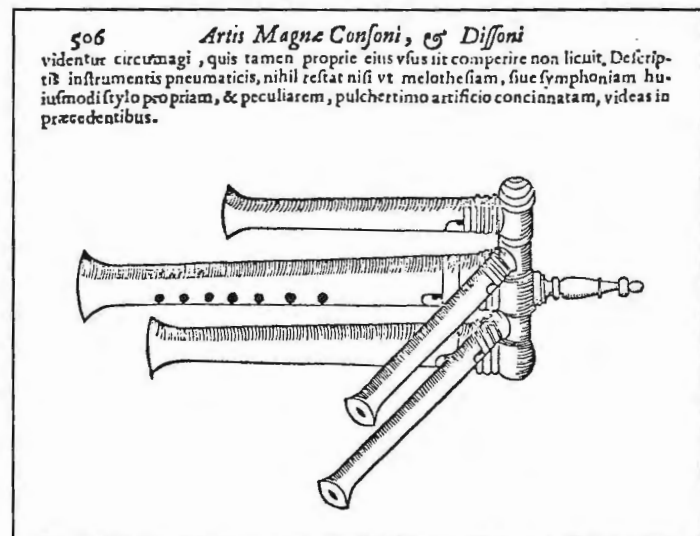


Signor Settala's 'armonia di flauti'

Filadelfio Puglisi



1 Woodcut of the 'armonia di flauti' from A. Kircher, *Musurgia universalis* (Rome, 1650)

In the storeroom of the Civico Museo Bibliografico Musicale in Bologna there is a show-piece of baroque *estravaganza*, an instrument that seems to have cast some kind of spell through the centuries. For we find it pictured in Kircher's *Musurgia universalis* of 1650 (see illus.1); and about a century later, a copy of this woodcut turns up in a plate in Diderot's *Encyclopédie* (see illus.2). Then, at the end of the last century, copies of the instrument were made for the Mahillon and Crosby Brown collections.¹ But perhaps more important than its curiosity value is the rare if not unique opportunity it presents to link a surviving woodwind instrument to a specific 17th-century contemporary reference.

The instrument in question is a 'multiple recorder' with five speaking pipes (see illus.3, p.322). It is entered as no.1781 in the inventory of the Civico Museo's musical instrument collection.² Each pipe is inscribed with the name MANFRE (Manfredo) above a symbol formed of seven oblong marks; these suggest seven wings, that is, 'sette ali', which gives the name 'Settala' (see illus.4).³

Manfredo Settala (1600-1680) was a Milanese physician; a naturalist by inclination, he earned his

living as a clergyman.⁴ His father Ludovico started a collection, mainly of books, about natural history.⁵ Manfredo enlarged it with natural and man-made objects, gathered on his travels to the Middle East, brought home by Jesuit missionaries, or made by his own hands. He had his workshop equipped for a variety of operations, from lens making to wood turning, and he built most of the hundred or so musical instruments in his personal museum, which achieved some renown during his lifetime. The collection was wonderfully varied, and included such items as precious stones, exotic pieces of wood, and ivory vases, as well as flutes and bagpipes.

The collection was curious enough to warrant the publication of an extensive catalogue, first in Latin in 1664, then in Italian two years later (see illus.5).⁶ In each catalogue there is a section devoted to musical instruments. (The Italian version will be used here, since it is more generous in its descriptions and comments, and contains some instruments not in the Latin version.) After a foreword which notes that only rare and curious instruments are included, the list starts with the woodwind. It is clear that multiple instruments of the fipple-flute family are a favourite

item. To this type seem to belong the following:⁷

Duei biflauti con ottava e terza
Un biflautino o fiesoletto, con l'ottava e disopra

Two double recorders with an octave and a 3rd
A small double recorder or flageolet, with the octave and above [i.e. the octave above?]

