had long been known in Florence following Giovanni de' Medici's relocation to the city for their role in the patronage of art and architecture. Some items of the early collection are reminiscent of the Medici penchant for artistic patronage in that they appear as beautiful examples of fine art. This was because some of the objects were probably collected as examples of certain engravers and goldsmiths intended to be displayed in' Cosimo I's cabinet of curiosities, whilst others relate to the Medici's e growing predilection for the sciences.² His collection did originate as works of art, coins and armour, however the nucleus of scientific items that formed the basis of the future Medici collection deigned to show that being a patron of science was also an important role, and Medici scientific collection broke away from the assemblage of art and architecture amassed by previous patriarchs and emerged as an increasingly separate collection.

¹ Silvio A. Bedini, 'The Fate of the Medici-Lorraine Scientific Instruments,' *Journal of the History of Collections*, Vol. 2, No. 7 (1995) p. 159

² Bedini, p. 159

As a collection of scientific instruments the Medici collection has a distinctive history, with the collection that is housed in the museum today originating in two places. Firstly it was housed within the Palazzo Vecchio under Cosimo I, and subsequently within the Uffizi Gallery after the efforts of Francesco I and his brother, Fernando I. In *Displaying Scientific Instruments* Filippo Camerota writes that the two rooms are early examples of museum arrangements that involved the participation of famous architects, mathematicians, painters and courtiers.³ Both places therefore reflected the efforts of the Medici patrons to create designated grand showcases of scientific knowledge, especially given that they were in two seats of Medici power. The first installation of the collection in the Palazzo Vecchio was documented by Giorgio Vasari who designed the layout of the Ducal Wardrobe in collaboration with the cosmographers Miniato Pitti and Egnazio Danti.⁴ The room was arguably a reflection of Cosimo's cosmographic knowledge, with his own name having its root in the Greek *Kosmos*. It was something more than a repetition of the style of collector's wardrobes as it was a display bringing together the terrestrial and celestial, becoming a collector's item in itself. Mark Rosen states that Cosimo's Guardaroba took a pivotal step toward the next generation of Medici collecting halls of the Uffizi, and that these grandiose spaces were designed as carefully structured environments in which the scientific objects could be displayed to their best advantage.⁵

In the time of the collections origins under Cosimo I, as well as the preceding and following eras, cultural power equalled political power to a certain degree. However displaying a mastery not just of the cultural arts but the sciences was also important to the political ambitions of the ruling family. With Cosimo's rise to the role of leader at the age of seventeen, this is something he perpetuated through his scientific collection, and was inherited by future generations of the family, firstly with Cosimo's eldest son Francesco I. He shared his father's scientific interests but had developed a more particular interest in alchemy. It was Francesco who began the transformation of

³ Filippo Camerota *Displaying Scientific Instruments: From the Medici Wardrobe to the Museo Galileo* ed. by Filippo Camerota (2012) p. 3

⁴ Camerota, *Displaying Scientific Instruments*, p. 3

⁵ Mark Rosen, *Maps and Cartography: The Mapping of Power in Renaissance Italy* (Cambridge: Cambridge University Press, 2014)

the Uffizi into a private gallery, assembling masterpieces of art both ancient and modern centred in Bernardo Buonalenti's *Tribuna* designed in 1584.⁶ This is where the collection was first displayed outside of the Palazzo Vecchio, holding many of Francesco's precious objects and is often described as being based upon the designs of the *Kunstkammern* and *Wunderkammern* of the European Princely courts. This is arguably a deliberate attempt by the *Tribuna*'s designers to emulate the royal status of these cabinets of curiosities.

Ferdinando I, however, was the son who exhibited the stronger interest in the collection of scientific knowledge. It was Ferdinando who contributed significantly more to the continuation and subsequent expansion and promotion of the Medici scientific collection. The Cosmography Room in the Palazzo Vecchio may have been abandoned, but it was done so for the vision of a grander home for the Medici's display of scientific knowledge. The Uffizi was to be the new centre of the Medici collection, pulling together the cosmographic, alchemic and artistic aspects of the collection into a unified series of rooms. This was realised with the creation of the Hall of Mathematics and new Cosmography Room in the Uffizi under the design of Alfonso Parigi. Following Cosimio I's original intentions, the collection specifically honoured the science that yielded Florentine military success containing many of the objects used in warfare that are now housed in Room VI of the museum. These original homes and their layout can tell much about the reasons behind the assemblage of the collection and how the collection was to be viewed. The grandeur of their new home betrayed the importance of the study of science and its' objects to the Medici. Important guests of the Grand Duke would be taken to the Uffizi and the scientific collection was there to impress, displaying the knowledge and power of the Duke himself. The Uffizi gallery also signified the beginnings of museology, as described by Camerota and Miniati who stress how Ferdinand inserted the Mathematics Room within a broader design project, as with the opening of the Armoury, the Mathematics Room and the Map Room, the design was to promote the relationship between art and science.⁷

