Dolce Napoli: Approaches for performance

De Avena Braga, I.

Quanto più quest'instrumento è cognito, tanto più incognita è la fabrica sua…
Anonymous, *Tutto il bisognevole per sonar il flauto da 8 fori con pratica et orecchia* (1630)

Chapter 1: Italian Baroque Recorders

1.1 Brief overview

The process of studying, measuring, copying and playing on Italian Baroque[101] recorders has one way or another been left slightly by the curb line of the Early Music highway. Instruments by Peter Bressan, the Stanesbys (Sr. and Jr.) and Jacob Denner, amongst others, have (rightfully) enjoyed pride place as the models most studied[102] and copied, and therefore known and used, for all styles of Baroque music written for the recorder. It is no coincidence that the recorder pioneers of the Early Music revival owned or had access to originals from those makers, and that, enchanted by these early pioneers' virtuosity and charisma, pupils and makers would want to copy those models first. Yet it is high time to start turning some of our attention to other models of recorders, which, while slightly less famous today, might have enjoyed local and even international fame during the Baroque period, and which certainly imprinted their characteristics on the music written for them.

Given the vast amount of music written in Baroque Naples specifically for the recorder,[103] it seemed only natural to look for Neapolitan recorders that might enrich our understanding of this world. As no previous studies regarding Neapolitan recorders were

[101] See the Glossary and the Introduction for the application of the word 'baroque' in relation to the period of study as well as in regard to the type of recorders that were researched.

[102] Important studies, focused on the technical aspects of Baroque recorders, which also contain biographical information on the makers, include: Thomas Lerch, *Vergleichende Untersuchung von Bohrungsprofilen Historischer Blockflöten des Barock* (Berlin: Staatliches Institut für Musikforschung Preussischer Kulturbesitz Musikinstrumenten-Museum, 1996). Jan Bouterse, *Dutch Woodwind Instruments and their Makers, 1660–1760*, trans. Ruth Koenig (Den Haag: Koninklijke Vereniging voor Nederlandse Muziekgeschiedenis, 2005). Rob van Acht, Vincent van den Ende, Hans Schimmel, *Dutch Recorders of the 18th Century: Collection Haags Gemeentemuseum* (Celle: Moeck Verlag, 1991). Eric Halfpenny, "The English Baroque Treble Recorder," *The Galpin Society Journal* 9, no. June (1956). pp. 82-90. Relevant studies which include historical evidence around the instrument makers include: Martin Kirnbauer, Peter Thalhemer, Catherine Taylor, "Jacob Denner and the Development of the Flute in Germany," *Early Music* 23, no. 1, Flute Issue (February) (1995). pp. 82-100. David Lasocki, "New Light on Eighteenth-Century English Woodwind Makers from Newspaper Advertisements," *The Galpin Society Journal* 63 (2010). pp. 73-142. Maurice Byrne, "Pierre Jaillard, Peter Bressan," *The Galpin Society Journal* 36, no. March (1983). pp. 2-28. Eric Halfpenny, "Biographical Notices of the Early English Woodwind-Making School, c.1650–1750," *The Galpin Society Journal* 12, no. May (1959). pp. 44-52. Eric Halfpenny, "Further Light on the Stanesby Family," *The Galpin Society Journal* 13, no. July (1960). pp. 59-69. Maurice Byrne, "Some More on Stanesby Junior," *The Galpin Society Journal* 45, no. March (1992). pp. 115-122. For further complementary studies, see: Phillip T. Young, "Woodwind Instruments by the Denners of Nürnberg," *The Galpin Society Journal* 20, no. March (1967). Dale S. Higbee, "A Plea for the Tenor Recorder by Thomas Stanesby, Jr.," *The Galpin Society Journal* 15, no. March (1962).

[103] As will be seen in Chapter 2.

available,[104] and acknowledging that, surprisingly, the substantial amount of music written for the recorder in the Baroque period in Italy[105] as a whole had not inspired any collective research on the instruments, it seemed relevant to direct one's attention to the actual instruments made in Italy at that time, as means of better understanding this vast corpus of music. This study presents an overview of the currently known Italian Baroque makers and their extant instruments. Though not comprehensive,[106] it will examine a broad enough range of recorders to attempt to define 'Italian', but also present in-depth studies of a few particular instruments; as a part of this study, some of these recorders have been reproduced and used in concerts and recordings of the repertoire.

It is important to mention that this study does not include Italian Baroque double-recorders.[107] Although these technically belong to the recorder family, it seems more useful to focus on instruments of analogous physical characteristics, and which had obvious use in the repertoire which was considered. Also excluded from this study are the marble recorders

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[104] Information on the research available on the production of instruments in Naples in the eighteenth century can be found in Francesco Nocerino, "Gli strumenti musicali a Napoli nel secolo XVIII," in *Storia della musica e dello spettacolo a Napoli. Il Settecento*, ed. P. Maione F. Cotticelli, vol. 2 (Naples: Turchini Edizioni, 2009). Also in Giovanni Paolo Di Stefano, "Documentary Evidence Concerning the Early History of Vincenzo Trusiano and the Panormo Family of Instrument Makers in Italy," *Journal of the Violin Society of America* XXIV, no. 2 (Fall) (2014). pp. 51-61. Giovanni Paolo Di Stefano, "Panormo." *Dizionario Biografico degli Italiani, Vol. 80*. Treccani, accessed September 24, 2014, http://www.treccani.it/enciclopedia/panormo_(Dizionario-Biografico). Complimentary to these is the very valuable research on notarial inventories examined by Renato Ruotolo, "Spazi per la musica e dipinti di soggetto musicale del Settecento napoletano, con qualche nota sul fenomeno del dilettantismo musicale," in *Il Tempo di Niccolò Piccinni, Percorsi di un musicista del Settecento*, ed. Clara Gelao and Michèle Sajous D'Oria (Bari: Mario Adda Editore, 2000). pp. 35-44.

[105] See Federico Maria Sardelli, "Il flauto nell'Italia nel primo Settecento," *Ad Parnassum* II, no. 3 (2004). pp. 103-152. Treats not only the recorder but also the traverso repertoire in Baroque Italy, and especially in Venice. See also Richard A. McGowan, *Italian Baroque Solo Sonatas for the Recorder and the Flute*, vol. 37 (Detroit: Detroit Studies in Music Bibliography, 1978).

[106] The present author is convinced that many extant instruments remain unreported and therefore unstudied, intentionally or not, in private collections.

[107] Such as the six Anciuti double recorders documented in: Alfredo Bernardini, Renato Meucci, "L'oboe d'avorio di Anciuti (1722)," in *Rassegna di Studi e di Notizie*, vol. 26 (Milan: Civica Raccolta Stampe Bertorelli, 2002). pp. 371-383. Early descriptions of 'flauto doppio' in general refer to types of tibia (the ancient Roman wind instrument) such as the one portrayed by Bonnani, where two individual instruments are played concomitantly. The double recorders made by Anciuti are of a different type though, probably similar to the instrument invented by Michel Parent in Amsterdam in 1692; Meucci describes Anciuti's double recorders as

> *"the fruit of brilliant turning: the two adjacent bores separated by a thin dividing wall were all made from a single piece of ivory […] The same divider also separates the finger holes, allowing one finger to close two holes at the same time and thus create two different notes. These notes are tuned in intervals of a third, hence the alternative name of 'flûte d'accord', these double recorders represent "a type of instrument that was widely made but for which there is no specific musical repertory."*

Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments," ed. Firenze Musei (Florence: Giunti, 2007). p. 219. Filippo Bonanni, *Gabinetto armonico pieno d'instrumenti sonori*, 2nd ed. (Rome: Placho, 1723). p. 63.

attributed to Grandi,[108] which are surely art works or curiosities more than musical instruments. All the instruments under scrutiny are included in Appendix 1: Catalogue of Italian Baroque recorders, as an overview of the entirety of the information gathered thus far.[109]

1.2 Italian Baroque makers and their twenty-seven extant recorders: what was studied

The Italian Peninsula is now especially famous for its manufacture of bowed and plucked instruments, from early times. In the so-called Early Music revival, woodwinds, and in particular recorders, have been associated more often with French (e.g. the Hotteterres, Jean Jacques Rippert), English (e.g. Bressan, Stanesby Sr. and Jr.), Dutch (e.g. Richard Haka and Jan Steenbergen) and German (e.g. Denner, Johann Wilhelm Oberlender) makers. Although some attention has since been paid to Italian woodwinds, mainly oboes and traversos, Italian recorders have been somewhat cast-aside, only being remembered when speaking of Renaissance consorts and the Bassanos,[110] or when original Baroque models close to A=440 Hz (namely, 'copies' of Giovanni Maria Anciuti recorders) are needed for modern reproduction.

Numbers are not in Italy's favor: Bruce Haynes listed 373 Baroque recorders in his Appendix 5 to *The story of "A".*[111] Out of his list, only thirteen were of Italian origin.[112] The

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[108] Michele Antonio Grandi (1635–1700): a recorder in white marble is housed at the Musée de la Musique (Paris) and one in white marble with a red stain is in the Galleria Estense (Modena). Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." pp. 180-181.

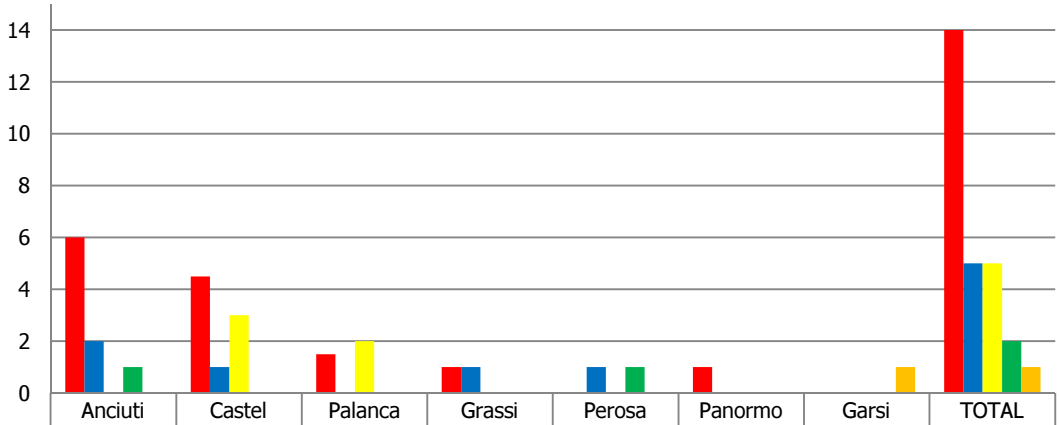
[109] The aim in Chapter 1 was to offer a basic understanding of the Italian Baroque recorders currently extant, a quest born out of my own frustration in not finding this information gathered elsewhere. This chapter was therefore written especially for those who are not recorder makers or researchers of recorder making – the latter being the ones who would have been capable of carrying out this study on their own. As only very little of what is presented here was previously available at all, this work shall naturally be expanded in the future, and I hope to have inspired others to do so. Since it was also the first time this data was collected in one place, until the overview was available it would have been rather difficult for anyone to assess what was there to be researched. All that was gathered is found in Appendix 1, and specialists in the field will naturally refer directly to it in order to draw their own conclusions. Written from the point of view of a performer, I have not described every instrument examined *in loco* in the same way, but in fact 'plucked out' what captivated me, offering a chance for those who will not hold the instruments in their hands to be able to 'see' them in their three-dimensionality. It is important to point out that the linking of technical details with sound and 'speaking' qualities is offered here precisely because this study was approached from the angle of artistic research, and my interest was always to 'translate' into the playing realm what the paper cannot; this could only have been done by a professional player, and this is therefore my personal contribution to the subject. Some of my remarks and conclusions are derived from practical experience with recorders (originals and copies, by various makers), from informal conversations with recorder makers and other players, and from the literature presented, for example, in footnote 101 (p. 27). Much of this is knowledge embodied over many, many years, and as such I also use myself as a source.

[110] About the Bassanos, please refer to the Introduction.

[111] Bruce Haynes, *A History of Performing Pitch / The story of "A"* (Lanham, MD: The Scarecrow Press, Inc., 2002). p. 441.

present study increases this number of Italian instruments considerably, more than doubling it to the current twenty-seven instruments by seven makers, scattered in public and private collections around the world,[113] and ranging in size from sopranino to bass,[114] as shown in Chart 1.2.1.[115]

Chart 1.2.1: Extant Italian Baroque recorders in sizes and numbers



	Anciuti	Castel	Palanca	Grassi	Perosa	Panormo	Garsi	TOTAL
alto	6	4,5	1,5	1	0	1	0	14
sopranino	2	1	0	1	1	0	0	5
tenor	0	3	2	0	0	0	0	5
soprano	1	0	0	0	1	0	0	2
bass	0	0	0	0	0	0	1	1

[112] Ibid. p. 452.

[113] See, at the end, the List of Consulted Collections. The majority of instruments in this compilation, contained in Table 1.2.1, is listed by Waterhouse and Young: William Waterhouse, *The New Langwill Index* (London: Tony Bingham, 1992). Phillip T. Young, *4900 Historical Woodwind Instruments* (London: Tony Bingham, 1993). The information was otherwise completed in private communication with the respective collections and collectors or consulting the following: Laura E. Gilliam, William Lichtenwanger, *The Dayton C. Miller Flute Collection: A Checklist of the Instruments* (Washington, D.C.: Library of Congress, 1961). Michael Seyfrit, *Musical Instruments in the Dayton C. Miller Flute Collection at the Library of Congress: A Catalog*, vol. I: Recorders, Fifes, and Simple System Transverse Flutes of One Key (Washington, D.C.: Library of Congress, 1982). Bruce Haynes, *A History of Performing Pitch / The story of "A"*. Nicholas S. Lander, "Recorder Home Page: Original Recorders, Makers & Collections." accessed November 12, 2013, http://www.recorderhomepage.net/original.html. Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." Anthony Baines, *Catalogue of Musical Instruments in the Victoria and Albert Museum*, vol. Part II: Non-Keyboard Instruments (London: V&A Publications, 2002). Guido Bizzi, Lorenzo Girodo, *La collezione di strumenti musicali del Museo Teatrale alla Scala* (Cinisello Balsamo, Milan: Edizioni Il Laboratorio da Amilcare Pizzi s.p.a. Arti Grafiche, 1991). *Historic Musical Instruments in the Edinburgh University Collection*, ed. Arnold Myers, vol. Part D, Fascicle i: Recorders and Flageolets, 1st edition. (Edinburgh: Edinburgh University Collection of Historic Musical Instruments, 2000). Luisa Cervelli, *La Galleria Armonica: catalogo del Museo degli strumenti musicali di Roma* (Rome: Istituto Poligrafico e Zecca dello Stato, 1994). Richard Rephann, *A catalogue of the Pedro Traversari Collection of musical instruments* (Washington, D.C.: Organization of American States, 1978). Gerhard Stradner, *Musikinstrumente in Grazer Sammlungen (Grazer Öffentliche Sammlungen)*, vol. XI, Tabulae Musicae Austraiacae (Vienna: Verlag der Österr. Akademie der Wissenschaften, 1986).

[114] The Garsi bass, although too late for the present study, has nonetheless been included in the instrument list as it is the only eighteenth-century Italian bass currently known. The fact that this instrument was even produced at such a late date is also puzzling.

[115] Voice-flutes are grouped as tenors in Chart 1.2.1.

Other makers certainly existed; we know of some makers who made recorders, but none seem to have survived. This is the case of Andrea Fornari: in a petition of 1791, as a true "flautajo,"[116] Fornari declared that he made, among a long list of other instruments, "Flauto a Becco Corista, Detto a Becco Terzetto, Detto a Becco Ottavin."[117]

Table 1.2.1 details all twenty-seven extant Italian recorders:[118] nine by Anciuti,[119] eight by Castel, one by Castel (head joint) and Palanca (middle and foot joints), one by Garsi, two by Grassi, three by Palanca (one of which with flageolet features[120]), one by Panormo and two by Perosa.[121] A very similar, though less detailed, table was published in

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[116] A craftsman of all wind instruments, such as traversos, recorders, oboes, bagpipes, trumpets, horns etc. Stefano Toffolo, "La costruzione degli strumenti musicali a Venezia dal XVI al XIX secolo," *Il flauto dolce* 14/15, no. April-October (1986). p. 25.

[117] Translation by the present author: "an alto recorder (in F), a third flute (in A, soprano or alto?) and an octave flute (sopranino in F)." Fornari lists later a "Flauto Traverso un ottava più basso del Corista," leaving no doubt he is not speaking of pitch, but of nominal sizes. Stefano Toffolo, *Antichi strumenti veneziani 1500–1800: Quattro secoli di liuteria e cembalaria* (Venice: Arsenale Editrice, 1987). p. 214. The term *corista*, as seen in the Introduction, should be understood as 'general pitch standard'. Bruce Haynes, *A History of Performing Pitch / The story of "A"*. p. 159. In the fourth edition of the *Vocabolario degli Accademici della Crusca*, the following definitions of *corista* are given: "II. Onde Tuono corista, vale Tuono, che s'adatta alle voci comuni, e Strumento corista, vale: Che non è più alto, nè più basso di quello, che può servire pe' cori. […] III. Corista si dice ancora da' musici un Flautino, di cui si servono per accordare, e ridurre gli strumenti al tuono corista." Translation by the present author: "II. Chorister tone, that is, tone which adapts itself to the common voices, and chorister instrument, that which is neither higher nor lower, and can serve the choirs. […] III. Chorister is used also by the musicians to mean a small recorder, which they use to tune, and adapt their instruments to the chorister tone." Accademici della Crusca, "Corista," in *Vocabolario degli Accademici della Crusca* (Florence: Domenico Maria Manni, 1729–1738).

[118] For the sake of practicality in identifying the recorders mentioned here and detailed in Appendix 1, all have been assigned 'numbers'. These are generally formed by the first three letters of a maker's name, followed by the first three letters of the size of instrument, followed by a two digit number, e.g. Anonymous Alto 'no. 1' = Ano.ALT.01. Soprano and sopranino needed to be distinguished and were therefore catalogued with the abbreviations SPO and SPI, respectively.

[119] Two more Anciuti recorders are signaled by Meucci, without confirmation of current ownership: a sopranino marked 'ANCIVTI / A MILAN / 1715' sold at Sotheby's on 17 November 1994 (LN6484, LOT 23) and an alto attributed to Anciuti sold at Christie's on 16 June 1999 (SALE 8419, LOT 40). Alfredo Bernardini, Renato Meucci, "L'oboe d'avorio di Anciuti (1722)." This alto cannot be verified on the sales records of that day at Christie's, though, and the Sotheby's website did not come up with a result for that sopranino either. A third instrument, a sopranino recently in the collection of Barons Nathaniel and Albert von Rothschild (Rothschild inv. no. AR1384), also attributed to Anciuti, was indeed sold at Christie's (along with three other recorders) at a different auction on 8 July 1999 (SALE 6179, LOT 40: http://www.christies.com/lotfinder/lot/an-ivory-sopranino-recorder-probably-milanese-in-1479890-details.aspx?from=salesummary&intObjectID=1479890&sid=cdb02e91-bb54-4aca-97c9-b58146203330, accessed November 14, 2013). Finally, a fourth instrument by Anciuti is said to be in a private collection in Switzerland, size unknown to me (Ralf Netsch, private communication). As neither of those could really be confirmed, they are not included in the lists of this chapter.

[120] This instrument is housed at the Copenhagen Musikhistorisk Museum (Danish Music Museum), and has always been listed as an alto recorder. It does possess all the physical qualities of a recorder but it also has a flageolet mouthpiece (with a sponge). Although this mouthpiece diverges from all the other instruments listed, considering that the rest of the instrument corresponds to a 'normal' recorder, it was deemed important to include it in the comparisons. The drawings and measurements very kindly drawn up by Ture Bergstrøm (curator) were therefore also included in Appendix 1.

[121] It is important to take into account that it is, unfortunately, in the nature of private collectors to conceal their collections from the public. I suspect the majority of extant Italian Baroque recorders to be indeed in private hands, and, in most cases, to have escaped attention thus far. As this study will continue further, I would be especially keen to find out how many extant instruments did not make it into the current list. Individually, these may seem irrelevant, but the fact that we are not able to group and compare them delays and impairs our knowledge. It is especially difficult to assert the

an article in 2013,[122] then also accounting for twenty-seven instruments; however, that list was slightly different. An instrument there attributed to 'Montazzavi' was in fact signed Montazeaud or Montazzaud,[123] and has not been included in Table 1.2.1, and the current list also includes a previously unknown alto by Anciuti in a private collection in Parma.[124]

Table 1.2.1: Italian recorder makers of the Baroque period and extant recorders

Maker	Maker's mark	Dates	Cities	Collections and extant instruments
ANCIUTI, Giovanni Maria[125]	[lion of Venice] ANCIVTI A MILAN[O]	1674–1744	Forni di Sopra, Venice, Milan	- Anc.ALT.01: alto in F (in boxwood, dated 1717), 10.484, A.G.lj, Landesmuseum Joanneum, Graz - Anc.ALT.02: alto in F (in boxwood, dated 1720), private collection (Vagge Family, currently kept by C. Cacco), Genova - Anc.ALT.03: alto in F (in boxwood, dated 1729), private collection (Moeck), Celle - Anc.ALT.04: alto in F (in boxwood, dated 1729), private collection (?), Parma - Anc.ALT.05: alto in F (in ivory, dated 1740), 20/5 (7469-1861), GB.L.v, Victoria & Albert Museum, London - Anc.ALT.06: alto in G (in ivory, undated), MTS-FD/03, I.M.ts, Teatro alla Scala, Milan - Anc.SPI.01: sopranino in F (in ivory, dated 1709), private collection (F. Velluti), Belluno - Anc.SPI.02: sopranino in F with missing head (in boxwood and ivory, dated 1733), 470, D.B.im, Musikinstrumenten Museum, Berlin - Anc.SPO.01: soprano in B♭ (in stained boxwood, dated 1725), 146 (MTS-FD/02), Conservatorio di Musica Giuseppe Verdi, Milan

brilliance of those Italian makers of which only a handful of instruments is available for study, in contrast with the vast number of instruments by Bressan and Denner, for example, which are known, studied, copied and used in performance. It should therefore lie in the interest of collections and collectors that the makers' output be further investigated, as only in this way the cultural (and economic) value of the 'collectable' can be ascertained.

[122] Inês de Avena Braga, "The Panormo Alto Recorder: A *Dolce Flauto Dolce*?," *Journal of the American Musical Instrument Society* XXXVIII (2012). pp. 34-46.

[123] In an incorrect deduction which clearly originated from only examining the mark on the foot of the instrument, this recorder had been listed in previous studies as marked 'Montazzavi', and, because of its name, was considered Italian (William Waterhouse, *The New Langwill Index*. p. 270.) No information on such a maker has come to the surface up till now. Upon our closer examination of the marks on the body and head of the instrument it is possible to affirm that this instrument is not by Montazzavi (if there ever was such a maker), but in fact by Montazeaud or Montazzaud, though no information was found on this maker either. The new name and the crude construction of the instrument have excluded it from detailed measurements for this study, but pictures are included in Appendix 1, for future reference.

[124] The existence of this instrument is only known thanks to the website of Francesco Li Virghi (Francesco Li Virghi, "J. M. Anciuti alto in F at A = 440 Hz." accessed January 12, 2015, http://www.livirghi.com/baroque-recorders/j-m-anciuti-alto-in-fa.) What is known is that the instrument is in a private collection (supposedly in Parma) and was measured during a Verdi exhibition in 1982-83 by Li Virghi, who very kindly provided a copy of his drawing and measurements. Current ownership is unknown to the present author.

[125] Francesco Carreras, Cinzia Meroni, "Giovanni Maria Anciuti: a craftsman at work in Milan and Venice," *Recercare* XX, no. 1-2 (2008). Alfredo Bernardini, Renato Meucci, "L'oboe d'avorio di Anciuti (1722)." pp. 181-215.

CASTEL & CASTEL, N. [126]	*[with or without stylized]* N or И CASTEL. [griffin/lion rampant]	fl. 1720–1750	Venice	- Cas.ALT.01: alto in F (in ebony and ivory), C168, F.NI.pl, Palais Lascaris, Nice - Cas.ALT.02: alto in F (in stained pearwood), 3261, EC.Q.t, Museo de Instrumentos Musicales Pablo Traversari, Quito - Cas.ALT.03: alto in F (in boxwood), 887|644,[127] I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome - Cas.ALT.04: alto in F (in stained pearwood?), 879|1421, I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome - Cas.SPI.01: sopranino in F (in ivory), 3323, GB.E.u, Edinburgh University Collection of Historic Musical Instruments - Cas.VOI.01: voice-flute in D (in boxwood), 170, I.R.an, Accademia Nazionale di Santa Cecilia, Rome - Cas.VOI.02: voice-flute in D (in boxwood and metal), 884|698, I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome - Cas.VOI.03: voice-flute in D or tenor in C (in stained pearwood), I.N.111, A.W.gm, Gesellschaft der Musikfreunde, Vienna
CASTEL/ PALANCA	*[head mark by Castel, body and foot by Palanca]*			- Cas/Pal.ALT.01: alto in F (in boxwood and ivory, with thumbhole bushing, and turned silver ferrules), DCM1359, US.W.c, Library of Congress, Washington, D.C.
GARSI, Francesco [128]	[stylized sun] GARSI PARMA [stylized sun]	1764–1856	Parma	- Gar.BAS.01: bass in F (in maple and brass), 3011, I.PA.mc, Conservatorio di Musica Arrigo Boito, Parma
GRASSI, Paolo? [129]	GRASSI [B?]RASSI [unclear sign] GRASSI ИИ МILAИ[130]	fl. 1797–1802	Milan	- Gra.SPI.01: sopranino in F (in boxwood and ivory), 1113, D.LE.u, Musikinstrumenten-Museum der Universität Leipzig - Gra.ALT.01: alto in F (in boxwood, ivory and metal), 881|638, I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome
PALANCA, Carlo[131]	CARLO PALANCA [sun, star or flower]	c. 1691–1783	Palanca, Turin	- Pal.ALT.01: alto in F (in boxwood with ivory mountings and flageolet windcap), E86, DK.K.m, Musikmuseet, Musikhistorisk Museum & Carl Claudius' Samling, Copenhagen - Pal.TEN.01: tenor in C? (boxwood): private collection (V. Gilardone), Fontanelle - Pal.TEN.02: tenor in C (boxwood/fruitwood?), DCM 1321, US.W.c, Library of Congress, Washington, D.C.
PANORMO, Giovanni[132]	IOAN: PANORM:	1746–after 1783	Palermo, Naples	- Pan.ALT.01: alto in F (in ivory), DCM 327, US.W.c, Library of Congress, Washington, D.C.

[126] Francesco Carreras, "Il Flauto traverso in Italia: Tre secoli di storia nella collezione Carreras / Flute-making in Italy: Three centuries of history in the Carreras collection," ed. MUSA-Museo degli strumenti musicali dell'Accademia Nazionale di Santa Cecilia (Rome: Accademia Nazionale di Santa Cecilia, 2009).

[127] The recorders kept at the Museo Nazionale degli Strumenti Musicali in Rome are given with double inventory numbers: firstly those used by Cervelli in the museum catalogue, followed by the internal inventory number of the museum.

