

GANASSI AS RESEARCHER:
La Fontegara and Practice-based research in
HIP

Nuno Atalaia – c012077
Research Master – Early Music Recorder
Coaching: Prof. Dr. Rebecca Stewart and Prof. Dr. Paul Scheepers
10 June 2014

INTRODUCTION	4
GANASSI – MUSICIAN, PAINTER AND RICERCATORE	11
A NAME BY ANY OTHER DOCUMENT - TRACING GANASSI'S FAMILY AND ORIGINS	11
GANASSI AMONG THE <i>PIFFARI</i> - MOBILITY, TASTE AND STATUS	16
UT PICTURA MUSICA – GANASSI AS PAINTER	22
FONTEGARA – AN INSTRUMENT IN SEARCH OF A VOICE	26
SIMILITUDES – PROXIMITY AND ATTRACTION AS STRATEGIES	26
ESTABLISHING PRECEDENTS - TEXTUAL POLITICS	28
MAKING THE RECORDER SPEAK – FONTEGARA FROM VOICE TO VOICE	30
VOICE	30
FINGERS	31
TONGUE	34
DIMINUTION	35
SONARE ARTIFICIOSO	36
THEORY AS SUPPLEMENT: FONTEGARA AND THE FUNCTION OF PROPORTION	40
THE TOOL OF PROPORTION - THE TRANSLATION OF PRACTICE	41
THE SYMBOL OF PROPORTION - THE LIBERALIZATION OF INSTRUMENTAL PRACTICE	44
THE MYTH OF PROPORTION - THE HARMONIOUS REPUBLIC	48
EXPANSION AND CRYSTALLIZATION - THE DAWN AND TWILIGHT OF DIMINUTION	53
REGULA RUBERTINA, 1542, LETTIONE SECONDA, 1543, <i>GANASSI DAL FONTEGO</i>	54
MUSICA INSTRUMENTALIS DEUDSCH, 1545, MARTIN AGRICOLA	55
COMPENDIUM MUSICES DESCRIPTUM AB ADRIANO PETIT COCLICO, DISCIPULO JOSQUINI DES PREZ, 1552, ADRIANUS PETIT COCLICO	56
TRATADO DE GLOSAS SOBRE CLAUSULAS Y OTROS GENEROS DE PUNTOS EN LA MUSICA DE VIOLONES, 1553, DIEGO ORTIZ	57
PRATTICA MUSICA, 1556, HERMANN FINCK	59
CARTA A GIOVANNI DA CAPUA, 1562, MAFFEI DA SOLOFRA	60
ARTE DE TAÑER FANTASÍA, 1562, TOMÁS DE SANTA MARÍA	62
IL VERO MODO DI DIMINUIR, 1584, GIROLAMO DALLA CASA	62
RICERCATE, PASSAGI ET CADENTIE, 1585 AND MOTTETI, MADRIGALI, ET CANZONI FRANCESE, 1591, GIOVANNI BASSANO	65
PASSAGI PER POTERSI ESSERCITARE NEL DIMINUIRE, 1592, RICCARDO ROGNONI	67
IL TRANSILVANO, 1593, GIROLAMO DIRUTA	68
BREVE ET FACILE MANIERA D'ESSERCITARSI A FAR PASSAGI, 1593, GIOVANNI LUCA CONFORTI	69
REGOLE, PASSAGI DI MUSICA, 1594, GIOVANNI BATTISTA BOVICELLI	71
PRATTICA DI MUSICA, 1596, LODOVICO ZACCONI	73
IL DOLCIMELO, CA. 1600, AURELIO VIRGILIANO	74
LIBRO DE PASSAGGI, 1609 AND 1624, GIOVANNI BATTISTA SPADI DA FAENZA	75
SELVA DI VARI PASSAGI, 1620, FRANCESCO ROGNONI	76
CONCLUSION – TOWARDS A RESEARCH-BASE PRACTICE	79

BIBLIOGRAPHY	85
1. PRIMARY SOURCES	85
2. SECONDARY SOURCES	89

Introduction

How did Ganassi create the school of recorder playing?

Can we view his treatise, *La Fontegara*, as one of the first examples of practice-based research, through which an instrumental musical practice gained its validity on a level with vocal practice?

Was Ganassi an “artistic” researcher?

These questions are the starting point for my thesis on the life and work of the instrumentalist and writer Silvestro Ganassi (c. 1491 – c. 1557). Furthermore they open the possibility for a debate which unites the two fields in which I, as a Masters Student in the The Hague Royal Conservatory, am concerned with – historically informed performance¹ and practice-based research in the arts.

Both these fields deal with the same question: how does the musician relate to the results of his work? However, they do so by focusing on different aspects of this relationship.

I hope that through an informed examination of Ganassi’s life and treatise, these different aspects of the performer’s relationship with his ‘production’ today may be clarified.

The first of these fields – HIP – is more concerned with asking how the performer is to shape his performance of a given piece or repertoire in accordance with the remnants of the past – whatever form they may take, from original instruments to official documents such as payment slips for musicians in an orchestra. The movement of HIP – mostly known to the public as the Early Music movement – has been active since the late fifties, having changed the way players and singers deal with the heritage of Western music until the musical developments of the early twentieth century. This movement became more than an univocal historicist approach, and still

¹ Henceforth HIP

exists as one of the main areas of debate over the presence of the past in the present of our musical performance.

The second — practice- or artistic-based research — is the result of a more contemporary concern with the status of the arts among other academic disciplines and fields of study. An approach that has been taking shape since the early eighties, practice-based research attempts to validate modes of artistic production (music being part of this group) as areas of “knowledge production” – valid as disciplines connected with the academia. These concerns have led to a general reform of many European artistic institutions, from art academies and galleries to music conservatories. More specifically, it is this concern with artistic research which has led to the creation of the research master program for which this thesis is being written.

From these introductory paragraphs we can see that both of these fields have the “validation” of the processes and methods specific to the artistic profession (HIP being directly concerned with the practice of music) as their main goal. But while HIP focuses on how these processes (and their results) relate in a coherent way to the knowledge of the past, artistic research seeks ways through which these processes can themselves be seen as knowledge in the present.

As a musician and researcher concerned with the future of my own practice and its validity within society, both these approaches and the way they might supplement each other are of vital importance to me. HIP has had a close relationship with the academic disciplines of the humanities – directly with musicology but also with fields such as anthropology and aesthetics – since the very moment of its inception. In fact it is the closeness of this relationship which gave this movement the urgency and pertinence that has secured its place within conservatories worldwide, as well as its importance in musical and historical debates to the present day. My question is: what will happen to this relationship once musicians themselves start to look at their

work as properly academic?

More specifically, I wish to understand how this combination of an historical approach with an academic setting might influence recorder playing and the status of the recorder as an instrument within the larger musical community. The recorder as a discipline within the conservatory is a recent addition to the circle of instruments belonging to the system of higher education. This is a direct result of the rise to prominence of the HIP movement. As such the process of validation – of both practice and the knowledge produced therein – is not simply one of curiosity or eccentricity but vital to the presence of pedagogical practices within teaching institutions.

This concern and the questions I have initially posed led me to the origins not only of the recorder's identity, but of the entire instrumental musical practice as a discipline within the Western music tradition and its history. This origin has as much to do with practice as it has to do with knowledge (the mechanisms of its production, systematisation and validation), both dimensions converging in one of the most exceptional documents of the Renaissance musical tradition: the treatise on recorder playing and extemporaneous improvisation *Opera Intitulata Fontegara*, published in 1535 in Venice by the wind (and string!) player Silvestro Ganassi.

The exceptionality of this treatise does not lie so much in its theme but in its approach. In the *Fontegara* we find the first moment of the recorder's history as a discipline. For the present research a more valid subject could not have been desired.

It is the hypothesis of this thesis that Ganassi stands as one of the first artistic researchers in the history of Western instrumental music — whose coming-of-age he is responsible for —and founder of a self-reflective mode of artistic production. My goal is to examine the principles and conditions which led Ganassi to write a treatise on the recorder, in a detail and breadth unheard before that time. I do this in order to help musicians within the field of HIP to bridge the gap

between their performance and the knowledge on which it depends and from which it results. In Ganassi we find an example and a starting point of a conception of a dialectic relationship between the arts and the academy which avoids the submission of one by the other.

I am not, however, trying to compare Ganassi's research with that of a modern academic, nor am I trying to prove a parallel between his treatises and the essays and books we see now published by musicologists. Enticing as this image might be, it suffers from what Bruce Haynes called the modern stance of chronocentrism² - or presentism – one which, in an effort to enhance the similarities between one's time and those of the past, blinds itself to the specificity inherent in each epoch and culture.

My argument is, rather, that Ganassi's production – vitally connected as it is to the social and historical reality of sixteenth century Venice – might be seen to have motivations and concerns not that distant from our own. Ganassi belongs to a generation of instrumentalists that experienced benefits and privileges (both institutional and artistic) heretofore unknown to their musical class: the Venice of the late Renaissance (famous for its epithet of *La Serenissima* – The Most Serene) is becoming in all respects the site of a musical Golden Age, from the innovations of its composers to the prestige of its musicians. *La Fontegara* is as much a result as it is a reaction to this development: the privileged position Ganassi enjoys leads him to write a text which would supply his artistic class with an enhanced status within the musical community. This change of status is effected by a process of “academicisation”³ of the instrumental practice, transforming the oral community of master craftsmen to which Ganassi belonged into an equally select group of experts whose knowledge is now shared and communicated in the written form. At the same time Ganassi inaugurated one of the most influential genres in Western musical

² Haynes, 2007, p. 27

³ Or as Taruskin puts it the “history of musical literacy” (Taruskin, 2005, p. XV)

literature: the instrumental tutor, not only discussing the technical aspects of the playing of the instrument, but also the aesthetic principles shaping its performance.

What does this shift mean to the practice itself?

In other words, what happens when what was once said and showed is now written and argued?

Will not the mingling of the heard and the written result in a drastic – almost traumatic – change in the very way we hear and make music?

These questions are as pertinent to an understanding of Ganassi's situation as they are to the clarification of our own. As a musician whose main source of material lies in the past, I propose that a close understanding of Ganassi's context – his biography, social standing, his precedents and influences both musical or otherwise – can only serve to clarify my own position. As such, the main question of this thesis – was Ganassi an artistic researcher? – is an attempt to answer a more private question of my own: how can I be an artistic researcher?

I have divided my thesis into four different sections, each exploring different aspects of my theme: Ganassi's biography, his treatise *La Fontegara*, the social background influencing the text's writing and the influence this work exerted upon the future works in the tutor genre.

The first section, dedicated to Ganassi himself, traces his life across surviving documents of the time and modern biographies on the musician. These sources help us follow his path as a prominent instrumentalist, member of the influential ensemble of the *Piffari* under direct employment of Venice's Doge, Andrea Gritti (1455 – 1532) but also as a respected painter, concerned with the social standing of both arts; a path which led to the writing of three instrumental treatises, of which *La Fontegara* was the first.

The second section provides a close reading of the treatise, the chapter and *modi* into which Ganassi divides and organises the principles — from the most basic to the complex — necessary

to reach the ultimate goal of the *suonare artificioso* – the artful playing. This reading focuses on two aspects of the text: the emulation of the Aristotelian tradition as the guiding principle of its form and the argument for a kinship between the recorder and the human voice whose defence and proof can be said to be the *Fontegara's* main goal. As I will attempt to show, both these aspects are vital to the founding of instrumental playing as an elevated art form, rather than a mercenary craft.

The third section focuses on the social, artistic and musical background in which the writing of the treatise is set, attempting to deduce in the former the motivations for the latter. *La Fontegara* can be proven to have more than the merely pedagogical goal we might deduce from a superficial reading of the document. The work's status as a paradigmatic break within the hierarchical organisation of the arts in *Cinquecento* Europe, depends on the understanding of this hierarchy among the arts (divided into the elevated liberal and the lowly mechanic) and within music itself – stratified in three levels, with instrumental playing situated at its very bottom – to which it responds. This will be done by focusing on one musical aspect of the treatise – its treatment of proportion – and tracing how it operates in different levels of society and the arts. By using the theoretical tradition of proportion as a tool in his treatise, Ganassi is also situating his text within larger and more complex debates than that of instrumentalists and their craft.

In the fourth section, I will depart from the treatise's past and present, focusing on the flourishing of the the genre of the diminution tutor — inaugurated by *La Fontegara* — and its future dominion over the musical practice of the sixteenth and early seventeenth centuries. The goal of this section is to demonstrate how Ganassi's shift at the level of his practice's transmission led to an irrevocable change in the very identity and methods which organised the practice itself. Furthermore, I will show how the passage of the practice of diminution to the

written medium leads to its standardisation and eventual deterioration into the more prescriptive style made famous by Caccini's publication of *Le Nuove Musiche* and the aesthetic break which is epitomised in Claudio Monteverdi's *Seconda Pratica*.

Finally, the thesis will conclude with a small section dedicated to a recapitulation of the arguments explored in the previous four sections, as well as some thoughts on how the findings of this research have influenced my practice as a recorder player and the relationship I have with my instrument. In the same way that Ganassi's choice of writing on his practice dramatically altered the approach of future generations of artists, so too must we consider how integrating practice-based research into our daily practice as musicians might lead to a shift in how we relate to the documents of our past.

Ganassi - musician, painter and *ricercatore*

Modern musicology has produced little documentation on the life of Ganassi. The inexistence of any biographical document of the time makes the sketching out of the musician's life and activity a question of deducing different information from documents such as his treatises - *La Fontegara* (1535), *Regula Rubertina* (1542) and *Lettione Seconda* (1543) - contracts and payment slips. Furthermore, though there are several modern biographical accounts⁴ - of which the most comprehensive are those of Lasocki and Lo Presti - the information in each of them sometime differs or misses proper documentation. This section, dedicated to the musician and his place in Venetian society, attempts to compile the information into a single, though fragmented, narrative, focusing on his activity as merchant, musician and painter⁵.

A name by any other document - tracing Ganassi's family and origins

The simple attempt to name and pinpoint Ganassi's existence is a matter of deduction crossreading of several documents. The three treatises Ganassi authored give us the basic information concerning Ganassi's date of birth, roots and profession.

Thanks to the frontispiece of his final treatise, *Lettione Seconda*, published in 1543, we can deduce his age:

“And surely I can truly say that, of the fifty one years with which I find myself, not five were spent in studying”⁶

⁴ Ganassi, 1959; Gargano, 1987; Selfridge-Field, 1994; Ongaro, 2001; Ganassi, 2002; G treau, 2003; Lo Presti, 2003; Lasocki, 2004

⁵ Only Lasocki mentions Ganassi as a painter.

⁶ “Et certamente io posso dire com verita che de cinquanta uno anno che mi ritrovo haver non ho hauuto il tempo di

That Ganassi mention fifty one years rather than just fifty allows us to pinpoint more precisely the date of birth to the years 1491 or 1492, though only Lasocki's biography bothers to mention both possible dates⁷.

In his second treatise, *Regula Rubertina* of 1542, we come across some more information regarding his birth and origins:

“It is common in ancient histories that the philosopher will thank God for three things. The first that he was Greek and not Barbarian. Secondly that he was a rational animal not an irrational one. Thirdly, that he was a man and not a woman. So in the same way I thank God for three things. First that I am bergamasque of origin. Second that I was born in the Venetian city. Thirdly, christian and not pagan. The reason for this I will tell you: the lombardic progeny endows me with an ingenious mind, the greatness of the venetian land makes me studious, and faith enables me to operate things useful to the soul and even the body. The blood or origin springing from my father and my mother makes it so that I will not lose gratitude; the Venetian land and fidelity of being a christian makes it so that I will not lose hope: but I will always think Jesus Christ for so much grace being bestowed upon me [...]”⁸

Finally, the first of his treatises, the *Opera Intitulata Fontegara*, presents Ganassi as a “player for the Illustrious Seignior of Venice”⁹. From this starting point we must look to contracts and

anno dito cinque studiosi”, Ganassi, 1543, f. 5 (*unless otherwise specified, translations are provided by the author*)

⁷ Lasocki, 2004, p. 19

⁸ “Trovassi nelle historie antiche il filosofo ringratiar Iddio di tre cose. La prima che gli era greco e non barbaro. Seconda che gli era animale rationale e non irrationale. Terza che gli era maschio e non femina. Dil che ancora io ringratio il signor Iddio di tre cose. Prima che son concetto di progenia bergamasca. Seconda nato nella citta veneta. Terza christiano & non pagano. il perche di questo dicoui la progenia lombarda mi dota de l'ingenio. Et la grandezza della patria veneta mi fa studioso, e la fede mi fa operare cose utile a l'anime & anchora al corpo [...] il sangue ouve progenia che deriva dal patre e matre mia, salua in me la gratitudine, e la patria veneta la fidelta. Per[es]sere christiano salua in mi la speranza: pero sempre ringratiaro giesu Christo de tanta gratia da im [sic] havere [...]”

Ganassi, 1542, f. IV

⁹ “Opera Intitulata Fontegara [...] composta per sylvestro ganassi dal fontego, sonator de la *Illustrissima Signoria di*

payment slips.

We know from Lo Presti that a document from June of 1517 mentions that a certain Ganassi had been “admitted into the *piffari*” of the Doge - a musical ensemble composed of wind instruments (bombard, cornettos, shawms and sackbuts among others) very common in 15th and 16th century Italy as well as other European countries. Ganassi held his position from the death of the “Signoria”¹⁰, and is there addressed as “Silvestro Antonio *piffaro*, resident of the *Fontego della Farina* in Rialto”¹¹.

According to Lasocki, the name “Antonio” is inherited from his father. Furthermore, Ganassi is a surname we find at the *Concerto Palatino* in Bologna, belonging to a Zaccaria Ganassi (perhaps Silvestro’s brother who served the Concerto from 1513 to 1528). This Zaccaria would have two children - Giovannino da Zaccaria and Vicentio da Zaccaria - both employed at the *Concerto* and the second one being explicitly named as “Vicentio Ganassi”¹².

An article by Gértreau gives us some information regarding Silvestro’s own progeny naming two children: Antonio and Giovanni Battista. Giovanni Battista would become a musician of the *Serenissima*, like his father, while Antonio would complete his legal studies in Bologne¹³. Furthermore, this article, corroborates with Lasocki’s biography, by stating that Silvestro’s father, Antonio, owned a barbershop near the “*Fontego della Farina*”¹⁴.

This *Fontego* – a word of arab origin (*funduq*) meaning store or quarters – also referred in the previously mentioned in the 1517 document, was used for the buildings along a city’s ports, serving the function of palace, warehouse, market as well as living quarters for the specific

Venetia”, Ganassi, 1535, f. 1

¹⁰ Lo Presti, 2003, p. 1

¹¹ Ongaro, 1994, p. 216

¹² Lasocki, 2004, p. 23

¹³ This is also mentioned in Lasocki’s own article, though he only mentions the first son and not Giovanni Battista.

¹⁴ Gértreau, 2003, p. 155

merchant community of that building¹⁵. There were several *fonteghi* in 16th century Venice, but according to Lasocki the *Fontego della Farina*, corresponded to the famous *Fontego dei Tedeschi* - of the Germans.