⁶ Camerota, *Displaying Scientific Instruments*, p. 5

⁷ Filippo Camerota and Mara Miniati, *The Medici and the Sciences* (2009) p. 93

The collection accumulated a vast array of scientific instruments, maps and books over the Medici Grand Ducal reign in varying ways, an interesting point of study. The methods with which the Medici acquired the desired objects for their collection demonstrates the differing collecting practices they employed. Firstly items entered the collection as donations or gifts, making up a significant part of the Medici collection. Instruments and books were given to the Medici by the creators, designers or authors as gifts, possibly to gain political favour with the Grand Duke. They could also be given as thanks for the support or funding of their work, or as a means to express their loyalty to the Medici, possibly to seek further support in the future if the gift was appreciated. Often the instruments or books would have a dedication to the Medici family, either in text or a painted or engraved illustration of their coat of arms. There are many examples

of these gifts and donations within the collection, perhaps most explicitly seen in the rare books of the Museo Galileo's antique book collection. Assembled by Cosimo I and his successors, it comprises of nearly five thousand volumes. In particular Ottavio Pisani's *Astrologia* is an example of this practice of dedicating texts to the



Medici family, as it displays a delicate illumination of the Medici coat of arms and a text dedication to Cosimo II on the frontispiece. Studies have suggested and provided evidence that this copy was sent by Pisano to Galileo, asking him in turn to present it to the Medici court in order to gain

financial support. A second text is Galileo's posthumous

Opere di Galileo Galilei published by Vincenzo Vivani

which has gilded binding, the Medici coat of arms on the cover and a dedication on the frontispiece to Galileo's main patron Ferdinand II

The first plate of the book also depicts Galileo pointing out the Medicean planets

(Jupiter's satellites) and is an obvious gift to the Medici

family. Much of the collection was acquired through the Medici commissioning objects from



designers, artisans or workshops, either for practical or decorative purposes. The *Armillary Sphere* (inventory no. 714) designed by Antonio Santucci is arguably the most significant example of a Medici commission within the collection. Made at the bequest of Ferdinando I it was meant to represent the universal machine of the world.⁸ Its opulence and grandeur displays the wealth and power of the Medici family and the coat of arms on the outer ring is a distinct symbol difficult to miss by those who viewed the sphere. However it was not made purely to be a decorative symbol of their worldly importance, wealth and power. It also heralds Ferdinando's mastery of cosmography and involvement in the sciences as it was a working sphere and an astrological instrument both beautiful and practical. The sphere emphasises in particular how knowledge of the original housing of the collection and the placing of specific items is important to understanding the item itself. The sphere was originally mounted between two important globes in the room of Mathematics in the Uffizi which highlights just how treasured an item it was. This project is also significant as it marked Ferdinando's continuation of his father's grand cosmographic project that Francesco only partially continued.⁹ Without this continuation of dedication to cosmography and astrology, the collection may not have grown to the extent that it did. The sphere then can be viewed as a symbol of the wealth Ferdinando was prepared to dedicate to these impressive scientific projects. It is this kind of dedication that continued on throughout the dynasty, seen in the 1657 founding of the Accademia del Cimento by Prince Leopoldo and the Grand Duke Ferdinand II de' Medici. It was Europe's first scientific society where a great level of devotion to the production of purpose-built instruments and experimentation was shown. Certain objects of the collection however were for entirely decorative rather practical purposes, which can be seen in some of the items housed in Room VI regarding the science of warfare. The more finely detailed and ornately decorated instruments were created as apparatuses of beauty intended for display and most likely never saw battle, whilst others were designed for practicality and precision. Ferdinando II dedicated much of his time to the exploration of natural sciences and experimentation in mathematics with other members of his court, so as a

⁸ <http://catalogue.museogalileo.it/section/AntonioSantuccisArmillarySphere.html> (accessed 31st July 2015)

⁹ Camerota and Miniati, p. 95

result it is known he commissioned the construction of various instruments, many made from his own designs.¹⁰

However, with items bearing the Medici coat of arms or a dedication to the family, there is not always information provided on how and why the item specifically came into the collection. This can make it difficult to determine if the object was commissioned by or for the Medici, or given as a gift, especially considering there was a Medician workshop with the sole purpose of producing measuring instruments for the Grand Ducal collection. An example of one such item is the finely decorated *Cylinder Dial* of Room II (inventory no. 2457).



Made of gilt and painted wood the dial is a striking piece that bears a dedication to Francesco I de' Medici. The information on the dial is limited, as the maker is unknown and only has a suggested date of manufacture between 1574 and 1587.¹¹ Therefore it could have been made within any year of

Francesco's short reign as Grand Duke. We know that Francesco took up his father's interest in the sciences so he could have commissioned the object himself, however it is also known he was a greater advocate of the natural sciences. Subsequently without any more details, the reason behind its creation cannot be determined.