[128] Francesco Carreras, "Flute making in Italy during the eighteenth and early nineteenth centuries," *Geschichte, Bauweise und Spieltechnik der Qüerflöte* Band 74 (2006). pp. 71-102.

[129] Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." p. 166.

[130] The marks on these two instruments by Grassi are different but the stamp for "GRASSI" seems to be the same, the 'S' is clearly recognizable.

[131] Francesco Carreras, "Flute making in Italy during the eighteenth and early nineteenth centuries." Alfredo Bernardini, "Carlo Palanca e la costruzione di strumenti a fiato a Torino nel settecento," *Il flauto dolce* 13 (1985). pp. 22-26.

[132] Francesco Nocerino, "Gli strumenti musicali a Napoli nel secolo XVIII." pp. 795-797. Giovanni Paolo Di Stefano, "Panormo".

PEROSA, Domenico[133]	∴ PEROSA *[in a wimple or scroll]* I	c.1693–after 1757	Venice	- Per.SPO.01: soprano in C (in boxwood), SAM 153, A.W.km, Kunsthistorisches Museum, Vienna - Per.SPI.01: sopranino in F (in ivory), private collection (G. Klemisch), Berlin

In addition, there are seven anonymous instruments,[134] shown in Table 1.2.2, which may well be of Italian origin. These have all be identified as being of Italian origin either by the museums that hold them[135] or in previous studies,[136] or present characteristics similar to that of Italian recorders as uncovered by the present study.[137]

Table 1.2.2: Anonymous recorders (of possible Italian origins) studied

Maker	Collections and extant instruments
ANONYMOUS	- Ano.SPI.01: (stolen) sopranino in F (in ivory), DCM 329, US.W.c, Library of Congress, Washington, D.C. - Ano.SPI.02: (stolen) sopranino in F (in ivory, with engraved decorations[138]), DCM 1259, US.W.c, Library of Congress, Washington, D.C. - Ano.ALT.01: alto in F (in fruitwood, with tortoise shell, gold and mother of pearl inlay decorations), 1124-1869, GB.L.v, Victoria & Albert Museum, London - Ano.ALT.02: alto in F (in ivory), DCM 1351, US.W.c, Library of Congress, Washington, D.C. - Ano.ALT.03: alto in G (in stained boxwood), SAM154, A.W.km, Kunsthistorisches Museum, Vienna - Ano.TEN.01: tenor in C (in stained boxwood, palisander block), 1135, D.LE.u, Musikinstrumenten-Museum der Universität Leipzig[139]
(fake) BRESSAN, possibly PEROSA	- Ano.ALT.04: alto in F (in boxwood), SAM155, A.W.km, Kunsthistorisches Museum, Vienna

[133] Francesco Carreras, "Flute making in Italy during the eighteenth and early nineteenth centuries."

[134] Two more instruments were inspected at I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome: two Anonymous ivory sopraninos, 874|2208 and 873|77. For conservation reasons, it was not possible to produce measurements of those instruments, and therefore they are not included in this compilation. The basic details collected are nonetheless included in Appendix 1.

[135] Ano.ALT.01 and Ano.TEN.01.

[136] Ano.ALT.03 and Ano.ALT.04, by Adrian Brown, private communication.

[137] Ano.SPI.01, Ano.SPI.02 and Ano.ALT.02.

[138] The picture of this beautifully turned instrument provided by the museum shows decorations of birds, grapes and grapevines, a seated figure playing what looks like an aulos, and, more interestingly, a lion. Might this be an engraved mark of Anciuti? The fact that the instrument displays no block chamfer and virtually no upper chamfer is a strong indication that it might indeed be by Anciuti, as will be seen below.

[139] This Anonymous tenor is believed, by the museum, to be of Italian origin: "[…] Ähnlich gefleckte Blockflöten waren im 17. Jh. in Italien bekannt, vgl. J. Schlossers Kommentar zur gebeizten Marmorflöte Wien […] Die Einstufung als italienische Arbeit beruht einmal auf der Überlieferung durch A. Kraus und G. Kinsky, zum anderen auf Eigenheiten des Bohrungsverlaufes […]." Translation by the present author: "[...] Similar colored recorders were known in Italy in the seventeenth century, c.f. J. Schlosser's commentary on the stained marble flute in Vienna. […] The classification as an Italian work is based by A. Kraus and G. Kinsky, among other aspects, in peculiarities of the design of the bore [...]." University of Leipzig - Museum of Musical Instruments, "ULEI:M0001131." *MIMO*. accessed December 3, 2014, http://www.mimo-db.eu/MIMO/Infodoc/ged/View.aspx?eid=OAI_ULEI_M0001131. The instrument has therefore been included in this study. Nonetheless, as will be seen further below, the bore comparisons with other Italian instruments does not corroborate this hypothesis.

The Italian Baroque recorders examined *in loco*[140] are shown in Table 1.2.3. Of those, three have been copied as a result of this study.[141] Also closely examined was one of the unsigned recorders,[142] which presents characteristics of Italian manufacture.

Table 1.2.3: Recorders studied *in loco*

Maker	Collections and extant instruments
ANCIUTI	- Anc.ALT.03: alto (in boxwood, dated 1729), private collection (Moeck), Celle
ANONYMOUS	- Ano.ALT.01: alto (in fruitwood, with turtle shell, gold and mother of pearl inlay decorations), 1124-1869, GB.L.v, Victoria & Albert Museum, London
CASTEL	- Cas.ALT.01: alto (in ebony and ivory), C168, F.NI.pl, Palais Lascaris, Nice[143] - Cas.SPI.01: sopranino (in ivory), 3323, GB.E.u, Edinburgh University Collection of Historic Musical Instruments - Cas.VOI.01: voice-flute (in boxwood), 170, I.R.an, Accademia Nazionale di Santa Cecilia, Rome - Cas.ALT.03: alto (boxwood), 887|644, I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome - Cas.ALT.04: alto (in stained pearwood?), 879|1421, I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome - Cas.VOI.02: voice-flute (in boxwood and metal), 884|698, I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome
CASTEL/ PALANCA	- Cas/Pal.ALT.01: alto (in boxwood and ivory, with thumbhole bushing, and turned silver ferrules), DCM 1359, US.W.c, Library of Congress, Washington, D.C.
GRASSI	- Gra.ALT.01: alto (in boxwood, ivory and metal), 881|638, I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome
PANORMO	- Pan.ALT.01: alto (in ivory), DCM 327, US.W.c, Library of Congress, Washington, D.C.

[140] All with the invaluable collaboration of Fumitaka Saito, who measured and drew up plans for those instruments. Cas/Pal.ALT.01 (DCM1359, US.W.c) could only be partly measured, for constraints of time. What was collected is included in Appendix 1.

[141] Pan.ALT.01 (in 2011), Cas.ALT.01 (in 2013) and Cas.VOI.01 (in 2015), copied by Fumitaka Saito. A copy of Per.SPO.01 was purchased from Luca de Paolis in 2014.

[142] The wonderfully ornate anonymous alto in the collection of the Victoria and Albert Museum in London, previously owned by Rossini.

[143] This instrument had previously been measured by Philippe Bolton. For the purpose of copying it though, details of voicing were missing, which were then added by Fumitaka Saito. The technical plan in Appendix 1 is thus by Philippe Bolton, with complementing details by Fumitaka Saito.

Other nine Italian and six possibly Italian recorders were studied by acquiring previously available measurements, in varying levels of completion and detail, listed in Table 1.2.4.

Table 1.2.4: Recorders studied through pre-existing technical data

Maker	Collections and extant instruments
ANCIUTI	- Anc.ALT.01: alto (in boxwood, dated 1717), 10.484, A.G.lj, Landesmuseum Joanneum, Graz[144] - Anc.ALT.05: alto (in ivory, dated 1740), 20/5 (7469-1861), GB.L.v, Victoria & Albert Museum, London[145] - Anc.ALT.02: alto (in boxwood, dated 1720), private collection (Vagge Family, currently kept by C. Cacco), Genova[146] - Anc.ALT.04: alto (in boxwood, dated 1729), private collection (?), Parma[147]
ANONYMOUS	- Ano.ALT.02: alto (in ivory), DCM 1351, US.W.c, Library of Congress, Washington, D.C.[148] - Ano.ALT.03: alto (in stained boxwood), SAM154, A.W.km, Kunsthistorisches Museum, Vienna[149] - Ano.SPI.01: (stolen) sopranino (in ivory), DCM 329, US.W.c, Library of Congress, Washington, D.C. [150] - Ano.SPI.02: (stolen) sopranino (in ivory, with engraved decorations), DCM 1259, US.W.c, Library of Congress, Washington, D.C.[151] - Ano.TEN.01: tenor (in stained boxwood, palisander block), 1135, D.LE.u, Musikinstrumenten-Museum der Universität Leipzig[152]
(fake) BRESSAN	- Ano.ALT.04: alto (in boxwood), SAM155, A.W.km, Kunsthistorisches Museum, Vienna[153]
GRASSI	- Gra.SPI.01: sopranino (in boxwood and ivory), 1113, D.LE.u, Musikinstrumenten-Museum der Universität Leipzig[154]
PALANCA	- Pal.ALT.01: alto (in boxwood with ivory mountings and flageolet windcap), E86, DK.K.m, Musikmuseet, Musikhistorisk Museum & Carl Claudius' Samling, Copenhagen - Pal.TEN.02: tenor (boxwood/fruitwood?), DCM 1321, US.W.c, Library of Congress, Washington, D.C.[155]
PEROSA	- Per.SPI.01: sopranino (in ivory), private collection (G. Klemisch), Berlin [156] - Per.SPO.01: soprano (in boxwood), SAM153, A.W.km, Kunsthistorisches Museum, Vienna[157]

[144] Initially it proved difficult to obtain such drawings from the museum, though they had on record that the instrument had been measured and copied by James M. Scott already in the 1980s. A set of plans was kindly provided by Martin Wenner, who acquired them from the museum, with authorship unknown. Finally, a second set of drawings was obtained from the museum, drawn up by Johannes Skorupa (in which he refers to previous measurements by Guido Klemisch, which leads to believe that the first set of plans is by Klemisch).

[145] Measurements kindly provided by Adrian Brown

[146] Plan available by Riccardo Gandolfi, Valter Biella, "Flauto appartenuto a Angelo Vagge." accessed December 6, 2014, http://www.baghet.it/Flauto%20di%20Montoggio.pdf. An x-ray of the recorder made at the Scuola Internazionale di Liuteria di Cremona was published by Cristina Ghirardini, "Gli strumenti di Nicolò Bacigalupo, detto "u Grixiu", di Cicagna, e i ritrovamenti di Calvari e Montoggio," in *Il piffero in Fontanabuona*, ed. Centro di Documentazione della Civica Biblioteca di San Colombano Certenoli (Chiavari: Grafica Piemme, 2007). p. 38.

[147] Plan kindly provided by Francesco Li Virghi.

[148] Plans drawn up by Mark Gaydos and Bob Marvin, kindly provided by the museum.

[149] Measurements kindly provided by Adrian Brown.

[150] Plans drawn up by Richard Palm, kindly provided by the museum.

[151] Plans drawn up by Laura Beha, kindly provided by the museum.

[152] Measurements kindly provided by Stephan Blezinger.

[153] Measurements kindly provided by Adrian Brown.

[154] Plans kindly provided by Ralf Netsch, made in cooperation with Stephan Blezinger.

[155] Plans drawn up by Joanne Saunders, kindly provided by the museum.

[156] Kindly provided by Guido Klemisch (www.guido-m-klemisch.de).

Instruments that could not be studied in depth, but of which basic measurements were nonetheless collected, are listed in Table 1.2.5 and included in Appendix 1.

Table 1.2.5: Recorders of which only insufficient technical data could be collected

Maker	Collections and extant instruments
ANCIUTI	- Anc.SPI.01: sopranino (in ivory, dated 1709), private collection (F. Velluti), Belluno[158] - Anc.SPI.02: sopranino with missing head (in boxwood and ivory, dated 1733), 470, D.B.im, Musikinstrumenten Museum, Berlin[159] - Anc.SPO.01: soprano (in stained boxwood, dated 1725), 146 (MTS-FD/02), Conservatorio di Musica Giuseppe Verdi, Milan [160] - Anc.ALT.06: alto (in ivory, undated), MTS-FD/03, I.M.ts, Teatro alla Scala, Milan[161]

Impossible to be accessed for various reasons are the Italian instruments shown in Table 1.2.6. What little technical information was available is also included in Appendix 1.

Table 1.2.6: Recorders not examined in this study

Maker	Collections and extant instruments
CASTEL	- Cas.VOI.03: voice-flute (in stained pearwood), I.N.111, A.W.gm, Gesellschaft der Musikfreunde, Vienna - Cas.ALT.02: alto (in stained pearwood), 3261, EC.Q.t, Museo de Instrumentos Musicales Pablo Traversari, Quito
GARSI	- Gar.BAS.01: bass (in maple and brass), 3011, I.PA.mc, Conservatorio di Musica Arrigo Boito, Parma
PALANCA	- Pal.TEN.01, tenor (boxwood): private collection (V. Gilardone), Fontanelle[162]

Table 1.2.7 summarizes the recorders considered here.[163]

Table 1.2.7: Thirty-four recorders considered in this study

Numbers	Level of detail of the extant measurements
11 (10 Italian, 1 Anonymous)	Studied *in loco*
15 (9 Italian, 6 Anonymous)	Studied through pre-existing, sufficient technical data
4 (Italian)	Studied through pre-existing, insufficient technical data
4 (Italian)	Not studied

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[157] Kindly provided by Adrian Brown, with the permission of the museum.

[158] Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments."

[159] Partial plan by Friedrich von Huene, kindly provided by the museum.

[160] Ibid.

[161] Ibid.

[162] Alfredo Bernardini, "Carlo Palanca e la costruzione di strumenti a fiato a Torino nel settecento." In this article, Bernardini mentions the owner to be in Sardegna, and refers to Paolo Pollastri who spotted it. However from the catalogue of the exhibition where Pollastri probably saw it, one reads the owner is in Piemonte. See Roberto Leydi, Febo Guizzi, *Strumenti Musicali e Tradizioni Popolari in Italia* (Rome: Bulzoni Editore, 1985). p. 322.

[163] A further note regarding the instruments in Tables 1.2.5 and 1.2.6: Anc.SPO.01 and Anc.ALT.06 in Milan, Gar.BAS.01 in Parma and Cas.ALT.02 in Quito were not studied for lack of funds available for those trips. The sopranino in Berlin (Anc.SPI.02) was deemed less relevant as it is incomplete (missing the head joint). The private owner of Anc.SPI.01 could not be contacted. The private owner of the Palanca tenor (Pal.TEN.01) exhibited in Bologna in 1984 was not found. Lastly, it was impossible to access the recorder housed at the Gesellschaft der Musikfreunde, Cas.VOI.01 ("Aus bestimmen [sic] Gründen ist es nicht gestattet Vermessungen der Instrumente unserer Sammlung durchzuführen." Günther Faimann, Archiv Bibliothek Sammlungen der Gesellschaft der Musikfreunde in Wien, private communication).

Though the instruments were studied with various degrees of thoroughness, the fact that a considerable number of the extant instruments has been included in this project allows for a first overview of what an 'Italian Baroque recorder' could be. This may offer interesting insights into the performance of the repertoire that most likely has been played with such instruments, by distilling performance practice information, such as pitch for instance, deducible from their physical traits.

As the current study focuses on Naples, the reasoning behind the decision to consider makers from other regions of Italy may not be immediately evident, as Italy was then still split into a number of states, and taxes were paid to import foreign goods. But, that connections between Naples, Rome and Venice were more frequent than perhaps at first imagined, is suggested by the mobility, both within Italy and abroad, of the Neapolitan composers that make up the repertoire in focus here (e.g. Domenico Sarro, Leonardo Leo, Leonardo Vinci) as well as by the equally great, and perhaps more obvious, mobility of the instrumentalists.[164] The connections between Naples and other cities, as well as those of musicians in transit shall be expanded further afield in Chapter 3.

1.3 Makers and extant recorders in more detail

Giovanni Maria Anciuti (Forni di Sopra, 1674 – Milan, 1744)

One of the most admired figures in woodwind making in the eighteenth century, Anciuti left a considerable legacy[165] of some of the most beautiful and expertly crafted instruments built in the Baroque period. His extant recorders are listed in Table 1.3.1.

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[164] The lists of leave of absence of the period 1720–1740 give a clear idea of how mobile the musicians connected to the Royal Chapel of Naples really were, with numerous requests to go mainly to Rome and Venice but also Milan and Turin for opera commissions. See: Francesco Cotticelli, Paologiovanni Maione, *Le Istituzioni Musicali a Napoli durante il Viceregno Austriaco (1707–1734)* (Naples: Luciano Editore, 1993). pp. 84-85. The absences must have been so frequent and so greatly abused that in 1737 the king himself determined that the musicians would have to sign a book at the sacristy to determine their presence in the requested days and hours; failing to comply would determine the payment of a fine as well as require justification. This decree did not last long, after strong complaints from the musicians. This was resolved by splitting the staff of the Chapel in a more efficient way. From 1740, leaves of absence would no longer be paid. Ibid. pp. 36-37. On the mobility of musicians across the three main Italian centers for music (Venice, Rome, Naples) as well as references to other places, see the results of the Musici Project (2010–2013): www.musici.eu.

[165] Bernardini and Meucci list seven recorders, six double recorders, a flute and a bass flute, fourteen oboes, as well as a contra-bassoon. Voice presents more or less the same list. Both lists are incomplete regarding Anciuti recorders: Voice, Bernardini and Meucci do not mention Anc.ALT.02 and Anc.ALT04, and Bernardini and Meucci exclude Anc.SPI.02. Alfredo Bernardini, Renato Meucci, "L'oboe d'avorio di Anciuti (1722)." Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844" (Doctor of Philosophy, University of Otago, forthcoming).

After countless conjectures about his name and possible connections with Venice and Milan (inferred from the mark on his instruments), the 2008 article by researchers Francesco Carreras and Cinzia Meroni[166] has been instrumental in finally painting a clearer picture of Anciuti's life. The forthcoming thesis by researcher Nichola Voice,[167] the most recent and updated study on the Venetian Turner's guilds, presents further detailed background information on the Anciutis, as will be seen below, elucidating a few more aspects of his work.

Anciuti was born in Forni di Sopra (Udine) in 1674, which partly explains his ties to the Republic of Venice (often referenced by marking his instruments with the winged lion of St. Mark). He died in 1744, at the age of seventy, in Milan, a city to which he was tied by marriage.

The research carried out which resulted in the thorough article of Carreras and Meroni also brought to light notary documents that help to date his move from Udine to Milan, and in addition further elucidate his connection to Venice. The first document is a debt contracted with his uncle Tomaso in 1693 in Venice;[168] the second is another debt, also in Venice, in 1700, contracted this time with Tomaso's son Carlo, for the purchase of ivory[169] (both debts were paid only in 1723, partly *in natura*, i.e. "piferi et flauti"). A third document is his father's will, of 1706, which names him as heir and states that he is now living in Milan ("… il signor Giovanni Maria suo figlio, ora dimorante in Milano…"[170]). This shows that, although already living in Milan at least since 1699, Giovanni Maria was back in Venice in 1700 to borrow money and ivory from his cousin, keeping therefore a work related link with Venice even when already settled in Milan.

The interpretation of the documentation unearthed in the 2008 article presents a few interesting facts about the social status of the Anciutis: at the age of nineteen, Giovanni Maria could write (signature on the notary act of 1693), denoting a person with a decent level of instruction. And upon his death, Giovanni Maria's father left a considerable amount

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[166] Francesco Carreras, Cinzia Meroni, "Giovanni Maria Anciuti: a craftsman at work in Milan and Venice."

[167] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844."

[168] Francesco Carreras, Cinzia Meroni, "Giovanni Maria Anciuti: a craftsman at work in Milan and Venice." p. 258. Tomaso died in 1701.

[169] Ibid. "[Q]uesti auti [sic] ad imprestito in parte et in parte in roba di avolio." Translation by the present author: "Loaned partly in cash and partly in ivory." p. 259.

[170] Translation by the present author: "… his son Giovanni Maria, now living in Milan…" Ibid. p. 257.

of money, properties and land.[171] The research also shows that Giovanni Maria's uncle owned a shop in Venice and that he traded in precious metals.[172] Finally, his wife brought a high dowry to their marriage, an indication of his high financial status at that time.

There is further corroboration of his strong link with Venice:

- As Bernardini and Meucci recall,[173] the 1706 edition of Vincenzo Corronelli's *Guida de' forestieri* (reprinted many times from 1697) states that, in Venice, woodwind instruments are imported from Milan (Carreras and Meroni point that out to be the case also in the 1712 edition[174]). This could be a direct reference to Anciuti.
- Carreras and Meroni[175] point out what conductor and musicologist Federico Maria Sardelli[176] also wrote: in 1704 the Ospedale della Pietà in Venice hired two oboists, one of them Onofrio Penati who was from Milan and had been an oboist in the chapel of St. Mark's since 1696; in 1705 the *Pietà* ordered two oboes from Milan, maker unknown, but quite probably Giovanni Maria.

What remained uncertain after the article was how Anciuti came to be a master of woodwind making: where he apprenticed, and why exactly he stamped his instruments with both the Lion of St. Mark, and "MILAN" or "MILANO".

It seems probable that he learned his trade in Venice, once the home of the famous recorder-making family of the Bassanos, especially considering that he had close family in that line of business already working in Venice. In the regulations of the *Arte de' Tornidori,* Voice has found regulations relating to apprenticeship:[177]

> [A]nyone who wants to be a master in this *arte* must first study for five years with a Venetian master who has previously spent time as an apprentice with his own master, as decreed by the *Giustizia Vecchia*, and he must make a payment of two lire to have his name registered in the *Libro de Lavoranti*, the Book of Workers.
> If this worker then wants to become a master he must work for two years as a labourer before telling the steward that he wishes to become a master and that he would like to

[171] Ibid. pp. 261-264.

[172] Ibid. p. 266.

[173] Alfredo Bernardini, Renato Meucci, "L'oboe d'avorio di Anciuti (1722)." p. 372.

[174] Francesco Carreras, Cinzia Meroni, "Giovanni Maria Anciuti: a craftsman at work in Milan and Venice." p. 270.

[175] Ibid. p. 269.

[176] Federico Maria Sardelli, "Il flauto nell'Italia nel primo Settecento." pp. 146-147.

[177] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 103.

> offer proof of his ability. The steward is obligated to allow the proof to be made in his own, or some other, atelier upon payment of ten *lire*.

Voice states, though, that "[t]here is no evidence yet found that any woodwind instruments makers were apprenticed in Venice during the eighteenth century, yet there is an acknowledged tradition of these instruments in use there."[178] She hypothesizes that "Giovanni Maria Anciuti is the only eighteenth-century maker that we can currently be reasonably certain did his apprenticeship in Venice […] through the bone tuner's guild."[179] However, his name is not to be found on the *Arte de' Tornidori* records.[180]

Voice did, however, find evidence linking three other Anciutis with the *Arte de' Tornidori* guild:[181]

> The surname Anzuti, (a spelling variant of Anciuti) first appears in 1675, with the abbreviated Christian name "Batta". The name "Baista" probably equates with Batta as these are both variants of the abbreviation for Battista, and this variant appears in February 1685. These names are followed eventually by the first names Tomaso, and then Carlo, in 1692 and 1703, respectively. These last two are known to be a father and son pairing, and are related to the instrument maker Giovanni Maria Anciuti, with Tomaso being Giovanni Maria's uncle and Carlo being Tomaso's son, and therefore the cousin of Giovanni Maria.

She hypothesizes further about why Anciuti did not apply to become a master of the guild in Venice, neither did he join the one of Milan, choosing to remain independent.[182]

> Part of the function of the guild was to pass the particular craft down from father to son, or master to apprentice, keeping the métier intact while safeguarding its secrets, thereby preserving the financial security of the next generation. Anciuti's apparent lack of guild membership is therefore curious, and may or may not be indicative of the actual working state of the guild at that time. That Anciuti may not have been a guild member results from his name not being found in guild papers in Milan where he was known to be working, or in Venice […].

It is pertinent to point out here that there were instrument makers, not only in Italy, who worked outside of the guild system, either independently or under the protection of a patron.[183]

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[178] Ibid. p. 155.

[179] Ibid. pp. 159-160.

[180] Ibid. p. 190.

[181] Ibid. p. 86.

[182] Ibid. p. 161.

[183] Renato Meucci, *Strumentaio: Il costruttore di strumenti musicali nella tradizione occidentale*. (Venice: Marsilio, 2008). pp. 129-131, 163-183.

Voice cites four reasons put forth by the organologist Cecil Adkins for the use of the Lion of St. Mark in the marks of Anciuti:[184]

1. It is a possible indication that the instrument was commissioned by someone in Venice.
2. It is a possible reference to Anciuti's roots in the Venetian province of the Udine.
3. It may have indicated that Anciuti was under the patronage or protection of the Serenissima, enabling him to retain a link to Venice from the Habsburg-dominated Milan.
4. It may have been a means of maintaining or taking advantage of a continued Venetian citizenship.

Of Adkins points, Voice writes:[185]

> The first three points sum up previous theories, but the last point has merit, given that Carreras' research has been unable to show that Anciuti ever become a citizen of Milan[.]

A quick consideration of the maker's mark on the surviving recorders[186] shows that he stamped all with the Lion of Venice,[187] his name and city of manufacture, with production spanning from 1709 to 1740.[188] Voice connects the high relief carving technique of mark application used by Anciuti in his wooden instruments with contemporary instruments from Nuremberg.[189]

Anciuti is credited with the development of the straight-top oboe, a significant, avant-garde aspect of his work.[190] However, no previous study deals in particular with the technological aspects of the recorder production left by Anciuti.[191] The visual appeal of many of these instruments (especially the ones of carved ivory) seem to overshadow some

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[184] Ibid. pp. 174-175. The work Voice refers to is unpublished. The present author attended a conference in which a related paper was presented: Cecil Adkins, "The Anciuti Enigma," in *AMIS-CIMCIM Conference* (Metropolitan Museum of Art, New York: Unpublished, 2012).

[185] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 175.

[186] As mentioned before, double recorders have not been included in this study. It has not been verified therefore whether the extant double recorders by Anciuti (all) display the Lion mark.

[187] The symbol of Venice might have been used as a marketing tool, resting on the fame of the city and its association with quality. Ton Koopman, private communication.

[188] Private correspondence with the Berlin museum confirms the now missing sopranino head joint to have been dated 1733. Bernd Wittenbrink, Bildarchiv und Fotothek, Musikinstrumenten-Museum Berlin, private communication.

[189] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 506.

[190] Francesco Carreras, Cinzia Meroni, "Giovanni Maria Anciuti: a craftsman at work in Milan and Venice." p. 277.

[191] The abnormality in the absence of chamfers and the consequences of this are briefly mentioned in Guido Bizzi, Lorenzo Girodo, *La collezione di strumenti musicali del Museo Teatrale alla Scala*.

particularities in construction which seem puzzling for such a highly esteemed maker, such as the fact that his recorders present no chamfers, a significant detail with considerable consequences for the functioning of those instruments. Precisely because of his versatility and ingenuity as a maker, such a strange choice appears to serve a purpose rather than denote ignorance, and it may be that the absence of chamfers serves a sound ideal purpose. This will be discussed further below.