This German connection is further corroborated by a surviving copy of *La Fontegara* located in the Herzog-August library in Wolfenbüttel, Germany. At the end of this copy we find a handwritten dedication (fig. 1) by Ganassi himself as well as a series of 150 diminutions on a melodic theme. The mention of lessons for the fret viol which he had prepared for a Florentine *gentilhomme*¹⁶, allow us to deduce that this copy was sent by the time of Ganassi's second publication, the *Regula Rubertina* of 1542, a treatise on that very same instrument. The close terms, with which Ganassi writes his dedication, point to an equally close relationship with his German addressees.

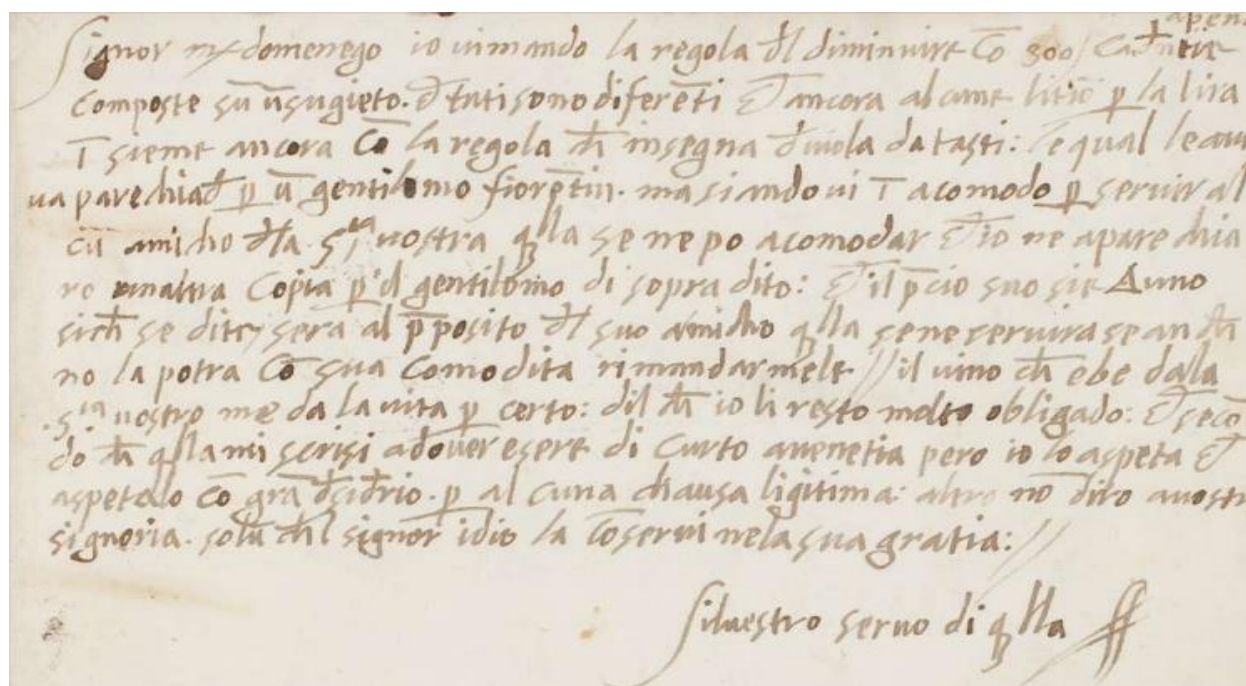


Figure 1 - Manuscript dedication, Wolfenblüttel copy of *Fontegara*

¹⁵ «http://en.wikipedia.org/wiki/Fondaco_dei_Tedeschi» - accessed 20 December, 2013

¹⁶ Ganassi, 1535, (<http://diglib.hab.de/drucke/3-3-musica/start.htm?image=00003> - accessed 5 January 2014) f. 3

This document helps us deduce an intense relationship between the author of the *Fontegara* and the inhabitants and merchants of that *Fontego dei Tedeschi*. This strong connection with the merchant class is in itself vital to understand the condition which may have led to Ganassi being his own publisher for his three treatises (which would have helped ensuring the completion of his pioneering project):

“Printed in Venice by Silvestro Ganassi dal Fontego, player of the Illustrious Seigniorship of Venice, the author himself. MDXXXV” (*Fontegara*)¹⁷

“With Grace and privilege, in Venice at the author’s request. MDXLII” (*Regula Rubertina*)¹⁸

“Printed by the author himself in MDXXXIII” (*Lettione Seconda*)¹⁹

Finally, there is also the possibility that our author is the same “Silvestro del Cornetto” who in 1566²⁰ rented a store close to Rialto, according to a document cited by Ongaro and Brown²¹.

With this we can complete our initial portrayal of Ganassi as a prominent, economically stable musician (with the capacity to rent a house and provide an education for his children) from a German merchant background. This merchant background should be seen as complementary to his own development as a musician helping him see in his artistic practice the possibility of merchandise.

I would like now to turn to his position as a musician and player of the *piffari* as another factor in the diffusion and fame of Ganassi’s style of playing, making its more widespread distribution in printed form possible.

¹⁷ “Impressum Venetiis per Sylvestro di ganassi dal fontego sonator della illustrissima signoria di Venetia hautor proprio. MDXXXV” *ibid*, f. 1

¹⁸ “CON GRATIA ET PRIVILEGIO: In Venetia ad instantia de l’auteur MDXLII” *ibid*, 1542, f. I

¹⁹ “Stampata per Lauttore proprio. Nel M.D.XXXXIII.” *ibid*, 1543, f. I

²⁰ This however goes completely against Gétreau’s article, stating that Ganassi would have died at the age of sixty-five in the year 1557 - although I have found no sources confirming this claim.

²¹ Ongaro & Brown, 2001

Ganassi among the *piffari* - mobility, taste and status

Discussing the *Fontego della Farina*, Lo Presti notes that in 1517 a pre-existing ensemble of trumpets and *pifferi* housed in the merchant quarters and led by one Zuan Maria del Cornetto, would have played in the feast of the *Scuola di Sant'Orsola* around 20 - 21 of October of 1516 and the following year for the same occasion²².

This Zuan Maria del Cornetto was himself part of the Doge's *piffari* as is shown in Blackburn's article. In a passage in the diary of the young Venetian patrician Marcantonio Michiel, recounting a visit of Pope Leo X to the Republic, we are told that the pope's cardinal insisted that a certain Zuan Maria be allowed to leave the Doge's service so that he might play for the Pope on a particular occasion²³. Little time after, the secretary Marino Sanuto writes an entry dating from June 1520 in which the Seigniorship gives licence to Zuan Maria's temporary absence, so that he may leave his position for a year, to serve Pope Leo X, leaving his brother in his stead²⁴. Considering the pope's insistence – even though, in 1520, he employed a company of twenty nine instrumentalists for his private court alone – we can begin to understand the high regard and esteem the *piffari* of Venice's Seigniorshi held outside the city state.

Another document of 1534, reporting a banquet offered to the Duchess of Ferrara on her visit to the Venetian Republic, lists sixteen instrumentalists present at the feast. According to this document, six were wind instrumentalists of *piffari* and trombones, six played the *violone* and four the *trombe squarzade* - sackbut - all of them playing aboard a gondola. A considerable sum

²² Lo Presti, 2003, p. 1 note 5

²³ Blackburn, 1992, p. 9

²⁴ *ibid.*

is mentioned as payment for this concert, handed two of the musicians – Giovanni Maria *dal Cornetto* and a “man of the *Fondego dalle Campanelle*” (probably Zuan Maria and Ganassi themselves²⁵). This shows how the position and fame of the *Piffari* made them a costly but ever present greeting card for the Republic’s many diplomatic occasions.

We also find mention of these two musicians – Giovanni Maria del Cornetto and Silvestro Ganassi (as well as Zaccaria dal Trombone, Silvestro’s supposed brother) – in an influential poetic text of the time. In his *Monte Parnaso*, written between 1519 and 1525, Filippo Oriolo da Bassano recounts to a patron, his visit to the divine mountain. Guided by Jacopo Sannazaro, author of the famous *Arcadia* (a clear reference to Dante’s usage of Virgil as his guide in the *Divine Comedy*²⁶), Oriolo not only cites poets, philosophers and ancient figures of mythology but also mentions the presence of musicians – performers and composers alike – many of them from the Venetian region²⁷.

In the fourteenth *canto* Oriolo describes the wind players:

“There was a proud and noble chorus
Of players so upright and perfect
That near them David would appear base.
Ferante was one of these elect,
Agustino the German, and **Gian Maria**
With their bagpipes and their cornets.
Still others were playing in company with them
On such pipes and trombones

²⁵ Selfridge-Field, 1994, p. 49

²⁶ Slim, 1965, p. 139

²⁷ *ibid.*

So that such harmony was never heard before.
 Of these there was a certain **Zacaria**
 Whose trombone sent such sweet tones to heaven
 That they were enjoyed by the cherubim and by the thrones.
 Girolamo was the other who raised
 His voice so that the whole mountain
 And all of that valley resounded.
 Do not ask me to tell you here
 What Sbarbaio and Allovise
 And Sandro da Regusi were playing face to face.
 Among these, Nicolo the piper took his place
 With Bernardin[o] and Giovanni of Mantua
 Playing their pipes in many ways.
 I say nothing of Andrea the Venetian,
 Of **Silvestro dal Fondaco** and of Toso,
 Each one of whom is master of the pipe.
 To such a glorious choir
 Were added some ladies and other damsels
 And a very amorous ball began”²⁸

²⁸ “Eravi um choro altero e signorile / Di Sonatori si integri e perfetti / Che presso lor David parrebe vile, / Era Ferant l’un di questi eletti / Agustino tedesco, e **Gian Maria**, / Con le lor cornemuse, e lor cornetti / Sonavano altri anchor in compagnia / Di questi tali piferri e tromboni / Che mai non si senti tanta harmonia, / D’s quali un era **Zacaria** ch’i tuoni Del suo trombon si dolci al ciel mandava, / Che ne godean gli Cherubini e i Throni / Girolamo era l’altro, il qual alzava / Tanto la voce, que tutto quel monte / E tutta quella valle rimbombava / non Dimandar che quivi ti racconte / Cio, che facea Sbarbaio et Allovise / E Sandro da regusi a fronte a fronte, / Tra questi Nocoló pifar si mise / Con Bernardin e Giovan mantoano / Toccando che suo pifari a piu guise / Nulla dico di Andra vinitiano / Di **Silvestri dal fondaco** e del Toso / Ch’ogniun di lor è pifaro sovrano / A questo choro tanto glorioso / Giunsero alcune donne e altre donzelle, / Et cominciar un bal tutto amoroso” trans. Slim *in* Slim, 1965, pp. 150 - 151 (author’s

The company of the *Piffari* is also present in paintings such as Bellini's *Procession in Piazza San Marco* (fig. 2). Composed by six musicians – with extra members added depending on the occasion (which explains Bellini's depiction of ten musicians²⁹) – they were a vital part of Venetian ritual and ceremony. They played for all of St. Mark's celebrations – both sacre and secular – not to mention a mandatory daily hour of music in the city square³⁰. No state or church affair would be complete without the *Piffari*.



Figure 2 - Giovanni Bellini, *Processione in Piazza San Marco*, 1496

It was in these concert occasions that Ganassi presented the highly sophisticated recorder techniques he describes in his *Fontegara* treatise. As Lo Presti remarks, the inclusion of the recorder and cornetto as a standard instrument of the ensemble is addressed in a 1515 document. This document states that processions were to be accompanied by the *piffari* – playing both cornetti and recorders – as they left and entered the *Scuola Grande di San Marco*. Furthermore we find in this document a description of the repertory prepared for these occasions: they included vocal motets and chansons adapted by the ensemble to their instruments; this meant transpositions, adding of parts for the trombones, counterpoint improvisation and the extemporaneous practice of diminution.³¹

bold)

²⁹ Selfridge-Field, 1994, p. 14

³⁰ *ibid*, p. 6

³¹ Lo Presti, 2003, p. 2

It is this last practice which would become a main feature of Ganassi's first treatise, which marked a fundamental shift in music printing: not only were composed pieces published but also the manner in which they were performed.

Also, for a player of Ganassi's status in the Venetian Republic, proficiency in several instruments would be expected. This is especially true in Ganassi's case as can be read in Francesco Sansovino's 1560 *Dialogo di tutte le cose notabili che sono in Venetia*, where special mention is made of his prodigious mastery of several instruments - recorder, bombard, cornetto, lute and viol, to name a few. These last two instruments would be the theme of his two following treatises - *Regula Rubertina* and *Lettione Seconda* - whose dedications further prove the social advantages Ganassi enjoyed with his position in the *Piffari*. Both treatises are dedicated to figures of the Florentine aristocracy, students and patrons to which Ganassi tended with pedagogical and diplomatic care.

The *Regula Rubertina*, as the title denounces, is dedicated to his student, Ruberto Strozzi, son of the influential marriage of Filippo Strozzi and Clara de' Medici, all of them patrons to some of the most important composers of the time – Arcadelt, Willaert and Cipriano da Rore³². Ganassi pays careful attention to his pupil's many gifts in the opening text:

“[Since] it is also harmony to give to each what each requires, thinking of whom I could address this little work of mine to, your S.[eigniorship] occurred to me as he [who this work] was best addressed to: for this [seigniorship] is more ornate than most in the harmony of the soul, the harmony of the body and the harmony both vocal and instrumental, with all his magnificent household, and more than others would

³² Agee, 1983

enjoy it. I add that he, whom I mention with such praise, was my disciple[...]"³³

His second volume on the viol was dedicated to Neri Capponi, Ruberto Strozzi's close friend, thus maintaining himself close to the graces of this powerful network of patrons.

In his activity as the Doge's instrumentalist, Ganassi also maintained direct and active contact with the most important musicians in 16th Venice and Italy, responsible for several of the major shifts in the music practice of his time. One of them was the composer Adrian Willaert, St. Mark's chapelmaster since 1527. In the *Lettione Seconda* Ganassi mentions him as the:

"[...] never sufficiently lauded *messer* Adriano, new Prometheus of the celestial Harmony, past's humiliation, glory of the present and master of the future century, he whose divine judgement's praise will, without a doubt, please the universe."³⁴

Willaert also is featured in the *Regula Rubertina*, alongside influential past figures such as Josquin and Mouton, as well as two of his contemporaries: Jachet de Mantova – responsible with Willaert for inaugurating the polychoral compositional style – and Nicolas Gombert. Gombert, one of the most important musicians at the court of Charles V – the Holy Roman Emperor – was of special importance in the rise of instrumental music in court and church affairs. Ganassi attributes to him the particular tuning setting for the viol's strings which he describes in his *Regula Rubertina*. Not only that but he is many times mentioned as an authority with rising compliments:

"as is done by the excellent *Gomberto*"

³³ "[...] perche è harmonia ancora il dare ad ogniuno quello, che si conviene, sensando io a chi questa mia operetta si douesse indirizzare, m'è souuenuta V. S, allaquale si deue piu che ad altri: quanto essa è piu d'altri ornata de l'armonia de l'anima, de l'armonia del corpo, & de l'armonia vocal & istrumental, con tutta la sua magnifica case, & piu d'altri se ne diletta aggioutoue apresso che essa è stata mio discepolo, il che dico con mial laude [...]" Ganassi, 1542, f. 3

³⁴ "[...] il non mai a bastanze lodato messer Adriano nuouo Prometheo della celeste Armonia, scorno del passato, gloria del presente & maestro del futuro secolo, quello senza dubbio all'universo piacerà che dal suo diuino giudicio sia lodato" Ganassi, 1543, f. 4

“the same as the most excellent *Gomberto*”

“that which is warned by the true master, named *Gomberto*”

“as observes the true chapelmaster, named *Gomberto*”³⁵

From this list of documents we can deduce not only Ganassi's excellence as a musician but also the artistic and social opportunities his position in the *Piffari* of the Doge lent him. The 16th century is a pivotal moment in the history of the instrumentalist as a figure in western musical culture. This rise in importance meant, for some fortunate musicians, a geographic and hierarchic mobility - inside and outside their community – heretofore unheard of.

One such lucky figure was none other than Silvestro Ganassi and, luckily for us modern day players, he also possessed the keen instinct of preserving and expanding his networks of patronage and artistic cooperation. These in turn ensured both the success and survival of his printing exploits.

To finish this section, I would now like to turn to another feature of Ganassi as a 16th century character: his transversal character among the several arts and crafts of his time, as painter and carver, marking him as an example of the Renaissance ideal of the *uomo universale*.

Ut pictura musica - Ganassi as painter

Eight years after his first publication, Ganassi changes his occupation from that of “*sonator*” in the *Fontegara* to that of “*desideroso nella pictura*”. *Desideroso* - *che desidera*, who desires - is not so much a position or a profession but a stance towards a practice, describing a relationship of passionate devotion which the fifty-one year old instrumentalist held for the pictorial art.

³⁵ “Che fa lo eccellente Gomberto”; “così come lo eccellissimo Gomberto”; quello che auuertisce il vero maestro ditto Gomberto”; “si come osserva il vero maestro di capella detto GOMBERTO”, Ganassi, 1542, f. XIII and XIII

Lasocki is quick to interpret this term as a synonym of *studioso* - well studied - stating that Ganassi held a sort of hobby-like relationship with painting, natural of the high social position he ambited³⁶. A question remains: why would Ganassi take such care to mention a secondary, mostly private aspect of his life, in the very first page of his last treatise?

It could also be mentioned, somewhat poetically, that desire can go both ways. It was not only Ganassi who was fond of painting. Painting - as a community of painters and their works – held the Venetian *piffaro* in particular esteem, as well.

Lasocki's description painting as of secondary importance in the painter's life is clearly refuted by two influential painting treatises of the time: Paolo Pino's 1548 *Dialogo di Pittura* and the later 1557 *Dialogo della Pittura Intitolato L'Aretino* by Ludovico Dolce.

These two works also represent a paradigmatic shift in the history of their own discipline: they are, together with *Della Nobilissima Pittura* of Michelangelo Biondo (1548), the first dedicated historiographic catalogues of Venetian painting, precursors of the genre of art criticism.

The particular role of these theoretical works in the elevation of painting from mechanical craft to liberal art, might have inspired Ganassi in the writing of his own³⁷. What is important to remark is that the ideal of the perfect painter– an adept of all artistic disciplines and a master in their combination (epitomized in the doctrines of *ut pictura poesis* and *ut pictura musica*³⁸) – these texts defended found, in Ganassi, a life example. This might be the reason behind the very positive picture both authors paint of the musician.

Pino, discussing the proper conduct of the painter both inside and outside his craft, holds that he should:

³⁶ Lasocki, 2004, p.23

³⁷ A possibility which I will explore in a later section.

³⁸ Markiewicz. 1984

“[...]entertain and restore himself with the sweetness of poetry, or then with the softness of the music of voice and various instruments, or with his own virtues as should be garnered by all true painters”³⁹

Just a few paragraphs later we find Ganassi as an example of that ideal painter, alongside the figures Albrecht Dürer and Leon Battista Alberti. The description is very flattering:

“I almost forgot Silvestro dal Fondaco, nephew of painting, for being a son of music, sister of our art. This one has a divine intellect, all elevation, all virtue and a good painter.”⁴⁰

This genealogical description of the arts is by Da Vinci’s *Il Paragone* – a comparison of the arts which he wrote – in which music is described as the inferior sister of painting. But Ganassi is not only mentioned as a musician with ties to painting - the importance given his intellect and to his own works mark him as a painter in his own right.

