

**‘Dolce Napoli: Approaches for performance; Recorders for the Neapolitan Baroque repertoire 1695-1759’**

Inês de Avena Braga defended her thesis with the above mentioned title on Thursday 2 July at the University of Leiden. The thesis is on the internet at: <https://openaccess.leidenuniv.nl>. Use ‘Braga’ as key word in the search machine and you will come directly to the title of the thesis. Click on the title, and scroll than to ‘downloads’, and choose for the option ‘full text’. Appendix 1 is very interesting for instrument makers and researchers: with photos, drawings, measurements and descriptions of a selection of very fine Italian baroque recorders.

It was a busy week for Inês d'Avena and the team around her, because part of her defence was the performance of a concert with her ensemble ‘La Cicala’ on Monday 29 June at the Waalse Kerk in Leiden, and on Wednesday a masterclass/lecture recital at the Royal Conservatory in The Hague. She played and explained the music and the recorders, three of them were copies of Italian instruments, made for her by Fumitaka Saito.

A brief description of her project (from the website of the Academy of Creative and Performing Arts of the university): Inês d'Avena is a Brazilian recorder player with a penchant for Neapolitan Baroque music. During her doctoral studies, Inês researched the repertoire composed in Naples for the recorder, uncovering a rich and forgotten corpus of music written and copied between 1695 and 1759, which sets the recorder in an important place during the period in which the Partenopean city reached the peak of its fame. Equally interested in original instruments, Inês embarked on the search for the Neapolitan Baroque recorder, eventually extending the study to all Italian Baroque recorders currently known, unjustly neglected among the instruments that have customarily been used by period performers. In her thesis, Inês compiled the information currently known about the makers of these recorders, as well as technical drawings, measurements and photographs of all the thirty-four Italian and anonymous instruments included in the study. Her practical experience with the copies of a few recorders was described, offering a more musical dimension to this data. The Neapolitan recorder works were also listed with a brief analysis and further commentary on the recorder part, with a view of connecting the works with the instruments that might have once been used to play them. Furthermore, an overview of the social and cultural atmosphere of Naples in the early eighteenth century is offered as contextualization to the musical ambience, aided by iconographical references. The release of the homonymously-titled CD as a first artistic outcome of this study has brought together the two main aspects of the research: ‘new’ instruments and ‘new’ works. In conclusion, Inês reflected on the role of the instrument in affecting the player, and became conscious of a different ideal for her approach to Early Music and period instruments.

**Finding and comparing instruments**

What started as an interest in Neapolitan recorder music, became thus a quest for the instruments which might have been used for that music, or which were even made in Naples in the first half of the 18th century. Inês discovered that no research has been made into original Italian recorder building techniques and the influence their characteristics may have had on Italian recorder music composed in the early 18th century. But she also discovered that you can’t do such research without comparing the instruments with recorders

made in other countries and which have well-known qualities. She focused here on recorders (mainly altos) of Peter Bressan (London) and Jakob Denner (Nuremberg).

An important and - as I know myself - difficult part of the research was making an inventory of the recorders by Italian woodwind makers in public and private collections. Inês de Avena found 5 sopranino recorders, 2 sopranos, 14 altos, 5 tenors and voice flutes, and one bass recorder by Giovanni Maria Anciuti (Venice and Milano), Castel (Venice), Francesco Garsi (Parma), Paolo (?) Grassi (Milano), Carlo Palanca (Palanca and Turino), Giovanni Panormo (Palermo, Naples) and Domenico Perosa (Venice). In addition, there are seven anonymous instruments which may well be of Italian origin. These have all be identified as being of Italian origin either by the museums that hold them or in previous studies, or present characteristics similar to that of Italian recorders as uncovered by the present study. Amongst them two ivory sopraninos, which were stolen from their collection, the Library of Congress in Washington DC. It is good that information is given about these instruments (including pictures and some measurements), because they might turn up somewhere.