Table 1.3.1: Nine extant recorders by Anciuti

Instrument number	Maker's mark	Collection	Accession number	Size	Year	Material	Length (mm)	Pitch A/Hz	details
Anc.ALT.01	head: [lion of Venice] ANCIVTI A MILANO 1717 II body: ANCIVTI A MILANO I foot: ANCIVTI II	A.G.lj, Landesmuseum Joanneum, Graz	10.484	alto (F)	1717	boxwood	TL: 477 SL: 416	435 [192]	used by Nikolaus Harnoncourt
Anc.ALT.02	head: [lion of Venice] ANCIVTI A MILAN 1720	private collection (Vagge Family, currently kept by C. Cacco), Genova	–	alto (F)	1720	boxwood	TL: 476 SL: 418	440 [193]	cracked head and foot
Anc.ALT.03	head: [lion of Venice] ANCIVTI A MILANO 1729 I body: ANCIVTI A MILAN	private collection (Moeck), Celle	–	alto (F)	1729	boxwood	TL: 484 SL: 422	430 [194]	this could be the instrument sold in 78 by the Early Music Shop[195]

[192] Stradner gives 435. Gerhard Stradner, *Musikinstrumente in Grazer Sammlungen (Grazer Öffentliche Sammlungen)*, XI. Haynes writes "435 Hz. Lemberg gives 440, as does Museum." Bruce Haynes, "Pitch Standards in the Baroque and Classical Periods" (1995). p. 452. Meucci says the instrument is "so high that […] can be considered as pitched in g'." Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." p. 215.

[193] Valter Biella and Riccardo Gandolfi, private communication. A video of a sound proof on the instrument is available at appennino4p, "Flauto dolce di G.M. Anciuti posseduto dal pifferaio Langin." accessed January 12, 2015, http://www.youtube.com/watch?v=CRkxylxexb4&feature=youtu.be.

[194] Haynes writes "427 Hz. Now at 430 but probably about 427 originally." Bruce Haynes, "Pitch Standards in the Baroque and Classical Periods." p. 452.

[195] Phillip T. Young, *4900 Historical Woodwind Instruments*. p. 5.

	I foot: ANCIVTI III								
Anc.ALT.04	[lion of Venice] ANCIVTI A MILAN	private collection (?), Parma	–	alto (F)	1729	boxwood	TL: 483 SL: 420	440 [196]	Ibid.[197]
Anc.ALT.05	head: [lion of Venice] ANCIVTI A MILAN 1740	GB.L.v, Victoria & Albert Museum, London	20/5 (7469-1861)	alto (F)	1740	ivory	TL: 475 SL: 420[198]	440 [199]	octagonal body, carved beak & sockets; now at Horniman; top of middle joint too long
Anc.ALT.06	all 3 parts: [lion of Venice] *[in a scroll]* ANCIVTI A MILAN ▪	I.M.ts, Teatro alla Scala, Milano	MTS-FD/03	alto (G)	–	ivory	TL: 470 SL: 415	413 [200]	cracked windway
Anc.SPI.01	head: [lion of Venice] *[in a scroll]* ANCIVTI A MILAN 1709 body: unclear	private collection (F. Velluti), Belluno[201]	–	sopranino (F)	1709	ivory (and silver, added during restoration work[202])	TL: 264 SL: 222	?	two longitudinal cracks in head & foot; right/left holes for little finger
Anc.SPI.02	body: ANCIVTI O[203]	D.B.im, Musikinstrumenten Museum, Berlin	470	sopranino (F)	1733	boxwood and ivory	PL: 151	c.440	now 2 parts head joint: destroyed[204]

[196] Indication present in the plan by Francesco Li Virghi (private correspondence).

[197] Phillip T. Young, *4900 Historical Woodwind Instruments*. p. 5.

[198] This contradicts the 415 Hz reported by Meucci. Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." p. 216. The museum reports 420 Hz (private correspondence), probably not accounting for the fact that the middle joint is too long.

[199] Bruce Haynes, *A History of Performing Pitch / The story of "A"*. p. 452.

[200] This would mean the instrument is in G (or in F at a=464 Hz). Guido Bizzi, Lorenzo Girodo, *La collezione di strumenti musicali del Museo Teatrale alla Scala*. p. 117. Meucci writes: "This recorder may have already been part of the collection when the Museo Teatrale all Scala was established in 1914, that is, if it matches the laconic description: '71. Flauto d'avorio tornito' […] in the 1914 Catalogue (p. 16)." Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." p. 215.

[201] This collection also holds an alto in G by Thomas Boeckhout. Renato Meucci, "Gli Strumenti Musicali," in *Musica nel Veneto, I Beni di Cultura*, ed. Paolo Fabbri (Milan: Rti Grafiche Motta, 2000). p. 75.

[202] Meucci suggests the restoration to be contemporary to the instrument. Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." p. 211.

[203] Bernardini and Meucci suggest this "O" to refer to "Opus" but considering the marks "I", "II", and "III" found on other instruments, I would put forward the possibility of this being a "0" (zero). This issue of part numbering will be discussed further below. Alfredo Bernardini, Renato Meucci, "L'oboe d'avorio di Anciuti (1722)." p. 374.

Anc.SPO.01	head: [lion of Venice] ANCIVTI A MILANO 1725 body: ANCIVTI A MILAN foot: ANCIVTI	Conservatorio di Musica Giuseppe Verdi, Milan	146 (MTS-FD/02)	soprano (B♭)	1725	stained boxwood	TL: 377[204] SL: 327	430 [206]	stained marmorized; "a clear sound, a prompt attack, a marked propensity for use in the treble register, few dynamic possibilities, and excessive weakness in the bass register" [207]

N. Castel (Venice?, fl. 1720 – 1750)

Castel's[208] biography still eludes us, though it is clear by analyzing his instruments in the context of Italian Baroque recorders that his extant output is as significant as that of Anciuti, both in number and in the quality of craftsmanship of the instruments. The fact that so many of his instruments now share parts by other Italian makers[209] is perhaps a case in point for the distribution of his output in his time.

As I have discussed elsewhere,[210] nothing is known about when exactly N. Castel was born, lived or worked; indeed his first name remains unknown.[211] Sardelli[212] and Carreras[213]

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[204] The head of this instrument was destroyed during World War II, but seems to have had the mark "ANCIVTI / A MILAN" that is found on other instruments. Ibid. Otterstedt confirms that "The head of the instrument was lost in the war […] and there are no pre-war measurements and investigations save the entry in the catalogue of Curt Sachs (1922) which tell us that this instrument is an "Oktavflöte (f'')." As Sachs calculated from the then modern pitch of 435–440, the pitch of the instrument might have been somewhere around this." Dr. Annette Otterstedt, curator of the Musikinstrumenten-Museum in Berlin, private communication.

[205] Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." p. 182. Young reports 373. Phillip T. Young, *4900 Historical Woodwind Instruments*. p. 5.

[206] The catalogue reports the instrument to be in B♭ at this pitch, the fundamental being at 455 Hz. *La collezione di strumenti musicali del Museo Teatrale alla Scala*, (Cinisello Balsamo, Milano: Edizioni Il laboratorio da Amilcare Pizzi s.p.a. Arti Grafiche, 1991); Guido Bizzi, Lorenzo Girodo, *La collezione di strumenti musicali del Museo Teatrale alla Scala*. p. 116.

[207] Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." p. 182.

[208] Both Phillipe Bolton and Haynes write the maker's mark as 'CASTELL' for the Nice alto but this is not the case on that instrument or any of the recorders extant. Philippe Bolton, technical drawing, dossier d'oeuvre, Musée du Palais Lascaris, Nice. Haynes, op. cit.

[209] Composite instruments have parts by N. Castel and Giovanni Panormo, N. Castel and Carlo Palanca, and by N. Castel and Magazari. Francesco Carreras, private communication.

[210] Inês de Avena Braga, "Three Castel recorders: Rome, Edinburgh and especially Nice," *Recercare* XXV, no. 1-2 (2013). pp. 75-93.

suggest that he was from the Venice area, Young fails to mention him at all in either of his catalogues[214] and William Waterhouse simply listed five surviving instruments associated to three maker's marks with the surname Castel, which could possibly indicate more than one maker.[215]

Very recently, an undated copy of a seventeenth-century membership list of the *Arte de' Tornidori* guild in Venice was found with the name "Anzolo Castel," confirming the link of the surname with the city.[216] This document is presented by Voice, who argues that "[t]he rubric beside his name [on that list] could read 'and his son'."[217] Voice also writes that there is a second document

> dated 3rd February 1720, which contains both the names Anzolo Castel, and Domenico Perosa: it is either a list of masters, or a roll of those present at a chapter meeting. There is an additional notation of the name Anzolo Castelbergher, this name suggesting a Germanic origin, given in a list of masters who were providing merchandise to another guild, which may refer to the same person. There is no date on this [third] document.[218]

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[211] We also do not know anything about Giuseppe Castel, by whom a four-part traverso is extant; according to Sardelli, the instrument is in a private collection in Frankfurt. Sardelli assigns other instruments marked only "Castel" to Giuseppe, remarking though that the style of construction of these instruments is different. Federico Maria Sardelli, *La Musica per Flauto di Antonio Vivaldi* (Florence: Leo S. Olschki, 2001). pp. 36-37.

[212] Ibid. p. 36.

[213] Francesco Carreras, "Il Flauto traverso in Italia: Tre secoli di storia nella collezione Carreras / Flute-making in Italy: Three centuries of history in the Carreras collection." p. 32.

[214] It is indeed very strange that Castel was not at all included in the revised version of the catalogue. Phillip T. Young, *4900 Historical Woodwind Instruments*.

[215] William Waterhouse, *The New Langwill Index*. p. 58. For what it is worth, the Castel surname is now found mostly in France. In Italy, it is concentrated in the Veneto. "Castel." *Names Encyclopedia*. accessed December 5, 2014, http://namespedia.com/img/Italy/Castel.jpg.

[216] It may be pertinent to point out that "Castello" was (and is) the name of a neighborhood of Venice; therefore, the surname "Castello" or "Castelli" must have been quite commonly used to indicate where a person came from.

[217] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 89. The document is found in I-Vas, Documento Per Scola de Marzeri C. Arte Tornidori, stampe Peteneri e Tornidori. Arti, Scole dei Marzeri, b. 388. c.n.n.

[218] The presence of Anzolo Castel and Domenico Perosa on the same document is relevant, probably suggesting that N. Castel and Perosa knew each other. This third document which mentions "Castelbergher" is found in I-Vas, Documento Per Scola dei Marzeri Contro Arte Tornidori. Arti, Scole dei Marzeri, b. 388, c. 78. If indeed Anzolo Castel and Anzolo Castelbergher were the same person, it is worth noting that 'Castelbergher' would probably refer to someone who is *from* Castelberg. For what it is worth, the surname Castelberg is now mostly found in Switzerland. "Castelberg." *Names Encyclopedia*. accessed December 5, 2014, http://namespedia.com/img/Switzerland/Castelberg.jpg. "Die Ruine der Burg Castelberg liegt unterhalb von Luven am Eingang zum Val Lumnezia im Kanton Graubünden in der Schweiz." "Burg Castelberg." *Wikipedia*. accessed December 5, 2014, http://de.wikipedia.org/wiki/Burg_Castelberg. „Die Familie [Castelberg] ist erstmals urkundlich erwähnt um 1289. Die Familie ist in Luven, Castrisch, Disentis, Schluein, Sumvitg und Peiden nachweisbar. Die Herren von Castelberg sollen mit den Herren von Übercastel (Surcasti) und Löwenstein stammesgleich oder verwandt sein. […] Der ursprünglichste Besitz der Castelberg ist die gleichnamige Burg bei Luven. Um 1400 waren die Burgen Surcasti, Löwenstein und Baldenstein im Besitz der Familie." "Castelberg (Familie)." *Wikipedia*. accessed December 5, 2014, http://de.wikipedia.org/wiki/Castelberg_(Familie). As Voice recalls "Herbert Heyde argues

One of the maker's marks revealed by Waterhouse is "J. C. Castel",[219] but this seems to be a misreading of the stylized "N" found, for example, on the Castel recorder in Nice. Some of the other "N" marks look like "M", "W" or "U," most probably due to an unclear stamp. If correct, four maker's marks for Castel would in fact exist: "[reversed] И. | CASTEL", "CASTEL", "N. | CASTEL" and "[stylized] N. | CASTEL", with or without a lion rampant/griffin. Only the last three marks are verified in Castel's eight extant recorders,[220] presented in Table 1.3.2: one sopranino, four altos and three voice-flutes.[221] Many other instruments have come down to us marked Castel,[222] and Waterhouse dates Castel's output to the last three quarters of the eighteenth century, meaning N. and Giuseppe Castel would probably not have been father and son but, in light of the information which helps range Anzolo's working period, perhaps brothers?

The iconographic part of his mark, described both as a lion rampant and a griffin, is not present on all the instruments, and this has given rise to the assumption that more than one person were associated with perhaps a bigger workshop which carried the name of the master. At the moment, the style of his instruments offers the best clue for defining N. Castel's work period.

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that the town symbols used by makers in the Netherlands, Britain, and the area now known collectively as Germany served not only as locators, but as workshop signs, and that these town symbols were often concurrently emblems that monarchy used." Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 237. A lion, such as is present in the Castel mark, has not been found to be associated with the family Castelberg, which is associated with a peacock; but the fact that they partially stem from Löwenstein may offer a possible connection, if indeed the Castel family originated there and migrated to Venice.

[219] William Waterhouse, *The New Langwill Index*. p. 58.

[220] One more recorder bears the mark of Castel but only in the head joint: an alto (DCM 1359/S.19) in the Dayton Miller Flute collection in Washington, D.C., made in boxwood with ivory rings, which Haynes says to be pitched at A=410 Hz. This instrument is only partly by Castel, the body and foot being stamped Carlo Palanca. Laura E. Gilliam, William Lichtenwanger, *The Dayton C. Miller Flute Collection: A Checklist of the Instruments*. Michael Seyfrit, *Musical Instruments in the Dayton C. Miller Flute Collection at the Library of Congress: A Catalog*, I: Recorders, Fifes, and Simple System Transverse Flutes of One Key.

[221] As can be observed, the mark "И. / CASTEL" is not found on any of the recorders extant.

[222] These are: a transverse flute datable to the 1730s marked "GIUSEPPE / CASTEL / lion rampant/griffin" (the only one with this mark), Pelzel Collection, Bensheim. William Waterhouse, *The New Langwill Index*. p. 59; Two other transverse flutes marked "N. / CASTEL" with what looks like a lion rampant/griffin, E.980.2.4 and E.980.2.14, Paris, Musée de la Musique. http://mediatheque.cite-musique.fr/, accessed December 12, 2013. Bruce Haynes, *A History of Performing Pitch / The story of "A"*. p. 440; A transverse flute marked "CASTEL", M700, Stockholm, Musik & Teatermuseet. http://www.mimo-db.eu/, accessed December 12, 2013; Two oboes marked "N. / CASTEL / rampant / griffin," 1314, Leipzig, Museum für Musikinstrumente der Universität Leipzig and C.147, Nice, Musée du Palais Lascaris. http://www.mimo-db.eu/, accessed December 12, 2013; One oboe marked "N. / CASTEL" on the upper joints and "MAGAZARI / BOLOGNA" on the bell. M705, Stockholm, Musik & Teatermuseet. http://www.mimo-db.eu/, accessed December 12, 2013.

Table 1.3.2: Eight extant recorders by Castel

Instrument number	Maker's mark	Collection	Accession number	Size	Year	Material	Length (mm)	Pitch A/Hz	details
Cas.ALT.01	all 3 parts: [stylized] N. CASTEL [griffin/lion rampant]	F.NI.pl, Palais Lascaris, Nice	C168	alto (F)	–	ebony and ivory	TL: 509 SL: 449	407	double holes for 6 and 7
Cas.ALT.02	all 3 parts: N. CASTEL [griffin/lion rampant]	EC.Q.t, Museo de Instrumentos Musicales Pablo Traversari, Quito	3261	alto (F)	–	stained pearwood	TL: 508 SL: 448	–	
Cas.ALT.03	all 3 parts: N. CASTEL [griffin/lion rampant]	I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome	887|644	alto (F)	–	boxwood	TL: 512 SL: 452	403	
Cas.ALT.04	all 3 parts: N. CASTEL [griffin/lion rampant]	I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome	879|1421	alto (F)	–	stained pearwood	TL: 504 SL: 446	c.407	
Cas.SPI.01	both parts: CASTEL .	GB.E.u, Edinburgh University Collection of Historic Musical Instruments	3323	sopranino (F)	–	ivory	TL: 242 SL: 207	415	
Cas.VOI.01	N. CASTEL . [griffin/lion rampant]	I.R.an, Accademia Nazionale di Santa Cecilia, Rome	170	voice-flute (D)	–	boxwood	TL: 605 SL: 533	407	
Cas.VOI.02	all 3 parts: N. CASTEL. [griffin/lion rampant]	I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome	884|698	voice-flute (D)	–	boxwood and metal (ring)	TL: 578 SL: 509	c.427	
Cas.VOI.03	all 3 parts: N. CASTEL . [griffin/lion rampant]	A.W.gm, Gesellschaft der Musikfreunde, Vienna	I.N.111	voice-flute (D)	–	pearwood, stained black	TL: 614 SL: 535	c.396	possibly a tenor in C at A=443Hz[223]

Although three recorders by Castel are kept in the Museo Nazionale in Rome, which also holds many instruments originally in the collection of Alessandro and Benedetto Marcello,[224] none of the Baroque recorders in the collection of the museum originates from their collection.[225] They all stem instead from the Evan Gorga collection.[226]

[223] Günther Faimann, Archiv Bibliothek Sammlungen der Gesellschaft der Musikfreunde in Wien, private communication.

[224] Inherited by the Giusti del Giardino.

[225] Renato Meucci, private communication.

One further instrument by Castel exists, its construction being shared with Palanca.

Table 1.3.3: One extant recorder by Castel (head joint) and Palanca (center and foot joints)

Instrument number	Maker's mark	Collection	Accession number	Size	Year	Material	Length	Pitch A/Hz	details
Cas/ Pal.ALT.01	head: N. (reversed) CASTEL. [griffin/ lion rampant] body: CARLO PALANCA foot: CARLO PALANCA	US.W.c, Library of Congress, Washington, D.C.	DCM 1359	alto (F)	–	boxwood and ivory, with thumbhole bushing, and turned silver ferrules	TL: 503 SL: 441	410[227]	foot joint shaped like a traverso foot. Provenance: W. Howard Head, London, 30 July 1938[228]

Francesco Garsi (Parma, 1764 – 1856)

Almost no information is available on Garsi. Citing Gervasoni,[229] Waterhouse says Garsi was a good maker of clarinets and bassoons, but no such instruments seem to have survived, and in addition to this late recorder[230] only a one-keyed flute is extant.[231]

Table 1.3.4: One extant recorder by Garsi

Instrument number	Maker's mark	Collection	Accession number	Size	Year	Material	Length	Pitch A/Hz	details
Gar.BAS.01	[stylized sun] GARSI PARMA [stylized sun]	I.PA.mc, Conservatorio di Musica Arrigo Boito, Parma	3011	bass (F)	–	maple and brass	TL: 1120 SL: 1000	440	lowest note E; 4 keys; damaged labium

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[226] Interestingly, so does the Castel alto now in Quito: it was originally in the Gorga collection and was acquired by Pedro Pablo Traversari in an instrument exchange between the two collectors in 1907. Richard Rephann, *A catalogue of the Pedro Traversari Collection of musical instruments*. On the Gorga collection in Rome, see: Luisa Cervelli, *La Galleria Armonica: catalogo del Museo degli strumenti musicali di Roma*. See also: Andrea Cionci, *Il Tenore Collezionista* (Florence: Nardini Editore, 2004).

[227] Bruce Haynes, *A History of Performing Pitch / The story of "A"*. p. 452.

[228] "DCM 1359: Carlo Palanca; Castel / Treble (Alto) Recorder in F." *Dayton C. Miller Flute Collection*. Library of Congress, accessed December 2, 2014, http://hdl.loc.gov/loc.music/dcmflute.1359.

[229] Carlo Gervasoni, *Nuova teoria di musica* (Parma: Blanchon, 1812).

[230] Details obtained in communication with the museum of the Conservatorio di musica 'A. Boito'. The instrument has been inspected by Renato Meucci, Petr Zeifert, Fabio Biondi, and Francesco Trevisin. Alessandra Presutti, private communication.

[231] William Waterhouse, *The New Langwill Index*. p. 128.

Paolo? Grassi (Milan, fl. 1730)

Until 2007, all the information on Grassi had been connected to Barnaba Grassi, as discovered by Heyde (1978).[232] Meucci demonstrates this to be an error in translating the term "trombaio/trumbè" and suggests that the recorders are in fact by Paolo Grassi.[233]

Young lists sixteen extant instruments marked Grassi, of which two are recorders.[234] Most of the marks reported by Young are "GRASSI | IN MILAN" with or without the inverted 'N' of 'in' and 'Milan'. He reports the Leipzig sopranino to be marked this way but this is an inaccuracy, as it bears a mark that is perhaps unique to this instrument as shown below and in Appendix 1.

Table 1.3.5: Two extant recorders by Grassi

Instrument number	Maker's mark	Collection	Accession number	Size	Year	Material	Length	Pitch A/Hz	details
Gra.SPI.01	middle joint GRASSI [B?]RASSI [unclear sign]	D.LE.u, Musikinstrumenten-Museum der Universität Leipzig	1113	sopranino (F)	–	boxwood and horn	TL: 252[235] SL: 217	c. 440[236]	in 3 parts
Gra.ALT.01	GRASSI ИИ МІLАИ	I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome	881|638	alto (F)	–	boxwood, ivory and metal	TL: 476 SL: 417	c. 435	now in 2 parts, originally 3

Carlo Palanca (Palanca, c. 1691 – 1783)

According to Alfredo Bernardini,[237] Palanca is the Italian Baroque maker currently best represented by extant instruments, and also the one with the most diverse output. From Bernardini we learn that Carlo was the son of Lorenzo, who was from Palanca in Val Sesia. Haynes calls Carlo's father Giovanni (born c. 1645), who was an instrument maker in Turin in 1705, and says that Carlo studied with his father.[238] Bernardini writes that Carlo was

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[232] Herbert Heyde, "Flöten," in *Musikinstrumenten-Museum der Karl-Marx-Universität Leipzig Katalog* (Leipzig: VEB Deutscher Verlag für Musik, 1978).

[233] Paolo was the father of Antonio Grassi, born in 1736, who would be the maker of the instruments marked "GRASSI / FIGLIO". Franca Falletti, Renato Meucci, Gabriele Rossi-Rognoni, "Marvels of Sound and Beauty, Italian Baroque Musical Instruments." p. 166.

[234] Phillip T. Young, *4900 Historical Woodwind Instruments*. pp. 91-92.

[235] Ralf Netsch, private communication.

[236] This information was not available from the museum. Ralf Netsch says c. 440 Hz; Fumitaka Saito calculates c. 425 Hz; private communication.

[237] Alfredo Bernardini, "Carlo Palanca e la costruzione di strumenti a fiato a Torino nel settecento."

[238] Haynes only gives Giovanni as his first name (referencing Bernardini, who in turn was citing Francesca Oldling, "La costruzione degli strumenti a fiato a Torino tra '700 e '800," *Quaderni della Regione Piemonte, Artigianato*, 2/II (Oct. 1997), p. 45), Bernardini gives Lorenzo. Bruce Haynes, *The Eloquent Oboe, a History of the Hautboy from 1640 to 1760*, Oxford

admitted to the Cappella Reale of Turin in 1719 as a bassoon player. Therefore, besides being a maker, he was also a musician, and well related with the most notable woodwind players of his time, the Besozzis. In Voice's recent work we read that

> [a] 1705 census document is the first dated documentary evidence of a professional woodwind instrument maker in Italy after the arrival of the modern French instruments.[239]
> This first reference to a flute maker in Turin appears in the census of 1705 as the registration of Giovanni Lorenzo Palanca (ca. 1645 – after 1705), who "fa flutte" (makes flutes), aged sixty. It gives the information that he lived at Casa Marchese di Pianezza, Isola di S. Emanuel along with his wife Maria (aged forty), and his son Carlo, working in the bottega (workshop) at the age of fourteen. Listed as living with him are sons Aymo (aged ten), Biaggio (aged eight), Bertolameo (aged three), and lastly a fifteen-year-old daughter, Angella Maria. This daughter is the artist known as Angela Maria Pittetti (1690–1783) who has painted a portrait of a flautist. A second sister, also a successful painter, is reported.[240]
> There are no extant instruments by this maker [Giovanni Lorenzo], but he was the father of Carlo Palanca, an Italian maker of the recorder, traverso, oboe, and bassoon, and records show that Carlo worked in his father's workshop.[241]

Voice later also writes that

> Carlo Palanca was born Carlo Pitteti, in Palanca, Val Sesia in northern Italy, and spent most of his life in Turin. His year of birth, 1691, can be ascertained by his age as given in the 1705 census, as shown above.[242]

Carlo Pitteti 'detto' Palanca received assignments for "flauti" in 1748 and 1755. In 1773, oboes were ordered from him from Lisbon ("coll'intelligenza del s.r Besozzi"),[243] conceding Palanca a certain air of fame. But three years later, the same commissioner writes again complaining that Palanca had sent an oboe in five parts [sic], three old and only two new.[244] This is an interesting contemporary account of what in fact can be observed on precisely the Castel/Palanca recorder in Washington,[245] where the head of the instrument by Castel was clearly re-turned to match the Palanca body. Details of this instrument can be

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Early Music Series (Oxford: Oxford University Press, 2001). p. 404. Alfredo Bernardini, "Carlo Palanca e la costruzione di strumenti a fiato a Torino nel settecento." p. 22.

[239] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 283.

[240] Ibid. p. 284.

[241] Ibid. p. 283.

[242] Ibid. p. 286.

[243] Alfredo Bernardini, "Carlo Palanca e la costruzione di strumenti a fiato a Torino nel settecento." p. 22.

[244] Ibid. p. 23.

[245] Already listed in the section on Castel above.

found on the website of the Library of Congress.[246] Aesthetically the instrument does look like one, with homogeneous wood; but the internal design does not really work as one, neither is its constructional quality comparable with other Baroque instruments listed here. Bernardini writes that the Portuguese letter is not the only reason to doubt the competence of Palanca, and says that his work shows "scadente qualità dei materiali utilizzati, l'approssimazione nella tornitura e la diversità poco convincente tra i suoi strumenti (non solo in dimensioni, ovvero altezza d'intonazione."[247] This is not actually observable on the three complete Palanca recorders that are extant, the mixed Castel and Palanca one being the odd one out, mostly in fact because the Castel head, very uncharacteristically, is feebly made.

Only one of Palanca's instruments, an oboe, is dated 1780. According to Bernardini,[248] Palanca suffered from loss of eyesight beginning in 1770. About this oboe, Voice writes: "[t]his date, an anomaly on the Palanca instruments, appears three years after he was retired out of service to the duke, due to failing eyesight. This would indicate to me the possibility of another maker using his mark, or perhaps doing the finer finishing work on the instrument."[249]

Young lists forty of Palanca's extant instruments,[250] including four recorders, three of which are listed here (the fourth is listed above as it is shared with Castel).