This is further corroborated by Dolce’s own description of the musician. Also a defender of the ideal perfect painter, Dolce describes the “painter as a mute poet and the poet as a speaking painter”. This relationship of image, word and sound – a clear combination of the *pictura poesis* and *pictura musica* doctrines - leads to a praising of Ganassi’s talents:

“On this, you could search for the opinion of your own Silvestro, excellent musician and player of the Doge, who draws and paints laudibly and makes us play with our hands in such a way that the painted figures of the good masters speak almost imitating the living.”⁴¹

³⁹ “[...]intratenendosi e istaurandosi con la dolcezza della poesia, aver nella soavità della musica di voce e istromenti diversi, o con sue altre virtù, del che ciascuno vero pittore debbe esser guarnito.”Pino, 1548, f. 30

⁴⁰ “Quasi che mi scordavo di Silvestro dal Fondaco, nipote della pittura per esser figliuolo della musica, sirocchia dell'arte nostra. Costui ha un intelletto divino, tutto elevato, tutto virtù, et è buon pittore” ibid, f. 31

⁴¹ “In ciò si può ricercare il parer del vostro virtuoso Silvestro, eccelente musico e sonatore del doge, il quale disegna e dipinge lodevolmente e ci fa toccar con mano che le figure dipinte da buoni maestri parlano, quasi a

Furthermore, the Italian term used for drawing - *disegnare* – can also refer to the practice of printing and woodcarving. It is quite probable that Ganassi himself would have prepared the ornate woodcuts of his self-published treatises. Pino’s mentioning of Ganassi’s drawing talents could be a direct reference to Ganassi’s treatises, in particular the frontispieces of the *Fontegara* and the *Regula Rubertina*, and the sophisticated engravings in the *Lettione Seconda* (fig. 3), marking him as a perfect artist, embodying the harmony of all arts in his own practice.

This further demonstrates importance of Ganassi’s different practices and backgrounds and how they influenced his work. Ganassi was more than a musician, and the *Fontegara* more than a pedagogical treatise - they both represent the highest exponentials of an artistic and social reality particular to the Venetian Republic and its inhabitants. Ganassi was a master of a particular horizontality of talents - merchant, player, writer and painter - which, coupled with the social mobility intrinsic to the Republic’s political and artistic structures⁴², allowed him to become a uniquely well versed and emancipated individual: a “*ricercatore*”, an artistic researcher.

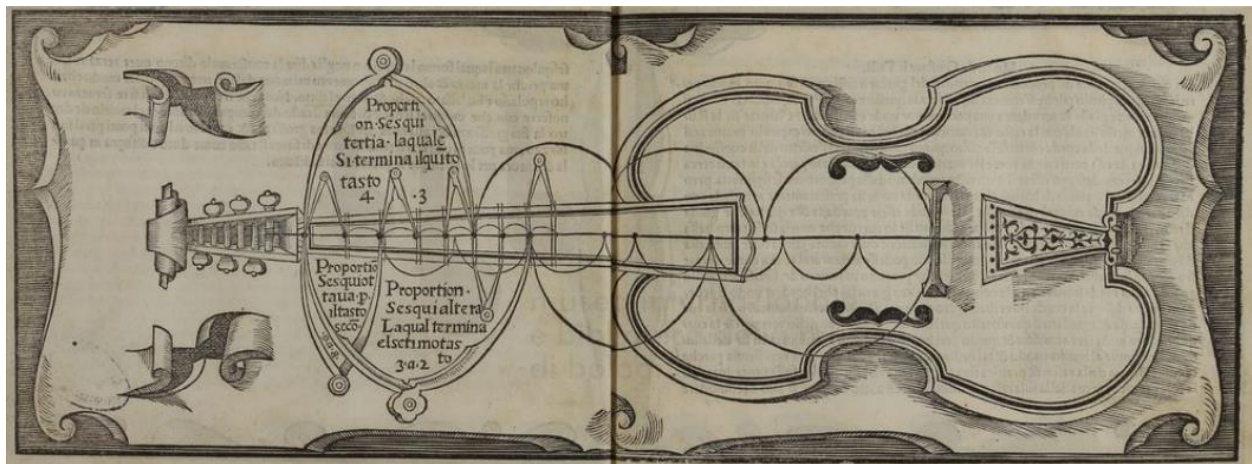


Figure 3 - Silvestro Ganassi, engraving from *Lettione Seconda*

paragon delle vive” Dolce, 1557, f. 147

⁴² Further discussed in Section 4 of this thesis

***Fontegara* - an instrument in search of a voice**

In what way can we say that *La Fontegara* represents a first of its kind?

Three previous sources already discuss the recorder – both the instrument and its technique – in some detail: a manuscript of anonymous source from the early 16th century, Sebastian Virdung's *Musica Getutscht* printed in 1511, and the first edition of Martin Agricola's *Musica Instrumentalis Deudsch* of 1529.

But though these works already feature the recorder they do not represent the same paradigm shift. Ganassi is the first to depart from a merely organological perspective on the instrument, also focusing on questions of performance and taste, thus inaugurating the recorder as a discipline – a field of “knowledge production” – which would elevate the status of the instrumental musician.

This section attempts to explore this uniqueness by focusing on two of the text's aspects: the emulation of previous Aristotelian tradition of writing (giving the text its formal rigour) and the way in which this tradition is used to develop and defend Ganassi's main thesis: that of a kinship and similitude between the recorder and the human voice.

Similitudes - Proximity and attraction as strategies

In his seminal *The Order of Things*, Michel Foucault (1926 – 1984) sets out to chart the genealogical process through which sciences and the concept of scientific knowledge as such were born and organized at the close of the 16th century. As he states:

“Up to the end of the sixteenth century, resemblance played a constructive role in the

knowledge of Western culture. It was resemblance that largely guided exegesis and the interpretation of texts; it was resemblance that organized the play of symbols, made possible knowledge of things visible and invisible, and controlled the art of representing them.”⁴³

In trying to make this system clearer, Foucault focuses on four different kinds of similitude that organized 16th century knowledge: *convenientia*, *aemulatio*, *analogy* and *sympathy*. For this section’s argument I will focus on two of these similitudes: *convenientia* and *sympathy*. *Convenientia*, according to Foucault:

“[...] is a resemblance connected with space in the form of a graduated scale of proximity. It is of the same order as conjunction and adjustment. This is why it pertains less to the things themselves than to the world in which they exist.”⁴⁴

The “world” in which both the recorder and the voice exist is the human body. Countless times we will see reference to the breath (*fiatto*), the teeth (*denti*), the tongue, the throat and their importance in the playing of the recorder; the same parts of the body which give rise to the human voice account for the recorder’s sound. This is more than a reference to the pragmatic reality of recorder technique, I claim. In creating this proximity of origin (both result from the human body) Ganassi can more easily defend what he consider’s to be the recorder player’s main goal: the mimicking of the human voice.

The second kind of similitude, *sympathy*, is a moreactive one, in which things do not only resemble one another but are also “drawn to each other”⁴⁵.

“Moreover, by drawing things towards one another in an exterior and visible

⁴³ Foucault, 1994, p. 17

⁴⁴ *ibid*, p. 18

⁴⁵ *ibid*, p. 24

movement, it also gives rise to a hidden interior mouvement - a displacement of qualities that take over from one another in a series of relays [...]"⁴⁶

As the similarities between voice and recorder are brought up by Ganassi, a “displacement of qualities” of sorts begins to occur at the level of nomenclature - how the holes of the recorder are called *voce*, and the tongue’s articulation the instrument’s *proferire*, for example – and of identity – how the voice’s personality encompassed in the concepts of *imitatione*, *prontezza* and *galanteria*, is translated into the recorder’s technique. The same transference will be true on the side of the voice, since diminution – a central theme of the treatise – becomes a crucial part of future vocal technique treatises, as I will try to demonstrate later on.

These two similarities are the basic arguments which veil the recorder’s lesser status as instrument, allowing it to be cloaked by a vocal identity as Ganassi constructs the formal system of playing which we will now discuss.

Establishing precedents - textual politics

Before tackling the main subject, the very beginning of *La Fontegara* is devoted to Ganassi’s patron and employer, the doge Andrea Gritti. The political connotations of this initial part of the text, superfluous to the subject of recorder playing as they may seem, play an essential role in fabricating a general sense of authority for the treatise and its theme.

It is remarkable how Ganassi, in petitioning for an authority’s blessing – granting a political importance to the text – takes the chance to quote some of the principal sources of antiquity which themselves supply his text with their own kind of importance.

⁴⁶ *ibid*, p. 23

It begins with an almost direct quotation from Castiglione's *Il Cortegiano*, one of the most notable texts on the cultural and political upbringing of the ruling principesque class:

“I am sure that it [music] will be dear to Your Sublimity, since the excellence of music is such that such and so much that the philosopher Socrates, considered so wise by the appolinean oracle, being in the eightieth year of his life, learned it avidly [...],”⁴⁷

“And let me also tell you, grave Socrates, when he was already very old, learned to play the cythara.”⁴⁸

With the first mention of Socrates (which Ganassi direct links with the figure of the Doge), a list of classical philosophers and their works ensues - Aristotle and his *Politics*, Plato and his *Laws*, (these two also in Castiglione's text) Aristoxenus and his *Harmonic Elements*. The presence of Nero, the Roman emperor, in this list creates a “similitude”: the same way that the Roman emperor found, found justification for his love of music in the texts of the great philosophers, so too would Gritti find justification for his patronage of the arts, in texts such as Ganassi's treatise. This strategy of name calling also results in Ganassi's treatise becoming one text alongside these classics which in turn shield the *Fontegara* with a literary authority of its own.

This authority is further established by another classical borrowing - Aristotelian style (*lexos*) - which informs Ganassi's search for textual clarity, breaking his subject (recorder playing) into its basic components which, themselves, are then divided to their atomic indivisible principles which are then dialectically related to each other and exposed in an order of ascending complexity and totality, following the Aristotelian logic of species and *genus*.

⁴⁷ “Qual so certo; dover esser a V, Subli, Cara p'cio che la Eccellentia della musica e tale y tanta che socrate philosopho dico il giudicato sapientissimo dal oraculo de Apoline, essendo nel ottagesimo anno de lla sua vita quella avidissimamente apparò [...]” Ganassi, 1535, f. 2

⁴⁸ Castiglione, 1528, p. 70

From breath, fingers and hand, to solmization, proportion and tactus to *imitatione, pronteza* and *galanteria* until we reach the totality of the *sonare artificioso* – Ganassi’s logic is not his own invention but the emulation of a convention common to all “scientific” texts of the time.

Why is this important for the musician wishing to read the treatise today?

We must realize that Ganassi is not describing a pedagogical process, but the totality of his knowledge. His progression from parts to whole is not the same as the path from ignorance to mastery, but one which begins and never leaves mastery; hence its reading should not be too literal or sequential – we will not get hints on how to reach Ganassi’s mastery but rather a representation of this mastery. We won’t know how to get there, but how “there” more or less looks like.

Only from this vision of a totality, which is there before the text is even written, we can begin to follow Ganassi’s argument.

Making the recorder speak - Fontegara from voice to voice

Voice

The *Opera Intitulata Fontegara* is divided into twenty-five chapters grouped in thirteen sections - “treatise of many things”, “figure table”, “manner [*modo*] which teaches the seven extra notes”, “manners which teaches the tongue”, “manners of diminution”, “examples of diminution”, “first table”, “second table”, third table”, “fourth table”, “reporting of the rules”, “manner of the artful playing [*sonare artificioso*]” and “figure table”.

The first section states the principle and aim under which all of the text’s contents are subsumed

and from which they are deduced: the human voice and its emulation by the recorder. It is interesting that to further establish a relationship between the voice and the instrument – and how it may be achieved – Ganassi uses the painter as an analogous example:

“[...] the same way the worthy and perfect painter imitates all things created by nature with the variation of colours, in the same way, with these wind and string instruments, you will be able to imitate the *proferire* that the human voice makes.”

Colours⁴⁹ and *proferire* are at the same level, they are the basic elements which the painter and the player manipulate in their craft: the painter creates an image of reality, the player an image of the human voice. The importance of *profferire* as a concept becomes even more apparent when its double meaning in the treatise is established: what started as a specific vocal aspect in the first chapter becomes an equally specific recorder technique in the fifth one.

The first two chapters establish and cement a *proximity* between the recorder and the voice – how the recorder can sound like the voice, how the voice is shaped like a recorder – which will then allow for the *sympathetic* transference of properties developed throughout the rest of the chapters. Ganassi also takes this initial moment of his treatise to mention the interpretive community of wind players in which he is situated – to which he will return several times. These *altri sonatore* are not only a reference to the oral roots of his practice but also a social strategy, which will be explained later in the thesis.

Fingers

Having done this he proceeds to a discussion of fingerings, solmization and notation; three

⁴⁹ The next section will discuss the importance of painting in the writing of Ganassi's treatise.

elements which he brings together in his figurative tables (fig. 4). These three elements are related in two ways: on the one hand, the solmization (of vocal notes) is translated into the notation which is then represented in the drawing of recorders with their holes either filled or left empty - a logical way; on the other, the vocal solmization and the recorder fingerings are brought closer than the notation by the employment of the terms *voce* and *nota* - a rhetorical way, far more crucial for Ganassi's argument.

While *voce*, as Heyghen remarks, was normally used to refer to the solmization syllables (ut-re-mi-fa-sol-la) within an hexachordal system⁵⁰, Ganassi mentions the recorder's eight holes as *voce* - "*voce otto cioe busi*"⁵¹ - thus creating a relationship between the solmization system used for vocal training and the very organological components of the recorder⁵². However, for the notes written on the staff he uses the term *nota*, separating them from the other two elements.

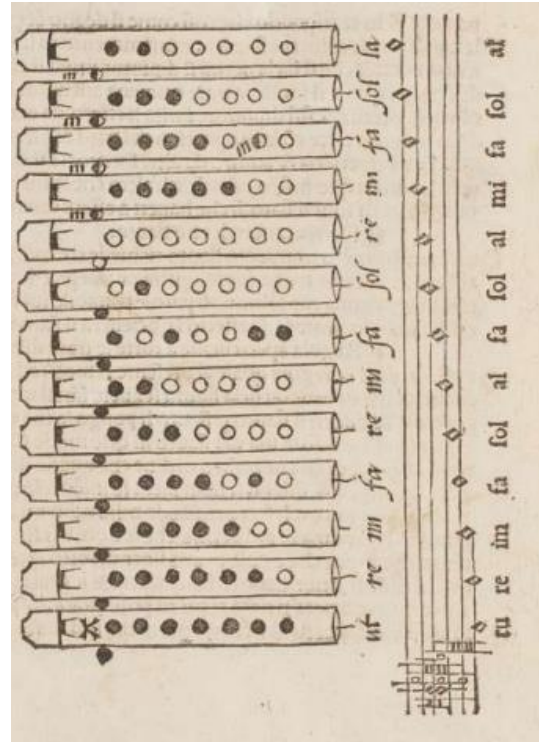


Figure 4 - Silvestro Ganassi, fingering table from *Opera Intitulata Fontegara*

Another way in which Ganassi brings the solmization system closer to the recorder is through the inherent transposability of this hexachordal system. Hexachords being movable rather than fixed pitch scales, allowed for the name of a note to refer to different sounds. The same happens with the recorder and its different sizes - soprano in G, tenor in C and bass in F: the same fingering

⁵⁰ Heyghen, 2005

⁵¹ Ganassi, 1535, f. 3

⁵² This relation becomes even more interesting when we consider how solmization was taught to singers with the help of the Guidonian Hand - a sort of vocal fingering.

produces different sounds. To take full advantage of this, Ganassi inserts more than one clef at the beginning of the musical staff (fig. 4) in order to have the three recorder pitches represented in the same table⁵³, not only saving precious paper and woodcuts, but also creating an even more direct relationship with the vocal system of solmization.

The same process is repeated in the section on the seven extra notes, but in a different way: instead of three clefs we are given two or more notes in a nine-line staff (fig. 5).

Another interesting thing occurs in these tables: what had once been three flutes of different sizes become three flutes of different makers, each with their specific table⁵⁴. This is a testament to the laboratorial nature of the treatise, which values a multiplicity of playing methods and techniques:

“Of such a difference, a different way of playing is born: this of a master, the other of another”⁵⁵

This comment, another reference to Ganassi’s community of instrumentalists, points again to the fact that the author is not presenting a process for reaching the different notes but the distilled knowledge that his own learning process has resulted in. Fortunately, Ganassi also makes

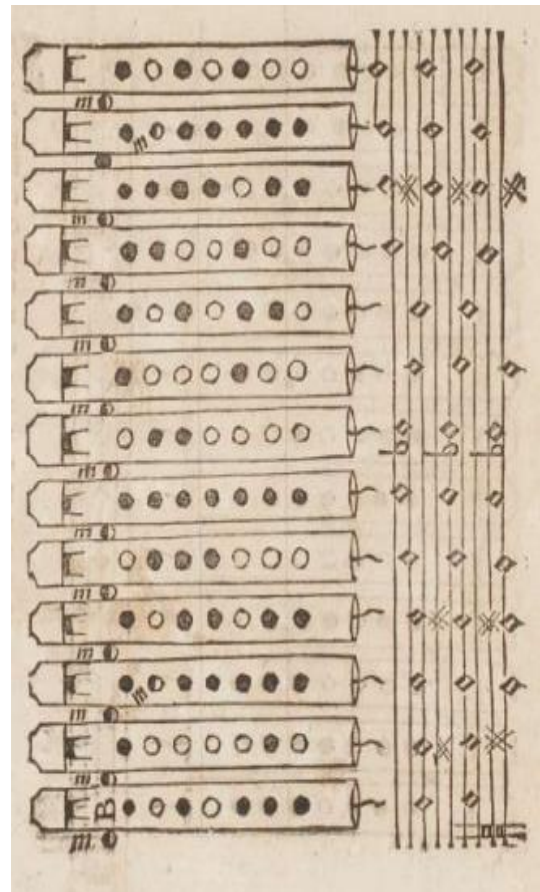


Figure 5 - Silvestro Ganassi, Bassano recorder fingering table from *Opera Intitulata Fontegara*

⁵³ Salvatore, 2003, p. 14

⁵⁴ For more on the different symbols and the recorder makers, read Brown, 2006

⁵⁵ “Per tal differentia nasce uno variado mode di sonar quello de uno maestro e quello de unaltro” Ganassi, 1535, f.

mention of the experimental process in passing:

“[...]You will do the same as I, if you need to play flutes of new masters, you will proceed as I teach you and if you do not manage in this way, you will have to investigate [...]”⁵⁶

Tongue

Having finished his explanation of the instrument's different fingerings, Ganassi deals with the question of articulation from the fifth to the eighth chapters. Here *sympathy* of properties between the voice and the recorder occurs, centered on the concept of *proferire*. What at first had been described as a vocal attribute - the capacity to say things - is described in these chapters as the basic element which makes up the effects of syllables in the instrument - “*fa varii effetti per causa del suo proferir con varie sillabe*”⁵⁷.