However the *Quadrant* of Room I (inventory no. 2521) has more background information regarding its provenance. The engraved object is beautifully crafted with nine concentric circles forming a perpetual calendar, and also has an engraving dedicated to Cosimo I, who was not yet Grand Duke of Tuscany. It is attributed to Giovanni Battista Giusti in 1556, or importantly to the Medician workshop.¹² However, this again means that the quadrant could have been made for the Medici as a gift by Giusti, or by the Medici workshop under the orders of Cosimo for his collection and scientific study.

¹⁰ Bedini, p. 160

¹¹ http://catalogue.museogalileo.it/object/CylinderDial_n02.html (date accessed 31st July 2015)

¹² http://catalogue.museogalileo.it/object/Quadrant_n12.html (date accessed 31st July 2015)

Alternatively a great part of the collection was assembled by acquiring objects already in existence either for display or use, and assimilating them into the array of scientific objects. The *Dptych Dial* also in Room II (inventory no. 2489) is perhaps an example of this collecting practice, as there is no information given with the object to suggest it was made specifically for the Medici. Made of ebony and ivory it is dated from 1574 and its maker is unknown, but it is suggested that due to the value of the marked latitudes inside the lid of the dial it most likely came from France. The instrument was already documented in the reign of the Grand Duke Cosimo de' Medici but no evidence is provided that it was commissioned for him rather than acquired, making it feasible that the object was possibly bought and collected for his collection.¹³ Other Medici family members aside from the Grand Duke also contributed to the collection in significant ways and this displays how the Medici would acquire many foreign pieces.



For example in Room II there are various objects brought back to Florence from Germany by Prince Mattias de' Medici, the third son of Cosimo II in the first half of the seventeenth century, including a 1608 *Quadrant* (inventory no. 1495) by Tobias



Volckmer and a *Dptych Dial* by Hans Tucher (inventory no. 2471).

The collection itself is a demonstration of Medici interests which often both compliments and contrasts with their already expansive collection of art and architecture. As a family, particularly under the earlier patrimony of Cosimo the Elder, Lorenzo the Magnificent and future Pope Leo X Giovanni Medici, they had created and added to their art collection through fostering close relationships with some of the most prolific artisans of the Florentine Renaissance. These artisans included figures such as Donatello, Michelangelo and Benozzo Gozzoli. The scientific collection too was also partially built up in this manner, with trusted artisans, cosmographers and astrologers working for the court of the Grand Duke. These included individuals such as Engazio Danti, Antonio

¹³ http://catalogue.museogalileo.it/object/DiptychDial_n01.html (date accessed 31st July 2015)

Santucci and of course, Galileo. The Medici were supporting and sponsoring scientists and scholars in the same way that they would support artists and architects with Medici commissions helping Florence's scientific community to flourish.

The cartographical aspect of the collection demonstrates again how and why certain objects would be added to the collection. Many of the maps and atlases housed in the library and on display in the museum are a part of the cartographic material that the Medici Grand Dukes collected to support their expansionist ambitions across the Atlantic. Mark Ronsen writes that throughout the Middle Ages and into the sixteenth century, maps used for decorative purposes served to inspire wonder, indicate dominion and signify awareness of previously uncharted territories.¹⁴ He refers to the fifty-three maps of the Medici Guardaroba of the Palazzo Vecchio which were part of a similar decorative program. However they also served to show how the Grand Dukes wanted to exhibit their knowledge of the world and work towards a mastery of the globe through the commissioning of maps and atlases. The maps of the Guardaroba in particular were produced at a great expense to the Florentine Court, and exhibited how the space honoured the study of science, the known and unknown terrestrial world and the cosmos. Like his father, Ferdinando I also carried on the Medici interest in maps and sponsoring their creation, founding a cartographic workshop in Livorno which produced nautical instruments, maps and atlases, some of which reside in the Medici collection. Therefore, even if the maps were not produced directly for members of the Medici family and their collection, their production was indirectly sponsored by the Medici. Other items however originated



elsewhere, yet still were produced under the instruction of Medici family members. These include Giovanni Oliva's *Atlante Nautico* (inventory no. MED GF032) of which a facsimile is on display in Room V of the museum. It is finely decorated, comprising of eighteen maps showing the Mediterranean, Europe, the East Indies and the New

World and it was probably produced in Marseille for Maria de' Medici.

¹⁴ Mark Rosen, *Maps and Cartography: The Mapping of Power in Renaissance Italy* (Cambridge: Cambridge University Press, 2014) p. 40

The Medici collection is a fascinating example of Renaissance collecting practices and their development throughout the sixteenth century and on into the period of Grand Ducal reign in Florence. It marks the legacy of Cosimo I, a great political figure who headed a family that through subsequent generations embraced both science and the arts, contributing greatly to their continuation and development in the city. Through their personal interests in the mastery of scientific knowledge, the Medici family gathered a scientific collection of great importance that became the foundation for the Museo Galileo, and marked the beginning of a developing interest in not just learning but collecting the instruments that facilitated the teaching of the sciences.

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