Bernardini states that Palanca instruments find more affinity with the Anglo Saxon school than with the French school, which might be assumed from his location in the environment of Turin.[251]

Table 1.3.6: Two extant recorders by Palanca

Instrument number	Maker's mark	Collection	Accession number	Size	Year	Material	Length	Pitch A/Hz	details
Pal.ALT.01	all 3 parts: CARLO PALANCA [sun, star or flower]	DK.K.m, Musikmuseet, Musikhistorisk Museum & Carl Claudius' Samling, Copenhagen	E86	alto (F)	–	boxwood with ivory mountings and flageolet windcap	TL: 535 SL: 421	c. 426–430	flageolet-like mouthpiece.

[246] "DCM 1359: Carlo Palanca; Castel / Treble (Alto) Recorder in F".

[247] Alfredo Bernardini, "Carlo Palanca e la costruzione di strumenti a fiato a Torino nel settecento." p. 23.

[248] Ibid. p. 22.

[249] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 229.

[250] Phillip T. Young, *4900 Historical Woodwind Instruments*. pp. 172-174.

[251] Alfredo Bernardini, "Carlo Palanca e la costruzione di strumenti a fiato a Torino nel settecento." p. 24.

Pal.TEN.01	CARLO PALANCA	private collection (V. Gilardone), Fontanelle	–	tenor (C?)	–	boxwood	–	–	exhibited in Bologna in January, 1984.
Pal.TEN.02	all 3 parts: CARLO PALANCA	US.W.c, Library of Congress, Washington, D.C.	DCM 1321	tenor (C)	–	boxwood/ fruitwood, ivory	TL: 610 SL: 547	c. 438	provenance: Alec Hodsdon, Lavenham, Surrey, England, 15 Sept. 1937.[252]

Giovanni Panormo (Palermo, 1746 – Naples?, after 1783)

Only one recorder by Giovanni Panormo survives, an ivory alto with stunning turning work kept at the Library of Congress, marked "IOAN: | PANORM:" on all three sections. An article dedicated entirely to this recorder was published in 2012, but a number of developments since then require an update.[253]

Giovanni was the son of Gaspare Trusiano, a luthier from Palermo. Panormo, the ancient name for the city of Palermo in Sicily,[254] was the surname adopted by the Trusiano family upon their move to Naples after 1754. Theirs was indeed a *family* of makers, famously manufacturing violins, bows and guitars not only in southern Italy but also in Paris, Dublin and London; the Neapolitan branch of the family, though, seems to have specialized in woodwind instruments well into the nineteenth century.[255]

Giovanni Trusiano 'detto' Panormo was born in Palermo and baptized on March 24, 1746.[256] He was active as a woodwind maker in Naples and is known to have sold two *flautini* to the Teatro del Fondo in 1783.[257] These are late dates for a recorder, and the Washington alto indeed contradicts such late dating: the style of the turning work is typical of the early 1700s and it has a proportionally long foot, with a very wide bore – a design principle found in early instruments by Bressan and Stanesby Sr. As proposed in 2012, it is

[252] "DCM 1321: Carlo Palanca / Tenor Recorder in C." *Dayton C. Miller Flute Collection*. Library of Congress, accessed December 2, 2014, http://hdl.loc.gov/loc.music/dcmflute.1321.

[253] Inês de Avena Braga, "The Panormo Alto Recorder: A *Dolce Flauto Dolce*?."

[254] Giuliano Gasca Queirazza, "Palermo," in *Dizionario di toponomastica. Storia e significato dei nomi geografici italiani* (Turin: UTET, 1990). p. 469.

[255] Francesco Nocerino, "Gli strumenti musicali a Napoli nel secolo XVIII." pp. 795-797.

[256] Giovanni Paolo Di Stefano, "Panormo". The date given in this article is 1743 but Di Stefano confirms that the correct date is 1746. Giovanni Paolo Di Stefano, private communication.

[257] Francesco Nocerino, "Gli strumenti musicali a Napoli nel secolo XVIII."

possible this instrument was made in the end of the Baroque period but copying an earlier design.

Extant instruments reported to bear the same mark of the Washington, D.C. recorder include four transverse flutes,[258] one oboe,[259] one tenor oboe[260] and one clarinet.[261] Four other instruments carry similar marks.[262]

A few oboes by Giovanni Panormo have *corps de rechange* for the top joint. One of these has a longer joint which plays at A=400 Hz and another joint which is damaged but, considering its length, seems to be at A=415 Hz.[263] As reported in 2012, the Washington Panormo recorder is unfortunately unplayable, the "head joint [being] severely cracked into three pieces with other cracks and losses."[264] From the recorder's length and bore measurements, its pitch can be deduced to be around A=420 Hz.[265]

Table 1.3.7: One extant recorder by Panormo

Instrument number	Maker's mark	Collection	Accession number	Size	Year	Material	Length	Pitch A/Hz	details
Pan.ALT.01	IOAN: PANORM:	US.W.c, Library of Congress, Washington, D.C.	DCM 327	alto (F)	–	ivory	TL: 487 SL: 431	c. 420	head joint severely damaged; Provenance: Sumner Healey, New York, 25 Apr. 1923, formerly in the Tolbecque collection.

[258] 519: Library of Congress, Washington, D.C. (William Waterhouse, *The New Langwill Index*. p. 290); 809, 810, 822: Museo Nazionale degli Strumenti Musicali, Rome. There may be a fifth one in Rome (821) but the catalogue is not clear (Luisa Cervelli, *La Galleria Armonica: catalogo del Museo degli strumenti musicali di Roma*. pp. 322-323).

[259] 842: I.R.ms, Museo Nazionale degli Strumenti Musicali, Rome. (Luisa Cervelli, *La Galleria Armonica: catalogo del Museo degli strumenti musicali di Roma*. p. 326).

[260] 1610: Musée de la Musique, Paris (William Waterhouse, *The New Langwill Index*. p. 290).

[261] 326 C/8: The Royal College of Music Museum of Instruments, Rome (ibid.).

[262] In the Museo Nazionale degli Strumenti Musicali in Rome, one oboe (830) and a tenor oboe (848) are both marked: "IOAN: / PANORM: / NEAPOLI". This is the same mark found on the oboe and *voce umana* in the private collection of Alfredo Bernardini (private communication). Also in Rome, a piccolo transverse flute (806) is marked "PANORM / E FIGLI / NAPOLI" (Luisa Cervelli, *La Galleria Armonica: catalogo del Museo degli strumenti musicali di Roma*. pp. 322, 324, 326). At the Musik- & Teatremuseet in Stockholm, another flute (698) is marked the same way. Waterhouse dates this latter mark to the early nineteenth century, as a manuscript list of 1835 now at Reggio Calabria details the woodwind and brass instruments made by 'Panorm' (William Waterhouse, *The New Langwill Index*. p. 291).

[263] Alfredo Bernardini (private collection), private communication.

[264] "DCM 0327: Joannes Panormo / Treble (Alto) Recorder in F." *Dayton C. Miller Flute Collection*. Library of Congress, accessed November 10, 2014, http://hdl.loc.gov/loc.music/dcmflute.0327.

[265] The author's copy of this instrument plays at A=425 Hz. Copy made by Fumitaka Saito (Amsterdam, 2011).

Domenico Perosa (Venice?, c. 1693 – after 1757)

We have only a few puzzle pieces to suggest the picture of Domenico Perosa's life. Waterhouse suggested that Perosa's instruments dated from the first half of the eighteenth century, and alluded to a kinship with Marco Perosa, who was an oboist at San Marco in Venice, c. 1760. Haynes[266] had also linked Perosa with Venice, and the proof of this link was shown by Sardelli in 2004,[267] when he presented payment records of the Ospedale della Pietà between the years 1753 and 1757.

The records related to recorders are transcribed here:[268]

Adi 10 Giugno 1753 Venetia
L'Ospital della Pietà deve dar per fatura di agiustar un Flauto
Mutatto l [`]anima et quello li ocoreva L. 2.10

Adi 11 Luglio 1753
Simile per haver agiustato due Flauti l [`] uno fatto
il capeletto di sopra di avolio e agiustato li altri L. 6

Adi 24 detto
Simile per agiustar altro Flauto fatura L. 1.10

Adi Primo Febraro 1754
Simile per agiustato un med:[mo] fatura L. 2.10

Io Domenico Perosa Profesor da Instromenti
Da fiato San Moise.

Sardelli writes that the traversos of Italian origin known so far (listing a flute by Giuseppe Castel, the early instruments by Palanca and the Anciuti flutes in Vienna), all share aesthetic and structural characteristics with German instruments, such as those of Denner, Johann Heinrich Eichentopf and Oberlender.[269]

The recent study of Voice has uncovered further details of Perosa's life. She writes:[270]

> The name Perosa is paired with the names Domenigo (in heteromorphic orthography), and Domenico in the Venetian *Arte de' Tornidori* papers, and appears for the first time in the membership list for the ivory turners in the *Arte de' Tornidori* in 1712. […] For Domenico Perosa to have been a master by 1712, he would have been apprenticed by 1705.

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[266] Bruce Haynes, *The Eloquent Oboe, a History of the Hautboy from 1640 to 1760*. p. 407.

[267] Federico Maria Sardelli, "Il flauto nell'Italia nel primo Settecento." pp. 147-149.

[268] In this list, 'flauto' or 'flauti' is always in reference to the recorder, as other entries in the list speak of 'traverso' or 'traversie' when the transverse flute is meant (this is consistent with what was presented in the Introduction, and also with what will be shown in Chapter 3). As Sardelli explains, "mutatto lanima" means to re-ream the bore, the other terms seeming self-explanatory. It is interesting to note that Perosa re-made an ivory tenon or beak 'jacket' for one of those recorders, indicating that the Pietà could afford to own recorders with ivory decorations.

[269] Federico Maria Sardelli, "Il flauto nell'Italia nel primo Settecento." p. 150.

[270] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 87.

Voice notes later that[271]

> Perosa is found in the *Arte de´ Tornidori* guild records in the years 1712, 1713, 1718, 1719, 1720, 1721, 1730, 1732 (he appears as Mengo in this listing), 1733, 1738, and 1745.

And she defines the degree of kinship between Domenico and Marco as follows:[272]

> This connection was questioned as a sibling relationship, but as Domenico must have been at least eighteen to twenty years old when he was first registered in the *Arte de´ Tornidori* in 1712, Marco may have been a son, a nephew […]

Voice then introduces a third Perosa:[273]

> There is a second person with the surname Perosa mentioned in a short undated list of masters with their apprentices and workers in the *Arte dei Intagliadori*, the woodcarvers' guild. He is named as Zorzi Perosa, and the information shows that he was a master. There is no information with which to establish a relationship with either Domenico Perosa, or with the oboist Marco Perosa who was listed as an oboist at San Marco in 1750. It frequently appears however that there are both makers and players in the one family; therefore a kinship between Domenico and Marco, and possibly even Zorzi, may one day be verified: at this stage it is a link still to be explored.

Apart from the two recorders, only an oboe marked "D. PEROSA *[in a wimple or scroll]* " survives.[274]

Table 1.3.8: Two extant recorders by Perosa

Instrument number	Maker's mark	Collection	Accession number	Size	Year	Material	Length	Pitch A/Hz	details
Per.SPO.01	head: ∴ D. PEROSA *[in a wimple or scroll]* I[275]	A.W.km, Kunsthistorisches Museum, Vienna	SAM 153[276]	soprano (C)		boxwood	TL: 351 SL: 305	415[277]	instrument very bent

[271] Ibid. p. 280.

[272] Ibid. p. 282.

[273] Ibid. p. 89.

[274] 461: Copenhagen Musikhistorisk Museum, Copenhagen. William Waterhouse, *The New Langwill Index*. p. 299. Sardelli mentions "quattro buoni oboi oggi in Francia e in Danimarca" but doesn't give sources. Federico Maria Sardelli, "Il flauto nell'Italia nel primo Settecento." p. 147.

[275] The exact same mark is to be found on the Perosa oboe in Copenhagen. Adrian Brown, private communication.

[276] The old catalogue number is given by Waterhouse (8540.C164), along with the indication "ex-Catajo." William Waterhouse, *The New Langwill Index*. p. 299. This refers to the fact that this instrument originates from the collection of the Obizzi family, originally in Padua, moved to Vienna in 1870. Adrian Brown notes in his measurements (private communication) that the instrument was listed in the inventory of 1871. More information can be found at http://www.khm.at/en/visit/collections/collection-of-historic-musical-instruments/history-of-the-collection/, accessed December 31, 2013.

Per.SPI.01	head: PEROSA *[in a wimple or scroll]*	private collection (G. Klemisch), Berlin	–	sopranino (F)	ivory	TL: 259 SL: 226	415[278]	cracked on head and foot joints

1.4 Recorders studied: a selection

As mentioned before, all the instruments of which measurements, drawings and pictures could be collected are presented in Appendix 1: Catalogue of Italian Baroque recorders. This study offers a starting point for the continuation of the effort of measuring, studying and eventually reproducing these instruments.

Detailed information on selected instruments is presented below. With the exception of the Palanca alto of Copenhagen, all the instruments were examined by the present author and Fumitaka Saito.[279]

Anciuti alto, private collection, Celle

During a visit in 2013[280] it was possible to closely examine Anc.ALT.03, which is kept in good condition. It was observed that Anciuti's mark on the head of the instrument resembles mark "[a]" presented by Waterhouse,[281] with the addition that it is numbered "I". The middle joint is also numbered "I", whilst the foot is numbered "III". Out of Anciuti's recorders of which detailed information could be gathered, only the Graz alto of 1717 (Anc.ALT.01) presents similar numbering ("II", "I"," "II"), whilst what is left of the sopranino of Berlin (Anc.SPI.02) shows a sign which could either be a letter ("O", which Bernardini and Meucci suggest refers to "Opus") or a number ("0", which might be more in keeping with the rest of the numbering in the Celle and Graz altos).

Numbering of instrument parts was not uncommon, and facilitated the practical usage of *corps de rechange* at different pitches. In this case, that would be strange, considering that normally only an extra middle joint is made, but the 'original' head and foot

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[277] In his measurements (private communication), Adrian Brown gives 415 as a c instrument or 440 as a b instrument, but Haynes says 410. Bruce Haynes, *A History of Performing Pitch / The story of "A"*. p. 452.

[278] Guido Klemisch, private correspondence.

[279] The present author could not attend the visit to the Edinburgh collection, so the observations on the Castel sopranino all stem from Saito.

[280] The present author would like to thank Mrs. Haase-Moeck for her permission to examine this instrument as well as her son, Jan Nikolai Haase, for his time accompanying our research.

[281] William Waterhouse, *The New Langwill Index*. p. 8.

remain, so I–I–III would be an anomaly, unless the 'third' joint did not originally belong to this instrument.

Observation of the wood grain patterns of the head and foot show that they coincide. The instrument is made of boxwood with reddish patches on the (right) side of the head and foot; this redness is not present in the body.

The Celle alto is dated 1729, a date also found on another alto in a private collection in Parma (Anc.ALT.04); it would have been interesting to verify whether Anc.ALT.04 also contained any numbering, but, unfortunately, direct access to the instrument was not possible.

It is also possible that marks were used inside Anciuti's workshop as some kind of internal control. Alfredo Bernardini postulates that "the I–I–III on the recorder might mean something else, as to combine some particular joints together according to their bore. Makers did that sometime (they still do now), like Denner put often a D, probably as approval of the head of the workshop before delivery."[282] This may well be the case, but why not I–I–I? Bernardini further notes that "the 1722 Anciuti oboe at Milan Castello Sforzesco is the only one by this maker that has alternative top joints in different lengths to offer two pitches. […] Usually the smaller number was for the longer/lower joint and vice versa."[283]

Prior history of the instruments in the Moeck collection is in possession of the Moeck family, and access to this information is not available, so it is not clear if Anc.ALT.03 is the instrument sold in 1978 by the Early Music Shop. If it is not, Anc.ALT.04 may be. "612" is written inside both sockets of the Celle alto, but this could not be linked to any inventories that would confirm the relation to the Early Music Shop sale.[284]

The block of the instrument has one crack and one small chip, which has been filled with resin or glue, most probably in a modern restoration. The block is now very thin on the beak side. There is no top chamfer and the block chamfer is virtually nonexistent. The sanding of the block surface seems to be done in a zigzag pattern towards the windway exit but in one direction (parallel to the windway) at the windway entrance.

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[282] Alfredo Bernardini, private communication.

[283] Alfredo Bernardini, private communication.

[284] Phillip T. Young, *4900 Historical Woodwind Instruments*. p. 5. Correspondence with the shop currently known as The Early Music Shop reveals only that "[t]he Early Music Shop started around 1968 and was very much part of the Early Music boom of the 1970s, unfortunately our sales records do not go as far back as that! We did not have a shop of our own in Rome, though there could certainly have been a shop using the 'early music' tag at that time." Peter Booth, private communication.

The surface of the bore of Anc.ALT.03, despite being blackened, was rather smooth. This alto has a very wide head bore, comparable to instruments of Stanesby Jr. which are pitched at approximately A=410 Hz. The large head bore, more conical than expected, might compensate the absence of chamfers in stabilizing low notes.

Fortunately, it was possible to play a little on the instrument, and the following remarks are based on that trial:

- it plays evenly throughout the whole range, with rather easy high notes;
- the sound is very restricted, requiring especially delicate blowing;
- probably because of the absence of chamfers it speaks fast but requires subtle articulation;
- it is pitched at approximately A=430 Hz but its tuning feels odd, with a very small C4–C5 octave. B♭4 works with 0123467 but B♭5 does not work with 012346.

A few conjectures can be made:

- a shorter foot, which might be numbered "I" would probably give a better overall tuning to this instrument, with the exception that F4 would be too high;
- isolating the "III" foot and re-assembling it with proportionally adequate "III" head and middle joints would probably result in A=440 Hz alto.

Finally, the turning work of the Celle alto is simple. The fact that it is made entirely in box, in a modest fashion, with numbered joints, suggests to me an instrument that was played rather than made as a collectible. This is confirmed by the worn out thumbhole.

Anonymous alto, 1124-1869, London

The website of the Victoria & Albert museum provides in depth information on this striking unsigned alto (Ano.ALT.01), made of "fruitwood, veneered in turtle shell inlaid with gold piqué, silver and mother of pearl, and set with turned ivory collars"[285]:

> This exquisitely decorated instrument is unsigned but was probably made between about 1730 and 1750 in Naples, where furniture veneered with inlaid turtle shell was a speciality.
>
> Treble recorder of three joints, of turned fruitwood, veneered in turtle shell inlaid with gold piqué, silver and mother of pearl, mounted with ivory, plainly turned. The sections are turned and bored, the outer surfaces wrapped with turtle shell, which is overlapped and welded to itself after heating. The turtle shell would then be polished so that no line of joining is apparent.

[285] "1124-1869." V&A, accessed December 1, 2014, http://collections.vam.ac.uk/item/O58920/top-joint-unknown/. Square brackets originate from the original text, with the exception of '[…]' which indicates the omission of irrelevant sections.

[Treble recorder] A slightly bulbous ivory mouthpiece is turned with plain mouldings at the base. It is cut away on the underside and the fruitwood core is visible, with the fruitwood infill. Below this the joint is veneered in turtle shell, turned in the shell with shallow collars at top and bottom and showing on the top and bottom edge a pattern in gold piqué of addorsed S-scrolls with pendants including small circles of mother of pearl. Below the voicing aperture (through which the fruitwood core is visible) the turtle shell is inlaid with two coats of arms in gold, below a closed crown which is deeply engraved into the turtle shell. The dexter shield is barry of five, the two gold bars each engraved with continuous curving motifs. The sinister shield is barry of six, the three gold bars each engraved with two horizontal lines, the three bars of shell each inlaid in gold with single fleurs-de-lys. The core of the joint is visible below the lower edge of the turtle shell, where it extends approximately 4 cm to provide the core for the ivory collar […].

[Collar] Collar of ivory, of barrel form, turned at top and bottom with small, plain mouldings.

[Main joint] A plain, turned section, veneered with turtle shell and inlaid with bands of gold and mother-of-pearl inlay at top and bottom. The core of the joint extends beyond the decorated area at each end to provide for connection with the adjacent sections of the recorder, the narrower areas bound with fine cord to provide a tight fit. The joint is set with five finger holes on the top surface, each with an inlaid, framing mount in the form of a baroque cartouche, of engraved silver and with an additional finger hole below these, which is set within the inlaid decoration and shows no framing mount. There is an additional finger hole, with a similar collar, on the underside at the top.

[Bottom joint] A bell-shaped foot joint, with a turned ivory collar at the top and an ivory edge section to the base. The upper edge of the turtle-shell collar is set with the freize of addorsed S-scrolls in gold piqué and mother of pearl. The upper ivory collar is pierced with one finger hole on the underside of the instrument.
This recorder was one of a number of historical wind instruments that formed part of a decorative trophy on the wall of the Paris apartment of the composer of light opera Giocchino Antonio Rossini (1782–1868). As yet the arms of the original owner (inlaid into the turtle-shell) have not been identified.

When it was acquired in 1869, the Museum's Art Referee, Matthew Digby Wyatt wrote from Paris on April 20th: 'This instrument in fine tortoiseshell inlaid with fine piqué work in gold is a fine and rare specimen of (I believe) Neapolitan work of the middle of the last century. It bears inlaid in gold the arms -[sketch added here]. It belonged to Rossini's well-known trophy, and was well worthy to do so as it is a really fine specimen of the feasibility of applying art to musical instruments of a similar class. It general form is somewhat this - [sketch added here] - and very elegant. Upon the whole I think the prices asked reasonable for this object and recommend the purchase.' […] This is an early acquisition for which there are no Registered Papers. It was bought from Mr M. Bauer on 12 July 1869 for £24.0.0. and was described as a flute à bec.

The technique of inlaying turtle shell with gold, silver and mother-of-pearl had originated in Naples at the end of the sixteenth century and the city remained noted for such work throughout the seventeenth and eighteenth century. Pieces decorated with these materials were popular souvenirs for travellers making the Grand Tour. Turtle shell was extremely soft, and could be worked with gentle heat and polishing, so that joins in the pieces used for covering items could be 'welded' together, as on this

instrument, which shows not join lines in the veneer. The arms incorporated into the design of this instrument suggest that it was a particular commission.

The 'Rossini alto' is in storage since the Victoria & Albert virtually closed their instrument exhibition in 2011. We were very fortunate to have obtained special permission to examine this unique instrument in 2013.

It was not possible to remove the block and it was also not possible to play it. The instrument was measured, and those details are reproduced in Appendix 1. With the bore being discussed and compared with other instruments below, and with such a detailed description already available from the museum, only a few further observations seem necessary:

- small repairs can be seen on the Coat of Arms of the instrument. On the right side, the curvature of the tortoise shell and the gold inlay match, while on the left side a repair is discernible. The crown-shaped gold inlay of the top part of the Coat of Arms is missing;[286]
- the instrument is covered in *fleur de lis*; which may be another clue to its ownership;
- no undercutting of the labium is perceptible without removing the block, so it is probably very short;
- not only does this instrument display expertly made turning work and decorations, but its bore and voicing are those of an expertly constructed musical instrument;
- from the measurements we deduce it to be pitched at approximately A=403 Hz.

Castel alto, C168, Nice[287]

In the collection of the Palais Lascaris museum, bequested by Antoine Gautier (a collector born in Nice who had a strong penchant for Italy, and continued to trade and correspond with Italians, also after Nice became French in 1860), one finds a number of eighteenth-century recorders, including a stunning alto by N. Castel. Aside from its beautiful design and mint condition, it is unique in being the only Italian Baroque recorder with double holes (or twin holes), as will be seen below.

[286] The April 20, 1869 report by Wyatt does not mention either of those small imperfections. Art Referee Report by Digby Wyatt. V&A Registry file: RP/1869/18487 on MA/3/31.

[287] This section is a revised version of Inês de Avena Braga, "Three Castel recorders: Rome, Edinburgh and especially Nice."

This recorder – as well as the oboe by Castel and two other unidentified recorders, all in the collection of the museum – was in Gautier's possession already in 1878, as it is listed in an attachment to a letter from April 1st to Gaetano Gaspari (who was instrumental to the collection of the Liceo Musicale in Bologna). Gautier was close friends with Gaspari, and wrote that his visit to the Liceo was his inspiration for beginning to collect instruments himself.[288]

This beautiful alto is made of ebony, with beak, tenons and rings covered in thick ivory. Its elegant design and skilled turning work suggest a confident maker, whom we understand to be N. Castel from the maker's mark on all three sections of the recorder, which is accompanied by what Waterhouse describes to be a 'lion rampant'.[289] It is worthy of note to mention that this stylized 'N' is not the same as the 'N' marked on the oboe by Castel found in the same collection.[290]

The Nice Castel recorder was studied by Marc Ecochard in 1987, and a note by him from November of that year (written to the previous curator of the collection, Michel Foussard) reveals he found the animal under the maker's name to be a griffin, instead of a lion rampant.[291] He also notes that both this recorder and the oboe by Castel (which has beautifully ornate silver keys) were probably made for distinguished clients (and judging by the fact that their pitches do not match, probably different clients), and he judges the recorder to be at A=402 Hz and the oboe at A=415 Hz.[292] However, Ecochard fails to mention this recorder's most distinguishing feature: the fact that it has (equal sized) double holes for fingers 6 and 7.[293] No other extant, stamped, Italian recorder from the Baroque period displays this feature, and according to Van Heyghen only ten other Baroque recorders with similar characteristics have survived,[294] including instruments by Bressan, I. C. Denner, Stanesby Jr. and Steenbergen. Out of the high number of extant instruments with single holes, double holes are thus uncommon, but nonetheless mentioned in contemporary treatises, namely in France: Loulié's fingering for C♯6 suggests he had an instrument with

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[288] The letter is held in the International Museum and Library of Bologna, but the information was kindly provided by Robert Adelson, curator of instruments at the Lascaris Museum, in private communication.

[289] William Waterhouse, *The New Langwill Index*. pp. 58-59.

[290] It is interesting to note that this oboe, as well as the one in Stockholm, both have double holes for hole 4.

[291] Lascaris Museum, *Dossier d'oeuvre*.

[292] Drawings and measurements made in 1986 by Marc Ecochard, *Dossier d'oeuvre*.

[293] Modern finger numbering convention is used: 0 being the left-hand thumb, 7 being the right-hand little finger.

[294] Peter Van Heyghen, unpublished list, private communication.

double holes for finger 3,[295] and Hotteterre[296] reports that in his days instruments with double holes for fingers 3, 6 and 7 were common. This will be further discussed below.

1987 was also the year in which Philippe Bolton produced a fine set of technical drawings with measurements of the Castel alto.[297] Bolton set his tuning machine to A=410 Hz, already diverging from Ecochard. Curiously, Bruce Haynes seemed to disagree with both, listing it at A=404 Hz.[298] Bolton's drawings show the instrument to be of a design which resembles English instruments by Bressan. Its proportions are though quite unique: the ivory mounts being especially bulky and the wooden body rather slim.[299] The catalogue of a 1991 exhibition on music in painting, which includes a picture of the Nice Castel alto recorder, suggests that it recalls the instrument depicted in the paintings of János Kupezki.[300] Upon closer observation of one of the three paintings (Portrait of a man with a recorder, oil on canvas, 81.5×65.5 cm, Hamburg, Hamburger Kunsthalle, No. 685) one naturally concludes it to be a different instrument, that of the painting having different ivory mounts and clearly visible single holes for fingers 6 and 7.[301]

In the late 1980s a recording by the ensemble La Serenata (Sonates pour flûte a bec, label Pierre Verany, recorded on 17 and 18 May 1986, released in 1987) was made using instruments in the collection of the Nice museum. The recorder player of the ensemble, Christian Mendoze, played the Castel recorder in concerts preceding and following the recording (all in 1986),[302] but decided not to use it for the CD, because of intonation difficulties. In his plan, Bolton reports: "Dans l'état actuel le son est venteux (biseau affaissé) laissant le canal trop ouvert par rapport à celui-ci, et le bouchon trop haut. Par ailleurs il semble y avoir eu des tentatives de réaccordage car les notes du medium sont trop

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[295] Etienne Loulié, "Méthode pour apprendre à jouer de la flûte douce," (Paris late 1680s – revised 1701/1702). F-Pn, ms. n.a. fr. 6355, ms. xix, xx.