Ganassi goes on to describe and connect these basic effects with which he builds up a system of articulation: consonants, vowels, head, throat and tongue. These elements are brought together in the three original movements of articulation - **te-che-te-che**, **de-re-de-re** and **le-re-le-re** – which, for Ganassi, contain “the extremes with their middle”⁵⁸.

These original movements are themselves broken up and varied according to the vowel and type of consonant applied. At the end of this section, not only *proferire* but also *lingue* - tongue - will have become part of a recorder-specific nomenclature, no longer referring to an exclusively vocal element to be emulated by the instrument.

⁵⁶ “[...]il simile farai anchora tu: se a te bisognera sonar flauti de maestri novi, prociederai come te insegno per le figure sequente & se non te reusisce in tal modo e tu haverai de investigar [...]” Ganassi, 1535, f. 8

⁵⁷ *ibid.* f. 10

⁵⁸ “li estremi con il suo mezzo”, *ibid.* - a quick but important reference to an important Venetian political text by Gasparo Contarini, which will be better discussed in the next section of the thesis.

The section ends with some consideration on breath and tongue positioning. It is curious that breath - *fiatto* - is never given a dedicated chapter. Ganassi prefers to connect different technical aspects and how these influence and are influenced by the breath, showing that his methodology is not pedagogical in nature.

Diminution

The ninth chapter initiates the most laborious section of the *Fontegara* for its readers: the process of diminution. The level of detail Ganassi with which Ganassi goes into explaining this ornamentation technique is both remarkable as it is discouraging for the modern reader.

As I will claim, further in the thesis, this level of detail is not only due to the practice's inherent subtlety - making Ganassi divide it into categories and differences of greater and greater complexity elements - but also to it never having been written down before⁵⁹. It is for this reason that there is a turn to both notational preoccupations – the way in which Ganassi separates the different figures: whole, half, quarter and eighth notes – but also a careful usage of temporal proportion theory with which to represent the rhythmic and agogic variety of the technique. This results in the four tables of diminution for which the treatise has become famous (fig. 6).



Figure 6 - Silvestro Ganassi, Diminution table in *Opera Intitulata Fontegara*

⁵⁹ Considerations on tonguing, notation and fingerings were already present in Viridung's and Agricola's treatises.

Again it is important to keep in mind that Ganassi departs from the totality of a technique which had never before been described and broken down to its basic components. Such a “breaking down” is itself a novelty to the technique itself, only used to make the transcription of this technique into written and notated form possible. We should therefore be suspicious of Ganassi’s final chapter of this section, in which he instructs the reader on how to diminish his own melodies, by finding the interval in the chosens rule and applying it to the melody.

Ganassi is not only inaugurating a genre but a pedagogical method directed at educated *dilletantes*, one which we need to be conscious would not be the same as that which he went through in his training amongst the *Piffari*. Hence, the fact Ganassi writes about his practice radically changes its learning, and ultimately the practice itself.

A curious aspect of this section is how no reference or relationship to the human voice is made in this most aristotelian section of his treatise. Even Ganassi remarks upon it, by referring to his initial “promise”⁶⁰ - that of making the recorder able to mimic the human voice – as he ends the section, in preparation for the next.

Sonare artificioso

The final section, in which Ganassi completes his project of resemblance, is perhaps the most interesting when wanting to understand the limits language when describing music.

Ganassi takes up the topic of the human voice and its emulation – the ultimate goal of his treatise – by returning to the analogy of the painter. This repetition is not without strategy, as Ganassi will enter the most subtle part of his treatise. Discussing the most minute and extreme variations

⁶⁰ “non manchare a la promessa da me a te data” *ibid.*, f. 152

of sound and their different shades is best represented by the full chromatic range at the painter's disposal. Terms like *diesis* – referring to intervals more flexible than the semitone - and the description of the dynamic extremes and shades which can be achieved to breath and fingerings, find the recorder player exploring the full spectrum of acoustic possibilities at his instrument's disposal.

The final goal of emulation leads him to create a mimetic process divided into three distinct species: *imitatione*, *prontezza* and *galanteria*. Ganassi is quite specific in defining these three elements as “species” – a term belonging to the system of Aristotelian logic – a fact which should not be discarded.

Although the common reading of modern musicologists is that *prontezza* - of breath - and *galanteria* - of fingers - are two principles subsumed under the goal of *imitatione*⁶¹, this reading would only be right if *imitatione* would be a genus and not a species – the relation of these three elements, as species, is non-hierarchical.

My interpretation of this passage is that the three elements define three strategies of the performer when trying to relate to the human voice: an openness of the ear - *imitatione* - connected with an active readiness of the body - *prontezza* - which is softened and articulated by an inherent grace and agility of its features - *galanteria*. If Ganassi relates *prontezza* to the breath and *galanteria* to the *tremolo* of the fingers he is not making these elements equivalent to each other: in this case *prontezza* is a genus under which the species of the breath - both *quietissimo* and *superbissimo*⁶² - is subsumed. This does not mean that *prontezza* and breath are the same thing, or that the *galanteria* is wholly represented by his final figure table of alternative fingerings (fig. 7).

⁶¹ Myers, 2007, p. 67 & Smith, 2011, p. 144

⁶² Ganassi, 1535, f. 153

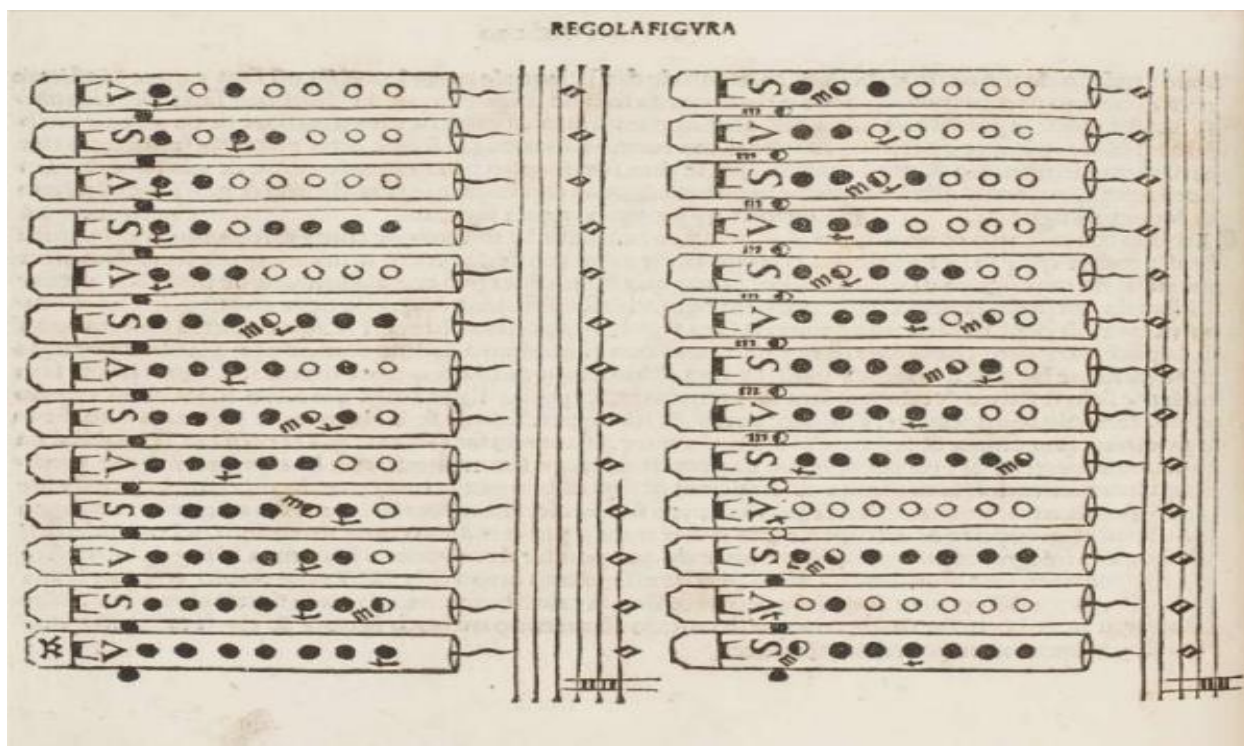


Figure 7 - Silvestro Ganassi, *Galanteria* fingering table in *Opera Intitulata Fontegara*

Furthermore, the common reading supposes that the three elements are separate from each other when in fact it is their dialectic (and not causal) relationship which creates the totality of the *sonare artificioso*: the principle of *galanteria* can only be best achieved through the proper *prontezza* of breath, informed by the constant process of *imitatione*.

This is of special importance since it allows us, if even for a while, to depart from the modern conception of sound which separates and divides sound into measurable and differentiated notions of rhythm, pitch and dynamic, capable of being objectively represented. In this final section, in which Ganassi struggles most to adhere to the Aristotelian form, we are confronted with the inadequacy of this very form to represent the intricate totality of his art - an inadequacy we should be well aware of in our times, warding off the literal interpretation of these documents.

Ganassi, however, is no longer worried with achieving a consistent theoretical rigour at the end of his text. His goal, as has been shown is another: *sympathy* has exerted its effect to the point that we are no longer speaking of the voice and the recorder as two separate and differentiated identities. At the end of the *Fontegara* we have two instruments – human voice and recorder - which strive for the same ideal: speech. In reference to this goal, their identity is the same. Ganassi's treatise has captured and transferred the fundamental attribute for the recorder's identity: a voice.

Theory as supplement: *Fontegara* and the function of proportion

Some of the questions we, conservatory students at the end of their training, are asked (and ask ourselves) about our thesis and research are connected with the needs it addresses:

How will it help me as a musician?

What sort of interest could it have for the broader community of musicians and researchers?

What sort of dialogues and debates might it start or join?

In short we are asked why this thesis should be written, what its use will be for both the researcher and the artistic community in which he is inserted.

I would like to address the same set of questions in relation to Ganassi's treatise. Though these questions seem beside the point – how could an instrument tutor's function not be straightforward? – *La Fontegara's* uniqueness as the first of its kind leads us to ask them if only to understand the motivation behind its appearance. What we ask ends up being:

Why was this treatise not written before?

This question connects the document with the many contexts – social, theoretical, political or aesthetic – to which it responded and reacted.

In this section, I would like to address a particular aspect of the treatise, directly connected with the practice of diminution: the highly detailed usage of rhythmical proportions in the tables of ornamentation⁶³ and their explanation.

The choice of this complex and long standing tradition of musical theory – situating the work within the history of the rationalisation and literalisation of Western musical practice⁶⁴ – is not surprising owing to the widespread presence of proportions in both theoretical works and

⁶³ In particular the second and fourth *regoli*, which leave today's musicians baffled with the 5:4, 7:4 and even 7:6 proportions

⁶⁴ Berger, Anna Marie Busse, 1993, pp. 33 – 50

musical compositions of the time.

What is surprising however is that Ganassi decides to use it to such a degree of detail, one which would remain unrivaled by any publication of the type in the decades to come, even those published by Ganassi himself. I would like to approach this unique feature by reading its consequences in three distinct but interconnected contexts:

- The birth of the tradition of a type of musical notation which attempts to describe a performance rather than create a musical piece
- The project of social ascension of the instrumentalist from the class of craftsman to that of liberal artist
- The propaganda devoted to the creation and diffusion of the *myth* of Venice as *La Serenissima Republica*

Through the study of these intersecting social and artistic fields this we can deduce a certain synchronicity between Ganassi's endeavours and our own artistic research. The project of inaugurating a theoretical tradition of instrumental practice leads Ganassi to borrow from previous theoretical traditions, much the same way musicians, such as ourselves, attempt to find the proper methodological tools with which to give our practice an academic pertinence.

The tool of proportion - the translation of practice

Why turn to proportion?

I would like to firstly address this question at a more pragmatic level. Probably the first and foremost concern for Ganassi when beginning to write *La Fontegara* was of finding the proper tools with which to describe the various themes of his text – one of which, the extemporaneous practice of diminution.

The origins of diminution as an ornamental practice are a debated theme. Horsley comments⁶⁵ that for Max Kuhn this particular technique has the same origins as those of franco-flemish composition and singing, which would spread to the whole of Europe⁶⁶. This makes special sense in the case of Ganassi's employment in the *Piffari* at St. Marks basilica, whose chapelmaster and main composer was none other than Adrian Willaert, the main exponent of the franco-flemish school of his generation.

Another hypothesis, also mentioned by Horsley⁶⁷, is that of Arnold Schering: he claimed that diminution has its roots in an improvisatory practice, famous in both Indian and Middle Eastern musical traditions⁶⁸. This opinion is also shared by Selfridge-Field⁶⁹ who believed that Venice, being one of the main merchant cities of the Mediterranean, would have had ample contact with these cultures⁷⁰.

A third hypothesis, proposed by Ernest Ferand, is that diminutions constitute a last reminiscence of a practice of improvisation springing from the oral genesis of music – diminution was a practice as old as music itself. This oral practice, still surviving in many non-western and non-academic musical cultures, would slowly dwindle throughout the Renaissance with the advent and perfecting of musical notation⁷¹ – a process in which *La Fontegara* plays a determinant role.

In what these three hypotheses agree is that, in writing *La Fontegara*, Ganassi is dealing with an established and still vital performance practice, common to his interpretive community – the

⁶⁵ Horsley, 1951, p. 4

⁶⁶ Kuhn, 1902

⁶⁷ Horsley, 1951, p. 4

⁶⁸ Schering, 1931

⁶⁹ Selfridge-Field, 1994, p. 76

⁷⁰ The problematic relationship Venice had with this middle eastern world (as well with the European), leading to its forging of a unique identity is one which will be tackled later in this section.

⁷¹ Ferand, 1961

Piffari. The writing of this practice had seemed unnecessary up until that point.

This give us a clue as to the sort of paradigm shift such a literalizing endeavour might have meant at the time, but also how difficult this task presented itself to be. Ganassi's project was more than a simple process of transcription: he wished to translate an oral practice into a yet to be created notational medium.

The treatise's section on diminution can be seen as the attempt to formulate a language capable of the impossible task of describing a musical performance – this impossibility became epitomised by Vicentino's dictum, in his treatise *L'antica musica ridotta alla moderna pratica* of 1555, that playing was a “certain order of doing [...] that cannot be written”⁷².

Taking Vicentino's sentence as a starting point, Lo Cicero deduces a very specific and pragmatic reason behind Ganassi's turn to the theory of proportion. Lo Cicero remarks that Ganassi's usage of rhythmical proportions such as 5:4 in the *Regola Seconda* of his treatise can be seen as a way of describing a certain agogic flexibility and inégalité present in the practice of extemporaneous improvisation. This he sees more clearly demonstrated in the examples given for the interval of fifth (fig. 8), seeing in them simply a variation, a slowing or speeding down of trochaic or iambic metre⁷³.



Figure 8 - Silvestro Ganassi, Second table of ascending fifths in *Opera Intitulata Fontegara*

⁷² “Un certo ordine di procedere [...] che non si può scribere”. Vicentino, 1555, lib. IV cap. XXXXII

⁷³ Lo Cicero, 2003, p. 217

This hypothesis is further corroborated by Horsley⁷⁴ and Brown⁷⁵, who hold that Ganassi's treatise, being the first attempt at the theorization of diminution would employ rhythmic proportions – a centuries old tradition of graphic representation of rhythmic and *tactus* variety – as a strategy with which to overcome the textual obstacles posed by such a rhythmically flexible practice.

However the question remains: why proportion specifically?

This question gains further significance if we consider how quickly the usage of proportion was abandoned by the following diminution treatises of other writers, as the genre became more widespread.

The choice of proportion can be traced to another motivation: the emancipatory strife of instrumental practice for its recognition among the liberal arts.

The symbol of proportion - the liberalization of instrumental practice

As we zoom out into the more general aesthetic panorama of 16th century Venice, we should note the significance of Ganassi's period of publishing - from 1535 to 1543 - as occupying a strict middle position between the publication of the two main works of Venetian Renaissance musical theory - Aaron's *Thoscanello della Musica* (1522) and Zarlino's *Le Institutioni Harmoniche* (1558).

The importance of musical theory at the time needs to be read within the process of artistic emancipation of the various mechanical crafts which marked the 16th century culture in a unique way. As the arts became one of the main tools for different political regimes to fashion an image

⁷⁴ Horsley, 1951

⁷⁵ Brown, 1976

and identity with which to overwhelm their opponents, artists began to experience a rise in their influence and social standing. This rise, however, was not immediately accepted within the professional and political hierarchy inherited from the late middle ages, which divided professions into the lowly group of the mechanical crafts and the select elite of the liberal arts.

The socially recognised liberal arts were divided into two groups: the *trivium* - composed by Grammar, Logic and Rhetoric – which prepared one for the study of the *quadrivium* - Arithmetic, Geometry, Astronomy and Music. The Renaissance humanists, though keeping with this medieval tradition, tried to expand and reformulate these categories by adding and taking away certain disciplines from each group - this was the specific case of poetry, a late addition to the *Trivium*. This project of expansion was also championed by professionals in the plastic and performing arts - from architecture, to tragedy - which would eventually lead to the modern birth of the “fine arts” as an aesthetic and professional category.

In the case of the plastic arts this project was motivated by the desire of several professionals to free themselves from the choking influence the guilds and their powers. The strategies employed were various, the most important of which the foundation of Academies, such as the famous *Accademia di San Luca* in Rome. But another, more subtle strategy was the production of theoretical works which attempted to supplement the different crafts with the features of the already established liberal arts. It is this theoretical strategy that led to the previously discussed doctrine of *Ut Pictura Poesis* (in painting as in poetry) which attempted to justify painting's superiority with the defence of a kinship between images and texts.

Although music already belonged to the privileged group of the *quadrivium*, the same hierarchical division was strongly outlined within the art itself in the separation of speculative and practical music. Speculative music, the liberal side of music deals with the explanation of the

divine rule of order which is operative in all the different levels of creation - music is the “sound of the number” and the Augustinian “science of good modulation. This divine rule is none other than that of proportion which connects and describes the macroscopic order of the spheres and their reigning harmony as well as the microcosm which explain the connections of human body and soul. As such, the speculative practice of music cared for the exegesis of the Pythagorean myth of musical discovery and the religious importance of these laws of consonance. This description of the cosmic structure of the universe leads writers such as Boetius in his *De Musica* to separate music into three distinct levels: *mundane* - connecting and representing the harmony of the spheres - *human* - connecting and representing the harmony of body and soul - and *instrumental* - the lowest of all directly connected with the practice of music⁷⁶.

It is this lowest level of harmony in which composers and other musicians were inserted - funnily enough the proof that it was the lowest of harmonic levels was the fact that it was the only one the imperfect humanity could hear.

The process through which the professionals of instrumental music, attempted to enhance the social standing of their practice mimicked those of the other arts. It is in this process of artistic emancipation that we can begin to understand the importance of works such as the two treatises by Zarlino and Aaron - even more if we consider these were the first Venetian musical treatises to be written in a vernacular language. One of their goals was to supply the the theoretical justification for their art’s validity. This justification is enacted in their structure, with a first section concerned with the proper explanation and outline of the speculative tradition which would then be connected with the practice of singing and composition in a second section devoted to the explanation of the practical laws of counterpoint, singing, solmization and

⁷⁶ Zarlino, 1558, f. 16 - 18

rhythmical writing of proportion. It is important to note that, through this tradition, proportion came to mean several things – from rhythmical variety to the laws ordering the movements of the universe – a confusion greatly exploited in these treatises.