The following instruments have been measured and described in detail:

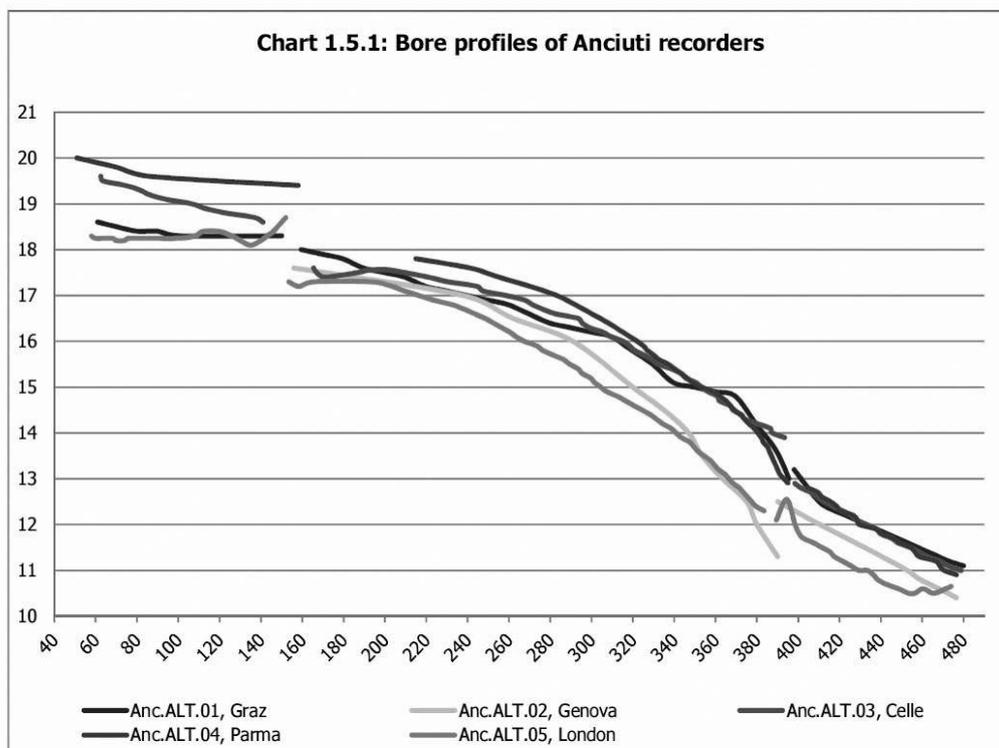
- Anciuti: alto No. 1 in boxwood, Universalmuseum Joanneum Graz, Austria, Inv. No. 10.484, a-435 Hz;
- Anciuti: alto No. 2 in boxwood, private collection Geneva Switzerland, (only a few measurements of windway and bore of head joint); a-440 Hz;
- Anciuti: alto No. 3 in boxwood, private collection , Moeck (Celle); a-430 Hz;
- Anciuti: alto No. 4 in boxwood, private collection, Parma (no data of fingerholes); a-440 Hz.
- Anciuti: alto No. 5 in ivory, Victoria & Albert Museum London, Inv. No. 20/5 (7469-1861) (bore measurements only as graphs); a-440 Hz.
- Castel: alto No. 1 in ebony with ivory rings, holes 6 and 7 double, Palais Lascaris Nice. Inv. No. C168; a-407 Hz.
- Castel: sopranino No. 1 in ivory, Edinburgh Collection of Historical Instruments, Inv. No. 3323; a-415 Hz.
- Castel: alto No. 3 in boxwood, National Museum of Musical Instruments Rome, Inv. No. 887/644; a-403 Hz.
- Castel: alto No.4 in boxwood, National Museum of Musical Instruments, Inv. No. 879/1421; a-407 Hz.
- Castel: voice flute No. 1 in boxwood, Academia Nazionale di Santa Cecilia Rome, Inv. No. 170; a-407 Hz.
- Castel: voice flute No. 2 in boxwood, Nationaal muziekinstrumentenmuseum Rome, Inv. No. 884/698; a-427 Hz.
- Grassi: sopranino No. 1 in boxwood and ivory, Muziekinstrumentenmuseum Leipzig, Inv. No. 1113; a-440 Hz.
- Grassi: alto No. 1 in boxwood and ivory, National Museum of Musical Instruments Rome, Inv. No. 881/638; a-435 Hz;
- Palanca: tenor No. 2 in boxwood of frute wood, Library of Congress Washington, Inv. No. DCM 1321; a-438 Hz;
- Panormo: alto No. 1 in ivory, Library of Congress Washington, Inv. No. DCM 327; a-420 Hz;
- Perosa: soprano No. 1 in boxwood, Kunsthistorisches Museum Vienna, Inv. No. SAM 153; a-415 Hz;