[296] Jacques Hotteterre, *Principes de la flûte traversière, ou flûte d'Allemagne, de la flûte à bec, ou flûte douce, et du haut-bois, diviséz par traitéz op. 1* (Paris: C. Ballard, 1707).

[297] It only missed a few details on voicing, completed by Fumitaka Saito during a visit to the Lascaris Museum in November 2012 at the commission of the present author.

[298] Bruce Haynes, *A History of Performing Pitch / The story of "A"*. p. 452.

[299] The ivory mount on the bell is screwed in place, and has therefore thread to help the fit.

[300] Josiane Bran-Ricci, Jean Forneris, Béatrice Debrabandère-Descamps, "La Musique et la Peinture 1600–1900," ed. Musée de Beaux-Arts (Nice Les Arts Graphiques, 1991). p. 164.

[301] Nicholas Lander, "Recorder Homepage - Recorder Iconography (K)." accessed November 9, 2014, http://www.recorderhomepage.net/recorder-iconography/artists-k/.

[302] Reviews were made of three concerts but the current curator, Robert Adelson, informed me in private correspondence that nothing specific about the sound of the Castel alto is mentioned.

hautes."[303] This is probably due to modern attempts to retune and revoice the instrument, with obviously unsuccessful results and permanent damage to the instrument's historical conditions. Bolton remarks in his plan's tuning table that wax can be found on a few holes, probably an effort to correct the tuning. More personal impressions of the instrument's playing qualities from a visit in November 2012 alongside recorder maker Fumitaka Saito are the following:

- it seems to be in A=407 Hz (after being hand warmed for five minutes at 19.8° C and at 60% humidity);
- the instrument plays evenly throughout the entire range, with full low notes and quite easy high ones;
- dark, woody, warm sound though also sweet, and not particularly clear (probably due to the labium now being too low);
- slow articulation response;
- considerable dynamic range.

The following constructional traits could be observed by a more in depth observation of the instrument's voicing by Saito:

- the block is probably made of (very compact) cedar and its surface is very rough and sanded in different directions, but it is unclear why (perhaps to solve a wolf problem or too much harmonic noise, or solve a problem of condensation?)
- rather open window, with a very vertical top chamfer, which presents an unusual extra angle that produces what could be called a 'double chamfer'. The function of this 'double chamfer' still eludes us: might it perhaps be a way to achieve a free feeling of blowing as well as a stable tone?[304]
- the concavity at the bottom of the block is similar to that observed on English recorders of the time, and the top of the block is concave, as expected on historical instruments.

[303] *Dossier d'oeuvre*. Translation by the present author: "In its current state the sound is windy (labium collapsed), leaving the wind channel too open in relation to it, and the block too high. Moreover there seem to have been attempts to retune it because the middle range notes are too high."

[304] On a prior study realized by the author and Saito on a Panormo alto (Inês de Avena Braga, "The Panormo Alto Recorder: A *Dolce Flauto Dolce*?."), a different but equally puzzling voicing detail was observed, in the unusual angle to which the top of the window is cut. These are important examples of the refined work that was done on these instruments, which we do not always grasp, but which we are bluntly ignoring when leaving those unstudied.

In 2013, this instrument was copied by Fumitaka Saito, on my commission, and I used the copy in a CD recording.[305] The opportunity to play on this model for a prolonged period revealed a few more traits of Castel's work:

- when played alone, the feeling of the player is that of a refined but small and delicate sound. Surprisingly, it does not sound too soft when accompanied by a harpsichord; the sound does "carry."
- the double holes for 6 and 7 do not necessarily facilitate tuning but naturally are essential in making F♯4, G♯4 and A♭4 notes that can be heard as clearly as all others.

Castel sopranino, 3323, Edinburgh[306]

This beautiful ivory sopranino by Castel had never been suitably measured.[307] Stemming originally from the Shaw-Hellier Collection, the instrument is on permanent loan to the Edinburgh University Collection of Historic Musical Instruments since 1993, previous ownerships unknown.

Considering its good condition and the fact that it is housed in such a famous and accessible collection, the lack of previous measurements is indeed unexpected. Though unexceptional (i.e. good turning work, good design, good voicing) it would probably be a good instrument to copy, especially considering its reported pitch of A=415 Hz.[308] The maker's mark found on both parts of the instrument is a simplified version of the marks found on other recorders by Castel, and the only one marked in this manner, perhaps precisely because it is the only instrument ivory instrument by Castel.

It was not possible to play this instrument, but, fortunately, it was possible to remove the block for inspection, and thus, among other things, to observe better its chamfer. It is slightly damaged on the left side, as is the left back side of the beak as well as the front. The edge of the labium is slightly damaged, and the catalogue of the collection suggests the window to have been made widened.[309]

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[305] La Cicala, Inês d'Avena, *Dolce Napoli, Sonate & Concerti per Flauto (CD)*, Passacaille 1007 (2014).

[306] This section is also a revised version of Inês de Avena Braga, "Three Castel recorders: Rome, Edinburgh and especially Nice."

[307] This sopranino was measured in April 2013 by Fumitaka Saito, on the present author's commission.

[308] *Historic Musical Instruments in the Edinburgh University Collection*, Part D, Fascicle i: Recorders and Flageolets, 1st edition. p. 28.

[309] Ibid. p. 28.

Castel alto, 887|644, Rome MNSM

Along with three more instruments described here (Cas.ALT.04, Cas.VOI.02 and Gra.ALT.01), this fine Castel alto (Cas.ALT.03) was part of the Homeric collection of Evan Gorga, which became the Museo Nazionale degli Strumenti Musicali in Rome, with over 3000 musical items.

The Castel boxwood alto, Cas.ALT.03, is in good general condition, especially the labium, which aside from a small chip, seems to be in its 'original' condition (and not 'sunken' as is usually the case). However, the bottom of the block is severely damaged; it seems there were attempts to remove the block using an instrument that had a protrusion, which created small dents of various similar shapes on the bottom surface.

Further remarks, regarding its general condition:

- there is a small chip on the right side of the beak, and two on one of the turned rings on the foot;
- the top of the flat part of the beak is scratched, many times, in the same direction;
- inside the foot joint, two small cracks show the excellent repair carried out, in a sort of 'jacket' of the upper part. This can be observed more clearly when looking through the top of the foot joint, on the inside of the hole. This repair appears to be contemporaneous to the instrument;
- there are two signs of attempts to modify the instrument in an unsuccessful way: firstly, the block was made lower (windway bigger, therefore), making it out of line with the labium, which, as mentioned, is perfectly preserved. The modification damaged the block, and got rid of the block chamfer, which therefore is non-existent and in 'steps', broken. Secondly, the top of the middle joint was made shorter, and in a very crude manner;
- the thumbhole is worn, in a normal way for an instrument which was used.

The design of the head joint is similar to that of the alto in Nice (Cas.ALT.01), but in a less contrasting form (regarding the 'main' part and the ivory mounts, as seen above).

The design of the foot joint is more 'German' than that of the alto in Nice, which, as mentioned above, is rather 'English' looking. Observing the foot closely it is possible to see the connection line of the 'jacket' work done (which happens on the top of the third ring of the foot, from top to bottom). The mark is off to the right side of the foot, not centralized.

A few more observations regarding design:

- the entire instrument has matching wood grain patterns, except for the 'jacket' part;

- the bottom of the block is straight;
- the top chamfer is absolutely 'normal', not comparable to that of the alto in Nice.

The recorder is marked "N. | CASTEL. | [griffin/lion rampant]" on all three parts.

It was fortunately possible to play briefly on this instrument. Although the block is now too low, the instrument still sounds quite special; one can only imagine how it would have sounded with an adequate block. It sounds more open than the Nice alto, and also less sweet.

The scale played reveals an instrument very well in tune, pitched at approximately A=403 Hz.

Castel alto, 879|1421, Rome MNSM

Unlike the previous instrument, Cas.ALT.04 is in rather poor condition. This stained boxwood[310] alto has the same maker's mark by Castel as Cas.ALT.03, centralized on all three joints. Unlike Cas.ALT.03, the "N" part of the mark is not as clearly discernible on the middle and foot joints, giving the possible interpretation of a "U". Examination of the head joint clarifies this to be an "N" indeed.

There is a large vertical crack running from the right side of the beak, down the side of the windway, as far as the window. Another large vertical crack runs down the back of the head joint, starting at the larger ring on the beak, all the way to the lower end of the head joint at the socket. The joint is currently held with nylon thread, which needs to be removed to be able to separate head and middle joints, as the top tenon on the middle joint has expanded considerably. Inside this back crack, a considerable amount of dirt is deposited, the removal of which would lessen the tension on the joint.

Further remarks on the current condition of this alto:

- the beak is severely damaged on both sides, especially the left, which is missing the entire tip;
- the top crack which starts at the top of the beak is also partially filled, perhaps with wax or some kind of resin (probably in an attempt to avoid air leaking from the crack). It seems the same substance partially fills the back crack;

[310] The Cervelli catalogue suggests pearwood, but the wood grain pattern, especially in the middle joint, is more characteristic of boxwood. Luisa Cervelli, *La Galleria Armonica: catalogo del Museo degli strumenti musicali di Roma*. p. 343.

- the window seems to have been considerably enlarged, very crudely, altering the symmetry of the bottom of the ramp, which is now 'lower' on the left side. There are vertical scratch marks on the ramp as well as 'steps';
- the block has been altered on this instrument as well: it was also made 'lower', too low in relation to the labium;
- the bottom surface of the block is straight;
- It was easy to remove the block because of the large crack in the head joint. By removing it, it becomes visible that the block was altered more recently, in a way that removed the lower half of the block surface (with rough marks), and which by consequence, removed any chamfer. A new chamfer was clearly not attempted, though there are marks of extra coarse sanding at the end of the block surface. There is a crack that runs transversely. Furthermore, the tip of the block seems to have suffered some kind of denting as well as the back (part of the beak);
- there was a lot of accumulated dust, especially inside the middle joint, as well as what may be some insect cocoons;
- the thumbhole is worn, in a normal way;
- the foot tenon of the middle joint is covered in old thread and tape. Inside the foot socket, a small piece of paper was found which reads "SS/14" on one side, and "AT" on the other;
- a thick crack runs down from the foot socket to the middle of the foot, fading away until a little lower than the maker's mark. Another crack slightly more to the back runs down more or less until the same point. There is also a small horizontal dent on the front surface of the foot, under Castel's mark. Finally, there is a little chip at the bottom, at the bell ring.

In terms of design, the foot turning is more similar to that of English recorders, than is the turning of Cas.ALT.03; indeed, the turning work on the two feet of these Castel altos in Rome is sharply different. The shape of the foot joint of the stained alto is similar to that of the voice-flute in this same collection, described next.

The top chamfer on this instrument is made in a slightly more accentuated angle than that of the other Castel alto in this collection. Both altos have rather open windows, with window sides at an open angle.

Needless to say, this instrument is unplayable.

Castel voice-flute, 884|698, Rome MNSM

Cas.VOI.02 is marked "N. | CASTEL. | [griffin/lion rampant]" on all three parts, but the middle joint "N" could be confused with an "M". The stamps are centralized on all three joints and very much resemble the stamps on Cas.VOI.01, which will be discussed next.

Unlike Cas.VOI.01, this instrument is not in top condition. Cas.VOI.02 has a very large crack that runs down the side of the head joint, extending from the socket upwards halfway into the head joint. It is interesting to note that the crack does not follow a 'straight' line upwards, but seems to be 'redirected' after the last turned ring on the bottom, 'pear-shaped' part of the head.

Observing this joint closely, it looks as if there was a repair to fix this crack, probably contemporary to the instrument, and as we saw with Cas.ALT.03, a 'jacket' has been put in place. Therefore, the crack also does not coincide on the inside of the socket and the outside of the joint: one sees two circles cracked in different places, which would be very unlikely if it were one piece of wood. Looking inside, only one continuous crack can be seen, which confirms the previous observation that there was a 'jacket' repair.

The middle joint is in good condition except for a few chips on the joints. The thumbhole shows signs of extensive use. The top of the middle joint seems to have been shortened, as seen by the different color of the wood and the 'rounding' of the surface on the joint. The distance from the top hole is also too short: it was probably shortened by about 5 mm.

The foot has a narrow crack, which can only be seen on the outside and as far as the socket on the inside, even though it runs down deeper on the outside than just the socket. This crack is to be found on the 'bulbous' part of the foot joint, stopping at the ring under the finger hole.

Further comments concerning the general condition of this voice-flute:

- the joints are now covered with cork, instead of thread;
- the block has suffered from a very poor repair, which left traces of glue (of the kind used for violins) on the end side of the windway;
- the beak of the instrument is also damaged, in the front and on both sides of the back, where a large part is missing on the right side;
- the head joint now has a metal ring, probably because of the crack;
- the tip of the labium is broken, making the window too large.

Regarding design:

- the top chamfer looks normal, once again, not comparable to the alto in Nice. The window is narrower than Cas.VOI.01, which indeed has a particularly large window;
- the original block chamfer cannot be traced, considering how poorly the current repair was made. It was also impossible to remove the block, as the 'repair' left a considerable amount of glue on all surfaces: it is now a glued block.

Finally, this seems to be a recorder that endured considerable use (as observed by the thumbhole, the condition of the wood around the holes, the repairs on the head, the condition of the beak etc.), and perhaps different modern attempts to render it playable again are the reason the block is now glued, the window too large etc. The lower right hand corner of the window shows evident sign of this, possibly motivated by trying to fix the fact that the labium is now too low.

Although the instrument could be played, the condition of the labium does not allow it to produce any significant sound. We estimate it to be pitched at approximately A=427 Hz.

Castel voice-flute, 170, Rome MUSA[311]

The Castel voice-flute in the collection of the Museo di Strumenti Musicali dell'Accademia Nazionale di Santa Cecilia is also in remarkably good condition, not only aesthetically but sonically. The instrument was donated in 1862 by Giocchino Pasqualini, the violinist and physicist, founder of the Associazione Nazionale Liuteria Artistica Italiana (ANLAI), who was responsible for the retake of the activities of the museum of the Accademia di Santa Cecilia, where he had once studied and been a member of the Santa Cecilia symphony orchestra.[312] Any prior history of the instrument is unknown at this moment.

Like the instrument in Nice, this recorder had previously been studied, cleaned and repaired, though no plans were available from the museum.[313] From the "Scheda di restauro" one learns the instrument was repaired in 1997 by Francesco Li Virghi and Giovanni Tardino, and that already then the instrument showed signs of a previous repair in the right side of the beak.[314] The report continues to mention that following this second restoration in 1997

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[311] This section is a revised version of Inês de Avena Braga, "Three Castel recorders: Rome, Edinburgh and especially Nice."

[312] *Scheda di restauro*, Rome, MUSA – Museo degli Strumenti Musicali, Accademia di Santa Cecilia.

[313] The instrument was thus measured in May 2013 by Fumitaka Saito, on the present author's commission.

[314] *Scheda di restauro*, Rome, MUSA – Museo degli Strumenti Musicali, Accademia di Santa Cecilia.

the block is no longer removable. It also mentions the crack on the foot (also repaired), which is indicated would affect stability.

During our study, it was thus regrettably not possible to remove the block because of the previous restoration work conducted on the beak of the instrument. The information on the report of the restoration was useful in describing the block:[315]

> Il blocco presenta un taglio orizzontale per metà della sua lunghezza nel quale è inserito un sottile spessore di legno. Questo accorgimento, adottato per ridurre l'altezza del canale d'insufflazione, era usato di frequente e potrebbe essere attribuito allo stesso costruttore; in ogni caso si tratta di un intervento eseguito allo scopo di migliorare le caratteristiche sonore dello strumento e quindi databile all'epoca del suo utilizzo musicale.

Though not removable, the block had visible, "normal" chamfers, and so did the top of the windway, which was very wide, for instance if compared to Bressan voice-flutes. The choices of voicing all converge to making this instrument loud (and loud it is).

A few details possible to observe up-close: it is exceptional that the top tenon of the body hasn't shrunk and in fact it seems that the fit is too tight on the head (which must have shrunk), as there is almost no thread left (as opposed to the bottom of the body, which is as usual). Maker's marks on each of the joints have different degrees of clarity, which would explain why in the "Scheda di restauro" it was attributed to "W. Castel". The mark on the middle joint is almost identical to that on the Castel oboe in Nice. Fortunately, playing was possible. These are a few of this author's subjective impressions:

- Very healthy, loud sound, rich in harmonics. It sounds 'as new' (or rather better).
- It seems the instrument is in fact around A=407 Hz.

It may be important to point out that, unlike English instruments, this Castel voice-flute has a range of over two octaves, as can be verified in Appendix 1.

Grassi alto, 881|638, Rome MNSM

The ivory decorations of this alto distinguish it from the maze of instruments in the pictures of the Gorga collection taken c. 1940, when the instruments were still in his apartments.[316]

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[315] Translation by the present author: "The block has a horizontal cut through half its length into which is inserted a thin strip of wood. This strip of wood, used to reduce the height of the windway, was used frequently and could be attributed to the same maker; in any case this is an intervention performed in order to improve the sound characteristics of the instrument and therefore dates from the time of its use for music." *Scheda di restauro*, Rome, MUSA – Museo degli Strumenti Musicali, Accademia di Santa Cecilia.

[316] Andrea Cionci, "Appendice Fotografica," in *Il Tenore Collezionista* (Florence: Nardini Editore, 2004). p. 116.

Gra.ALT.01 is made of boxwood, with ivory mounts and a metal ring. It is marked "GRASSI | ИИ MILAИ" on all three joints.

On the general condition of this alto:

- there is a large crack in the head joint, which runs down the front of the instrument, starting at the beak, and another crack in the wooden part as well as the ivory part of the 'pear-shaped' part at the bottom of the head joint;
- a similar crack is visible on the foot joint, affecting the ivory and continuing slightly into the wood;
- there is also a crack on the last ring/bell of the foot, which seems to stem from a natural knot in the wood;
- there is a 10 cm crack at the top of the middle joint, which justifies the placement of the metal ring. A piece of 'modern' paper was found stuck on the inside of the ring;
- the back of the beak is scratched and so is the block. It appears as if the block is too wide and too short for this windway/head;
- the two ivory mounts are slightly damaged, with various small chips;
- in the middle joint, a strange repair using sealing tape means it is now attached to the head of the instrument. The repair itself has a crack. The foot joint is also stuck to the middle joint.

It seems likely that both cracks on both joints originate from too much pressure on the joint, which is why both are now stuck together.

It is important to point out that the design of the instrument is strange, and the proportions are unusual:

- the beak is rather narrow;
- the windway is not centered with the window;
- the turning work on the top of the window is somewhat baroque but the turning on the 'pear-like' part of the head is of a later style (similar to other late Baroque instruments with simpler turning and fewer rings);
- the turning on the joint of the foot is similarly made in this later style, but the turning on the foot bottom bell is once again more Baroque, matching that of the top of the head joint.

Two hypothesis can be put forward: either Grassi was 'playing' with a more simple/late/classical/similar to traverso turning work design, or the ivory mounts were a later addition, along with a 'redesign' of the original shape.

Finally, there is no top chamfer on this alto, in a similar style to Anciuti. It seems likely that Grassi would have been apprenticed to Anciuti in Milan.[317]

Palanca alto, E86, Copenhagen

This unusual instrument has been kindly measured by Ture Bergstrøm, the curator of the Danish Music Museum, National Museum of Denmark where it is kept. The plan, with measurements and drawings, states:

> Boxwood recorder with ivory windcap and mountings. The flageolet-like windcap seems to be original. The upper end of the windway is badly damaged by pressure of the cap caused by moisture from the player's breath, and there is a heavy crack along the right side of the windway. The windway is so narrow due to the compression that inspection is very difficult and playing impossible. The front part of the beak (inside the windcap) has been removed. The pitch is estimated to a'=426–430 Hz. […] There are traces of a real beak, so the windway was originally 59 mm long.

Bergstrøm has provided a few further details:[318]

> There is room enough for a sponge inside, very much as the flageolet. […] The extra ivory ring at the top of the foot is very crudely made and is obviously not original.
> I would not hesitate to call this instrument a recorder with a flageolet-like mouthpiece. The tone holes and the tuning are typical for a 'normal' alto recorder in f', whereas the flageolet has its fundamental with 6 holes closed. Also the windway (apart from the cap) and the window are of a 'normal' recorder form.
> As the instrument was bought from Franciolini in Florence 1904, one has to be a little suspicious of its provenance, but the instrument has been intensively played after the (possible) conversion to the flageolet shape; this would not be the case if done by Franciolini. So I am pretty sure that the flageolet-like design stems from Palanca himself, but some of the ivory rings are more crudely made than you would expect from a renowned maker, and they could have been made at Franciolini's.

Leopoldo Franciolini was an "Italian dealer in and forger of antique musical instruments."[319] However, the 'mix and match' character of this instrument would not be unlike other work by Palanca, as has been seen before. At least aesthetically, this instrument very much resembles that of the Washington Castel/Palanca alto.

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[317] Similar conclusions were envisaged by Antonella Varvara, " Il serpentino, uno sconosciuto strumento musicale richiesto da Mozart a Milano" (Master Degree, Università degli Studi di Milano, 2013). p. 38, 61, 64. My appreciation to Renato Meucci for acquainting me with this study.

[318] Ture Bergstrøm, private communication.

[319] Edwin M. Ripin, "Franciolini, Leopoldo." *Grove Music Online*. *Oxford Music Online*. Oxford University Press, accessed 2014, December 1, http://www.oxfordmusiconline.com. On the catalogues of Franciolini, see Edwin M. Ripin, *The instrument catalogs of Leopoldo Franciolini*, ed. George R. Hill, vol. 9, Music indexes and bibliographies (Hackensack: Joseph Boonin, 1974). In those catalogues, in the instances a recorder is listed (p. 9, 18, 56, 64) the description does not correspond to the instrument in Copenhagen.

The iconographic part of Palanca's stamp on this alto, the sun or star or flower, is not reported by Waterhouse,[320] neither is it mentioned in other studies on Palanca, by Bernardini or Voice.[321]

Panormo alto, DCM 327, Washington, D.C.[322]

The Panormo ivory alto (DCM 327) is now kept at the Library of Congress in Washington, DC and is part of the vast collection of instruments, iconography, music scores, and books donated by Dr. Dayton C. Miller, the American acoustician and avid woodwind collector from the beginning of the twentieth century. It was acquired by Miller in 1923 – in pristine condition – from Sumner Healey of New York, and had previously been in the possession of Auguste Tolbecque.[323] The previous ownership of the instrument remains unknown, and it is unlikely it could be traced back three hundred years.

The instrument is marked "IOAN: | PANORM:" on all three sections. The website of the Dayton Miller collection states that the instrument shows "[h]ead joint severely cracked into 3 pieces with other cracks and losses."[324] The head joint of DCM 327 is indeed severely broken on its front and back sides. In fact, if it were not for the sticky transparent tape that holds it together, it would be in three *separate* pieces. It is damaged in such a way that the top of the labium has sunk much lower than it was originally. In short, it is impossible to play it.

Despite the poor condition of the recorder's head, when an elastic band is wrapped around it to bring it to its smallest diameter, the original block still fits perfectly. This may suggest the ivory has not shrunk much since it was turned into an instrument and that the instrument is probably close to its original pitch. The Panormo alto is a rather short instrument for that period, its sounding length being 431 mm (with its long foot).

From the length and bore measurements of DCM 327, its pitch is deduced to be around A=420 Hz, which is well within the range of the Italian recorders Bruce Haynes lists,

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[320] William Waterhouse, *The New Langwill Index*. p. 290. Ton Koopman raises the possiblity of the mark being faked by Franciolini. Ton Koopman, private communication.

[321] Alfredo Bernardini, "Carlo Palanca e la costruzione di strumenti a fiato a Torino nel settecento." Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844."

[322] This section is a revised version of Inês de Avena Braga, "The Panormo Alto Recorder: A *Dolce Flauto Dolce*?."

[323] Laura E. Gilliam, William Lichtenwanger, *The Dayton C. Miller Flute Collection: A Checklist of the Instruments*. p. 23. Michael Seyfrit, *Musical Instruments in the Dayton C. Miller Flute Collection at the Library of Congress: A Catalog*, I: Recorders, Fifes, and Simple System Transverse Flutes of One Key. p. 22.

[324] "DCM 0327: Joannes Panormo / Treble (Alto) Recorder in F".

i.e. between A=410 and 440 Hz.[325] Pitch in Naples is believed to have been between the low Roman pitch of around A=392 and the high Venetian pitch of A=440 Hz, so a recorder from Naples would be very acceptable at 415 or 420 Hz.

The character of the bore is similar to that of English recorders. It keeps to more or less the same degree of conicity and swells in similar ways in similar places. As the bore gives the instrument its sounding body, it determines to a great degree how low and high notes will function, usually one at the expense of the other. In the Panormo, as with Bressan and other English makers, the bore privileges low notes: it is what could be called a "slow-bore," not favoring a fast response. However, the voicing of this instrument is only partly similar to English recorders. In other ways, it follows principles more commonly found in Nuremberg instruments, like recorders by Denner. Appropriately called voicing, it can be bright and clean or rusty and velvety. In the case of this Panormo, its construction suggests a bit of both. Unlike Denner, it has a very small top chamfer, which would mean that its speaking would not be the most enunciated, and the articulation response – especially in the high notes – could be slow. On the other hand, the cutting on the bore part of the labium is very long[326] and parallel and touches the bore, just like Denner. This allows the air to flow faster and creates easier high notes, indeed increasing its speaking capabilities. It has a very concave windway length-wise, a feature common in historical recorders but rarely seen in modern instruments. Along with the opposite concavity in the block, this is key to creating a feeling of easiness in blowing. An extreme feature of this instrument is the inverted angle at which the window top is cut, the opposite being found on instruments by both Stanesby Sr.[327] and Jr.[328] and Steenbergen.[329]

Unlike what is often suggested with other ivory instruments, this recorder was certainly not simply a piece for display in the collection of a wealthy person: it shows signs of real use. This is very apparent from the black lines with mould on the windway, where there probably were superficial cracks (before the current, more severe ones) caused by extensive use, and is also obvious when observing the thumb hole area, which, in its worn state with a slight depression, is incredibly comfortable to hold.

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[325] Bruce Haynes, *A History of Performing Pitch / The story of "A"*. p. 452.

[326] 34 mm long.

[327] Once in the private collection of Michel Piguet, measured by Fred Morgan. Its current location is unknown.

[328] Private collection of Frans Brüggen (Amsterdam), measured by Fred Morgan.

[329] Private collection of Frans Brüggen (Amsterdam), measured by Fred Morgan.