But if composers and singers were in a lower hierarchical rank, instrumentalists were in a far more discredited position. The argument was that if humanity was the imperfect creation of divine harmony, instruments were the even more flawed creation of humanity. As such, Aaron and Zarlino are able to create a connection with the speculative side of their art in a much more direct way than Ganassi, who must firstly establish a connection of his instrument with the higher ranking human voice - partly explaining the mimetic relation between recorder and voice, at the core of the *Fontegara* treatise. As Van Heyghen mentions, among the instruments, the recorder holds a privileged position for its affinity with the sound and breath of singers⁷⁷, an affinity Ganassi is quick to exploit.

But we should also point to the significance, Ganassi's relationship with painting in the context of his theoretical output. As previously discussed, two theoretical works on painting make special mention of Ganassi - particularly his intellect in Pino's *Dialogo*. It is quite probable that this is a mention to Ganassi's versatility in connecting two theoretical traditions - that of painting and of music.

What I am trying to argue is that, although we could say that Ganassi's usage of proportion theory is a direct borrowing from works such as Aaron's and Zarlino's treatises, the way he envisions the function of this theory is one connected with a practice wholly native to painting theory: *ekaphrasis*.

Ekaphrasis is the practice of verbal, poetic description of a visual work of art, having its origins

⁷⁷ Heyghen, 2005, p. 238

in the Greek lyrical works of Homer and the philosophical writings of Plato. Firstly employed as a rhetorical device with which to enrich texts, its function is reversed with the advent of the genre of painting treatises such as those of Leon Battista Alberti or Leonardo Da Vinci.

Ganassi's usage of proportion could be said to have the same rhetorical function. It does not, as in Aaron and Zarlino, provide a basic tool with which to engender new works of art, but rather a range of tools with which to refine the description of a pre-existing practice, previously belonging to a mainly oral medium. In the same way that Homer attempts to give us the most detailed description of Achilles' shield in his *Illiad*, so does Ganassi attempt to describe to the best of his capacity the instrumental wonders he and his colleagues performed daily in the *Serenissima Republica*. Of both the shield and the Venetian music, only their description remains. Most importantly, it is through this hybrid creation of an "ekaphrastic proportion theory" that Ganassi manages to affirm the rising importance of instrumentalists as artistic and social agents, by proving their kinship with two of the major liberal arts: Rhetoric and Speculative Music. It is also this newly forged musical language that would lead to the birth of instrument-specific repertoire and compositional forms such as the *Ricercata* which would develop into the baroque *Canzona* and *Sonata*.

But there is still one more level of significance, one which locates Ganassi's social significance as a researcher within the intricate political representation of the Venetian Republic.

The myth of proportion - the harmonious Republic

The years of Andrea Gritti's rule as Doge of Venice – from 1523 to 1538 – were perilous ones for the Republic. Venice's involvement with the Italian wars and the attempts of the League of

Cambrai - composed of the main European and Italian powers - to halt its political and economical expansion⁷⁸ had left the Republic with depleted military resources at the time of the signing of the Bologna peace treatise of 1530. Furthermore, the continuous threat of Suleiman I and his Ottoman Empire maintained the centuries-old Republic in a constant state of alert, trying to direct Europe's attention to the advances of this Eastern power⁷⁹.

Gritti was the perfect doge for Venice's troubled times. A seasoned diplomat and general he had managed to keep the Republic's hold of Italian territory in a military equilibrium with other powers, including those of the papacy. But most importantly, when confronted with the military insufficiency brought by the peace of Bologna, Gritti turned to the city's other main political weapon: the prestige of their arts and the *Myth* they helped create.

The ordered and peaceful demeanor projected by the city, the ideal order of its powers and a ruling class of patricians whose sole concern was the commonwealth of their subjects garnered Venice the title of Most Serene Republic. Calm and confident, unwarred and unconquered for centuries, miraculously rising from the waters of the lagoon - this was the symbol Venice propagated to all of Europe and the Mediterranean, ensuring its survival and rule.

The decadence of its army marks the birth and expansion of the *Myth* of Venice whose main strength lay in the arts and their interaction with the political and legal order of the city. Not only did the ruling class invest in their artists, commissioning works of propaganda for the city, the city itself attempted to fashion itself after those artistic disciplines. As the art historian Jacob Burckhardt states in his *Civilization of the Renaissance in Italy*: the Venetian patriciate saw the state as their finest Work of Art⁸⁰.

⁷⁸ Rosand, 2001, p. 2

⁷⁹ Goffman, 2002 p. 111

⁸⁰ Burckhardt, 2010, p. 1

It is also around this time that a flowering is felt in the city's musical life and production⁸¹. As previously discussed, musicians served as the Republic's diplomatic greeting card with which to overwhelm and seduce its opponents. Andrea Gritti was himself responsible for some of the most important decisions concerning Venetian music life – the most obvious, the hiring of Adrian Willaert as the first foreign chapelmaster at St. Mark's basilica. The composer's activity until his death, in 1562, ensured Venice a musical Golden Age and its fame as Europe's capital for that art. It also prepared a new generation of famous composers and theorists such as Cipriano de Rore and Gioseffo Zarlino and Ganassi himself.

The dedication of the *Fontegara* to Andrea Gritti is proof of Ganassi's political allegiance to the mythifying project of Venice. But I would also like to argue that we should look in Ganassi's turn to proportion in the very same way – a show of political fidelity.

As a state which fashioned itself after the organization of the arts, Venice sought in the liberal arts – in much the same way as painters and other artists – the theoretical supplements with which to validate their political organisation and identity. Proportion appeared as the divine reasoning behind the Most Serene Republic's harmonious legal structure which brought the the best of all governmental types – monarchy, oligarchy and democracy – into melodious consonance.

A very clear example is given in Gasparo Contarini's portrayal of the Republic, *La repubblica e i magistrati di Vinegia* (1548):

“Our Republic organised the Senate and the Council of Ten, which in the city of Venice (said to be a mix of the regal, popular and noble states) represents the noble state: and it is these means which with their extreme parts, that is, the popular state [in

⁸¹ Rosand, 1977, p. 168

the] Great Council and the Prince, who represents the person of a king, come together in a tight knot. In the same way that Plato describes in *Timeu*, the the extreme elements - earth and fire - with the middle elements are united and ordered, so too in the consonance of the *Diapason*, the extreme voices with the middle ones, the *Diatessaron* and the *Diapente*, are tuned together.”⁸²

This usage of the three main pythagorean intervals - the *Diapason* (a 1:2 proportion, also known as the octave), and its two inner intervals of the *Diapente* (the 2:3 proportion known as the fifth) and the *Diatessaron* (the 3:4 proportion known as the fourth) - is a clear reference to the then famous *Thoscanello* of Pietro Aaron, itself dedicated to the Venetian Patrician Sebastiano Michell⁸³. This can give us an idea of how vital the bonds of music and politics were to the identity of the Republic.

These bonds would be further radicalised during Gritti’s tenure as Doge with his politics of *res aedificatoria*, the project of restoration and reconstruction of the city’s architecture according to the musical principles of harmony⁸⁴. This unity of architecture and music was already noted by Aaron and Zarlino: one states that “without Music the Architect will not be perfect”⁸⁵ while the other mentions that “if the architect had no knowledge of Music, as is well proven by Vitruvius, he would not know how to reasonably temper the machines, nor know how to place the columns in the Theatres nor how to position building in a musical fashion”⁸⁶.

This policy of state infrastructures was brought to material fulfillment in buildings such as St. Mark’s *Loggetta* by Jacopo Sansovino, whose work according to Iain Fenlon could be seen as the

⁸² Contarini, 1548 in Rosand, 1977, pp. 512-513

⁸³ Aaron, 1522, f. 4

⁸⁴ Tarfuri, 1989, pp. 4-5

⁸⁵ “[...] larchitetto senza musica non sara perfetto” ibid, f. 14

⁸⁶ “[...] se l’Architetto non havesse cognitione della Musica; come bem lo dimostra Vitruvio, non saprebbe com ragione fare il temperamento delle machine & nelli Theatri collocari li vasi, & dispor bene & musicalmente gli edifici]” Zarlino, 1558, book I, f. V

contemporary and stone mirror of Willaert's polychoral works⁸⁷. The people of Venice walked streets organised according to the same mute harmoniess that ordered the spheres, the soul's relationship with the body, and the patriciates' rule of their territory and subjects – musical proportion and Venice served as examples for one another.

This same harmonious order is represented in Ganassi's treatise, and his application of rhythmic proportion can be seen as a political message as well as an artistic tool. Luca de Paolis also mentions the philosophical scope of the diminution section of *La Fontegara* and its status as product of the particular culture of the Venetian Republic⁸⁸.

This more political level of influence allows for an understanding of the stakes Ganassi's treatise had as both product and agent within a musical practice, an interpretive community, and a political project. It attests to the transversal character of research, and the wider social impact its transference of knowledge represents⁸⁹.

⁸⁷ Fenlon, 2007, p. 81

⁸⁸ Paolis, 1991, p. 12

⁸⁹ Borgdorff, 2012, p. 93

Expansion and crystallization - the dawn and twilight of diminution

Although very little is known on the reception of Ganassi's treatise, its position as the first and most extensive treatise on diminution and recorder playing in general and the flourishing of the publication of similar treatises by like-minded musicians and theorists allow us to connect *La Fontegara*, within a process of expansion and filiation. What expands in these treatises is a new way of relating performance practice to textual analysis and description - a process which Taruskin declares to be one of the distinctive figures of Western Music and one of the main achievements of 16th century instrumentalists.

I would like to proceed in this section through a quick chronological catalogue of treatises which focus on the technique of diminution, as well as other ornamental innovations, with a brief paragraph to note some of its most prominent aspects and how they influenced the development of this instrumental and vocal sensitivity for ornamentation.

I will focus mostly on questions of *prescriptiveness* - how the rules set out in treatises become more and more specific while losing a technical foundation, opting for a more aesthetic justification - *standardization* - the extraction of certain cliché-type figures and turning them into self standing ornaments - and *idiomatic specificity* - how treatises and their authors seem less and less concerned with the correct emulation of the voice's expressive range, and different instrumental genres and styles start to emerge.

This will also help us understand how the very practice of instrumental and vocal ornamentation change and begin to grow apart, as they become further and further embedded in a practice of literalization and academisation in the various treatises in which they are featured. As such we're

not looking at the development of a practice but how the efforts to write it down begin to force its crystallisation and ultimate obsolescence.

Regula Rubertina, 1542, Lettione Seconda, 1543, *Ganassi dal Fontego*

Ganassi was not only the pioneer figure of the genre of diminution and instrumental tutors. He was also the holder of a ten year long monopoly, which only after 1545 began to be featured in the works of other writers.

This monopoly is exploited by the return to his work on instrumental performance practice in his two other texts, *Regula Rubertina* and *Lettione Seconda*. The way he returns to it is quite interesting showing how theory and practice evolve together, through a process of experimentation we can only deduce from the differences between the works.

One interesting fact is that Ganassi does not repeat himself. Both the *Regula* and the *Letione* do not feature a set of extensive interval tables with their respective ornaments. Ganassi prefers to make reference to his previous work, the *Fontegara*, advising the reader to look into it, should he be more interested in the practice of diminution⁹⁰.

Where Ganassi does innovate is in the way he deals with the technical specificity of stringed instruments enabling them to perform the same ornaments he describes for the recorder. He takes special care for different styles of bowing⁹¹ and fingering techniques with which to perform full passages without changing strings⁹² - as if they were produced in one breath. As I shall attempt to demonstrate later on, this is a completely different attitude than of later writers which begin to

⁹⁰ Ganassi, 1542, f. VIII

⁹⁰ Ganassi, 1543, f. 51

⁹¹ Ganassi, 1542, f. VIII

⁹² Ganassi, 1543, f. 66

formulate an idiomatic style of ornamentation for different instruments.

Furthermore Ganassi adds to both volumes a small number of instrumental *Ricercari*, a genre made famous by the later treatise by Giovanni Bassano, as well as a madrigal with a viol accompaniment for technical training in the *Letzione Seconda*.

If we also take into account that it was around this time, between the publication of these two treatises, that Ganassi sent to Germany the previously discussed Wolfenbüttel copy, containing the manuscript table of ornamentation for a melodic figure (rather than a set of intervals), shows that even in his non-published practice Ganassi established a laboratory like relationship with his own theoretical work, constantly reformulating it according to the findings his research as performer yielded.

Musica Instrumentalis Deudsch, 1545, Martin Agricola

Although, chronologically, Agricola's treatise might have been placed before Ganassi's work, the fact is that this text had a metamorphosis of sorts occur between its first edition in 1529 and its later rewritten version of 1545 - one which includes, for the first time in the treatise, references to the practice of diminution and instrument-specific ornamentation. According to Hettrick , "Agricola completely rewrote the main body of his text for the 1545 edition of *Musica Instrumentalis Deudsch*, claiming that the earlier version had been 'too obscure and difficult to understand'"⁹³.

It is in the newly rewritten second chapter that we read that the best method of ornamentation (*coloratur*) is that of organists (probably connected with the German tradition of organists such

⁹³ Hettrick, 1994, p. xv.

as Buchner), but that the coloratures (*coloriren*) and ornaments (*Mordanten*) should decorate melodies in all instruments. Also, Agricola avoids getting into too much detail claiming that the best source for this information is to be found in the instrumentalists themselves⁹⁴.

The fact that Agricola only adds this section in his second version and his reticence in diving into too much detail could help us understand that although this technique was rooted in a more oral based tradition, a certain novelty factor was attached to the presence of this technique in theoretical texts on instrumental playing. We could even speculate as to how Ganassi's text might have influenced Agricola's addition of diminution in the second version of his text, especially considering the Wolfenbüttel copy, quite close to both Magdeberg where Agricola worked as *cantor* and Wittenberg where his friend, Georg Rhau, had published the treatise.

Compendium musices descriptum ab Adriano Petit Coclico, discipulo Josquini des Prez, 1552, Adrianus Petit Coclico

The self-denominated pupil of Josquin De Prez, Adrianus Petit Coclico would publish his treatise in Nüremberg, after an unsuccessful attempt at a teaching career in Wittenberg in 1545 (the same year and place as the second edition of Agricola's text).

It is in the second part of this singing manual for students, that Coclico deals with the question of diminution in his chapter *De elegantia et ornatu, aut pronuntiatione in canendo*. In this section he counterposes the original and ornamented versions of parts from *chansons* such as *Languir me fault*⁹⁵.

⁹⁴ Ibid., p. 112

⁹⁵ Hulse, 1996, p. 6

The example is of particular interest if we consider the observations Coclico does on which voices should be ornamented. Although Coclico makes it clear that the base, as the fundament for the other voices, should not be ornamented⁹⁶, in this example we can clearly see that in this example, the base part has ornamentations applied to it (Fig. 9).

Also it is interesting to note that these ornamentation are much simpler than the one's featured in Ganassi's treatise and that no specific rules on how to apply these ornaments to a line, information that was possibly given in Coclico's own teaching practice as a singing instructor.

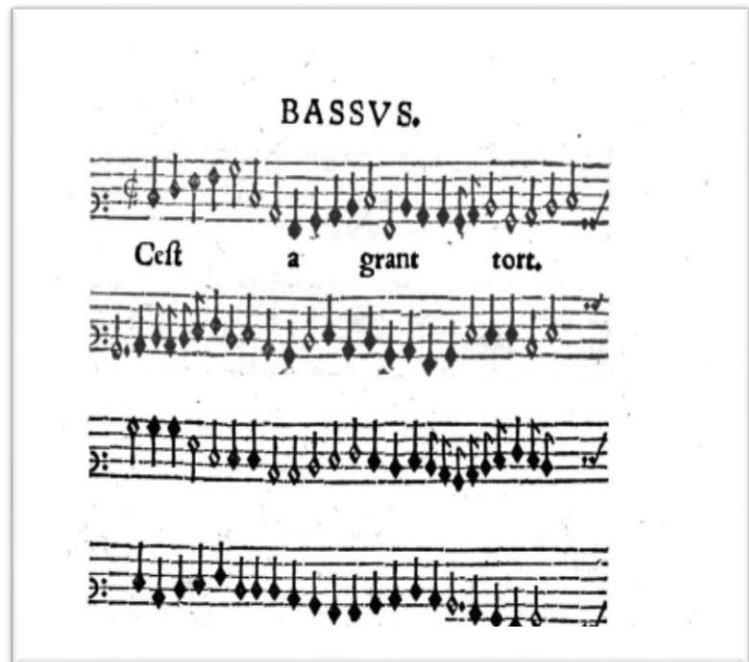


Figure 9 - Coclico, Ornamented Base part in *Compendium musices*

Tratado de glosas sobre clausulas y

otros generos de puntos en la musica de violones, 1553, Diego Ortiz

Perhaps the competitor, in terms of specificity and detail, to Ganassi's treatise, Ortiz's *Tratado de glosas* deals with ornamentation practice in the *violone*. The organist and composer, born in Toledo, worked for Fernando Álvarez de Toledo, duque of Alba and Spanish viceroy in the Neapolitan court and dedicated his text to Pedro Urries, Baron of Riesi, in Sicily⁹⁷, giving us an

⁹⁶ Horsley 1957, p. 10

⁹⁷ Stevenson, "Diego Ortiz" in *The New Grove Dictionary of Music and Musicians*

idea how closely related he was to an Italian (though not directly Venetian) instrumental practice.

In the first of the treatise's two books he proceeds, much in the same way as Ganassi, to point out the technical requirements necessary to play the different *glosas*⁹⁸, he describes basic principles one should have in mind when applying these diminutions to a piece (such as paying close attention to the piece's counterpoint). Although he states that it is best when the passage starts and ends in the same note as the original line, he is also quick to dismiss certain dissonances on account of the extreme speed of the ornaments⁹⁹. Finally he ends with giving us as list of several intervals [*puntos*] and cadential formulae [*clausulas*] (Fig. 10), having previously given us instructions on how to apply them:

“pick the voice you wish to *glosar* [ornament] and then rewrite it; when you arrive at the point you wish to *glosar*, go to the book and find the corresponding interval [*puntos*] amongst the intervals and cadences; look through all the diminutions [*diferencias*] written on those intervals, pick that which is best and put it in the place of the full interval, and so on in all the parts you wish to *glosar* in this manner.”¹⁰⁰

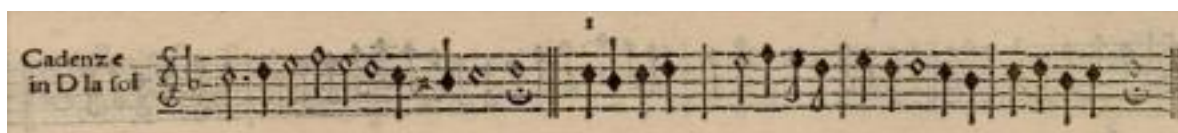


Figure 10 - Diego Ortiz, Cadence table from *Tratado de Glosas*

It is also important to note that in Ortiz (as in Agricola) there is already a separation between different types of ornamentation. Although diminution comes under the name of *glosa*, two types

⁹⁸ He separates these into *queiebros amortiguados* (more close to our idea of mordants or trills) and the *passos*.