- Anonymous: alto No. 1, in fruit wood with ivory rings and tortoise veneer, Victoria & Albert Museum London, Inv. No. 1124-1869 (bore measurements only on a graph on p. 86); a-403 Hz;
- Anonymous: alto No. 2 in ivory, Library of Congress Washington DC, Inv. No. DCM 1351; a-406 Hz;
- Anonymous (with Bressan stamp): alto No. 4. Kunsthistorisches Museum Vienna, Inv. No. SAM 155; a-440 Hz.
- Anonymous: tenor No. 1; Museum of musical instruments Leipzig, Inv. No. 1135; a-415 Hz.

Only a few instruments could be played - or were allowed to be played. Most of the pitch indications are from other sources, or estimations, or derived from copies of the instruments. Several recorders were investigated by Fumitaka Saito, other measurements and drawings are by well-known makers and researchers as Martin Wenner, Adrian Brown and Ture Bergstrøm.

My impression: these instruments vary rather much in size, pitch, materials (from simple fruit wood to very luxuriously carved ivory), turned profiles and details of the finishing and voicing (such as the shape of the windway - flat or more or less curved in cross or length section -, the size of the window and the shape of the underlabium). Some recorders have details which are a bit odd, such as the lack of chamfers (both block and top chamfers) at the south end of the windways on instruments by Anciuti. Why did he do that?

Early (renaissance) recorders generally have small or no chamfers. That allows the player fast switching between the registers, but may also cause instability. Chamfers are commonly found in baroque recorders, they make also the sound of the tones more refined.



*The lines in this chart are rendered in the dissertation in different colours. In this article they are in various tones of grey; it is much more difficult to set them apart. It is nevertheless evident that there is rather much variation in the bore profiles, especially when we take in account that the lengths of the instrument parts do not differ so much.*

These and other technical aspects require a quite specialist knowledge and the author enters here the field of advanced recorder acoustics. That is very brave of her and I assume that she learned a lot from contacts with instrument makers.

Inês de Avena made several interesting observations and rather strong conclusions. I give two examples. The first is about the only recorder which was likely made in Naples, an ivory alto by Panormo. She writes about this instrument (p. 75):

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 “slowbore,” 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 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. and Jr. and Steenbergen... 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. It is at just as high a standard – and therefore should be as highly regarded as instruments by Bressan and Denner.

Fumitaka Saito made for Inês a copy of the Panormo alto, but used boxwood instead of ivory. As the original recorder is not playable, it is not possible to compare both instruments. But for another alto there was an opportunity to play both the original recorder and the copy, again made by Fumitaka Saito, That was the alto recorder by Castel in the Palais Lascaris museum in Nice (see photo, next page). The French recorder maker Philippe Bolton writes in a plan of this instrument: “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.”

Inês made in 2012 a visit to the collection alongside recorder maker Fumitaka Saito and gives her impressions of the instrument, which she could play (p. 64):

- 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.
- photo right: alto recorder  
No. 1 by Castel*

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?