The fact that this instrument has such refined and personal turning work suggests a maker at the peak of his craft. The numerous balancing elements in the voicing and shaping of the bore also point to the desire for very specific sound character and playing possibilities.[330] It is at just as high a standard – and therefore should be as highly regarded – as instruments by Bressan and Denner.

[330] This instrument has been copied and used in concerts and a recording: La Cicala, Inês d'Avena, *Dolce Napoli, Sonate & Concerti per Flauto (CD)* Passacaille 1007 (2014).

1.5 Comparisons

Pitch

Using Haynes as a basis,[331] below is a compilation of the pitches that are known from the recorders studied. As Haynes remarks, two pitch centers are observed in Italy, around A=435 Hz and around A=418 Hz; the low recorders by Castel are therefore unusual.

Table 1.5.1: Italian and Anonymous recorders organized by pitch standards

A+0 (± 440 Hz)	- Anc.ALT.01, Graz (435 Hz) - Anc.ALT.02, Genova (440 Hz) - Anc.ALT.04, Parma (440 Hz) - Anc.ALT.05, London (440 Hz) - Anc.SPI.02, Berlin (c. 440 Hz) - Gar.BAS.01, Parma (440 Hz) - Gra.ALT.01, Rome (c. 435 Hz) - Gra.SPI.01, Leipzig (c. 440 Hz) - Pal.TEN.02, Washington D.C. (c. 438 Hz) - Ano.ALT.04, Vienna (440 Hz)
A-½ (± 430 Hz)	- Cas.VOI.02, Rome (c. 427 Hz) - Anc.ALT.03, Celle (430 Hz) - Anc.SPO.01, Milan (430 Hz) - Pal.ALT.01, Copenhagen (c. 430 Hz)
A-1 (± 415 Hz)	- Anc.ALT.06, Milan (413 Hz) - Cas.SPI.01, Edinburgh (415 Hz) - Cas/Pal.ALT.01, Washington D.C. (410 Hz) - Pan.ALT.01, Washington D.C. (420 Hz) - Per.SPO.01, Vienna (415 Hz) - Per.SPI.01, Berlin (415 Hz) - Ano.SPI.01, Washington D.C. (415 Hz) - Ano.ALT.03, Vienna (415 Hz) - Ano.TEN.01, Leipzig (415 Hz)
A-1½ (± 403 Hz)	- Cas.ALT.01, Nice (407 Hz) - Cas.ALT.03, Rome (403 Hz) - Cas.ALT.04, Rome (407 Hz) - Cas.VOI.01, Rome (407 Hz) - Ano.ALT.01, London (c. 403 Hz) - Ano.ALT.02, Washington D.C. (c. 406 Hz)
A-2 (± 392 Hz)	- Cas.VOI.03, Vienna (396 or 443 Hz[332])
Unknown	- Anc.SPI.01, Belluno - Cas.ALT.02, Quito - Pal.TEN.01, Fontanelle - Ano.SPI.02, Washington D.C.

Performers who specialize in music from earlier centuries are well aware of the profound consequences of playing at different pitches. The effect of pitch on woodwind

[331] Bruce Haynes, *A History of Performing Pitch / The story of "A"*. p. liii.

[332] The very low Cas.VOI.03 would be more in keeping with the pitch of other instruments as a C tenor, A=443 Hz, but is better placed within Castel's own output as a voice-flute pitched lower, and therefore in D.

instrumentalists is powerful, and words such as 'velvety', 'round', 'smooth' are used freely to describe 'lower' instruments – for example, tuned to A=392 Hz – especially by modern performers who have become accustomed to the often used A=415 Hz. The opposite 'bright', 'clear', 'penetrating' is used to describe higher instances of for example 465 Hz. The effects seem to be physical in many ways (sopranos are especially vulnerable to higher pitch standards, but woodwind instrumentalists also suffer with uncomfortable hand positions of pitch standards which are too low)[333] as well as emotional. The impact pitch may have on *affect* is discussed by Haynes:[334]

> There is another element which may be relevant: the effect the music may have on the listener's psyche at different frequencies. In 1713 Johann Mattheson published his famous description of the *Affects* he associated with various keys. Since there were different pitch standards in Mattheson's day, if there was some intrinsic property of a tonality that have it its own particular flavor, would D-major have expressed the same *Affect* in *Chorton* as in *Cammerton*, a M2 or m3 lower?
> Mattheson gave us the answer. In introducing his comments on *Affects*, he says: "I am thinking here principally of *Cammerton*, not *Chorton*." From this we can conclude that in Mattheson's mind, *Cammerton* was the primary standard and other pitches were transpositions. In any case, the implications of his idea are startling. Put another way, playing a piece at A-440 when it was first conceived at 466 or 415 could vitiate its ability to move listeners, or alter the intended expression. Whether pitch levels really have such power is a moot point. […]

Though these are important points to consider, for the purpose of this study, which in this chapter deals principally with the characteristics of the design of Italian Baroque recorders, it may be necessary to set aside pre-supposed expectations of sound when comparing instruments which are originally at A=407 Hz with those originally at 435 Hz, for example. They may indeed sound differently purely based on pitch. However, in many cases, internal design and bore unite instruments under a construction concept that invariably has sonic implications, dare one say, regardless of their pitch.[335]

Understanding an instrument involves an appreciation of what the instrument has to offer and at what expense. This basic notion transcends pitch, and allows an attentive

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[333] For example, even at A=466 Hz, tenor Renaissance recorders are particularly taxing on players hands, for the already large spacing of the holes. If such instruments were made at A=415 Hz, the instrument would be longer and this spacing would be even more uncomfortable.

[334] Bruce Haynes, *A History of Performing Pitch / The story of "A"*. pp. xl-xli.

[335] It must be taken into account that the process of copying instruments at different pitches than their originals involves a number of compromises, and therefore produces different instruments. Nonetheless, if the basic design of the instrument is maintained, although the perception of different timbres varies due to changes of pitch, the experience of the player regarding the primary feeling when playing that instrument will remain largely the same. This specific feeling makes it possible to identify specific models, even when instruments are made by different makers, at different pitches.

recorder player to be able to recognize a Denner at A=392 Hz, 415 Hz, 440 Hz, even though different compromises have to be made to have this same Denner 'design principle' translated into these different pitches.

The purpose of this chapter is to distil the very fundamental characteristics of these Italian Baroque recorders, and to see whether they share common points which may unite them under an umbrella of 'Italian Baroque recorders'. Furthermore, they may be linked, in their design, to instruments of other European Baroque makers, but in order to compare, we must go beyond pitch and take all that was mentioned above into consideration.

External design: aesthetic details

Whether or not it is useful, we tend to compare new things with the things we know well. Consequently, it is natural to compare the external designs of the Italian recorders studied here with their European counterparts already better known.

The designs of the rings and bulges found on Baroque recorders are signatures of style for many makers, and placing recorders by Denner and Bressan next to one another quickly reveals the considerable contrast present in the way these makers gave shape to their instruments.

Essentially, the only necessity from the point of view of good function is that the recorder be thicker at the joints, in order to better prevent cracks at the places that withstand the most stress from use. As Baroque recorders are fundamentally shaped as inverted cones in their bore, this shape is mirrored outside as well. How much wood is left at the top or bottom joints translates into different weight distributions of the recorder, which may be taxing on the hands of the player or not. For example, Bressan recorders have a bulkier foot joint in comparison to Denner, and to more sensitive players the Bressan instruments can create subtle discomfort at the support point of the right hand. Therefore, whilst the maker's decisions have minor implications for the comfort or discomfort of players, their design choices of the number, thickness and spacing of rings, for example, are primarily aesthetic. Design becomes then a signature in itself.

Observing the photos and drawings included in Appendix 1 it may become apparent that the instruments by each of the Italian makers that are well represented, although all individual, do follow an identifiable profile. Especially telling of this are the foot joints.

While collecting the work of colleagues who measured some of those instruments, it was common to find comments which compared the design of one with a 'German' instrument, another with an 'English' instrument. At the start of this study this was puzzling,

as these were not observations one would have expected. Just as with families, in order to recognize similarities and disparities, one needs to take someone as a point of departure.

This research began with the study of the Panormo alto (Pan.ALT.01), which quickly turned into a point of reference for the study of the other Italian instruments. It was only gradually that it became clear that the Panormo alto is even more unusual than realized at first. The elegant shape of its foot, for example, is one of a kind.

Indeed keeping foot joints as points of reference, the instruments can be divided into two categories: those resembling English recorders, and those resembling German ones. The smaller sizes are less distinct in this aspect, as the 'drop/bulb' design is more of a practical solution to the difficulties associated with turning thin rings in the making of such petit instruments rather than actual design concepts.

Table 1.5.2: Design of the foot joints of the recorders studied

'English'	'German'	Unique	'Drop/bulb'	Straight/'traverso'
Cas.ALT.01, Nice	Anc.ALT.01, Graz	Anc.ALT.05, London	Anc.SPI.01, Belluno	Cas/Pal.ALT.01, D.C.
Cas.ALT.04, Rome	Anc.ALT.02, Genova	Anc.ALT.06, Milan	Anc.SPI.02, Berlin	Pal.ALT.01, Copenhagen
Cas.VOI.01, Rome	Anc.ALT.03, Celle	Pal.TEN.02, D.C.	Anc.SPO.01, Milan	
Cas.VOI.02, Rome	Anc.ALT.04, Parma	Pan.ALT.01, D.C.	Cas.SPI.01, Edinburgh	
	Cas.ALT.03, Rome		Gra.SPI.01, Leipzig	
			Gra.ALT.01, Rome	
			Per.SPI.01, Berlin	

It is interesting to compare the design of the foot of Anc.SPO.01 and Gra.SPI.01: the unusual ring right under the last hole on the foot joint is another point in common between Grassi and Anciuti. As will be seen below, Anciuti and Grassi bores also coincide.

It is worth mentioning that Anciuti is the only Italian maker for whom carved instruments are extant. Anc.ALT.05, which displays exquisite craftsmanship, is his latest extant instrument, his *pièce de résistance*. Speaking of his carved instruments, Voice, drawing on Bernardini and Meucci, suggests a possible link between Anciuti and the French Aléxis Saint-Martin, who had moved to Milan by 1695. She writes:[336]

> The Saint-Martin oboe in Paris is carved. Stylistically it is quite different to Anciuti's carved instruments, with the carvings appearing only on the ivory mountings, but it has a classic Greek inspired theme of acanthus foliage. This may be a link between him and Giovanni Maria, given that no other Italian woodwind maker can be confirmed as carving woodwind instruments in the first half of the eighteenth century.

[336] Nichola J. Voice, "Turners' Guilds of Northern Italy: Their Role in Enabling Woodwind Instrument Manufacture from 1680–1844." p. 216. If indeed there is a link between father Sammartini and Anciuti, a further link could be made between Anciuti and Giuseppe Sammartini's music for recorder.

Table 1.5.2 shows that Anciuti had a penchant for 'German' looking turning work, and I propose that the carved instruments of Anciuti might be linked to carved instruments by Johann Benedikt Gahn and Oberlender. As seen above, Voice had already linked the technique used in his mark with makers of Nuremberg.

Voicing

As already described, many of the Italian instruments studied display unusual features of voicing: the Panormo alto has a very unique angle at the window top, Cas.ALT.01 has a 'double' top chamfer, Anciuti's instruments show the absence of chamfers,[337] and the Castel voice-flutes of Rome have exceptionally large windows.

Although it is difficult to propose an explanation for each of these atypical features, in view of the considerable work in external and internal design these instruments display, it can only be assumed that the unusual voicing is intentional and a part of a design concept that translates into a particular sound ideal. Further studies as well as experiments in the reproduction of these instruments will be essential in clarifying the principles and ideas behind the execution of what now appears to be odd.

Bore profiles: l'anima

The following charts serve as useful means of succinctly transmitting the essence of the design concept of the recorders which were studied, firstly grouped by maker, and subsequently presenting various relevant comparisons among instruments and makers.[338]

[337] Anc.ALT.02 does not have any top chamfer either. Riccardo Gandolfi, private communication.

[338] In order to systematize the comparisons, only the bore measurements starting at the block line were used, in millimeters. N.B. The measurements of the bore of the head joint of Anc.ALT.02 as well as Cas/Pal.ALT.01 are missing. All the comparisons have been made with the instruments' original pitch, unless otherwise stated. In the scaled graphs, all the instruments have been re-proportioned to F altos, A=415 Hz.

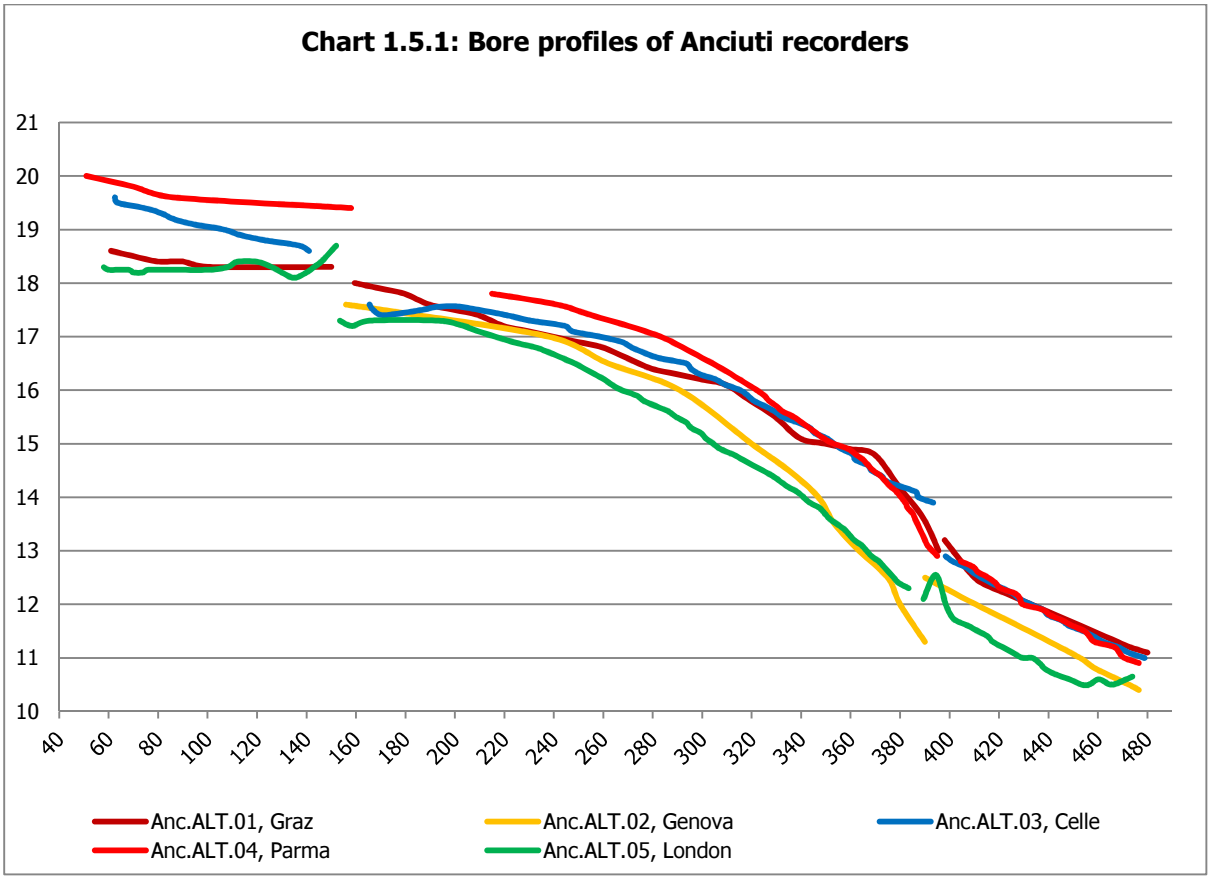
Chart 1.5.1: Bore profiles of Anciuti recorders
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280
300
320
340
360
380
400
420
440
460
480
Anc.ALT.01, Graz
Anc.ALT.02, Genova
Anc.ALT.03, Celle
Anc.ALT.04, Parma
Anc.ALT.05, London

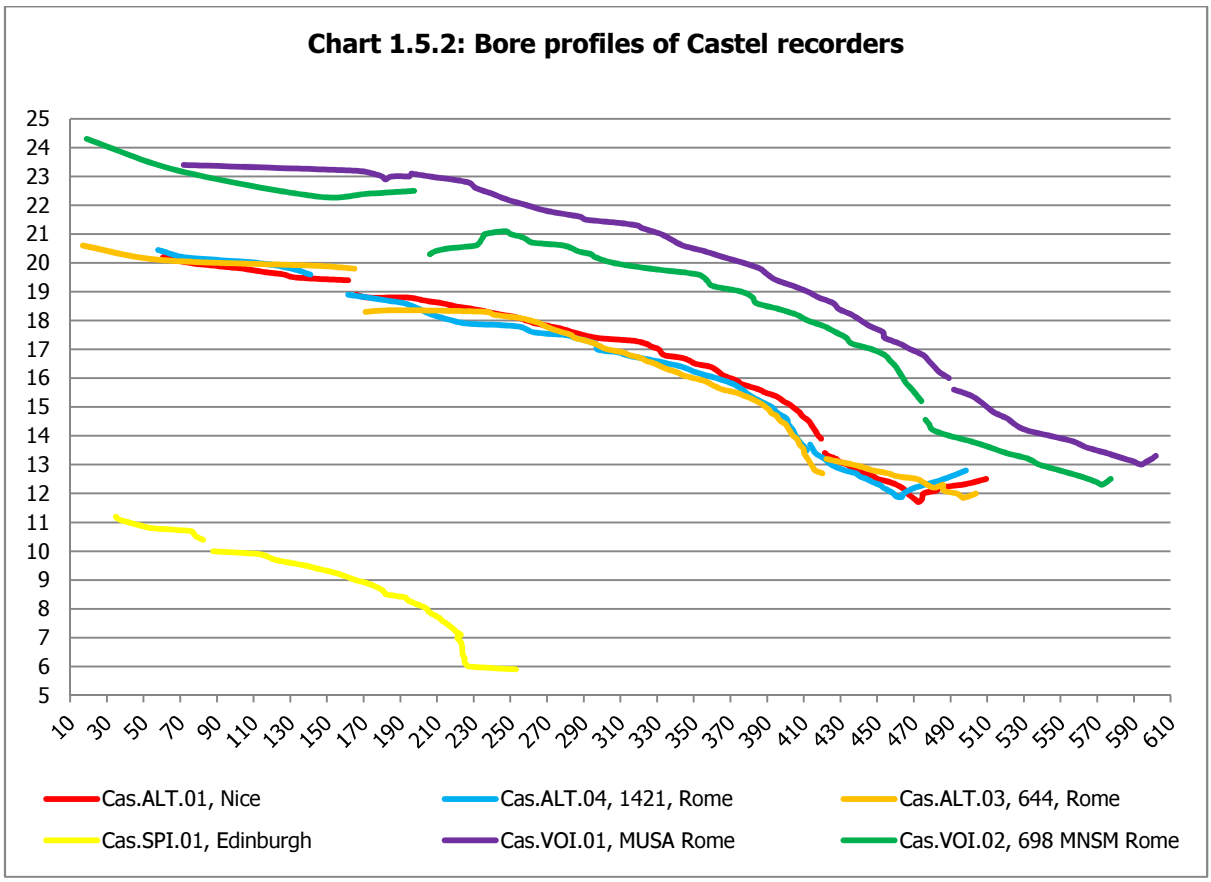
Chart 1.5.2: Bore profiles of Castel recorders
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410
430
450
470
490
510
530
550
570
590
610
Cas.ALT.01, Nice
Cas.ALT.04, 1421, Rome
Cas.ALT.03, 644, Rome
Cas.SPI.01, Edinburgh
Cas.VOI.01, MUSA Rome
Cas.VOI.02, 698 MNSM Rome

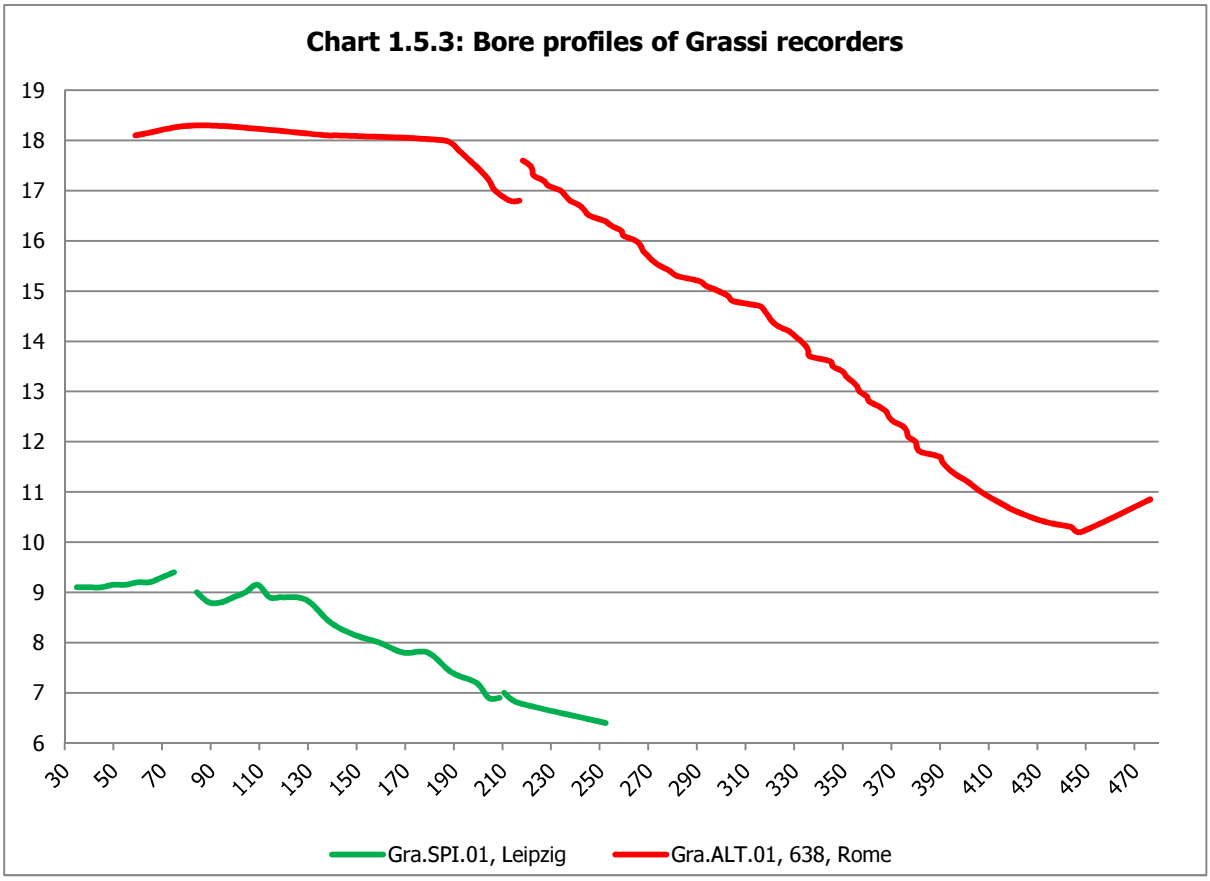
Chart 1.5.3: Bore profiles of Grassi recorders
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30 50 70 90 110 130 150 170 190 210 230 250 270 290 310 330 350 370 390 410 430 450 470
Gra.SPI.01, Leipzig
Gra.ALT.01, 638, Rome

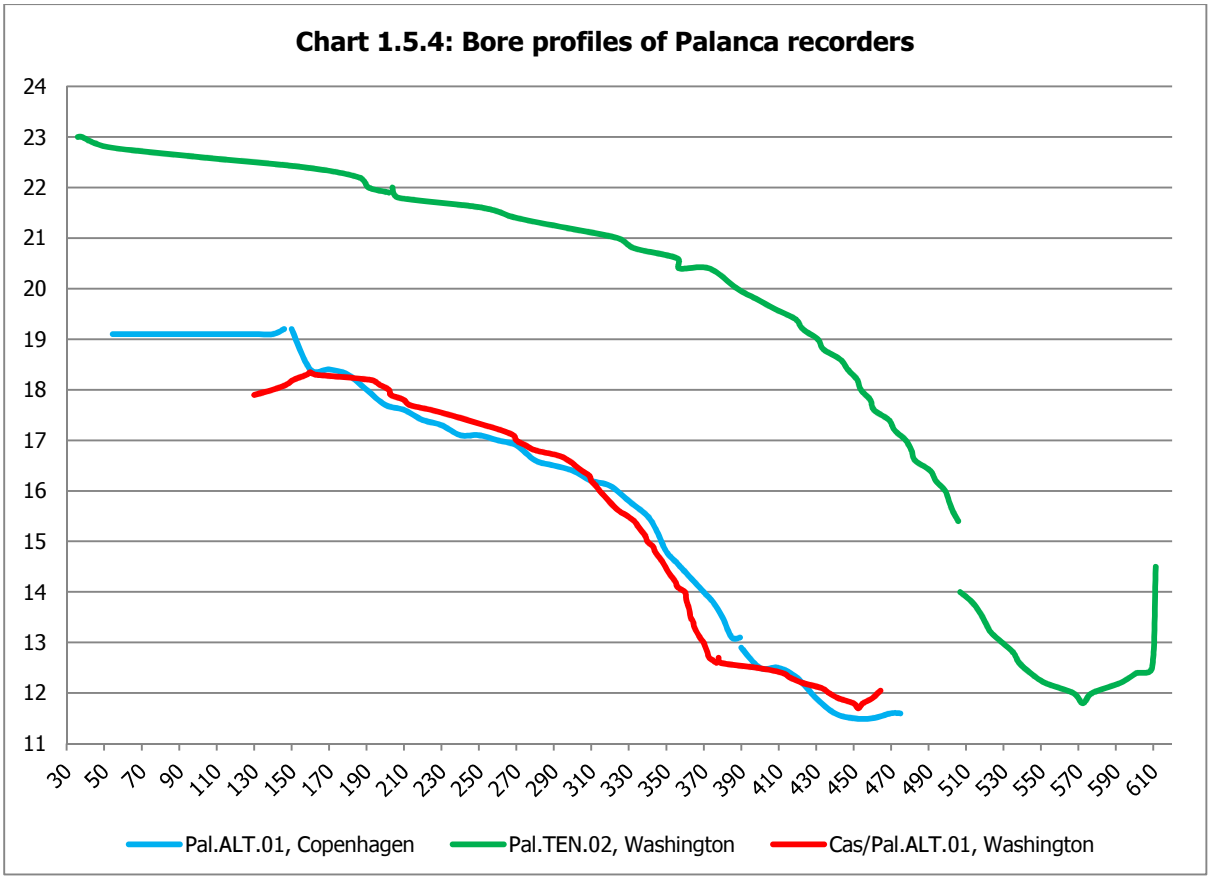
Chart 1.5.4: Bore profiles of Palanca recorders
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30 50 70 90 110 130 150 170 190 210 230 250 270 290 310 330 350 370 390 410 430 450 470 490 510 530 550 570 590 610
Pal.ALT.01, Copenhagen
Pal.TEN.02, Washington
Cas/Pal.ALT.01, Washington

