Abstract: Baccio del Bianco's career. an artist with a polyvalent education and multiple talents, is examined in the light of the artistic politics dominant in Florence in the late sixteenth and early seventeenth centuries, as a result of a cultural programme carefully coordinated by the Medici court: a clear emphasis on the manual, productive aspect of the arts, and on the "applied arts," and a close connection between the artistic domain and the scientific one. For both of these fields the concept and practice of disegno is central; the almost exclusive use of the graphic medium by Baccio del Bianco and the circle of artists around Giulio Parigi is considered in relation to the role of the artist in this courtly milieu.

Baccio del Bianco belonged to a group of artists working in close relation to one another at the Florentine court in the first half of the seventeenth century. Their careers covered a wide range of artistic activities but also, and most importantly, scenographic, architectural and engineering (civil and military) works, in relation to the patronage of the Medici court. Besides their multiple talents, the most striking feature of their work is their almost exclusive use of graphic medium (drawing engraving). This group of artists has been relatively little studied, even though their formation and their role in Florence raise interesting questions about the status of the arts in this courtly milieu, the cultural politics of the Medici court and the concepts related to art that dominated the artistic scene in late sixteenth- and early seventeenth-century Florence.

BACCIO DEL BIANCO AND THE CULTURAL POLITICS OF THE MEDICI COURT*

Ioana Măgureanu

Baccio del Bianco's work and career is also apt to show another crucial aspect of the Medici cultural politics: the patronage of science. In the discussion of Medici hegemonic attempts to control the arts and of the role of the artistic instruction in Granducal Florence, the concept disegno, essential in sixteenth-century art theory, will prove to be crucial, the meeting point of the interest in crafts and that in science. Baccio's international career speaks of the Medici cultural identity that the Grand Dukes were trying to promote to the other courts of Europe.

Baccio del Bianco was born in 1604 and, at the age of eight, entered the workshop of Giovanni Bilivert, a pupil of Cigoli. He then studied perspective and architecture with another pupil of Cigoli, Vincenzo Bocacci, painter and architect of fortifications. He also had some lessons in the school of Giulio Parigi, one of the private academies prolifically producing

^{*} The starting point of this article is my MA Dissertation at the Courtauld Institute of Art in London, where I studied during the 2004/2005 academic year, owing to the generous scholarship offered to me by the Courtauld Institute and a grant from the Ratiu Foundation, which I gratefully acknowledge. I should like to thank my supervisor Dr. Sheila McTighe for encouraging me to investigate Baccio del Bianco's drawing practices and for her constructive criticism. Part of this article was presented at the Renaissance Society of America Conference in Los Angeles in 2009. I am also indebted to Prof. Anca Oroveanu from the National University of Art in Bucharest for reading this paper and offering her comments and suggestions. My thanks are also due to the Gabinetto di Disegni e Stampe degli Uffizi (GDSI) and the Istituto Nazionale per la Grafica, Rome, for kind permission to reproduce the photographs shown in the plates.

architects and engineers. At the age of 17, Baccio followed the military architect Giovanni Pieroni, called Galliano, to Vienna and Prague. He returned in 1624 to Florence, where he opened a school in which he taught perspective and architecture and served the Medici court for the following two and a half decades until 1650, when he was sent to serve the king of Spain, Philip IV, in Madrid; he died there in 1656.¹

Most of his Florentine career evolved around the Medici court. He was involved in the staging of the many spectacles and festivities related to the court, both theatre plays put on for important dynastic events, and public spectacles on the streets of Florence (Fig. 1). He undertook many architectural works, especially in the port of Livorno (1626-27) and fortifications throughout the territory of the Grand Duchy of Tuscany during the Barberini war (1642-44).³ He also delivered designs for many types of decorative objects realised in the workshops of the Ducal court, such as tapestries or table decorations (trionfi da tavola).⁴ Although, as the primary sources paintings suggest, his were quantitatively unimportant in his work,⁵ I consider painting to be peripheral to his activity; moreover, very few of his painted works can still be identified nowadays.⁶

During the second half of the sixteenth century and throughout the seventeenth century the most sumptuous celebrations were held for family events of the Medici. These were opportunities for Cosimo I, and later his successors, to reinforce their position by stressing their kinship with all the important ruling houses of Europe, and to express their domination through the lavish celebrations that required the work of many artists — painters, sculptors, architects and engineers — for periods up to as long as a few years, encouraging thus the growth of a large number of crafts.

In the fashioning of these political propagandistic tools that arts and artists were to become, a new conception of art came to dominate in Florence in the last decades of the sixteenth century, articulated through a clear emphasis on the manual dimension of the arts. In a period when throughout Europe, and in Italy especially, crafts were devalued more and more as part of a general trend to downgrade manual labour and assert art's nobility through its association with the liberal arts, this might come as a surprise, but must be understood as a conscious position adopted by the Medici rulers as part of their very carefully staged-managed process of taking control over the arts and submitting them to their authority.



Fig. 1 – Baccio del Bianco, *Costume study*, pen and ink over black chalk and coloured washes on paper, GDSI, inv. 1329 A.

large body of literature has acknowledged that the Accademia del Disegno played a central role in this process. I am not concerned here with the academic phenomenon, so I will only address the problem with respect to other artistic issues, such as the position of crafts, or the formation of Baccio del Bianco and the other artists working for the Medici court. In this sense, one should keep in mind the potential distinction pointed out by Anthony Hughes between the intentions of the artists and those of the founders of the Academy.8 It is unquestionable that the artists' interests in founding the Academy included that of achieving social recognition, but that does not imply, as Charles Dempsey suggested, a clear break with the guild conception,9 and most importantly, it does not imply the same interests behind the Grand Duke's support of the Academy. On the contrary, an analysis of the artistic scene of the period will prove that these were not the Grand Duke's interests.