⁹⁹ Ortiz, 1554, p. 5

¹⁰⁰ “[...] tomar la boz que se quiere glosar y yrla escribiendo de nuevo y, quando llegare a donde quiere glosar yr al libro y buscar a quella manera de puntos si es clausula en las clausulas y sino en los otros puntos y mire alli todas las diferencias que estan escritas sobre a aquellos puntos y tome la que mejor le estubiere y pongale en lugar delos puntos llanos y en todas as partes que quisiere glosar haga desta manera”. *ibid.*, p. 6

of diminution are mentioned by Ortiz: *quiebro amortiguados* and *passos*. The *quiebro*s should be read as small stereotypical ornaments to be applied to solitary notes.

The second book gives us detailed information regarding the performance practice of instrumental music between the *violone* and the *cymbalo* [harpsichord], connecting the practice of ornamentation (and the process of its literalization) with the origins of chamber music. This can happen in three ways:

1. Free improvisation alternating passage work between the two instruments¹⁰¹.
2. The *violone* improvises on an ostinato bass line, a practice which Ortiz exemplifies with six *Recercadas* composed on the ostinato *La Spagna*¹⁰².
3. Transcribing a madrigal or motet for the harpsichord, “as per usual”, while the *violone* will play over each line with a series of diminutions - which the harpsichord should refrain from doubling¹⁰³ - as he exemplifies with four versions of the madrigal *O Felice Occhi Miei* by Jacques Arcadelt, and four versions of the French *chanson Douce Memoire* by Pierre Sandrin. What is remarkable of these examples is that the last of each four is based on a fifth original line, blurring the lines between ornamentation and composition (not surprising considering Ortiz himself was a composer).

Finally he leaves us with a series of solo *Recercadas* with which to “exercise the hand”¹⁰⁴.

Prattica musica, 1556, Hermann Finck

For the following example we return to Wittenberg where Hermann Fink lectured, held the role of organist and published his *Prattica musica, exemplariorum signorum proportionum, et*

¹⁰¹ *ibid.*, p. 51

¹⁰² *ibid.*, p. 55

¹⁰³ *ibid.*, p. 68

¹⁰⁴ *ibid.*, p. 51

canonum, iudicium de lous ac quaedam de arle suaviter et arlificiose cantandi conhinen, written for his students¹⁰⁵.

Much in the same way a Coclico's text, Fink dedicates a section on ornamentation in one of his chapters, *De arte eleganter et suaviter cantandi*, naming it the art of *coloratura*¹⁰⁶. Unlike Coclico, however, he does not specify which voices may or may not ornament and at what point, making it nonetheless clear that it should be done in turns so as not to create mistakes in the counterpoint and that each *coloratura* be heard properly¹⁰⁷ - he gives as example an ornamented version of a motet, *Te maneas semper*.

Carta a Giovanni da Capua, 1562, Maffei da Solofra

Also, focusing on the vocal practice of diminution, Maffei da Solofra's short letter of recommendations to the *Illustrissimo Conte d'Altavilla*, Giovanni da Capua whom he served as musician and physician¹⁰⁸ - his activity as physician is also connected with Maffei being considered one of the first to be concerned with the physiology of the voice and its influence in vocal coaching¹⁰⁹. This document reveals one of the most noted turns from description to prescription in the genre. Although Maffei's letter contains the usual list of diminution we have seen in the documents so far, as well as group of examples, including a 4-part madrigal with all the voices ornamented (much like Finck's own), it is in the specificity and justification of his rules that his work sets itself apart. As Horsley enunciates:

¹⁰⁵ Hulse, 1966 p. 8

¹⁰⁶ Applying the same nomenclature as that of Agricola.

¹⁰⁷ Horsley, 1951, p. 12

¹⁰⁸ Hulse, 1966, p. 10

¹⁰⁹ Bridgmann, 2001

1. *Passagi* should be used only at cadences, although some ornaments from one note to another (inserted within a definite melodic interval) may be used before arriving at the cadence. In his madrigal the cadence in each voice is embellished when the voices cadence at different times.
2. In one madrigal not more than four or five *passagi* should be used, for the ear may become satiated with too much sweetness. Again, Maffei must mean this rule to apply only to the individual voices. In his example the soprano and alto each make six, *passagi*, the tenor four, and the bass five.
3. *Passagi* should be made on the penultimate syllable of the word so that the end of the *passagio* will coincide with the end of the word. This however is not always the case in his examples.
4. *Passagi* sound best when made upon the vowel *o*. They are used predominantly on *o* in his examples but are also found on other vowels.
5. In an ensemble of four or five soloists the *passagi* must be made by each in turn. Otherwise, the harmony ceases to be clear.¹¹⁰

Of course, these rules probably have the same source as those present in the past documents - analysis of an already common practice - but the way these become further justified on aesthetic rather than technical values (take for example the fact that “clearness” becomes the justification for the last rule, where an appeal to the very objective reality of counterpoint would also suffice) can already point us to the slow process of reducing the variety inherent to this technique.

¹¹⁰ *ibid.*, pp. 14-15

Arte de tañer fantasía, 1562, Tomás de Santa María

An organist and friar working in several churches of Castilla¹¹¹, Tomás de Santa María published his organ treatise in Valladolid in the year 1562. Although the treatise is not dedicated to diminution, belonging to the tradition of texts devoted to the teaching of polyphonic improvisation (common for the instrument), the text devotes a full section to this particular practice - chapter XXIII “Do *glosar* as obras”.

Giving several indications from the right figures to apply the diminution to (full, half and quarter notes), to rules of counterpoint to be upheld, the treatise mentions two particularly interesting rules: when possible all voices should have diminutions and that when voices imitate each other, so should the diminutions¹¹².

This, provides us with interesting proof of the process of assimilation of diminution and composition which would result in the process of composers adding their own ornamentation to their pieces.

Il vero modo di diminuir, 1584, Girolamo Dalla Casa

Another one of the Venetian *piffari*, Girolamo Dalla Casa names himself the *Capo de Concerto delli Stromenti di fiato della Illustrissima Signoria di Venetia* in his *Il vero modo di diminuire con tutte le sorti de stromenti de fiato & corda & di voce humana*¹¹³. Belonging to the succeeding generation of wind instrumentalists to which Ganassi himself belonged, Dalla Casa would see his professional status considerably heightened by being hired as a fixed musician of

¹¹¹ Howell & Roig-Francoli, 2001

¹¹² Santa María, 1565, fol. 58

¹¹³ Dalla Casa, 1584, v.1 f. 1

the St. Marks Basilica in the year 1568¹¹⁴, and eventually named *Capo* (director) of a growing ensemble of wind instrumentalists, which would later inspire Giovanni Gabrieli in his canzonas and sonatas.

Divided in two books, his treatise greatly differentiates itself from that of Ganassi and other, for focusing almost solely on the practice of diminution and supplying a list of already ornamented pieces.

Except for a few beginning paragraphs on his own instrument - cornetto - and others, both books serve as a catalogue of pre-standardised ornaments and interpretations of different chansons and madrigals. Of interest are the *tremolo gropizzato* (fig. 11) and the *groppi battuti* (fig. 12),: these completely standardised ornaments would become more and more common throughout the century, especially in cadences. Another interesting fact is that this is the first treatise that ornaments intervals wider than the fifth.



Figure 11 - Girolamo dalla Casa, tremoli gropizzati from *Il Vero modo di diminuir*

¹¹⁴ Ongaro, 1994, p. 220



Figure 12 - Girolamo dalla Casa, gruppo battuto from *Il Vero modo di diminuir*

The first examples of ornamented pieces follow an order of mounting complexity by progressing from the slower figures (eighth notes) to the faster one, of which the final two - the *treplicate* (fig.

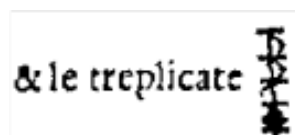


Figure 13 - Girolamo dalla Casa, quadruplicate from *Il Vero modo di diminuir*

13) and *quadruplicate* (fig. 14) appear for the very first time in a treatise - although Dalla Casa takes care to mention how common and necessary their usage was¹¹⁵. Even though the *treplicate* could follow a rule of proportion of 3:2, it is no more than a sequence of triplet sixteenth notes,

and the *quadruplicate* would be the equivalent of our thirty-second notes. This is of interest since it points us that, even in Venice, Ganassi's way of writing diminutions (with special care for the proportions and their possibilities) had become obsolete, and would be substituted by the more standardised and international type of notation witnessed in this and following treatises.

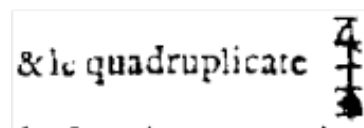


Figure 14 - Girolamo dalla Casa, treplicate from *Il Vero modo di diminuir*

The second volume serves as a supplement to the first, beginning with a series of fifteen fully ornamented madrigals and *chansons*, using the four different figures presented to us in the previous volume. Where the treatise is unique is in its discussion of diminution for the *viola bastarda*, and the practice of vocal diminution.

¹¹⁵ Dalla Casa, 1584, v. 1 f. 3

With the *viola bastarda* - which Dalla Casa gives second place of greatness after his own¹¹⁶ - the possibility of synthesizing two or more lines into the instrumental line - thanks to its wide tessiture – is explored, thus reducing the polyphonic structure and adding ornaments which follow rules of imitation and counterpoint. Dalla Casa gives us ten madrigals and *chansons*, organised in a rising complexity of notational figures, much like those of the first volume.

For the voice, Dalla Casa makes mention of the common and preferred practice of limiting the ornamentation to the top voice which would then be accompanied by the lute¹¹⁷, for which reason he gives more examples of that particular part, only reserving one final madrigal by Cipriano de Rore for which he supplies ornamentation in all the parts, following the rules given out by Maffei in his letter.

Dalla Casa provides a new norm for the style with which diminution treatises shape themselves, paying always some attention to the figures (rather than the proportions)¹¹⁸ and providing further examples of standardised ornaments which would become more common as the practice of diminution began to dwindle.

Ricercate, Passagi et Cadentie, 1585 and Motteti, madrigali, et canzoni francese, 1591, Giovanni Bassano

Another member of the *piffari*, though not a member of Dalla Casa's ensemble, Giovanni Bassano holds a very particular place in the relationship of instrumental and vocal music - not only was he an instrumentalist hired to play with vocal ensembles (rather than the organ as Dalla

¹¹⁶ *ibid.*, v. 2 f.2

¹¹⁷ "*cantar nel liuto*", *ibid.*, v.2 f. 2

¹¹⁸ Possibly we can connect this fact to the evolution of music printing technologies for which Venice had, since Ottaviano Petrucci, always been known.

Casa)¹¹⁹ he also held docency at St. Marks from the year of 1583 onwards, a position rarely given to an instrumental player¹²⁰.

Hired as soprano cornettist in 1576, at the very young age of 15 - reason for which he was also known as Zanetto - he is also believed to be the same “Zanetto” admitted five years before as a boy singer (*putto*) for St. Mark’s Capela which might be the reason for his position as teacher¹²¹.

A composer of vocal music as well, it is in his *Ricecate, Passagi et Cadentie, per potersi essercitar nel diminuir terminantemente con ogni sorte d’Instrumento: & anco diversi passagi* that he brings his own contribution to the practice of diminution. The least textual of the treatises presented so far, Bassano’s work begins with a very short paragraph - in which he introduces the figure of the *biscroma*¹²² the equivalent of Dalla Casa’s previous *quadruplicate*¹²³ - jumping straight into a sequence of *Ricercate*, pieces with a pedagogical purpose equal to those of Ganassi’s *Regola Rubertina* and *Lettione Seconda* and Ortiz’ *Tratado de Glosas*. However, the thoroughly composed character of these pieces with a rhetorical progression from basic hexachord and modal exploration to virtuosistic melismatic passages, is testament to the slow process of instrumental emancipation. Through the development of a specific repertoire initiated in these *Ricercate*, freed from the influence of an original vocal part, the way was paved for the major instrumental genre of the XVII century: the sonata¹²⁴.

After these instrumental soli, Bassano gives a sequence of intervals and cadences (which include many times the *gropi batutti* of the previous treatise although they are not specified as such) upon which he provides several alternatives, much in the same way of Dalla Casa’s treatise,

¹¹⁹ Ongaro 1994, pp. 225-226

¹²⁰ *ibid.* , p. 224

¹²¹ *ibid.* , p. 224 footnote 27

¹²² Bassano, 1585, f. 3

¹²³ Bassano’s nomenclature, unlike Dalla Casa’s would survive to this day in the Italian language.

¹²⁴ Horsley, 1961, pp. 3-19; Selfridge-Field, 1978, p.114

ending with two examples of an ornamented line from Cipriano de Rore's madrigal, *Signor mio Caro*.

In 1591 Bassano publishes a second work dedicated to diminution, this one containing 47 diminished works: *Moteti, madrigali et canzoni francese diminuite per sonar con ogni sorte di stromenti & anco para cantar*. Unfortunately due to the bombings of the second world war the original was lost forever, though we were lucky enough that a surviving copy from 1890 is still available to us thanks to Friedrich Chrysander¹²⁵.

Passagi per potersi essercitare nel diminuire, 1592, Riccardo Rognoni

Born and expelled from the region of Bergamo, Riccardo Rognoni would publish his treatise in Venice while employed as a prominent musician in the court of Milan where he earned himself the epithet of the Orpheus of his time, due to his extreme skill on the violin¹²⁶. His instrumental talents would make him one of the responsible for the birth of Milan's violin school, whose idiomatic traits can already be seen in the examples given in his *Passagi*, even though Rognoni does not specify any instrument in particular¹²⁷.

Divided into two volumes, already in the first volume the author brings a significant innovation to the genre of ornamentation treatise: instead of providing the reader with *Ricercate* with which to train his hand, as Ganassi, Ortiz and Bassano, Rognoni has a series of several technical exercises in the form of scales, passages on different intervals and jumps - the innovation is that these do not serve so much the function of examples of ornamentation but technically devoted exercises we could find in tutors of the centuries to come.

¹²⁵ Bass, 2008, p. 13

¹²⁶ Dickey, 2007, p. 6

¹²⁷ *ibid.*, p. 15

Another interesting detail is to be found in the small explanatory text in which he states that one should avoid performing the diminutions too fast since what mattered was that they continue being “distinct and clear”¹²⁸ - a vocabulary very close to that of Maffei’s letter. It could be that this was perhaps one of the aspects that set the Milan school apart from Venetian instrumental practice - both Dalla Casa and Bassano, are careful to mention the “need for speed” observable in their city’s performers - but it also does mean that the diminutions present in Rognoni’s treatise are of a much more simple and standardized nature.

After the initial section of various cadential figures, the second volume’s examples of intervals are written somewhat differently by putting not one interval but an ascending or descending line composed of those intervals, which are ornamented together. This puts this section in close proximity with the technical exercises of the first volume, following a scale logic rather than an interval logic, which could also be read as a departure from strict counterpoint thinking.

The volume ends with a small group of madrigals, *chansons* and motets, ornamented by using the previous examples of diminution.

Il Transilvano, 1593, Girolamo Diruta

Girolamo Diruta - actually Girolamo Mancini - wrote and published his work, *Il Transilvano*, over the course of almost twenty years, the first part being published in 1593, while the second only in 1610. Dedicated to a music loving prince of Transylvania, Sigismondo Báttori¹²⁹ and to the Duchess Leonor Orsini Sforza, the treatise is written as a dialogue between Diruta himself and a mystery interlocutor named *Il Transilvano*, believed to be Istvan Jósika the one responsible

¹²⁸ Rognoni, 1592, f. 4

¹²⁹ Cervelli, 1997, p. 1

for the contact between Sigismondo and Diruta¹³⁰.

A theorist, composer and organist, Diruta dedicates his treatise to the “true way of playing the organ”¹³¹, and his work goes through the various theoretical and practical fundaments necessary for this art (putting it closer to the older style of the more comprehensive treatises of Finck and Santa María), paying particular attention to diminution in the beginning of the second part, with a series of examples and advice on how to perform the diminutions, as well as a series of *toccate* and *ricercari* composed by himself and other composers of the time.

The special interest of this treatise lies in the fact that it is the first one concerned with the possibility of writing diminution in an organ tablature, with four voices in two pentagrams (fig. 15), as well as how his discussion of counterpoint improvisation anticipates the later writings of Johann Joseph Fux.



Figure 15 - Girolamo Diruta, organ tablature from *Il transilvano*

Breve et facile maniera d’essercitarsi a far passaggi, 1593, Giovanni Luca Conforti

A singer first in direct service of the Pope, than of the roman court of the Duque of Sora, Conforti was highly esteemed for the way he ornamented his vocal line, especially in chamber

¹³⁰ Palisca, 2001

¹³¹ Diruta, 1593, f. 1

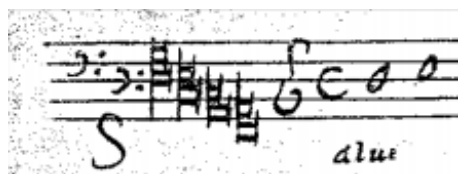


Figure 16 - Conforti, seven clef example from *Breve et facile maniera*

singing¹³².

The title of his brief treatise quite specific: “*Breve et facile*

maniera d'esercitarsi ad ogni scolaro, non solamente a far passaggi sopra tutte le note che si desidera, et in diversi

modi nel loro valore con le cadenze, ma ancora per potere da se senza maestri scrivere ogni opera et aria passeggiata che vorranno, et come si notano. Et questo ancora serve per quei che sonano di Viola, o d'altri istromenti da fiato per sciogliere la mano et la lingua et per diventar possess.re delli sogg.ti et per altre

inuenzioni da se fatte”¹³³.

This wish for brevity already present in the title, brings three peculiar aspects of the treatise. One is the choice Conforti makes when in the opening pentagram he provides us with seven different clefs (fig. 16) so he can dispense with repeating intervals - one interval is equivalent to all other intervals. The second is the attempt to fit into one pentagram two alternative diminutions (fig. 17), for

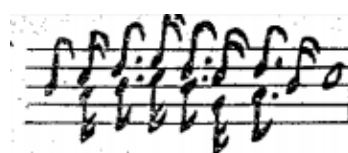


Figure 17 - Conforti, two alternative diminutions from *Breve et facile maniera*

the student to choose according to his taste and vocal range. Finally he adds a small cross (+) before particular examples (fig. 18) which he holds will always be consonant with any type of counterpoint or rhythm.



Figure 18 - Conforti, "fail proof" ornamentation from *Breve et facile maniera*

Brief as it manages to be, the treatise is another proof of the departure from an older more theoretical tradition and its care for counterpoint and solmization which seem to be neglected as

¹³² Rostirolla, 1986, p. 3

¹³³ “Brief and easy method for all students to practice, not only in making passages on all desired notes with a gracious disposition and in various modes and values with cadences by also to be able to, without a teacher, write any embellished work and aria and how to notate it. And this also serves for those who play the viol or another wind instrument to free the hand and the tongue, to become master of the subject and prepare other inventions by himself.” Conforti, 1593, f. 1

shown by Conforti's choice of publishing design.

Regole, Passagi di musica, 1594, Giovanni Battista Bovicelli

The author with the least documentation surviving on his life, Bovicelli was a franciscan friar, and singer in the courts of Rome, Mantua and Milan. His only work, the *Regole, Passagi di musica* is dedicated to the same duke of Sora that hired Conforti as singer.