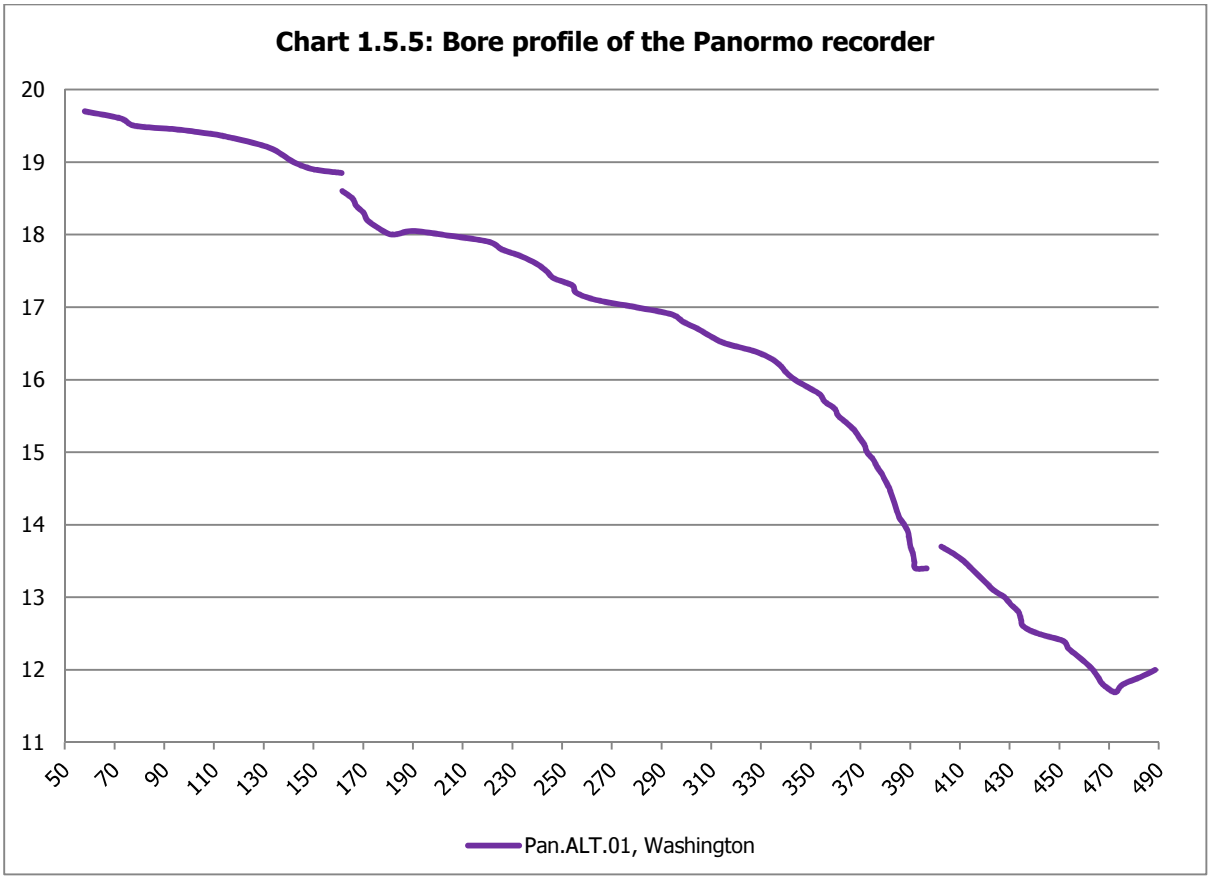
Chart 1.5.5: Bore profile of the Panormo recorder
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50 70 90 110 130 150 170 190 210 230 250 270 290 310 330 350 370 390 410 430 450 470 490
Pan.ALT.01, Washington

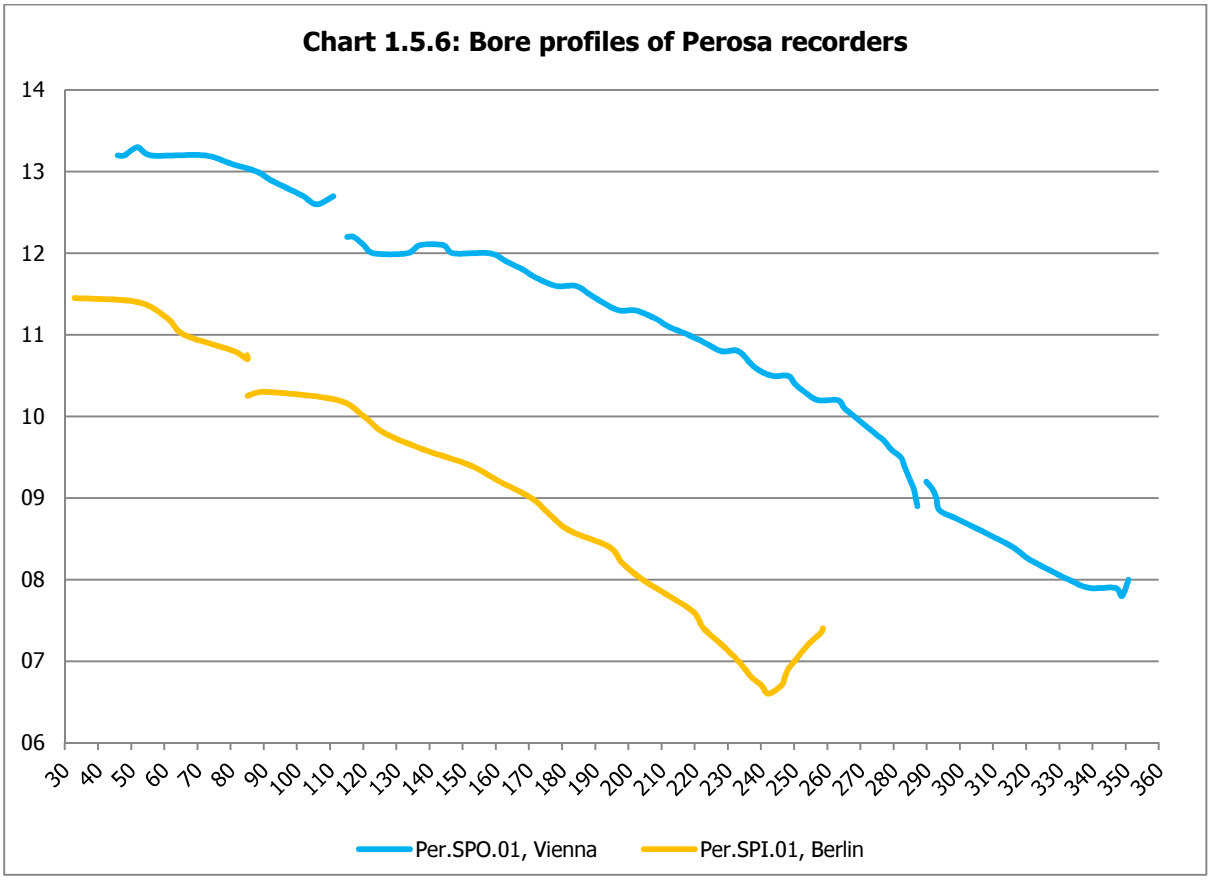
Chart 1.5.6: Bore profiles of Perosa recorders
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30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360
Per.SPO.01, Vienna
Per.SPI.01, Berlin

Chart 1.5.7: Bore profiles of the sopraninos and soprano studied

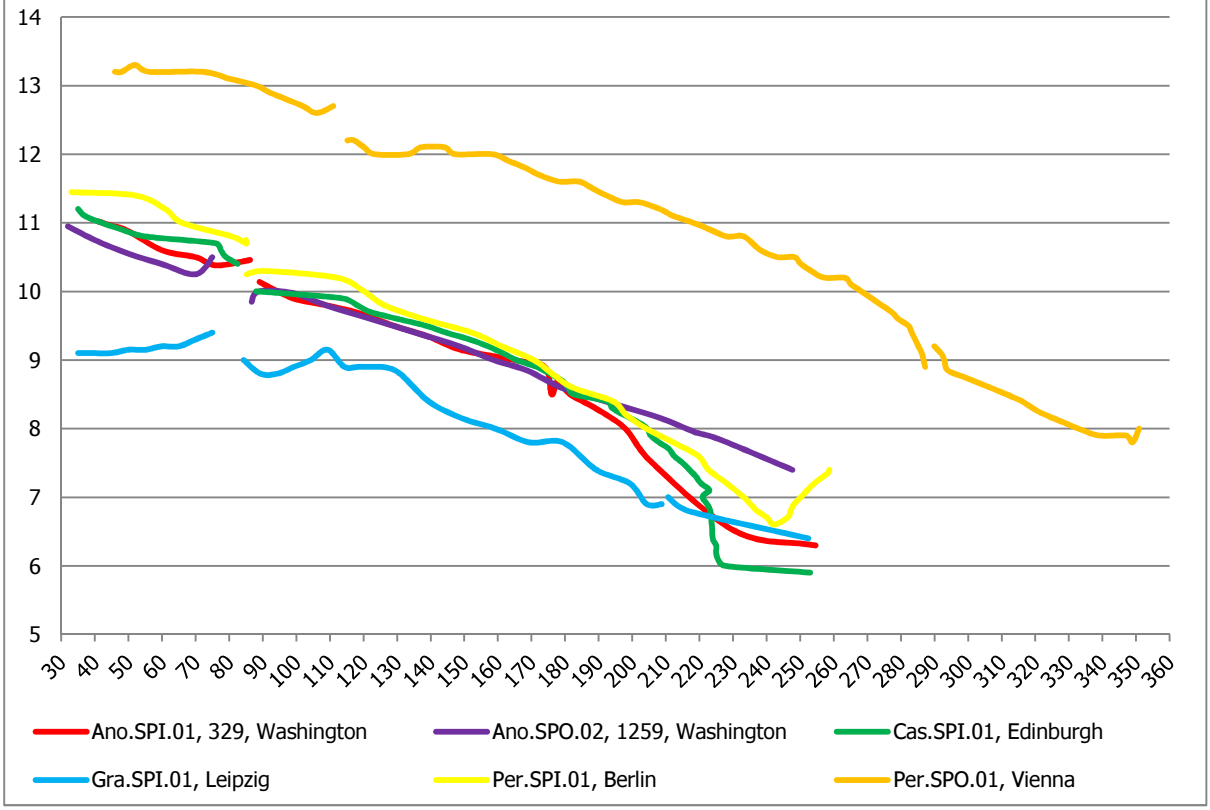


Chart 1.5.8: Bore profiles of the altos studied

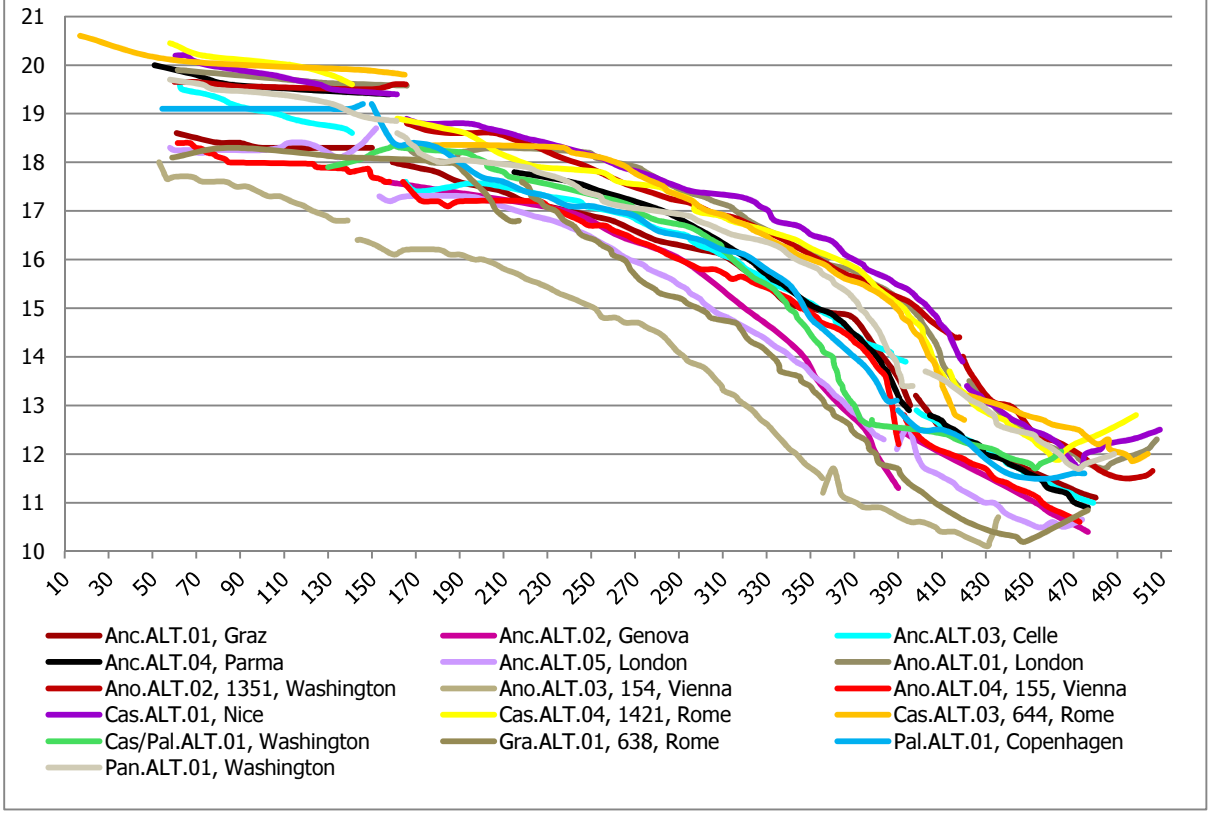


Chart 1.5.9: Bore profiles of the voice-flutes and tenor studied

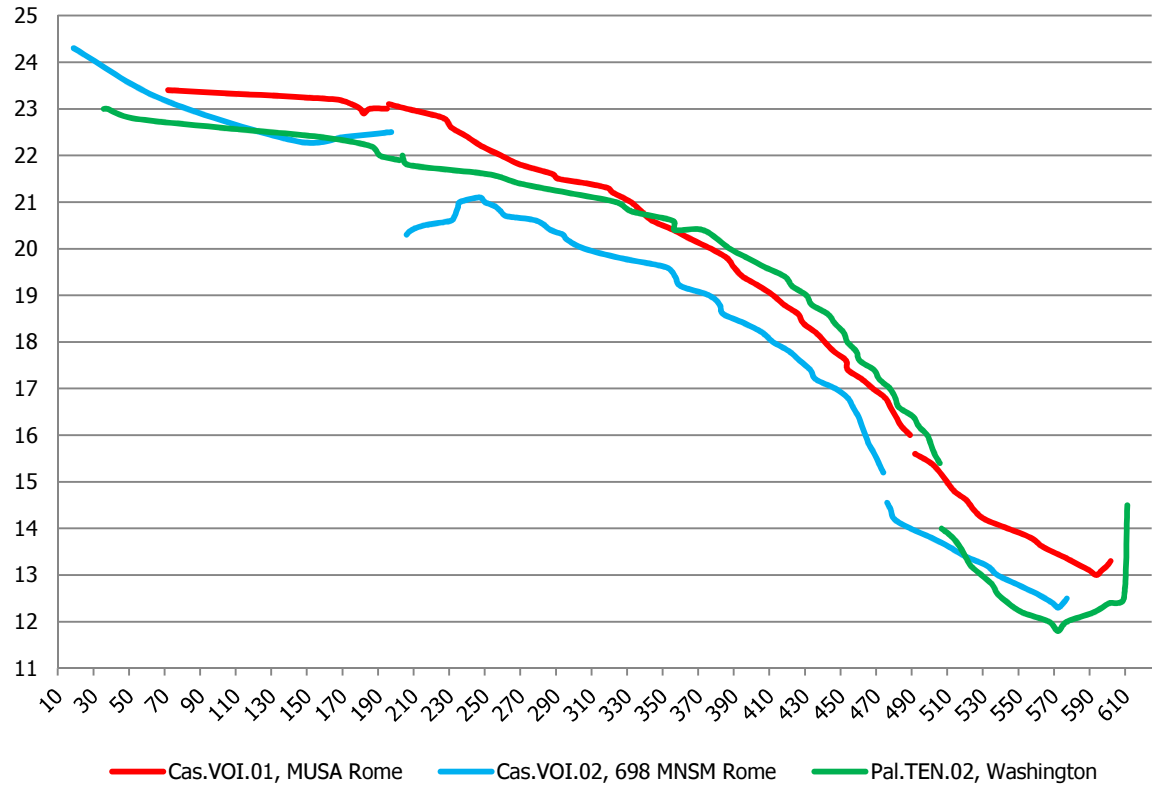
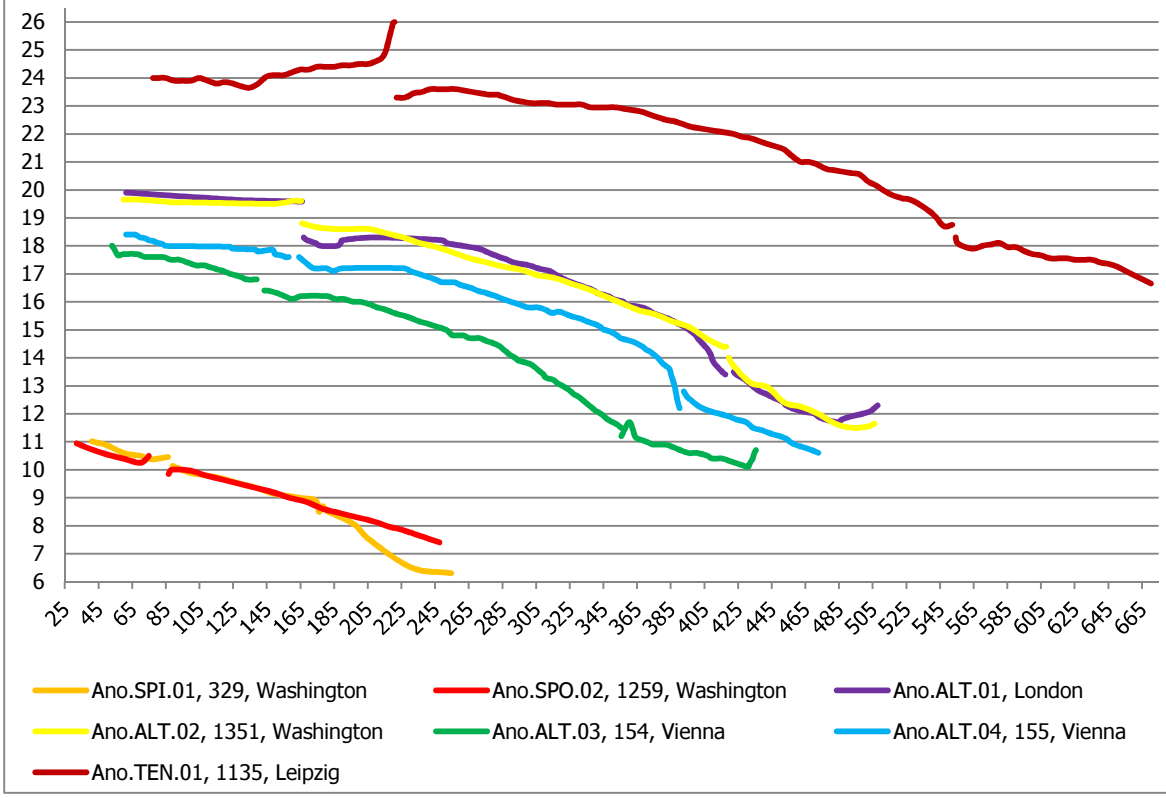


Chart 1.5.10: Bore profiles of Anonymous recorders possibly Italian



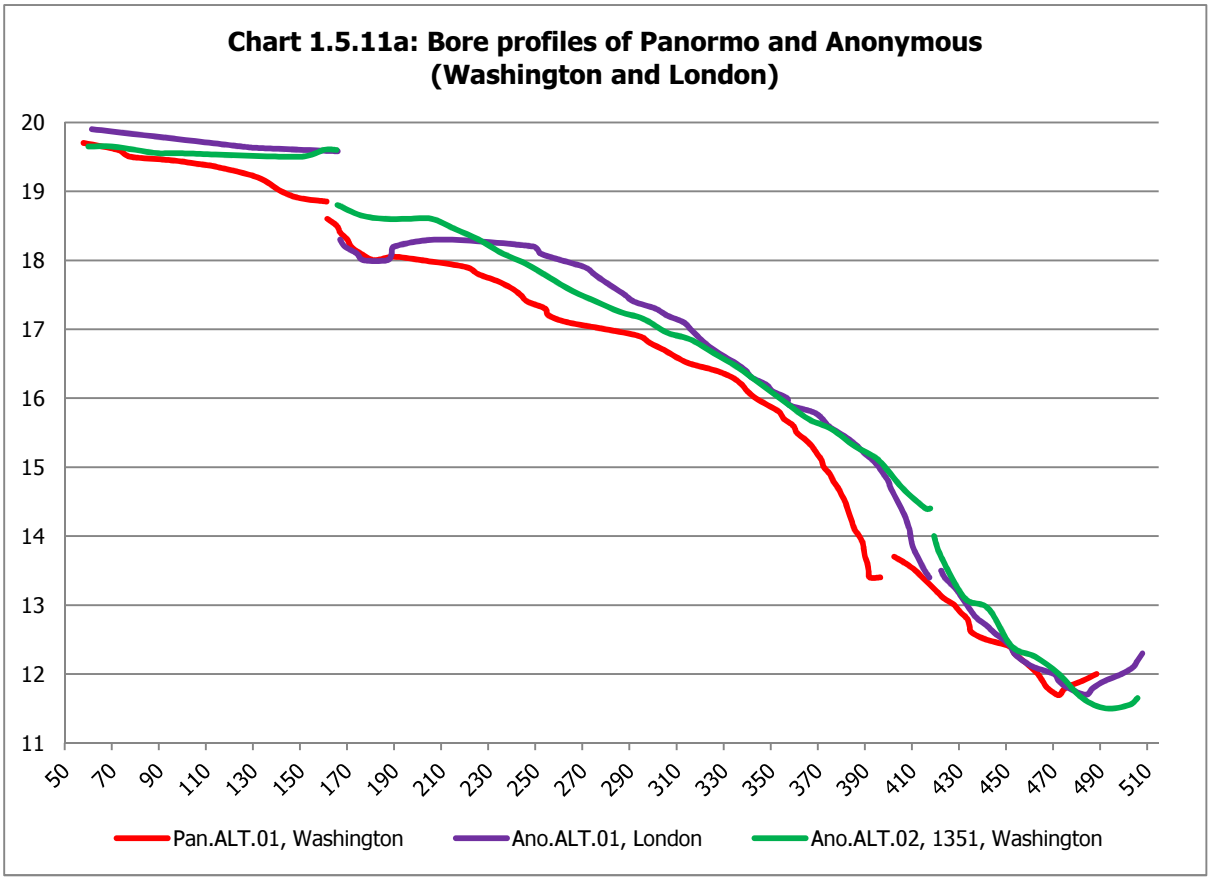


Chart 1.5.11a: Bore profiles of Panormo and Anonymous (Washington and London)
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290
310
330
350
370
390
410
430
450
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510
Pan.ALT.01, Washington
Ano.ALT.01, London
Ano.ALT.02, 1351, Washington

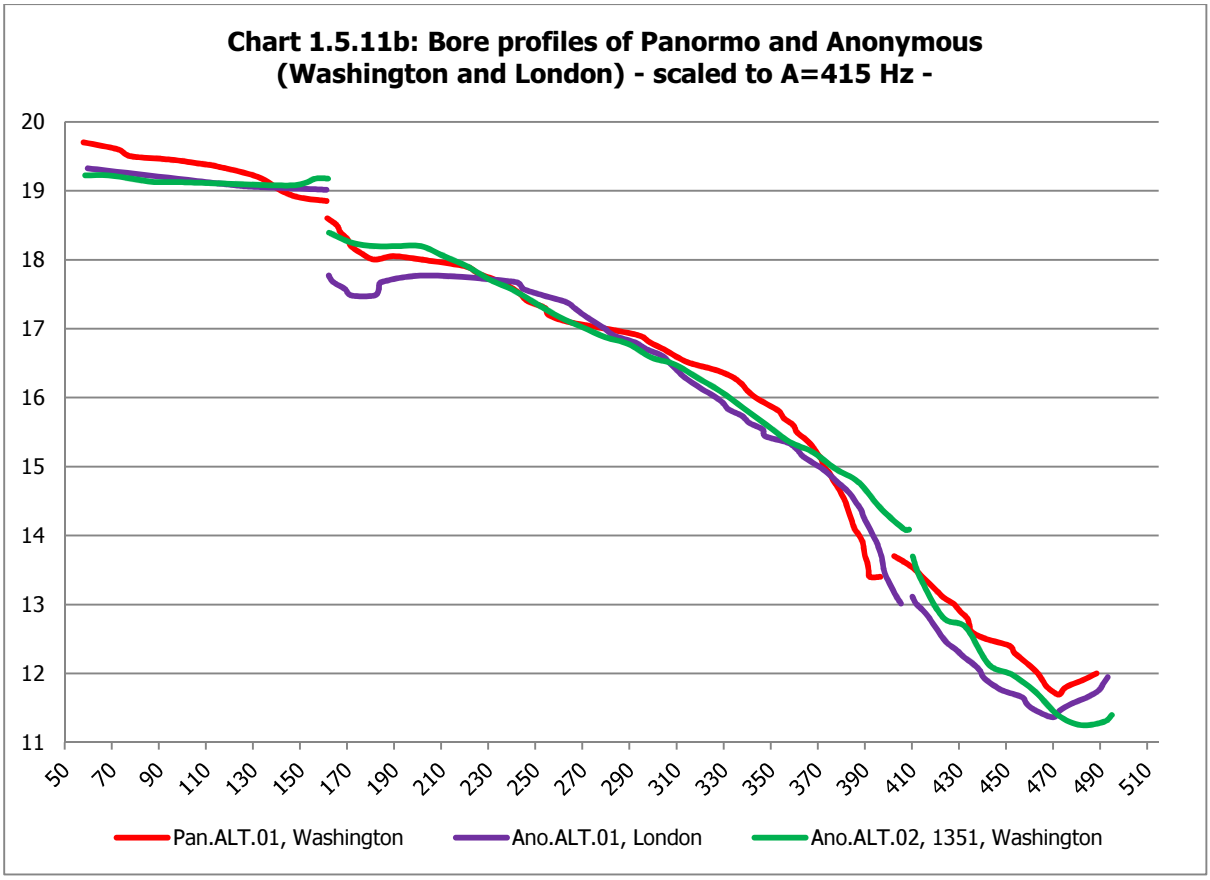
Chart 1.5.11b: Bore profiles of Panormo and Anonymous (Washington and London) - scaled to A=415 Hz -
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470
490
510
Pan.ALT.01, Washington
Ano.ALT.01, London
Ano.ALT.02, 1351, Washington