In the last decades of the century, during the reigns of Francesco I and Ferdinando I, the tight relation between the arts and the Medici family, which had by now become an essential element of the constructed image of the Medici rulers, was to change drastically. As Michael Levey has shown, it was the era of the courtier-artist, employed to serve the needs of the ruling family with his multiple talents, and the "traffic" of artists, asked, sent, received by the rulers confirms this, 11 as do the two trips of Baccio del Bianco to the courts of the Emperor Ferdinand II and the Spanish king Philip IV.

The intention behind the creation of the *Accademia del Disegno* by Cosimo I was specifically to ensure a supply of artists to serve the dynasty and to set up a workshop where the Medici iconography would be devised and where all the spectacles and ceremonies would be conceived.

Furthermore, not only had the new Grand Dukes given up the heroic artistgenius in favour of a multi-skilled craftsman, but their interest turned more and more from commissioning painting cycles, public statuary and architecture to collecting products of the so-called "applied arts," and to a taste for precious materials. Cosimo I had already established a tapestry manufacture industry and a workshop for the production of crystal glass. 12 But this interest in crafts intensified during the reign of Francesco I, the principe dello Studiolo, as he was called, due to his interests in experiments in alchemy and natural sciences, 13 the results of which were used in the activities of the crafts' workshops that he established.¹⁴ In 1583 Francesco transferred the workshops to the Uffizi, which was the first step towards the foundation of the Galleria dei Lavori in 1588, the first State manufactory. It comprised workshops of all kinds of applied arts, most importantly the semiprecious stonecutters working for the Medici Cappella dei Principi, 15 but also painters and sculptors. In 1617 Cosimo II established in the Boboli gardens a fornace per far bichieri di figure scherzose importing glass masters from Venice. Baccio del Bianco and Stefano della Bella were to provide drawings for these glass objects.16

These, along with his other many projects for the court, make of Baccio one of the artists most involved in the new emphasis on craft, as well as an example of the multi-skilled type of artist promoted by the Medici court. He also produced cartoons for tapestries, as well as drawings for funeral monuments, silver table centre-pieces or reliquaries. In 1637 he collaborated in the production of a table in semi-precious stones.¹⁷ One of his drawings for table decorations, representing a craftsman engaged in his activity, speaks, with Baccio's typical wittiness, of the place of the artisan at the Medici court: an element in a well-thought mechanism (Fig. 2).

The importance bestowed on crafts in the second half of the sixteenth century is illustrated by two contemporary examples: the *Galleria* of Niccolò Gaddi and the *Studio* of Bernardo Vecchieti, which both combined art collections with craft workshops (*botteghini*).¹⁸ The fact that

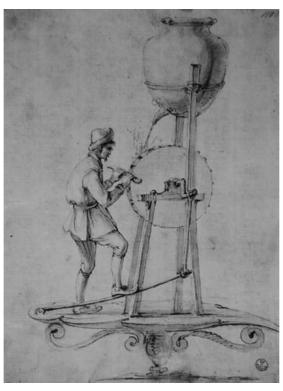


Fig. 2 – Baccio del Bianco, *Table ornament*, pen and ink over black chalk and wash on paper, GDSI, inv. 1108 orn.

Gaddi went on to become Luogotenente of Accademia del Disegno representative of the Grand Duke) after the death of Vincenzo Borghini (1580) confirms the impression that the emphasis on crafts increasingly became the policy of the court in relation to the arts. Borghini himself had declared that the Academy was Accademia di fare, non di ragionare and admonished the members not to engage in intellectual quarrels about the supremacy of the arts. 19 This context might also partly explain Vasari's "mechanical premiss," 20 his "profoundly conservative" position in respect to matters of technique which found a fertile ground in the cultural politics of the dedicatee of the *Vite* (Cosimo I).²¹

Waźbiński summarizes the outcome of these politics when he noticed that with the creation of the *Fonderia* (foundry) in Giambologna's workshop the interest shifted from creation to execution, and the school gradually transformed into a court manufactory.²² Furthermore, a treatise such as that written by Alessandro Allori for art

amateurs, in which the artistic process was deconstructed and compressed into practical rules, indicates a way of thinking that turned back to fifteenth-century ideas on art, ²³ giving us the key for understanding the shift in the way art was conceived that took place in the late sixteenth century.

The Medici were trying to reconnect with the long workshop tradition as part of their conservative politics to make a bond with the Quattrocento Medici family history. Florence had a long workshop and guild tradition, characteristic of an urban setting and a republican regime. In creating the Accademia del Disegno Cosimo did not free artists from guild duties, but only brought them together in the same guild, by giving the Academy the title *Università*. ²⁴ This is consistent with the sustained policy of guild reform of the Medici dukes in the sixteenth century, by which the arti were regulated, and what I have identified as the return to workshop tradition was the form their control took.

Within this setting, the feudal-type relationships, which are at the basis of court culture, would impose themselves increasingly on the artistic scene. The privileges given to artists such as Bernardo Buontalenti or Giulio Parigi, 25 the fact that "the palace workshops were often based on families of artisans with long histories of service to the Medici" explain the conservative artistic climate and the so-called *résistance élastique* of the Florentine artistic scene.

The creation of the Galleria dei Lavori by Ferdinando I not only demonstrates this interest in crafts, but also shows the procedure used to put all artists working for the court (with very few exceptions: Cigoli, Giambologna) under its strict supervision. The decree through which Ferdinando named Emilio de' Cavalieri as the first Soprintendente of the new institution speaks of the new way in which all the arts were thought to be in the service of the Grand Dukes; these officine involved practitioners as varied as painters and sculptors, goldsmiths and map-makers, gardeners, tailors, gun-smiths or scribes, and even Justus Sustermans, the official portraitist of the court:

We have many craftsmen for the personal use and service of the palace and of our House, and for the fulfillment of our numerous requirements. Many important works therefore pass through their hand. So that they can do their duty, and so that we can be served faithfully, diligently and promptly... we entrust [to] him all the craftsmen of every profession (tutti li artefici di ogni professione) and every rank, whether they work for us by the day or by the value of the work they do or by special arrangement.²⁸

The idea of relocating the artistic workshops in the same building as the state bureaucracy and the guilds is significant for the way the Medici were conceiving the arts as part of their ruling system.