A considerably more detailed account of the rules of ornamentation and its vocal performance are to be found in the text as Bovicelli's purpose is not only to give a catalogue of ornamentation but a more complete tutor, mixing the variety and exhaustive list of examples of treatises such as those of Rognoni with textual prescriptive guidelines present in Solofra's letter.

Furthermore, an interesting curiosity in his introductory text is how he attempts to detach himself from the position of artisan or merchant, a

sign of a certain rise in the social status of the musician through the liberalization of his art - a project that this treatise clearly belongs to as can be seen by his beginning remark that art is solely geared at the

imitation of nature, as with all painting treatises of the time¹³⁴.

After justifying the unique character of his treatise, Bovicelli goes on into an enumeration of the basic rules of diminution we have encountered so far. Where the text innovates or detaches itself from the previous treatises is by how the affects and emotion of the text should correspond to



Figure 19 - Bovicelli, *rhythmical inequality* from *Regole, Passagi di Musica*

¹³⁴ Bovicelli, 1594, f. 1

specific standardized ornaments such as the *accenti*, *tremoli* and *tirati*¹³⁵. Also there is a clear focus on rhythmical inequality which Bovicelli advises the overall application of dotted notes in passages with equal ones, which is then exemplified in musical writing (fig. 19)¹³⁶.

This same focus on rhythmical inequality is evidenced in the end of ornaments, especially cadences, where a kind of *rallentando* is written out in Bovicelli's examples. Punctuation and rhythmical inequality might be one of Bovicelli's ways of representing a certain kind of agogic flexibility of his own practice (a focus neglected by his direct contemporaries), but it is quite different from the old fashioned system of proportions employed by Ganassi in his *Fontegara*.

There is also some specific advice for singers on how to perform their ornamentation with a healthy vocal sound and how to avoid such things as breathing too often, clenching the teeth and making the voice nasal - a nice peek into the technical backstage of musicians performing such music. We could be motivated to ask, though, if these technical problems were constant throughout the history of the practice or a sign of a changing, less intuitive, manner of learning such styles.

The final part of the treatise retakes the more common structure of diminution treatises, giving out a list of intervals and scales with their possible ornamentation and also several cadences, finishing with ten fully ornamented lines from existing compositions of the usual composers such as De Rore and Palestrina, with the original line accompanying the diminutions in a stave above (fig. 20).

¹³⁵ *ibid.* f. 8

¹³⁶ *ibid.*, f. 11



Figure 20 - Bovicelli, Ornamented line with original line above from *Regole, Passagi di musica*

Prattica di Musica, 1596, Lodovico Zacconi

Born in Pesaro in 1555, Zacconi was a famous singer and organist, employed in the Chapel of the Austrian Archduke Carlo II and Guglielmo V, Duke of Bavaria where he worked under direct supervision of Orlando de Lasso.

His book, as the title suggests - *Prattica di Musica. Utile et necessaria si al Compositore per Comporre i Canti suoi regolarmente, si anco al Cantore per assicurarsi in tutte le cose cantabili.*¹³⁷ - is not a dedicated treatise to the practice of diminution, belonging more to the singing tutor genre of Finck and Coclico. However in the same title page we read that “lastly it is taught, the way of ornamenting a part with gracious and modern accents”¹³⁸.

This focus on ornamentation on such a vast treatise’s title page should note the extreme importance such a practice (that of writing ornamentation) even within earlier and more established topics of musical theory - prolatio, proportion, tones and solmization - also dealt within the treatise.

The two chapters of interest for ornamentation are the X and LXVI of the first book. The X

¹³⁷ “Practice of Music. Util and necessary be it for the Composer to orderly compose his chants, be it also for the singer, to ensure himself off all things singables.” Zacconi, 1596, f. 1

¹³⁸ “Ultimamente s’insegna il modo di fiorir una parte con vaghi e moderni accenti” *ibid.*

chapter “From where the ancients extracted their musical effects”, is particularly interesting for it creates a fiction of the performance practice of previous generations, describing it as devoid of any ornamentation, taking their effects from the pure effects of harmony¹³⁹. My concern with this affirmation is not whether this “unornamented” past is real or not but how such an idea comes about after half a century of ornament and performance literalization - it is as if, now that writing on ornamentation is an established tradition, the period which did not have this tradition, did not perform the ornaments written in treatises.

The later chapter describes the usual list of rules, and a set of ornamented melodic cells (rather than intervals) as well as an ornamented motet, written in the same manner as Bovicelli, with the original part written in a stave above.

A final and interesting remark is how, according to Singer, Zacconi is said to have written his treatise as a response to Zarlino’s criticism of his incomplete education¹⁴⁰, a clear sign that certain hierarchical differences between speculative and practical music were still existing and quite operative, regardless of a now established tradition of practical musical treatises.

Il Dolcimelo, ca. 1600, Aurelio Virgiliano

The most mysterious and incomplete of the treatises of this list is a manuscript to be found in the *Civico Museo Bibliografico Musicale* of Bologna, by a yet to be determined author. Aurelio Virgiliano is believed to be an academic pseudonym which, as Castellani notes, might belong to one of two musicians: Aurelio Averoldi, working in Milan, or Aurelio Bonelli, employed in the

¹³⁹ *ibid.*, f. 29

¹⁴⁰ Singer, 2001

musical academy of the *Floridi*, founded in Bologna by Adriano Banchieri¹⁴¹.

The book is divided into three sections, with intricate and beautiful drawings - perhaps the author was himself a *desideroso della pittura*, as Ganassi himself.

The first of these volumes starts with a list of ten rules of ornamentation and its performance. An interesting remark is that the second rule, discussing articulation, applies the nomenclature of *buone* and *cattive* to separate the two types of articulation (such as an up and down bow, or the *te* and *re* of wind instruments). Although the types of articulation are common to the treatises summarized in this section, the nomenclature is quite unusual for its time, corresponding perhaps to the future more common usage of *nobile* and *vile* of the XVIII century.

Also in the first book we are given a series of intervals with the different ornamentation separated according to the type of rhythmical figures: *crome*, *semicrome*, *perfidie*, *triplicate*, *quadruplicate* and *sestuple*.

Unfortunately the three last types of figures are left unfinished which leaves the question of whether this nomenclature would be referring to the figures given out by Dalla Casa, or if there is a reference to Ganassi's own employment of proportions. This second hypothesis, also put forward by Salvatore¹⁴², is corroborated by the *Ricercate* given out in the second book, particularly the change of proportion in one of them to 6:4 which Virgiliano names "Sestuple".

The third section puts the work even closer to those of Ganassi with a series of fingering tables and tuning modes for stringed and wind instruments. Unfortunately the great majority of pages is left incomplete with only the title head and some drawings remaining.

Libro de Passaggi, 1609 and 1624, Giovanni Battista Spadi da Faenza

¹⁴¹ Castellani, 1979, p. 1

¹⁴² Salvatore, 2003, p. 177

The most simple of all the treatises is one of the final ones. Little is known of the biography of Giovanni Battista Spadi da Faenze, except perhaps a family member - the composer Vincenzo Spadi da Faenza¹⁴³ - and the apprenticeship with the chapelmaster Giulio Belli - working also in Venice¹⁴⁴ - which Giovanni Battista himself mentions in his frontispiece¹⁴⁵.

No text whatsoever accompanies this treatise, only a sequence of different ornamentations for ascending intervals no wider than a third (much like the title, *Libro di Passagi Ascendenti et Descendenti di Grado per Grado et ancor di terza*, suggests) ending with two De Rore madrigals - interestingly the first of these follows Bovicelli's and Zacconi's example with an additional stave for the original stave, while the second *Ancor che co'l partire* only has the ornamented part, probably due to its fame and many appearances in earlier treatises.

Although the ornamentations provided are the simplest of all, mostly composed of step-wise motion and never using more than sixteenth notes as rhythmical figures, its second publishing during the author's own lifetime, attests to its positive reception and high demand, showing that the simplification and standardization of the practice of diminution was probably more connected to its widespread acceptance rather than its fall into forgetfulness

Selva di varii passagi, 1620, Francesco Rognoni

Son of the previously mentioned Riccardo Rognoni, Francesco Rognoni was himself a distinguished musician and composer, naming himself the "chief musician of instrument in the Regal Ducal Court and Chapelmaster in Santo Ambrósio Maggior of Milan", in the frontispiece of his *Selva di Varii passagi secondo l'uso moderno, per cantare et sonare con ogni sorte de*

¹⁴³ Fenlon, 2001

¹⁴⁴ Wessel & Kreyszig, 2001

¹⁴⁵ Spadi, 1624, f. 1

Stromenti.

The level of detail and the clear break it represents with the paradigm established by Ganassi, makes this work a fitting end to this list of treatises.

The *Selva* is divided into two books, the first meant for singers. It features a table of rules of the performance of standardized models of the *uso moderno* which we have seen develop throughout the line of diminution treatises: the *accento*, *gruppo*, *tremolo*, *trillo* and *esclamattio*. Rognoni takes this practice even further separating distinct types of diminution such as the table of *passagi* - diminution composed of step wise motion - and the jumps described in another section of the book.

The second book, dedicated to instruments, also features a shift in the method used for learning this ornamentation through what Rognoni calls his “infallible” rule of using the previous note to begin the ornament of an interval, which is the exact opposite of Ganassi’s method, emulated by all treatises until then. Furthermore, it can be seen that the style of ornamentation of the first book is considerably different from that of the second, a sign of an idiomatic specificity for which Rognoni’s father was already known for, but which is completely opposed to Ganassi’s first and most vital principle of vocal mimesis.

Furthermore the question of prescriptiveness is fulcral to the treatise - replicating the concerns of established theorists such as Zarlino - leading to a rarified and disciplined style of performance. The treatise is also a testament to the sophisticated level of music printing technology at his disposal, a technology that would later serve composers, such as Caccini, to begin supplementing their compositions with personally chosen ornaments.

The end of diminution?

This penchant for standardization and fragmenting - as well as the clear separation of instrumental and vocal performance - I have traced throughout these treatises is, I believe, the cause for the end of diminution as an experimental self-reflective performance practice.

The continuous division of an organic model of performance into specific and differentiated ornamental elements, and the rising prescriptiveness of their performance (which would derive into the extreme example of French style of the early XVIII century) is one of the reasons why the *Selva* is here considered the last of the diminution treatises, already fully inserted into the practice of the new modern style of ornamentation - as the title of Rognoni's treatise suggests.

This is not to say that ornamentation and diminution stopped being practiced or were radically altered from one moment to the other. Transitions and mutations were and still are a constant of western musical practice, but the brief window of time - about 85 years - in which the relationship of writing and playing was still a flexible and fertile ground for artistic innovation, reaches its eclipse and within it a new phase of prescriptive treatises which propose a literal reading of its principles begins.

One could say that the research potential of this practice - both inaugurated and radicalized by the *Fontegara* - is left in arrest for an unspecified period of time, which could also be connected with the new social standing of the musician, far less emancipated than in Ganassi's time, more and more under the power of a rising absolutism and the concept of nation, signs of a new monarchic model and political order taking hold of the European map

Conclusion - Towards a research-base practice

Texting the act: from practice to research

When confronted with the various dimensions which comprise our knowledge and its transmission, Michael Polanyi (1891 – 1976) attempted to create a spectrum within which these different aspects could be organized according to the degree of explicitness they exhibited. Not only did Polanyi show the distinction between knowledge and its perception – what we know and what we can show that we know are different things – he also concluded that the amount of knowledge unaccounted for greatly outweighs that which is validated by the methodological tools of the scientific disciplines. Furthermore, this mute knowledge – its tacit dimension – had as much to do with our capacity to perform actions and reach conclusions as its more visible – explicit – counterpart.

In simple terms Polanyi himself wrote: “we can know more than we can tell”¹⁴⁶. This act of telling – our capacity to make what we know known to others – marks the limit which separates the tacit dimension of our knowledge from its explicit dimension. This division is vital if we wish to think of the arts as areas of “knowledge production” as they depend, both at the practical and pedagogical levels, mostly on a tacit means of knowledge transmission. Polanyi himself wrote:

“Art which cannot be specified in detail cannot be transferred by prescription, since no prescription for it exists. It can be passed only by example from master to apprentice. This restricts the range of diffusion to that of personal contacts.”¹⁴⁷

But is not Ganassi’s treatise an attempt at surpassing this restriction?

¹⁴⁶ Polanyi, 1967, p. 252

¹⁴⁷ Ibid., p. 53

This tacit/explicit divide — and the possibility of crossing from one dimension to another — is fundamental to an understanding of the terms upon which an artistic practice can amount to research. It is also, I claim, the fundamental reason for calling Ganassi one of the first practice-based researchers.

In the Fontegara, Ganassi attempts to provide a textual medium for that which, until then, had been a knowledge tacitly shared and transmitted among the community of musicians which formed the ensemble of the Piffari. Furthermore his motivations are intimately connected with the validation of his practice's status, by finding for it a place among the literalised liberal arts. Also, much like in other fields of research, his treatise influenced the production of works which would reflect the same concerns on the performance practice of their time and its proper description; through the written word he creates and expands a debate to which new voices join with their own contribution. Finally, a shift at the level of this knowledge's transmission resulted in an equally relevant change at the level of its application. Treatises such as *La Fontegara* played an important role in the aesthetic changes which would lead to the baroque period of western music history.

This thesis demonstrates that Ganassi's innovations, and his status as an artistic researcher, do not stem from a change at the level of his practice but at how, in relating differently to his practice, he expanded instrumental playing as a valid – academic – field of knowledge production. Also, I have tried to show how the concerns leading to the writing of all of Ganassi's treatises were of a level which we would not immediately connect to the musical world: social status and political allegiance.

To think of Ganassi as an artistic researcher gives us present-day musicians the possibility of seeing research not as the production of a knowledge with which we have not been previously

acquainted, but as the process through which we can relate to our practice as a mode of knowledge production in itself: to play an instrument, to perform a piece, to make music before an audience has always entailed a knowledge of its own. Practice-based research seeks to expand the validity and the fields in which this knowledge comes into play, much the same way that Ganassi demonstrated that one could write about a theme such as performance and improvisation – Ganassi texts the act of music.

What does this mean to our status as musicians?

In what way should our relationship to our practice change? Do we simply write about what we do?

This is especially relevant if we consider the specific case of the musician involved in the HIP movement. As mentioned in the introduction, HIP's exceptionality stems from a pre-existent shift in its relationship to the academic discipline of musicology.

The goal of this thesis is not only to provide a study of Ganassi which would allow for a parallel to be drawn between his process and my own. Rather, I wanted to find how a rereading of the musician and his work – based on the social and artistic context to which they reacted and responded – could supply me with a novel way to relate to the documents of the past and their influence on my playing.

This conclusion wishes not only to confirm my hypothesis – that we can think of Ganassi as a precursor of practice-based research – but also to point to a new step in my own development as a musician. What I wish to provide is the means to a “research-based practice” as well as proof of its efficacy.

Acting the text: from research to practice

If Ganassi attempts and manages a translation of the tacit practice of a musician into the explicit text of a theorist, can we now perform a counter gesture?

We must first be careful to notice that for Polanyi, the tacit and explicit do not relate to different types of knowledge but as different aspects of the same knowledge. Ganassi does not create a new way of playing the recorder but rather an enhanced way of showing its playing; knowledge in itself does not change, only its mode of transmission.

But, confronted with this texted act, can I re-enact it?

Polanyi is clear on this matter:

“For just as, owing to the ultimately tacit nature of all our knowledge, we remain ever unable to say all that we know, so also, in view of the tacit character of meaning, we can never quite know what is implied in what we say.”¹⁴⁸

The passage from the tacit to the explicit always entails a loss of control over the possible interpretation of the knowledge we make explicit – we can only control what we write, not what others will read from it. Furthermore, the process of reading entails an adding of something initially alien to the explicit document we are reading – we always add something of our own when we read or hear something.

This problematic has already been explored in the debates on Early Music and the revivalist movement during the early eighties, leading to the acceptance that any prescriptive approach to the reading of the past is always doomed by the invisible influence of the present.

But does this mean that we simply give up and remain with a superficial reading of the past, content with the initial inspiration it provides us?

¹⁴⁸ Ibid., p. 95

Regardless of the failure of its initial pretension to historical authenticity, the shift performed in HIP is vital in the way we relate to our musical heritage. With HIP we can depart from the prescriptive ideals of authenticity and correctness (already present, as we have seen, in the sixteenth century ornamentation treatises), focusing on the more ethical concerns of our honesty and fidelity to the craft of music. The past has always played a role in every aspect of the present. What can change is our relationship toward it.

The question is not whether we should or should not read the texts of the past, but rather how this reading is to be done. How should we read the past?

My answer is: as much and as far as possible.

This thesis is only an initial step of what could be called an infinite task of reading. In my own practice, this expanded mode of reading has effected considerable changes upon my own playing and practicing. Understanding the importance of the human voice in Ganassi's text has led me to focus on the vocal pedagogy of the Renaissance period, as well as studying the specificity of the Venetian dialect and its phonetic qualities. This in turn has helped me understand some of the sections of the Fontegara treatise dedicated to articulation as translations of the Italian Ganassi heard and spoke on the streets of Venice.

This process is continuously expanding and has led to the organization of workshops in which, together with other musicians, I try to introduce singing as a model for our own playing. In the ensembles I work with I have tried to involve fellow players in the learning of solmisation as a means of understanding the polyphonic dimensions of each individual line. This reveals the hierarchy of intervals behind Ganassi's choice of ornamentation, a modal relationship which he tried to outline in the extensive tables of diminutions of La Fontegara.

This process does not validate my playing, but it certainly enriches it.

This cycle of reading and playing is unending, because I do not aim at a specific performance which manages to capture the totality of Ganassi's style and knowledge. La Fontegara is not an end point of a specific performance practice which I wish to emulate, but the starting point of an artistic process which, in itself, amounts to a research - its explicit form is but a doorway to an unending expansion of tacit musical knowledge which both humbles and excites my development as a musician.

This is perhaps what artistic research might mean for HIP: a radicalisation of the practice (and art) of musical reading.

Bibliography

1. Primary sources

AARON, Pietro. *Il Toscanello in Musica*. Veneza, 1529. Bolonha: Arnaldo Forni Editore, 1999.

AGRICOLA, Martin. *Musica Instrumentalis Deudsch*. Wittenberg, 1529 e 1545. Tradução de William E. Hettrick. Cambridge: Cambridge University Press, 1994.

ARISTÓTELES. *Ars Poética*. Edición Trilingüe por Valentín García Yebra. Madrid: Editorial Gredos, 1974.

BASSANO, Giovanni. *Ricercate, Passaggi et Cadentie*. Veneza, 1585. Münster: Mieroprint, 1996.

BOVICELLI, Giovanni Battista. *Regole, Passaggi di Musica. Madrigali, e moteti passeggiati*. Veneza, 1594. In: SALVATORE, Daniele. *L'arte opportuna al sonar di flauto*. Savignano sul Rubicone: Gruppo Editoriale Eridania, 2003, p. 142-149.

CACCINI, Giulio. *Le nuove mvsiche*. Florença, 1601. Florença: S. P. E. S., 1983.

CASTIGLIONE, Baldassare, *The Courtesan*, 1528, trans. George Bull, Penguin Edititions,

London, 2004

.