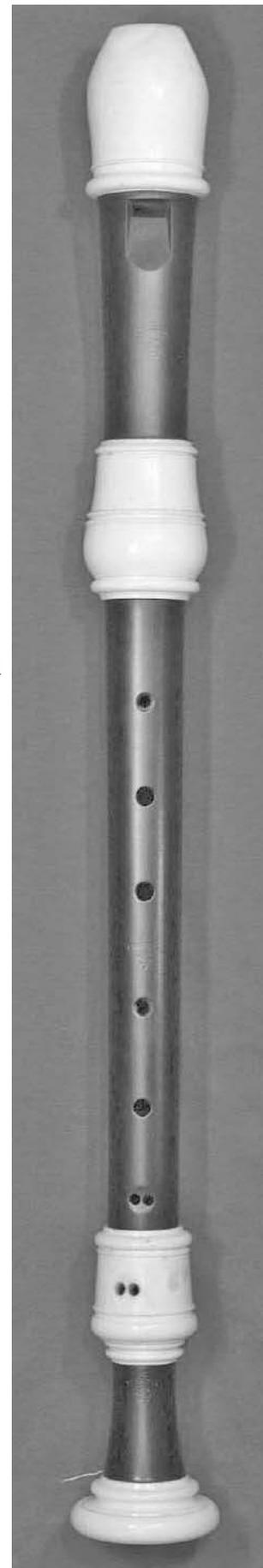
In 2013, this instrument was copied by Fumitaka Saito, on commission of Inês and she used the copy in a CD recording. The opportunity to play on this model for a prolonged period revealed a few more traits of Castel's work:

- 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 F4, G4 and A4\* notes that can be heard as clearly as all others.
- the concavity at the bottom of the block is similar to that observed on English recorders of the time [which ones? I have not seen original instruments nor drawings of them with such blocks, Jan B.], and the top of the block is concave, as expected on historical instruments.

*\* This is modern scientific notation of the notes. The G4 is in old notation g' (g1).*

The examples of the descriptions of these two alto recorders by Castel and Panorma show how far Inês d'Avena goes into the technical aspects of the instruments, and how she combines her observations with her playing experiences. That is the strong point of this dissertation and is also a stimulus for woodwind makers to cooperate with really strong players.

A problem for me is that you have to be very precise in giving your sources (as in the example of the concavities at the bottom of the blocks of English recorders). Inês d'Avena gives in footnote 102 (p. 27) a list of studies which she has consulted, but without a critical approach of the ideas of the authors. And I think that a thorough study is just needed for this (interesting) branch of



science: comparing musical instruments by using technical information. In the case of recorders there is still much work to be done. Inês used bore profiles as the central point to characterize the instruments in her study. Drawing conclusions from these profiles is not easy. See the graphs in this article of the bores of alto recorders by of Anciuti. No. 3 from Celle has a head bore which is much more conical (narrowing 1 mm) than the others.

What is the effect of this profile? Inês says (p. 59): The large head bore, more conical than expected, might compensate the absence of chamfers in stabilizing low notes. But why did Anciuti make the bores of altos No. 1 and 5 much narrower (and almost cylindrical), and of No. 4 again much wider?

There is the need for more research. Thomas Lerch (*Vergleichende Untersuchung von Bohrungsprofilen Historischer Blockflöten des Barock*, Berlin 1996, see about this study my article in 1997 in the FoMRHI-Q. No. 87, p. 10-14) studied bore profiles to find a method to typify the sound of recorders without playing them. His approach is interesting, but I dearly miss in his dissertation the judgments of experienced players. We are still waiting for a study where original recorders (or other types of woodwind instruments) and their copies will be investigated thoroughly, using advanced acoustical equipment, combined with the impressions of musicians who play real music on the recorders.

### **The conclusions of Inês d'Avena de Braga**

In her conclusions to chapter 1 (p. 255) the author writes: **With the data extracted from the technical information of the instruments studied it was evidenced that, as a whole, the bore of Italian Baroque recorders stands midway between English and German instruments. I conclude therefore that these instruments demonstrate the wish to balance a broad sound and ease of speech.**

How did she come to this conclusion? Have English recorders (Bressan type) always a broad sound (whatever that is), and those by Denner an 'ease of speech'? Inês mentions (p. 63) that the alto recorder by Castel has a design which resembles English instruments by Bressan, but her copy has 'a refined but small and delicate sound' (p. 65). And, as every experienced recorder maker knows, such playing characteristics do not depend on bore profiles only, but also on the details of the voicing, the height of the windway, the size of the window, etc.

Much more can be said about the study of Inês d'Avena de Braga. I have made some critical remarks, as I had to ask some questions at her defence of the thesis in Leiden. But my admiration for her work is great and I will finish with what she writes in footnote 109 (p. 29):

... 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.

... 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.