Workshop tradition meant firstly a certain type of work relation between its members and collaboration in the production of works of art. Thus, the common projects Baccio del Bianco, Stefano della Bella and other artists undertook together for the court: the costume drawings album in the

British Museum, the caricature album in the Biblioteca Nazionale Centrale di Firenze and the series of projects for table decorations by Baccio del Bianco and Stefano della Bella in the Uffizi.

I consider that this interest in mechanical crafts also explains the predilection for Northern art that marks both the second half of the sixteenth century and especially the first half of the following one. The outcomes can be clearly seen in the landscape drawings and engravings of Giulio Parigi and his especially those of Remigio Cantagallina, who made a journey to the Low Countries and was profoundly influenced by the Northern tradition of landscape. However, the level of his drawings and engravings does not surpass that of mecanica abilità and decoro artigianale ancora improntato a forme manieriste.²⁹ Such assessments place Giulio Parigi's school of engraving in the centre of the Medicean craft culture. While Baccio's landscapes show a debt to Cantagallina, in his naval scenes the Northern influence derives from Filippo Napoletano's very similar scenes. With his clear graphic precision, Baccio del Bianco is probably the Florentine artist of this group most influenced by the Northern landscape (Fig. 3).

This new way of conceiving the arts and the artist, that dominated the last decades of the sixteenth century, was actually built on theoretical arguments that dated from much earlier. The shift can be seen in Benedetto Varchi's lecture on the nobility of various arts. While Neo-Platonic discussions of arts placed painting and sculpture alongside Geometry and Poetry, trying to obliterate the manual aspect of their production, Varchi, making use of Aristotelian categories, places them in the lower area of the Rational Soul, the area of practical and productive actions, the province of craft, while Geometry belongs to the superior area of speculative actions.³⁰ I consider the importance that Aristotelianism has in the second half of the century for art theory to be the background for the emphasis put on the manual aspects of the arts in the late sixteenth century.

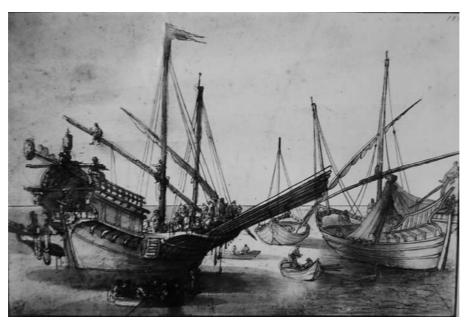


Fig. 3 - Baccio del Bianco, Naval scene, pen and ink over black chalk and wash on paper, GDSI, inv. 111 P.

Disegno was considered, at least from the fifteenth century on, the common foundation of the three arts (painting, sculpture, architecture, and, in Cellini's case, of *oreficeria* as well), and it was therefore central to such discussions. But while in the Neo-Platonic framework it was seen as the device to express the superior *Idea* found in the mind of the artist, seen through Aristotle's categories it becomes a cognitive process through which the sensible world of particulars is surpassed in order to attain the knowledge of the universal. This conception of *disegno* is very close to Leonardo's.³¹

The shift in the conception of disegno can be seen in the actual practice of drawing. Scholars have distinguished two types of drawing in the Florentine school: firstly, the albertian-leonardesque tradition of drawing, which is a tool for the investigation and representation of nature; secondly, the Mannerist tradition, for which drawing loses the primarily "indexical" function, since it serves not representation of the natural world, but the expression of a superior invenzione of the artist. Stylistically, the Mannerist style of drawing, with its taste for the purity of contours, speaks clearly of the intellectual

values that stand behind it. In the 1570s, however, a new generation of artists turned back to the investigation of the natural world through drawing and to the stylistic characteristics associated with that: the nervous, interrupted line, the numerous, visible *pentimenti*, and – very importantly, in my opinion – the use of pen and ink. Pen and ink had been, along with metalpoint, most popular medium in Quattrocento, but in the sixteenth century especially red chalk, predominant.³² In the late Cinquecento, however, we witness a return to the use of pen in the works of Cigoli, Ligozzi, Boscoli, Poccetti, Commodi, Pagani, and this trend continues in the seventeenth century with Baccio del Bianco and Stefano della Bella, to mention only a few names. Annamaria Petrioli Tofani explains this in terms of a neo-leonardesque trend in drawing, illustrated by artists such as della Bella, Furini, Pignoni,³³ and the copies that Stefano della Bella (1630?) and Francesco Furini (1632) made after Leonardo's *Tratatto* speak in the same sense. 34

But besides the attraction of Leonardo, I firmly believe that the main reason for this return to the pen was its suppleness in rendering detail, and that it was related

therefore to the technical function drawing assumed in this circle of artists. Additionally, similarities between pen line and engraved or etched line, and the primary function of ink drawing for printmaking have a crucial role in this development. In Callot's work, for instance, although one encounters drawings either in chalk or ink, "the final preparatory drawings [for engravings and etchings are] often translated into linear networks in pen and ink."³⁵

Going back to drawing's function as a tool for the investigation of nature, it is significant that in Florence naturalism was chiefly limited to drawing, while in Bologna, for example, it marked not only drawing but painting as well. One thinks in this context of the drawings dal vivo by Jacopo da Empoli, which stand as a link between the Quattrocento tradition illustrated by drawings by Maso Finiguerra and drawings dal vivo by Baccio del Bianco.³⁶ These associations do necessarily imply a direct derivation (though they may, none the less), but more importantly, they demonstrate an inner common way of perceiving the role of drawing as an instrument for investigation of the natural world.