CERRETO, Scipione. *Della Prattica musica vocale et strumentale*. Nápoles, 1601.

Bolonha: Arnaldo Forni Editore, 2003.

CONFORTI, Giovanni Luca. *Breve et facile maniera d'essercitarsi a far passaggi*. Roma, 1593. Roma: Società Italiana del Flauto Dolce, 1986.

DALLA CASA, Girolamo. *Il vero modo di diminuir*. Veneza, 1584. Bolonha: Arnaldo Forni Editore, 2003.

DIRUTA, Girolamo. *Il Transilvano*. Veneza, 1593 and 1609. Bolonha: Arnaldo Forni, 1997.

DOLCE, Lodovico. *Dialogo della Pittura Intitolato L' Aretino*. Veneza, 1557. In: *Trattati d'arte del Cinquecento*. Paola Barocchi (Ed). Bari: Laterza, 1960.

GANASSI, Silvestro. *Oeuvres complètes. La Fontegara (1535)*. Christine Vossart (Ed). Trans. Jean-Philippe Navarre. Sprimont: Mardaga, 2002.

GANASSI, Silvestro. *Opera Intitulata Fontegara. Veneza, 1535. A treatise on the Art of Playing the Recorder and of Free Ornamentation*. Hildemarie Peter (Ed). Trans. Dorothy Swainson. Berlin: Robert Lineau, 1959.

GANASSI, Silvestro. *Opera Intitulata Fontegara. Veneza*, 1535. Bolonha: Arnaldo Forni Editore, 2002.

GANASSI, Silvestro. *Lettione Seconda. Veneza*, 1543. Bolonha: Arnaldo Forni Editore, 1978.

GANASSI, Silvestro. *Regola Rubertina. Veneza*, 1542. Bolonha: Arnaldo Forni Editore, 1984.

ORTIZ, Diego. *Tratado de Glosas sobre clausulas y otros generos de puntos en la musica de violones*. Roma, 1553. Übertragen von Max Schneider. Kassel & New York: Bärenreiter, 1961.

PINO, Paolo. *Dialogo di pittura di Messer Paolo Pino nuovamente dato in luce*. In: Trattati d'arte del Cinquecento, a cura di Paola Barocchi, I, Bari 1960, pág. 93-139, 396-432.

ROGNONI, Francesco. *Selva di varii passaggi*. Milan, 1620. Bolonha: Arnaldo Forni Editore, 2001.

ROGNONI, Riccardo. *Passaggi per potersi essercitare nel diminuir*. Veneza, 1592. Bolonha: Arnaldo Forni, 2007.

SANTA MARIA, Tomás de. *Libro Llamado Arte de Tañer Fantasia*. Valladolid, 1565.

Geneve: Minkoff, 1973.

SPADI DA FAENZA, Giovanni Battista. *Libro de Passaggi ascendenti et descendenti*.

Venice, 1609 e 1624. Bolonha: Arnaldo Forni, 2007.

VIRDUNG, Sebastian. *Musica getutscht. Basel, 1511. A treatise on musical instruments*.

Ed. Beth Bullard. New York: Cambridge University Press, 1993.

VIRGILIANO, Aurelio. *Il Dolcimelo*. Bologne, ca. 1600 (manuscript). Florença: S.P.E.S.,

1979.

ZACCONI, Lodovico. *Prattica di Musica*. Venice, 1596. In: SALVATORE, Daniele.

L'arte opportuna al sonar di flauto. Savignano sul Rubicone: Gruppo Editoriale

Eridania, 2003, p. 159-171.

ZARLINO, Gioseffo. *Le Istitutioni Harmoniche*. Venice, 1558. New York: Broude

Brothers, 1965.

ZORZI, Francesco. "Memoriale. Veneza, 1º. de abril de 1535". In: FOSCARI, Antonio.

TAFURI, Manfredo. *L'Armonia e i conflitti. La chiesa di San Francesco della Vigna*

nella Venezia del '500. Torino: Giulio Einaudi Editore, 1983, p. 208-212

2. Secondary sources

AGEE, Richard: "Ruberto Strozzi and the Early Madrigal". In: *Journal of the American Musicological Society*, Brunswick, v. 36, n. 1, 1983.

ARNOLD, Denis; MARCIALIS, Andrea. "Dalla Casa, Girolamo". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

ARNOLD, Denis; FERRACCIOLI, Fabio. "Giovanni [Zanetto, Zuane] Bassano [Bassani]". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

BARBLAN, Guglielmo. "Prefazione". In: ROGNONI, Francesco. *Selva di varii passaggi*. Milão, 1620. Bolonha: Arnaldo Forni Editore, 2001.

BASS, John Burnell. *Rhetoric and Musical Ornamentography: tradition in sixteenth-century improvisation*. Post-doctoral thesis. Memphis University, Memphis, 2008.

BERGER, Anna Maria Busse Berger. *Mensuration and Proportion Signs: Origins and Evolution*. Clarendon Press Oxford, 1993

BERNSTEIN, Jane A. *Print Culture and Music in Sixteenth Century Venice*. New York: Oxford University Press, 2001.

BLACKBURN, Bonnie J. "Music and festivities of the court of Leo X : a venetian view". In: *Early Music History*, v. 11, Cambridge University Press, 1992, p. 1-37.

BORGDORFF, Henk. *The Conflic of the Faculties: Perspective on Artistic Research and Academia*, Leiden University Press, 2012

BORGDORFF, Henk & SCHUIJER, Michiel. Research in the Conservatory, *Dissonanz: Swiss Music Journal for Research and Creation*, n. 110. 2010

BRIDGMAN, Nanie. "Maffei, Giovanni Camillo". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

BROCK, Maurice. "Ut pictura musica. Comment l'image fait-elle voir la musique?". In: *Imago Musicae*, Lucca, v. XVI-XVII, 1999-2000.

BROWN, Adrian. "Renaissance Recorders and their Makers" In: *American Recorder*, St. Louis, v. 47, n. 1, 2006.

BROWN, Howard M. *Embellishing Sixteenth-Century Music*. London: Oxford University Press, 1976.

BURCKHARDT, Jacob. *The civilization of the Renaissance in Italy*, Dover Press, New York,

2010

BUTT, John. *Playing with History: The Historical Approach to Musical Performance*. Cambridge University Press, 2002

CASTELLANI, Marcelo. “Introduzione”. In: VIRGILIANO, Aurelio. *Il Dolcimelo*. Firenze: S.P.E.S., 1979.

CERVELLI, Luisa. “Premessa”. In: DIRUTA, Girolamo. *Il Transilvano*. Venezia, 1593 e 1609. Bologna: Arnaldo Forni, 1997

DICKEY, Bruce. “Prefazione”. In: ROGNONI, Riccardo. *Passaggi per potersi essercitare nel diminuir*. Venezia, 1592. Bologna: Arnaldo Forni, 2007.

DUNNING, Albert. “Coclico, Adrianus Petit”. In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

FENLON, Iain. *The Ceremonial City. History, Memory and Myth in Renaissance Venice*. New Haven e London: Yale University Press, 2007.

FENLON, Iain. *Music and Culture in Late Renaissance Italy*. Oxford & New York: Oxford University Press, 2002.

FENLON, Iain. "Spada, Vincenzo". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

FERAND, Ernest T. "Historical Introduction". In: FELLERER, Karl G (Ed). *Anthology of Music. Improvisation in nine centuries of western music*. Cologne: Arno Volk Verlag, 1961.

FINLAY, Robert. "The Immortal Republic: The Myth of Venice during the Italian Wars (1494-1530)." In: *The Sixteenth Century Journal*, v. 30, n. 4, 1999.

FINLAY, Robert. "Politics and History in the Diary of Marino Sanuto." In: *Renaissance Quarterly*, v. 33, n. 4, 1980.

FINLAY, Robert. "Al Servizio del Sultano: Venezia, i Turchi e il mondo cristiano, 1523- 1538." In: *Renovatio Urbis. Venezia nell'età di Andrea Gritti (1523-1538)*. Manfredo Tafuri (Ed). Roma: Oficina Einaudi, 1984.

FOSCARI, Antonio; TAFURI, Manfredo. *L'Armonia e i conflitti. La chiesa di San Francesco della Vigna nella Venezia del 500*. Torino: Giulio Einaudi Editore, 1983.

FOUCAULT, Michel. *The Order of Things: An Archeology of the Human Sciences*, trans. A. M. Sheridan Smith, Vintage Books, New York, 1994

FRINGS, Gabriele. "The 'Alegory of Musical Inspiration' by Niccolo Frangipane: New

Evidence in Musical Iconography in Sixteenth-Century Northern Italian Painting.” In: *Artibus et Historiae*, Cracovia, v. 14, n. 28, 1993.

GARGANO, Maria Cristina. “Sylvestro Ganassi dal Fontego”. In: *Bollettino dell’Istituto Musicale Sylvestro Ganassi*, Catania, n.1, 1987. <<http://web.tiscali.it/ganassi/sylvestr.htm>>, Accessed, December 2013.

GETREAU, Florence. “Un portrait énigmatique de l’ancienne collection Henry Prunières”. In: *Musique-Images-Instruments*, Paris, v.5, CNRS Éditions, 2003, p. 149-156.

GETREAU, Florence. “L’image du faiseur d’instruments de musique à la Renaissance”. In: *Imago Musicae*, Lucca, v. XVI-XVII, 1999-2000.

GOFFMAN, Daniel. *The Ottoman Empire and Early Modern Europe*, Cambridge University Press, 2002

GRANT, Kenneth. Tacit Knowledge revisited – We can still learn from Michael Polanyi. *The Electronic Journal of Knowledge Management*. Vol. 5 n. 2, pp. 173 -180, University of Toronto Press, Canada. 2007

GROOS, Ulrike. *Ars Musica in Venedig im 16. Jahrhundert*. Hildesheim: OLMS, 1996.

HAAR, James. (Ed.) *European Music 1520-1640*. Cambridge: The Boydell Press, 2006.

HAYNES, Bruce. *The End of Early Music: A Period Performer's History of Music for the Twenty-first Century*. Oxford University Press. 2007

HEYGHEN, Peter van. "The Recorder Consort in the Sixteenth Century: Dealing with the embarrassment of riches". In: LASOCKI, David. (Ed.) *Musicque de Joye*. Proceedings of the International Symposium on the Renaissance Flute and Recorder Consort, Utrecht 2003. Utrecht: STIMU, 2005.

HORSLEY, Imogene. "Improvised Embellishment in the Performance of Renaissance Polyphonic Music". In: *Journal of the American Musicological Society*, Brunswick, v. 4, n. 1, 1951.

HORSLEY, Imogene "The Diminutions in Composition and Theory of Composition" In: *Acta Musicologica*, v. 35, fasc. 2/3, 1963.

HORSLEY, Imogene. "The Renaissance Attitude toward Interpretation in Instrumental Performance." In: *Renaissance News*, v. 10, n. 2, 1957.

HORSLEY, Imogene. "The Solo Ricercar in Diminutions Manuals: New Light on Early Wind and String Techniques." In: *Acta Musicologica*, v. 33, fasc. 1, 1961.

HORSLEY, Imogene. "Bovicelli, Giovanni Battista". In: *The New Grove Dictionary of Music*

and Musicians. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

HOWARD, Deborah. MORETTI, Laura. *Sound & Space in Renaissance Venice*. New Haven & Londres: Yale University Press, 2009.

HOWARD, Deborah. *The Architectural History of Venice*. New Haven & Londres: Yale University Press, 2002.

HOWELL, Almonte; ROIG-FRANCOLI, Miguel A. “Santa María, Tomás de [Sancta Maria, Thomas de]”. In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

HULSE, Mark Vernon. *Sixteenth Century Embellishment Styles: with emphasis on vocal-ensemble application*. Tese (Doutorado em Artes Musicais). Departamento de Musica. Universidade de Stanford. Stanford, 1966.

KRISTELLER, Paul Oskar. “The modern system of the arts”. In: _____. *Renaissance Thought and the Arts*. New Jersey: Princeton University Press, 1990.

KUHN, Max. *Die Verzierungs-Kunst in der Gesangs-Musik des 16-17 Jahrhunderts*, Leipzig, 1902

LABALME, Patricia H; WITHE, Laura S. *Venice Città Excelentissima. Selections from the*

Renaissance Diaries of Marin Sanudo. Baltimore: The John Hopkins University Press, 2008.

LASOCKI, David. "Renaissance Recorder Players". In: *American Recorder*, St. Louis, v. 45, n. 2, 2004, p. 8-23.

LASOCKI, David. "Recorder in Print: 2003." In: *American Recorder*, St. Louis, v. 46, n.3, 2005, p. 18.

LASOCKI, David. (Ed.) *Musicque de Joye*. Proceedings of the International Symposium on the Renaissance Flute and Recorder Consort, Utrecht 2003. Utrecht: STIMU, 2005.

LATTES, Sergio; TOFFETTI, Marina. "Rognoni [Rognino, Rogniono, Rognone, Rognoni Taeggio, Rognoni Taegio, Rongione, Rongioni, Taegio]". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

LO CICERO, Dario. "Ganassi e 'um certo ordine di procedere' che... si può scrivere". In: SALVATORE, Daniele. *L'arte opportuna al sonar di flauto*. Savignano sul Rubicone: Gruppo Editoriale Eridania, 2003.

LO PRESTI, Carlo. "La musica strumentale per fiati nella Venezia del Cinquecento". In: SALVATORE, Daniele. *L'arte opportuna al sonar di flauto*. Savignano sul Rubicone: Gruppo Editoriale Eridania, 2003.

LYNDON-JONES, Maggie. "A Checklist of Woodwind Instruments Marked !!". In: *The Galpin Society Journal*. Hertfordshire, v. 52, 1999.

MARKIEWICKZ, Henryck, *Ut Pictura Poesis... A History of the Topos and the Problem*, *New Literary History*, v. 18, no. 3, John's Hopkins University Press, New York, 1987

MORETTI, Laura. "Gritti, Sansovino e Willaert: il nuovo volto del palcoscenico marciano". In: *Le Architetture di Orfeo. Musica e Architettura tra Cinquecento e Settecento*, Milão: Casagrande, in press.

MORETTI, Laura. "Architectural Spaces for Music: Jacopo Sansovino and Adrian Willaert at St Mark's". In: *Early Music History*, v. 23. Cambridge University Press, 2004.

MUIR, Edward. *Civic Ritual Renaissance Venice*. New Jersey: Princenton University Press, 1981.

MUIR, Edward. "Manifestazioni e cerimonie nella Venezia di Andrea Gritti." In: *Renovatio Urbis. Venezia nell'età di Andrea Gritti (1523-1538)*. Manfredo Tafuri (Ed). Roma: Oficina Einaudi, 1984.

MYERS, Herbert. Recorder. In: Jeffery Kite-Powell (ed.). *A Performer's guide to Renaissance Music*. Indiana University Press. 2007

NUTTER, David. "Conforti, Giovanni Luca". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

ONGARO, Giulio, BROWN, Howard M. "Sylvestro di Ganassi dal Fontego". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

ONGARO, Giulio M. "Gli inizi della musica strumentale a San Marco". In: *Giovanni Legrenzi e la cappella ducale di San Marco*. Francesco Passadore e Franco Rossi (Ed). Firenze: Olschki, 1994.

PACCHIONI, Giorgio. *Selva di varii precetti. La pratica musicale tra i secoli XVI e XVIII nelle fonti dell'epoca*. v.1. Bologna: Orpheus Edizioni, 1995.

PALISCA, Claude V. "Zarlino, Gioseffo". *The New Grove Dictionary of Music and Musicians*. Ed. Stanley Sadie e John Tyrell. London: Oxford University Press, 2001.

PALISCA, Claude V. "Diruta [Mancini], Girolamo". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

PAOLIS, Luca de. "Introduzione". In: GANASSI, Silvestro. *Opera Intitulata Fontegara*. Luca de Paolis (Ed). Roma: Hortus Musicus, 1991.

POLANYI, Michael. *The Tacit dimension*. Chicago University Press, USA. 2009

POLK, Keith. “The Recorder and Recorder Consorts in the Fifteenth Century”. In: LASOCKI, David. (Ed.) *Musicque de Joye*. Proceedings of the International Symposium on the Renaissance Flute and Recorder Consort, Utrecht 2003. Utrecht: STIMU, 2005.

ROBINSON, Lucy. “Viola Bastarda”. In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

ROSAND, David. “Venezia e gli dei”. In: *Renovatio Urbis. Venezia nell'età di Andrea Gritti (1523-1538)*. Manfredo Tafuri (Ed). Roma: Oficina Einaudi, 1984.

ROSAND, David. *Myths of Venice. The Figuration of a State*. Chapel Hill e London: The University of North Carolina Press, 2001.

ROSAND, Ellen. “Music in the Myth of Venice”. In: *Renaissance Quarterly*, v.XXX, n.4, 1977.

ROSTIROLLA, Giancarlo. “Introduzione”. In: CONFORTI, Giovanni Luca. *Breve et facile maniera d'essercitarsi a far passaggi*. Roma, 1593. Roma: Società Italiana del Flauto Dolce, 1986.

SALVATORE, Daniele. *L'arte opportuna al sonar di flauto*. Savignano sul Rubicone: Gruppo Editoriale Eridania, 2003.

SCHERING, Arnold. *Aufführungspraxis alter Musik*, Berlin, 1931

SELFIDGE-FIELD, Eleanor. *Venetian Instrumental Music, from Gabrieli to Vivaldi*. 3. ed. Nova York: Dover Publications, 1994.

SELFIDGE-FIELD, Eleanor. "Canzona and Sonata: Some Differences in Social Identity". In: *International Review of the Aesthetics and Sociology of Music*, Cracovia, v. 9, n. 1, 1978.

SINGER, Gherhard. "Zacconi, Lodovico [Giulio Cesare]". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

SLIM, H. Colin. "Musicians on Parnassus". In: *Studies in the Renaissance*, v. 12, University of Chicago Press, 1965.

SMITH, Anne. *The Performance of 16th-Century Music: Learning from the Theorists*. Oxford University Press, 2011

TAFURI, Manfredo. *Jacopo Sansovino e l'architettura del '500 a Venezia*. 2. ed. Padova: Marsilio, 1972.

TAFURI, Manfredo. "Il problema storiografico". In: *Renovatio Urbis. Venezia nell'età di Andrea Gritti (1523-1538)*. Manfredo Tafuri (Ed). Roma: Oficina Einaudi, 1984.

TAFURI, Manfredo. "Capitolo settimo: Epilogo Lagunare. Jacopo Sansovino dall'inventio alla consuetudo". In: _____. *Ricerca del Rinascimento. Principi, città, architetto*. Torino: Giulio Einaudi Editore, 1992.

TAFURI, Manfredo. *Renovatio Urbis. Venezia nell'età di Andrea Gritti (1523-1538)*, a cura di Manfredo Tafuri. Roma: Oficina Einaudi, 1984.

WESSEL, Othmar; KREYSZIG, Walter. "Belli, Giulio". In: *The New Grove Dictionary of Music and Musicians*. Stanley Sadie e John Tyrell (Ed). London: Oxford University Press, 2001.

WITTKOWER, Rudolf. *Architectural Principles in the Age of Humanism*, W. W. Norton, New York, 1977