Chart 1.5.12: Bore profiles of Perosa and both Vienna Anonymous

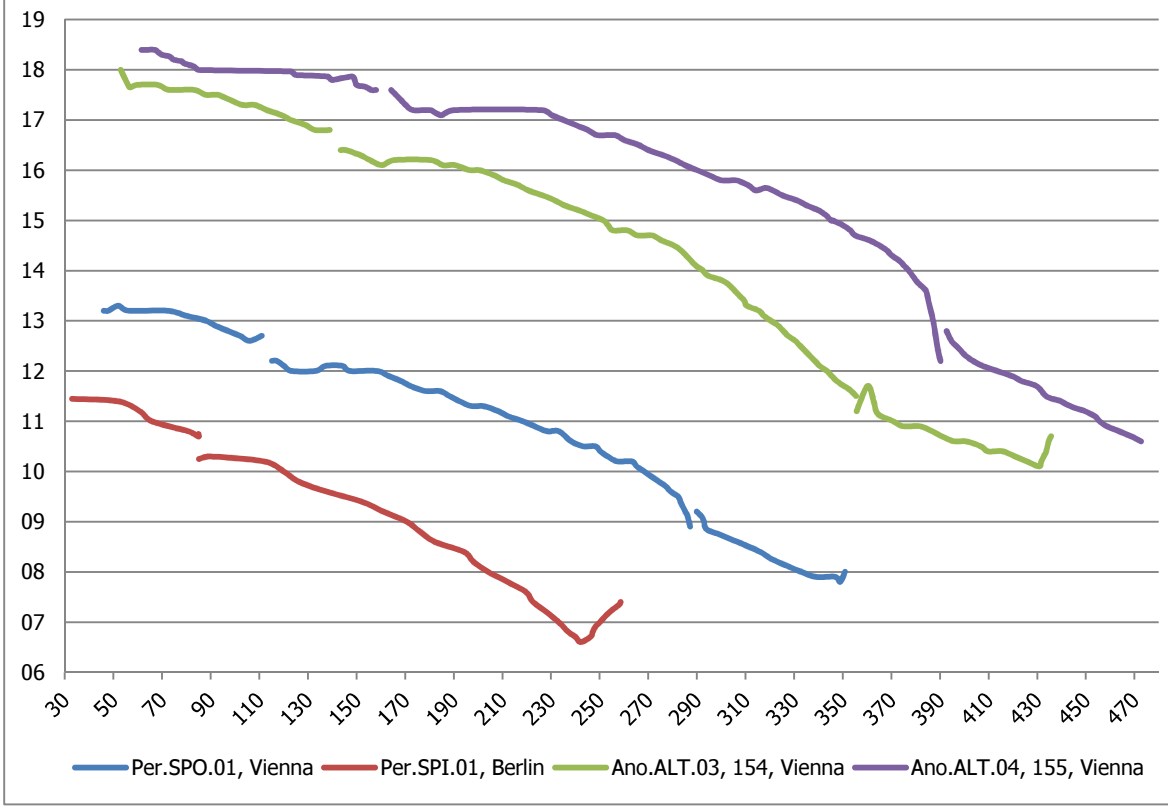
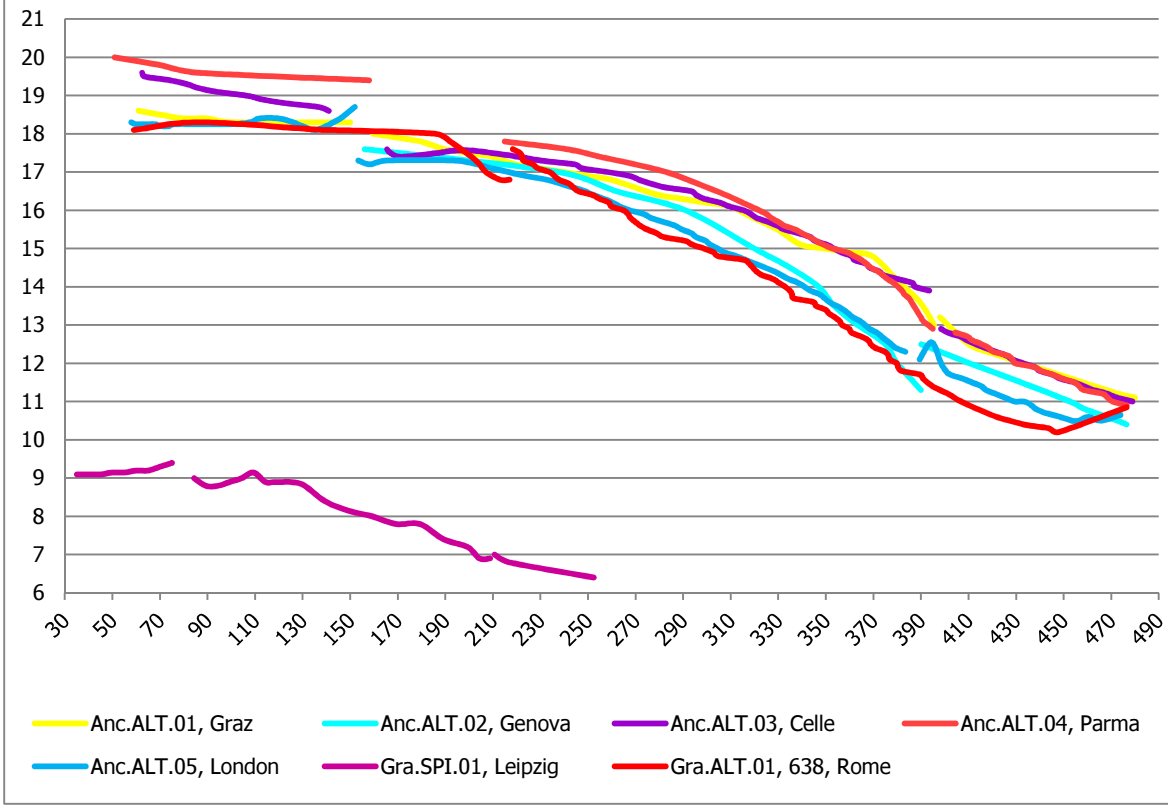


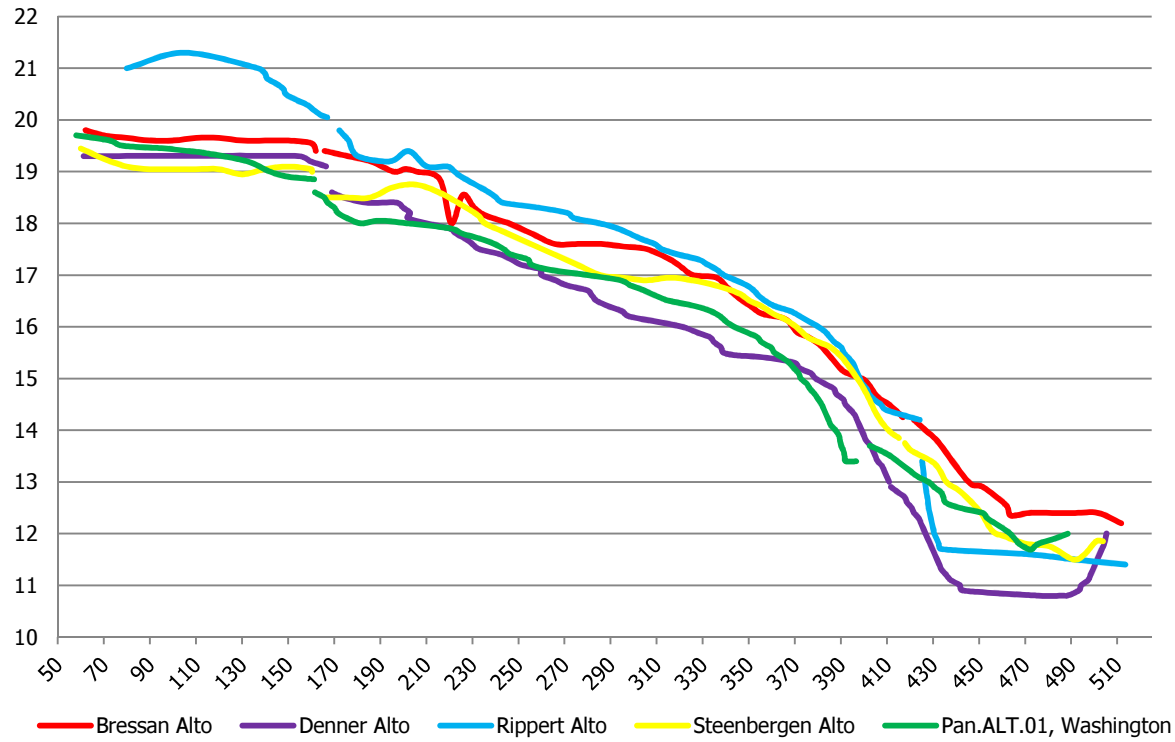
Chart 1.5.13: Bore profiles of Anciuti and Grassi recorders



Contextualization: bore comparisons with other European makers

Considering the extant output[339] of makers from four 'schools' that played a leading role in the development of the Baroque recorder, altos by Bressan, Denner, Rippert and Steenbergen have been chosen as examples for comparison with the Italian altos studied.[340]

Chart 1.5.14: Bore profiles of Panormo, Bressan, Denner, Rippert and Steenbergen altos



[339] Charles Fischer, "Baroque Recorder Makers by Surviving Instruments." *Unicorn Music*. accessed November 9, 2014, http://www.buyrecorders.com/pdf_files/baroque%20recorder%20makers%20chart.pdf.

[340] The specific instruments used in the comparisons are as follows: Bressan alto recorder, private collection of Frans Brüggen, measured and drawn by F. G. Morgan, 1973 & 1979; Denner alto recorder, E33, Danish Music Museum, measured and drawn by F. G. Morgan, 1980; Rippert alto recorder, private collection in Paris, measured and drawn by Jean-François Beaudin, 1986; Steenbergen alto recorder, private collection of Frans Brüggen, measured and drawn by F. G. Morgan, 1978.

Chart 1.5.15: Bore profiles of London Anonymous, Bressan, Denner, Rippert and Steenbergen altos

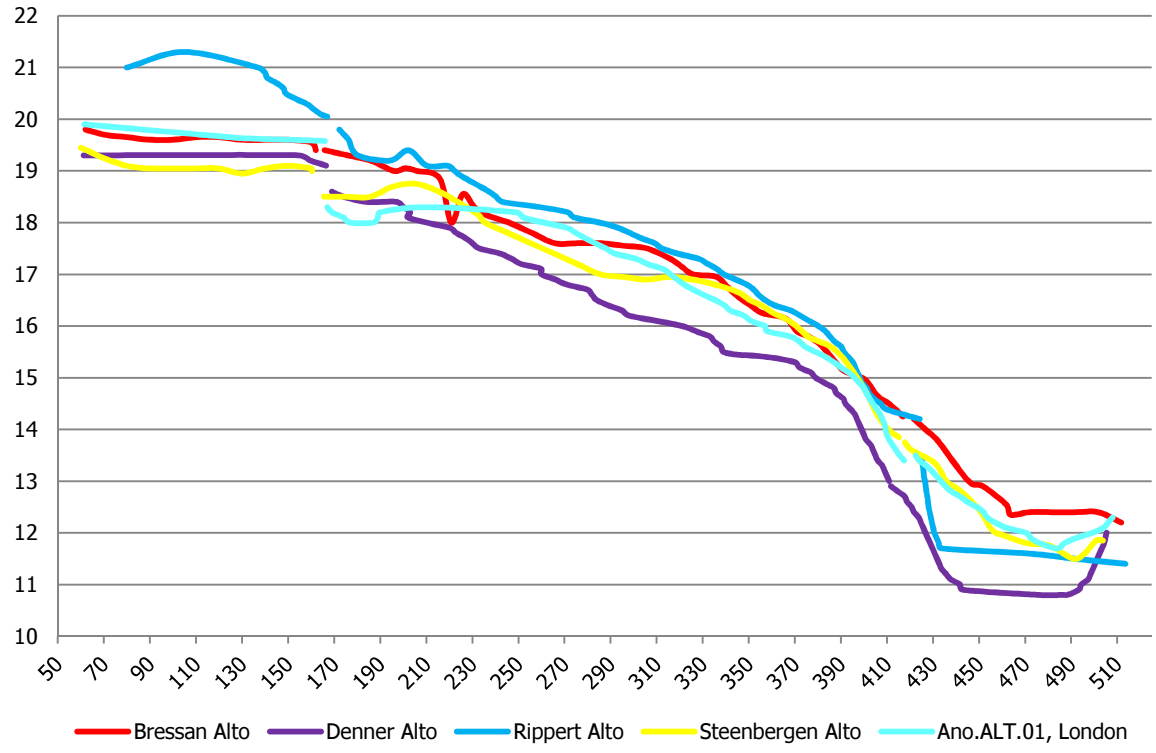


Chart 1.5.16: Bore profiles of Anciuti and Denner altos

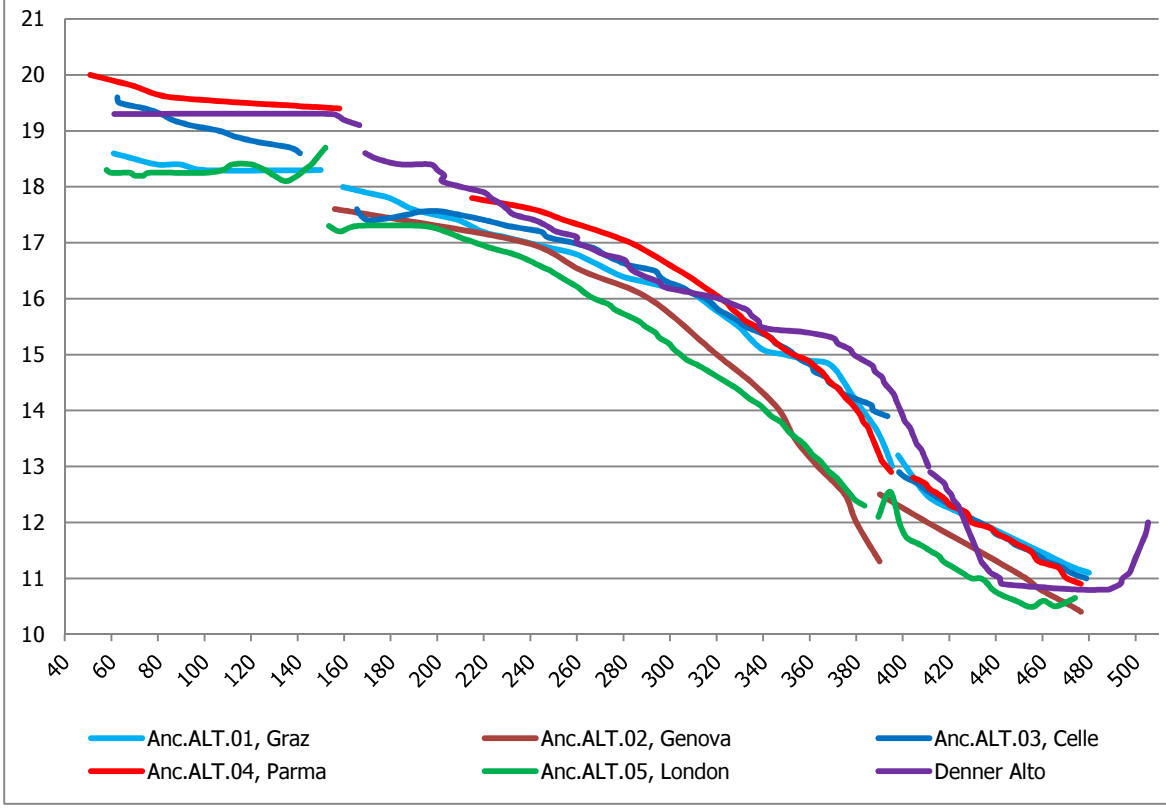
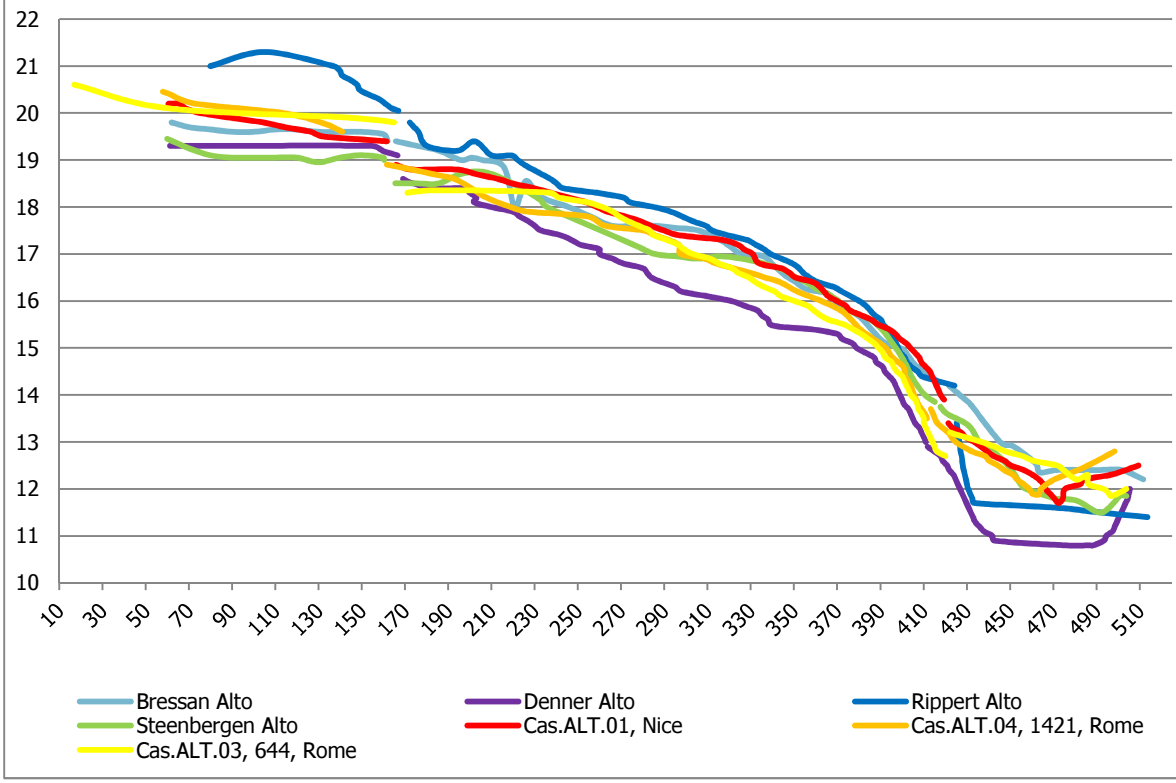
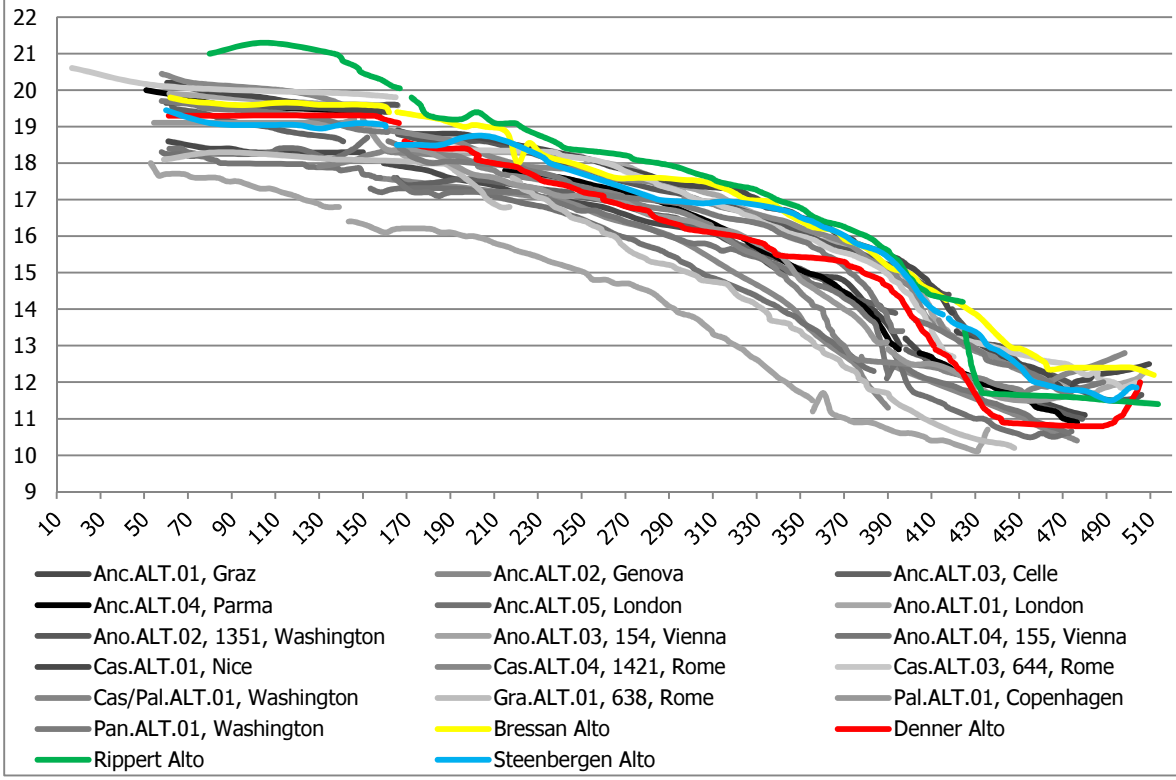
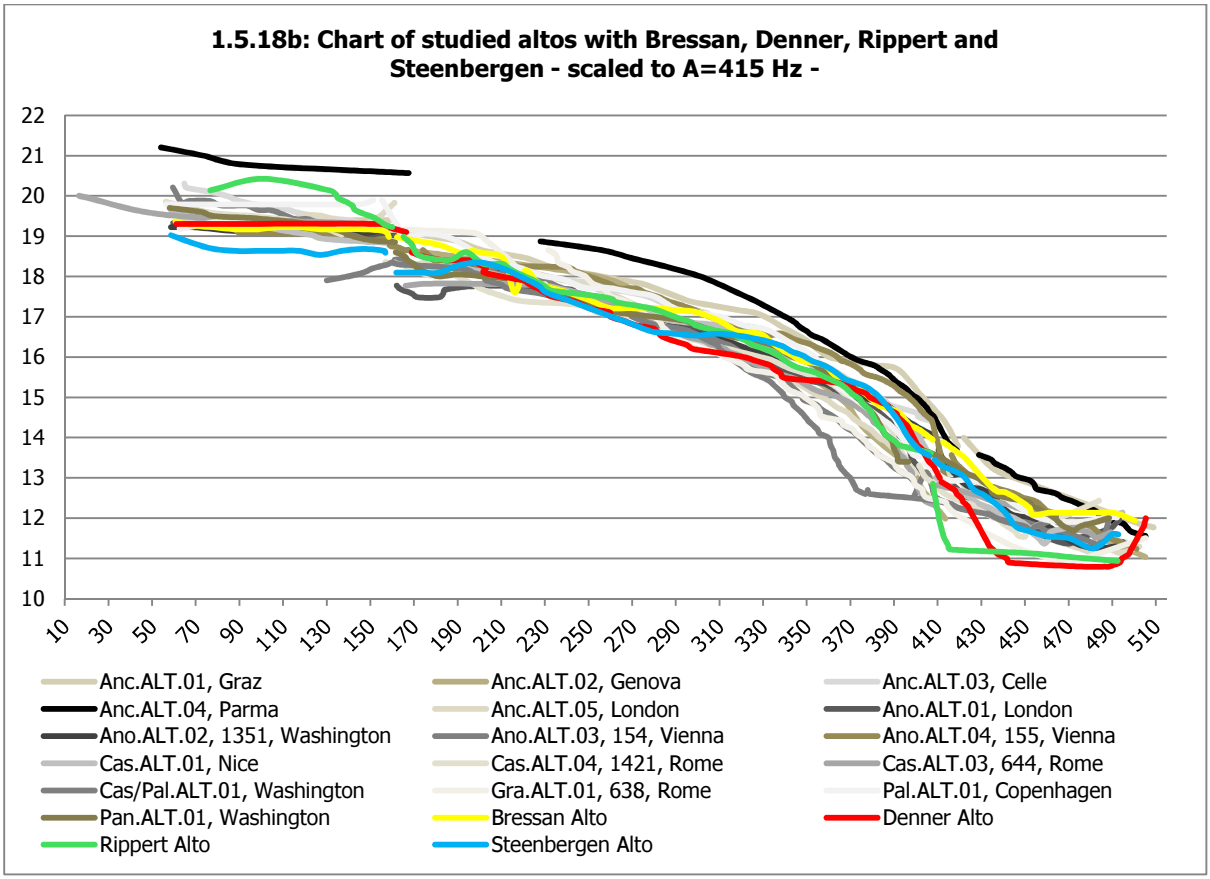


Chart 1.5.17: Bore profiles of Castel, Bressan, Denner, Rippert and Steenbergen altos



1.5.18a: Chart of studied altos with Bressan, Denner, Rippert and Steenbergen





The full interpretation of the data presented in Chapter 1 in relation to the repertoire which will be studied next will be given in Chapter 4. To summarize so far: the shapes of the bores of the Italian recorders presented above are mostly analogous to that of English recorders, though more conical. Combined with some unique aspects of the voicing (e.g. the absence of chamfers in Anciuti's instruments, the varied chamfers by Castel, the unusual window top by Panormo) these instruments demonstrate the wish for balancing a broad sound and easiness of speech.

All but one (Ano.TEN.01) of the Anonymous instruments postulated to be Italian do indeed present characteristics in common with the Italian instruments studied.

The cacophony of pitches, ranging from c. 403 Hz to 440 Hz, found in the recorders studied is an interesting mirror to the variety of pitches that co-existed in the Italian peninsula during the Baroque period. It is important to realize that although pitch standards did exist especially in institutional contexts, private music making was able to enjoy much more flexibility. Woodwind makers then (as now) were capable of providing instruments in an array of pitches, according to what their customers desired. The 'low' instruments of Perosa and Castel are great examples of this flexibility within a predominantly 'high' Venetian standard.

It is interesting to observe that out of the twenty-seven recorders listed, only one G alto was found (Anc.ALT.06), the other instruments being thirteen F altos, five sopraninos, three voice-flutes, two tenors, two sopranos and one bass. It is remarkable to see that Bismantova's iconic Baroque G alto is not better represented in the extant instruments made in the decades that followed his treatise. This can be interpreted in two ways:

- either the G alto had already fallen in disuse in the first decades of the eighteenth century and was therefore not commonly reproduced by Baroque makers, or, in other words, the fact that the instrument fell in disuse earlier than the F alto meant that owners disposed of their specimens and only kept those F altos that were still useful;
- the *G* alto was not, after all, what Bismantova meant to emphasize when he called it "flauto italiano".

As will be seen in Chapter 2, none of the works that form the Neapolitan Baroque repertoire absolutely calls for a G alto, unlike many of Vivaldi's chamber concertos, e.g. RV 90, 92, 94, 95, 101 and 108.

The two Italian centers for recorder music in the eighteenth century, Venice and Naples, are not equally represented in the extant instruments. If we consider Anciuti as one of the Venetian makers, his nine instruments can be added to the eight by Castel and the two by Perosa, totaling nineteen instruments which stem from *La Serenissima*, out of the twenty seven which are currently known. Compared to this, Panormo's alto stands alone as a unique specimen of a Neapolitan Baroque recorder. Even if we add to this comparison the two Anonymous altos which are very similar to Panormo, Naples still is at a great disadvantage. When placed into the context of the abundant repertoire that was written there (which will be seen next, in Chapter 2), this lack of instruments is particularly surprising. Possible explanations for this inconsistency will be explored in Chapter 3.