Baccio del Bianco's drawings done in the harbour of Livorno, probably in the late 1620s or early 1630s (Fig. 4),³⁷ make a very interesting case for the analysis of the role of drawing dal vivo. It has been a subject of dispute among scholars whether some of Stefano della Bella's drawings (Fig. 5), practically identical in pose and composition with some of Baccio's here discussed, were done in the same moment and place by the artist working alongside his slightly older companion.³⁸ Phyllis Dearborn Massar argued against this, claiming that even working together the two would have picked slightly different positions and moments of the action, especially since the characters represented were not posing, but engaged in their daily activities. She thinks that Stefano della Bella's sketches were done by the "young [artist], feeling his way and copying the compositions of his friend and teacher of perspective, Baccio del Bianco." Moreover, I believe that precisely the large, inconvenient to carry size of the sheets (420 x 315 mm.), on which Stefano crowds many of the motifs found in Baccio's drawings, is an argument that Stefano della Bella's drawings were not done in open-air, but copied after Baccio's.



Fig. 4 – Baccio del Bianco, Figure study, pen and ink, wash on paper, GDSI, inv. 3350 F.



Fig. 5 – Stefano della Bella, detail of a large sheet of sketches with figure studies and harbour scenes copied after Baccio del Bianco, pen and ink on paper, Istituto Nazionale per la Grafica, Rome.

However, it was a huge surprise to notice in Baccio's drawings in the Uffizi a particular feature that was not mentioned in the previous literature. Some of them, both the popular (Fig. 6) and the naval scenes (Fig. 3), are created out of cuttings and pieces stuck together, 40 the extreme precision of their production (the cuttings are barely visible) suggesting a "retro taste for workmanship." ⁴¹ I was not able to identify cuttings in the precise drawings by Baccio that Stefano copied, and therefore prove without any doubt the impossibility of the draughtsmen working simultaneously, but I believe that Baccio's working method here described is proof enough that his creative process involved studio elaboration. It proves not only the ambiguity of the term dal vivo, but also how little we really know of actual drawing practices in early seventeenthcentury Florence, 42 suggesting that we should read with care Baldinucci's account of Baccio's practice of drawing in the open-air:

Disegnò ancora paesi di penna eccellentissimamente, e già maestro, non ricusava di andare la mattina a buon'ora fuor delle porte di Firenze, e disegnare sopra un suo piccolo librettino vedute al naturale. 43

Many of these drawings are just records of one character or groups of two-three characters, done, in my opinion, *dal naturale*, on the streets. He later used these pieces for compositions, not by copying

them, but by sticking them together with such care that one wonders what the role of these drawings was. The most obvious answer would be that they were a stage between drawing and printmaking, but no engravings after them exist, and I believe therefore that they were not done for printmaking.44 The care with which the drawings were done also excludes their being simple workshop material to be used for larger compositions. But I believe that Stefano's copies suggest that they might have been created as models to be copied by younger artists learning to draw. Drawing dal naturale was a relatively late stage in the formation of an artist, as many early modern sources reveal, and copying drawings by the master was a basic routine in the workshop practice.

The problem remains open, but I suggest that in understanding these drawings we need to take into consideration the special function *disegno* had in the school of Giulio Parigi – something between documentation, investigation, and a tool for architects and stage designers.

One cannot help wondering about the exclusive use (or almost exclusive, in the case of Baccio del Bianco) of the graphic medium in the school of Giulio Parigi, and the significance it holds among this circle of artists. Drawing had always been the basis of every artistic project in Florence,



Fig. 6 - Baccio del Bianco, Figure study, pen and ink, wash on paper, GDSI, inv. 14376 F.

but in this group of artists it acquires a completely different value, mainly because it does not precede a finished oeuvre (except in the case of drawings for engravings) and therefore it does not comply with the needs of the different stages in the creation of a painting, and thus with the types of drawing which had become traditional in Florence: *pensiero*, figure study, composition study, cartoon.

Disegno was instead closely related to the other roles these artists played at the court. Drawing was, of course, the essential tool for stage designers, architects, engineers, cartographers, and drawing as an autonomous form has its origin in these practical forms. Hence, it is not surprising that those who practice disegno with such utilitarian ends in view will be the first to practice artistic autonomous drawing in Florence: caricature, landscape drawings, drawing dal vivo with no other end than the drawing itself.

It is revealing that the only area where drawing had kept its analytical function throughout the sixteenth century was technical drawing: the engineering treatises of Leonardo, Francesco di Giorgio Martini and Mariano di Jacopo (Il Taccola) were published or circulated in manuscript copies widely in the Cinquecento. Leonardo in particular was, for this group of artists in the first half of the seventeenth

century, the model for a whole range of drawing that they types of experimenting with on a large scale for the first time in this period: landscape drawing, caricature, technical (fortifications, machines, urbanistic) and naturalistic drawing.⁴⁶ One must think of the revival of horticultural drawings at the court of Francesco I, through the works of Jacopo Ligozzi, but, most importantly, of the new fashion of toccar di penna vaghissimi paesi⁴⁷ born at the school of Giulio Parigi. Indeed, Leonardo seems to have been almost the only artist interested in landscape in the Florentine tradition (with few followers in this camp, Fra Bartolomeo and Piero di Cosimo). One might evoke his famous drawing of the Arno valley as the direct antecedent for the country landscapes by Giulio Parigi, Remigio Cantagallina, Ercole Bazzicaluva and Baccio del Bianco. The exclusive use of pen and ink in this field in particular, by both Leonardo and the Parigi school, is crucial; landscape drawing in Bologna meanwhile was making use of either ink or chalk, the latter being much closer to the pictorial effects of the Venetian tradition of landscape, such as Titian.48

The Florentine fashion for caricature is indebted to Leonardo's legacy as well, rather than to the Bolognese tradition, as a series of physiognomic studies by Baccio

del Bianco suggests. 49 They disclose their direct derivation from leonardesque models sustain Baldinucci's claim that caricature was born in Florence and not in Bologna as some claimed: invenzione bizzarrissima, che dicono i Bolognesi, trovata da Annibale Caracci; sebbene io so che ussosi talora in Firenze fino del 1480.⁵⁰ Baccio's caricatures have been discussed by Mina Gregori in the context of the trend of burlesque literature (poesia giocosa, satirica, burlesca) that dominated in Florence from the Quattrocento to the end of the Settecento. But it is significant that these productions (which include literary pieces by artists such as Lorenzo Lippi or Baccio del Bianco himself), and Baccio's caricatures therefore, were not merely a popular trend, but they had the support of the Grand Dukes, ⁵¹ as the *Accademia della* Crusca, whose declared purpose was the cultivation of the *giocoso* in literature, ⁵² also had. I believe that it is reasonable to believe that at least some of them, such as the album in Biblioteca Nazionale Centrale di Firenze, were destined for the delectation of members of the Medici family, just like Callot's series of Capricci were dedicated to don Lorenzo, the younger brother of Ferdinando I.

In parallel with the emergence of autonomous drawing, a specialized collectionism of drawings appears; the *Galleria* of Niccolò Gaddi that I have mentioned earlier for putting side by side an art collection and workshops producing artifacts also included a vast collection of drawings, most of which were architectural drawings.⁵³ It is a brilliant example of how the interest in the manual production of art and that in the technical/scientific side of production meet.

I will lastly discuss the formation of Baccio del Bianco and his fellow artists at the Medici court, in relation to the artistic educational system proposed by the formal academy of art in late sixteenth and early seventeenth century and to the interests in science dominating Florence in the early seventeenth century.

The Accademia del Disegno founded in Florence in 1563 is the first art academy in the modern sense, an institution combining practical and theoretical education. However, it did not intend to replace workshop training; young artists were expected to have acquired the technical aspects of practice in the workshop. Instead, "practical" referred to drawing exercises after the masters, after the antique and dal vero: studies of draperies or after the nude.54 The "theoretical" component, on the other hand, considered by some modern critics the fundamental end of the Academy. included lectures mathematics and perspective, and anatomy dissections.

Without going into details about the much-discussed educational programme offered by the Accademia del Disegno, I will only mention that, while the Academy claimed its role as a unifying body for the practitioners of all three arts - painting, sculpture and architecture - and offered practical and theoretical training for the first two categories, little was actually done for the education of the latter. Furthermore, at its inception only two architects were members of the Academy: Vasari and Butteri, and both were known primarily as painters.⁵⁵ It was therefore out of the need for practical training for architects and engineers that the art academies of Bernardo Buontalenti, Giulio Parigi and Baccio del Bianco were born, and not out of competition with the public Academy. Baccio del Bianco, for instance, was lecturer in mathematics at the Accademia del Disegno, from 1640 to 1643-44, and at the same time ran his own private academy where "he taught perspective." The two functions did not exclude each other, since there was no rivalry between the two institutions.

These private academies were the first institutions to combine theoretical education with practical training in drawing (including technological training in drawing or engraving, as in the school of Giulio Parigi), but most importantly, they

provided their pupils with the knowledge of "applied" mathematics.⁵⁷ These men were all stage designers, architects and engineers who worked for the Medici court, and the specific requirements of their jobs determined the *curriculum* of their schools: applied mathematics, closely related to practical disciplines: Geometry, Hydraulics, Mechanics, Surveying, Perspective.⁵⁸

The instruction taking place in these schools was in close connection with the court and its interests, in such a way that one might see them as extensions of the Granducal court. The tight correlation between the court and these schools had its origin in the deep connection between the Grand Duke and his family and the artists running them, from the very beginning of their history, which can be traced to Bernardo Buontalenti, the prototype for these artists-engineers-courtiers.⁵⁹ The very localisation of these schools on via Maggio, the residential area of the high courtiers, indicates their dependence on the court, and the importance of the Granducal protection of their founders, as was the case for scientists such as Galileo or Viviani.

The weight of the scientific preoccupations in Tuscan culture in the sixteenth and seventeenth centuries cannot be fully discussed here, but one can invoke the Medici patronage of Galileo Galilei, the transformation of his discoveries into one of the best products of the Medici propaganda: the Medici court undertook negotiations with the Spanish and Dutch courts in order to sell them the right to use some of Galileo's practical inventions.⁶⁰

Baccio del Bianco himself was a fervent representative of Medici scientific interests and propaganda in Prague. In his frescoes in the Waldstein Palace he depicts the Planet Jupiter with the four "new" planets discovered by Galileo and named after the Medici family, and the allegory of Europe wearing the Medici crown. One wonders whether Waldstein was aware of the symbolic content of these frescoes.

But the reason for emphasizing the centrality of scientific interests in Florence

is their close connection to the artistic field in the early seventeenth century. Karen-edis Barzman talked of a "a growing community of individuals [...] who wedded craft with science;" Galileo, the pivotal figure of this community, was himself a keen art amateur and critic, 62 and scholars have convincingly argued that his discoveries would not have been possible without his mastery of drawing and understanding of perspective – and especially its branch of shadow projection -,63 both of which he mastered by attending the first private academy, that of Buontalenti. In asserting the centrality of drawing for this scientific community, Karen-edis Barzman speaks of "rare and specialised instruments and [...] conceptual (disciplinary and disciplining) tools" that these men shared and which allowed them "to construe the world in mathematical terms: Euclidean geometry, perspective, and shadow projection, just three of the foundation stones of disegno."64

In this cultural atmosphere, at the junction between the tradition of these schools and the scientific interests of the Medici court, we must interpret Baccio del Bianco's role and career. His teachers were themselves products of this courtly atmosphere: Vincenzo Bocacci, painter and architect of fortifications, who must himself have run one of the perspective-architecture schools;65 Giulio Parigi, and Giovanni Pieroni, matematico, filosofo, dottore, astrologo, algebrista, e in soma singolar virtuoso as Baccio characterised him in the autobiographical letter published Baldinucci. 66 Pieroni himself had emerged from the school of Bernardo Buontalenti and was a close friend of Kepler during his stay in Prague, being an intermediary between the German astronomer and Galilei.⁶⁷ Vincenzo Galileo Viviani, Galileo's favorite pupil and one of the key "elite." of this perspective in Baccio del Bianco's school.⁶⁸ And Baccio dedicated one of his literary pieces to him.69 I have cited earlier the manuscript copy of Leonardo's treatise made by Francesco Furini. This was later in the century recorded as being in the possession of Vincenzo Viviani, 70 and this is a crucial point that ties together the interest in science and mathematics and the role of Leonardo in this cultural context.

My last argument is a story related by Baldinucci. In 1642 Ferdinando II organised a contest for painters to draw the moon as seen through Galileo's telescope. The intention behind this artistic event was to get the proof for Galileo's discovery of the mountains on the moon, contested by the ecclesiastic authorities. But the fact in itself is highly significant of the deep

connections between art, craft, drawing as a tool of investigation, perspective and science. Baccio del Bianco took part in this contest and *si portò bene*, testifying to his part as an exponent of the Medicean culture here described.

I believe therefore to have identified in Baccio del Bianco a typical case of artist involved in the Medici cultural propaganda that served the court's internal needs as well as, his trips testifying to that, the promotion of the carefully crafted image of the Medici hegemony.

Notes

- ¹ Filippo Baldinucci, *Notizie de' professori del disegno da Cimabue in qua*, Florence, 1845-1847, Ristampa anastatica, Studio Per Edizioni Scelte, Florence, 1974-75, vol. V, pp. 16-51; Mina Bacci, *Lettere inedite di Baccio del Bianco, Paragone*, 157, 1963, p. 68-77.
- ² Such as the *Nozze degli dei* given for the marriage of Ferdinando II with Vittoria della Rovere in 1637.
- ³ Karen-edis Barzman, *The Florentine Academy* and the Early Modern State: the Discipline of 'Disegno', Cambridge University Press, Cambridge & New York, 2000, p. 95.
- ⁴ Alberto Arcangeli, *I disegni di Baccio del Bianco nelle collezioni fiorentine*, dissertation (tesi di laurea), Guglielmina Gregori (supervisor), Facoltà di Lettere e Filosofia, Università degli Studi di Firenze, 1989.
- ⁵ Tutta la nobiltà fiorentina faceva a gara per farlo qualcosa operare, Baldinucci, op. cit., vol. V, p. 30.
- ⁶ Alberto Arcangeli, "Baccio del Bianco" in Piero Bigongiari, Mina Gregori (eds.), *Il Seicento fiorentino: arte a Firenze da Ferdinando I a Cosimo III*, Exh. Cat., Palazzo Strozzi, Cantini, Florence, 1986, vol. III, p. 76-78.
- Such as the wedding of Cosimo's son, Francesco I, with Joanna of Austria, the sister of the Emperor, in 1565, that of Virginia de' Medici with Cesare d'Este in 1586, on which occasion the Uffizi Theatre was inaugurated, that of Cosimo's other son, Ferdinando I with Christine of Lorraine, Catherine de Medici's favourite granddaughter, that took place in 1589, and that of Ferdinando's son, Cosimo II with Maria Magdalena of Austria in 1608; the most opulent funerals were those of Cosimo I in 1574 and those organised in honour of the Spanish king Charles V in 1558; Alois Maria Nagler, Theatre Festivals of the Medici, 1539-1637, Yale University Press, New Haven & London, 1964; Giovanna Gaeta Bertelà, Annamaria Petrioli Tofani, Feste e apparati medicei da Cosimo I a Cosimo II, Exh. Cat., Gabinetto di Disegni e Stampe degli Uffizi, Leo S. Olschki, Florence, 1969.

- ⁸ Anthony Hughes, An Academy for Doing. II: Academies, Status and Power in Early Modern Europe, Oxford Art Journal, vol. 9, no. 2, 1986, p. 51.
- ⁹ Charles Dempsey, Some Observations on the Education of Artists in Florence and Bologna during the Later Sixteenth Century, Art Bulletin, vol. LXII, no. 4, 1980, p. 554.
- ¹⁰ Michael Levey, *Painting at Court*, Weidenfeld and Nicolson, London, 1971, p. 117.
- ¹¹ Pieroni was sent by the Grand Dukes when the Emperor Ferdinand II asked his sister Mary Magdalene, wife of Cosimo II, for a fortification architect; Lubomír Konečný, *Baccio del Bianco in Prague* in Ladislav Daniel (ed.), *The Florentines: Art from the Time of the Medici Grand Dukes*, Exh. Cat., Prague, 2002, p. 27; in 1618 Johann Ernest of Saxony asks Cosimo II to "lend" him Parigi for six months, but the latter wouldn't renounce at his services; Annamaria Negro Spina, *Giulio Parigi e gli incisori della sua cerchia*, Società Editrice Napoletana, Naples, 1983.
- ¹² Annamaria Giusti, "Origine e splendore delle botteghe artistiche granducali" in Marco Chiarini, Alan P. Darr, Cristina Giannini (eds.), *L'ombra del genio: Michelangelo e l'arte a Firenze 1537-1631*, Exh. Cat., Palazzo Strozzi, Firenze; Art Institute of Chicago; Detroit Institute of Arts, Detroit, Skira, Milan, 2002, p. 116.
- ¹³ Luciano Berti, *Il Principe dello Studiolo:* Francesco I dei Medici e la fine del Rinascimento fiorentino, EDAM, Florence, 1967, Ch. 3: *Il Principe in Fonderia*, p. 43-59.
 - ¹⁴ Giusti, op. cit., p. 116-118.
- ¹⁵ Andrew D. Morrogh, *The Early History of the Cappella de' Principi, Florence*, PhD dissertation, Courtauld Institute of Art, University of London, 1982.
- ¹⁶ Roberto Paolo Ciardi, Lucia Tongiorgi Tomasi, *Immagini anatomiche e naturalistiche nei disegni degli Uffizi, Sec. XVI e XVII*, Exh. Cat., Gabinetto Disegni e Stampe degli Uffizi, Leo S. Olschki Editore, Florence, 1984, p. 59.

¹⁷ Probably for the *Tribuna*, Arcangeli, *I disegni* di Baccio del Bianco.

¹⁸ Zygmunt Waźbiński, L'Accademia medicea del disegno a Firenze nel Cinquecento: Idea e Istituzione, Accademia Toscana di Scienze e Lettere La Colombaria: Studi 84, Leo S. Olschki Editore, Florence, 1987, pp. 347-351; Carolyn Valone, A note on the collection of Niccolò Gaddi, Critica d'Arte, vol. XLII, no. 151-153, Jan.-June 1977, p. 205-207.

¹⁹ Anthony Hughes, An Academy for Doing. I: The Accademia del Disegno, the Guilds and the Principate in Sixteenth Century Florence, Oxford Art

Journal, vol. 9, no. 1, 1986, p. 9.

²⁰ Michael Baxandall apud Hughes, An Academy

for Doing. II, p. 56.

21 More so since "his voracious appetite for technique [...] is responsible for the many striking additions which augment the second edition of the Vite [that] lie uneasily alongside Vasari's account of the liberality of the arts," Hughes, loc. cit.

²² Waźbiński, *op. cit.*, p. 339.

²³ Barzman, op. cit., pp. 167-168; Idem, Perception, Knowledge, and the Theory of Disegno in Sixteenth-Century Florence in Larry J. Feinberg (ed.), From Studio to Studiolo: Florentine Draftsmanship under the First Medici Grand Dukes, Exh. Cat., Allen Memorial Art Museum, Oberlin College, Oberlin, 1991, p. 38.

²⁴ Dempsey, op. cit., pp. 553-554; Hughes, An

Academy for Doing. I, p. 7-9.

²⁵ Mazzino Fossi, *Il taccuino di Alfonso, Giulio,* Alfonso il Giovane Parigi, Edizioni Gonnelli, Florence, 1975, p. XIV.

²⁶ Edward L. Goldberg, Patterns in Late Medici Art Patronage, Princeton University Press, Princeton 1983, p. 9; Baccio del Bianco was the son of a merchant who had provided the court with luxurious textiles for the spectacles.

²⁷ Catherine Monbeig-Goguel, Artistes florentins du XVIIe siècle: repli et ouverture in Françoise Viatte, Catherine Monbeig-Goguel, Dessins baroques florentins du musée du Louvre, Exh. Cat., Cabinet des Dessins, Musée du Louvre, Ministère de la Culture et de la Communication, Éditions de la Réunion des musées nationaux, Paris, 1981, p. 12.

²⁸ Goldberg, *op. cit.*, p. 11.

²⁹ Annamaria Petrioli Tofani, Note sul disegno fiorentino nel secolo XVII in Bigongiari, Gregori (eds.), op. cit., vol. I, p. 57.

30 Paola Barocchi (ed.), Pittura e scultura nel

Cinquecento. Benedetto Varchi, Vincenzio Borghini, Sillabe, Livorno, 1998, p. VII.

³¹ Leonardo's *Trattato della Pittura* was circulating fairly widely in the second half of the sixteenth century and the first half of the following century in Florence, and the name of Niccolò Gaddi appears again, in relation to one of the manuscript copies. It is probable that Gaddi and Vincezo Danti, both of whom were involved with the Accademia del Disegno in those years, were planning a printed edition. Claire Farago, conference, Courtauld Institute of Art, May 2005. But Leonardo's influence was much

larger and enduring in the Florentine arts. Scholars have identified a "Leonardesque revival" from the mid 1620s, especially in the artistic circle connected to Galileo; Ladislav Daniel, Galileo, Leonardo, Florentine Painting of the Seicento and the Works from Bohemian and Moravian Collections in Daniel (ed.), op. cit., p. 42.

Nicholas Turner, Florentine Drawings of the Sixteenth Century, Exh. Cat., The British Museum, Cambridge University Press, Cambridge & New

York, 1986, pp. 12-13.

³³ Annamaria Petrioli Tofani, book review: C. Thiem, Florentiner Zeichner des Frühbarock,

Prospettiva, no. 19, 1979, p. 75.

34 Kate Traumann Steinitz, Leonardo da Vinci's 'Tratatto della Pittura', Munskgaard, Copenhagen,

1958, pp. 54, 66.

35 H. Diane Russel, Jacques Callot in Jane Turner (ed.), The Dictionary of Art, Grove's Dictionaries Inc., Macmillian Publishers Ltd., London and New York, 1996, vol. 5, p. 439.

³⁶ Anna Forlani Tempesti, La pratica del disegno in Rosanna Caterina Proto Pisani (ed.), Jacopo da Empoli (1551-1640): pittore d'eleganza e devozione, Exh. Cat., Chiesa di Santo Stefano, Convento degli Agostiniani, Empoli, Silvana Editoriale, Milan, 2004,

p. 32.

37 Mina Gregori (*apud* Arcangeli) and Arcangeli,

1625: Phyllis Dearborn op. cit., agree on a date before 1635; Phyllis Dearborn Massar considers them to be done in 1626-27, Stefano Della Bella at Rome, Master Drawings, vol.

XV, no. 2, Summer 1977, p. 182.

38 Maria Catelli-Isola, Disegni di Stefano della Bella, 1610-1664: dalle collezioni del Gabinetto nazionale delle stampe, Roma, Villa della Farnesina alla Lungara, 1976, De Luca, Rome, 1975, p. 8 (nowadays, the drawings are to be found in the Istituto Nazionale per la Grafica in Rome).

Dearborn Massar, loc. cit.

⁴⁰ I have identified this practice, in various degrees, in the following drawings in the Gabinetto di Disegni e Stampe of the Galleria degli Uffizi: 14374 F, 14375 F, 14376 F, 14378 F, 111 P, 114 P, 115 P, 117 P, 121 P, 80 P.

⁴¹ To use Anna Forlani Tempesti's characterization of Empoli's taste for manually colored papers, loc. cit.

⁴² This has already been suggested in an article by Ulrike Ilg, in which the author proves that Stefano della Bella's drawings of the Entry of the Polish Ambassador to Rome were not entirely drawn from life, since they make use of previous woodcut illustrations; Ulrike Ilg, Stefano della Bella and Melchior Lorck: the practical use of an artists' model book, Master Drawings, no. 41, 2003, p. 30-44.

⁴³ Baldinucci, op. cit., vol. V, p. 34.

44 As neither was, in my opinion, The Market Scene in the Witt Collection, Courtauld Institute of Art Gallery (there attributed to Stefano della Bella, but without doubt a work by Baccio del Bianco), which was, nonetheless, engraved, probably by Jacques Stella; the attribution of the print to Jacques Stella was suggested by Phyllis Dearborn Massar, Stefano Della Bella. Catalogue Raisonné, Collectors Editions, New York, 1971, Cat. No. 209, vol. Plates, p. 81, vol. Text, p. 57.

45 Simonetta Prosperi Valenti Rodinò, Forme. Funzioni. tipologie in Annamaria Petrioli Tofani, Simonetta Prosperi Valenti Rodinò, Gianni Carlo Sciolla, Il Disegno, Istituto Bancario San Paolo di Torino, Cinisello Balsamo, Milan, 1991-1993, vol. 3, pp. 145-149.

46 Idem, loc. cit.

⁴⁷ Baldinucci, op. cit., vol. IV, p. 141.

⁴⁸ Prosperi Valenti Rodinò, op. cit., pp.156-166.

⁴⁹ Private collection, photographs in the Fototeca of the Gabinetto di Disegni e Stampe of the Uffizi.

Baldinucci, *op. cit.*, vol. V, p. 32.

⁵¹ Mina Gregori, Nuovi accertamenti in Toscana sulla pittura 'caricata' e giocosa, Arte antica e moderna, vol. IV, no. 13-16, 1961, p. 404.

52 Nikolaus Pevsner, Academies of Art, Past and Present, Cambridge University Press, Cambridge,

1940, p. 15.

⁵³ Cristina Acidini Luchinat, *Niccolò Gaddi*, collezionista e dilettante del Cinquecento, Paragone, vol. XXXI, no. 359-361, Jan.-March, 1980, pp. 144-147.

54 Waźbiński, op. cit., Ch. III.1: "La scuola accademica del Cestello in Borgo Pinti e la sua attività," p. 267-303.

⁵⁵ Barzman, op. cit., p. 58.

⁵⁶ Baldinucci, op. cit., vol. V, p. 30.

57 The statutes of the Accademia del Disegno demanded instruction in mathematics from its beginnings, although there is evidence of such lectures only for briefs periods, and, most importantly, the mathematics taught there was Euclidean ("pure") mathematics, while architects and engineers needed "mixed" or "applied" mathematics (such as the science of measurements), and these did not form part of the curriculum until the mid seventeenth century. Barzman, op. cit., Instruction in Mathematical Sciences, p. 151-157.

⁵⁸ A codex, Strumenti e machine, that belonged to Giulio Parigi, now in the Bibliothèque Nationale in Paris, and containing notions of physics, engineering, architecture and instruments and techniques of

measurement suggests how the instruction of mathematics was closely connected in his school to the practical disciplines; Paolo Galluzzi in Firenze e la Toscana dei Medici nell'Europa del Cinquecento: La rinascita della scienza, Biblioteca medicea Laurenziana; Editoria e società, Exh Cat., Orsanmichele, Firenze, Edizioni Medicee, Florence, 1980, Cat. No. 2.24, p. 146.

Buontalenti had been the instructor of mathematics of the young Francesco I, and in his school Don Giovanni de' Medici studied together with Galileo. The latter was to teach mathematics to the young Cosimo II. The sister of Giulio Parigi was the instructor of mathematics of the "Signore

Principesse."

⁶⁰ Such as his methods of calculating the longitude at night on the sea. Paolo Galluzzi. Il mecenatismo mediceo e le scienze in Cesare Vasoli (ed.), Idee, istituzioni, scienza ed arti nella Firenze dei Medici, Giunti-Martello, Florence, 1980, p. 200-201.

61 Konečný, op. cit., p. 27-34.

62 Erwin Panofsky, Galileo as a Critic of the Arts, Martinus Nijhoff, The Hague, 1954; Eileen Reeves, Painting the Heavens: Art and Science in the Age of Galileo, Princeton University Press, Princeton, 1997, p. 7; Claudio Pizzorusso, Galileo in giardino. Qualche osservazione sugli arredi scultorei dei giardini fiorentini tra Cinque e Seicento in Chiarini, Darr, Giannini (eds.), op. cit., p. 123-131.

63 Samuel Edgerton Jr., Galileo, Florentine Disegno, and the 'Strange Spottedness' of the Moon, Art Journal, vol. 44, no. 3, 1984, p. 225-248.

⁴ Barzman, *op. cit.*, p. 156.

65 Baldinucci, op. cit., vol V, p. 22.

66 Ibidem, vol. V, pp. 20-29.

67 Luigi Zangheri, "Giovanni Pieroni e Baccio del Bianco a Praga e Vienna," Antichità Viva, anno XXXI, no. 5-6, 1992, p. 54-55.

⁶⁸ Baldinucci, op. cit., vol. V, p. 30.

⁶⁹ Arcangeli, op. cit.

⁷⁰ Steinitz, *op. cit.*, p. 66.

71 Baldinucci, op. cit., vol. V, pp. 30-31; Barzman, op. cit., Mixed Mathematics in the Academy and the Role of Artists in the Vindication of Galilean Science, p. 157-159.