Tre altri flauti, in uno si fa l'ottava bassa, e l'altro si fa la quinta e terza, istrumento stravagante, invenzione e fattura del Sigr. Manfredo

Three other recorders, one sounding the lower octave, one the 5th, and the third an extravagant instrument, invented and made by Sigr. Manfredo [Settala]

Alcuni fiesoletti alla Francese, doppi di quarta alta

Some French flageolets, doubles, with the upper 4th

Una zampogna, o armonia di flauti a cinque canne di basso tutte a suono diverso capricciosissime, quali hanno la regola principale in 4, in 5, in 3. Opera del medesimo Signore

A *zampogna*, that is an assembly of recorders with five pipes of box-wood, all with different sound, extremely fanciful, with their basic tuning at the 4th, the 5th and the 3rd. The work of the same Signor

Un'altra Zampogna o armonia di 8 canne che si riuniscono in una sola più grande a basso continuo proporzionata mirabilmente

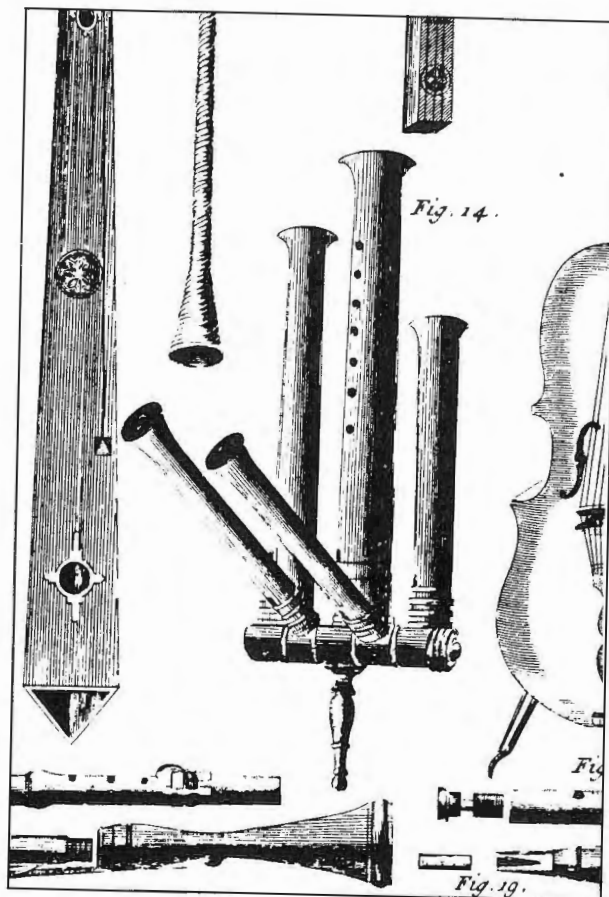
Another *zampogna* or assembly of eight pipes, of marvellous proportions, that converge into a larger one with basso continuo

Un triflauto dolcissimo, raccoglie il suono in una sola canna

A very sweet triple recorder, which gathers the sound in one pipe

The fifth item obviously corresponds to the instrument now in the Civico Museo in Bologna. The appeal of the instrument to the catalogue writer is expressed in his use of the word 'capricciosissime'. All baroque aesthetics is pervaded by the central idea that one of the aims of art is to strike the imagination and to inspire wonder. Settala's attempt to transfer the bagpipe idea to the fipple flute (the word 'zampogna' is a clue to this) creates something new in the most obvious way, that is, by straightforward multiplication.

Kircher, either genuinely impressed or simply as a favour to a personal friend, included the woodcut of this instrument, with the following comment: 'The very noble and ingenious Mr D. Manfredo Settala, sincere friend of mine, informed me not so long ago



2 Copy of Kircher's woodcut in D. Diderot and J. D'Alembert, *Encyclopédie* (Lausanne and Berne, 1751-65)



4 Detail of the 'armonia di flauti', showing the maker's mark

about an exotic instrument, the image of which we here show . . .'.⁸

The instrument consists of five pipes of the recorder type, converging into a common pipe, to which a mouth-pipe is attached. There is no device for blocking the air to the pipes, except of course through the placing of a disc of paper or similar material inside the individual sockets, the possibility of which is seen from the dismantled instrument as shown in illus.6. The pipes are not kept in their sockets by lapped tenons, since there is no room for lapping with thread. Instead, the sockets are pierced, as are the tenons inside, most probably for the insertion of pins (none of which, however, survive).

I have given a numbering system to the pipes, 1 having the greatest speaking length, 5 the shortest (see table 1). The only pipes with finger-holes are the longest, which is a recorder of the common renaissance design with quasi-conical bore and double bottom hole, and the shortest, which has three finger-holes. The three intermediate pipes have only an elliptical hole towards the lower end, evidently for tuning (see illus.7). To test the pitch of the pipes the instrument must be dismantled, but, since the sockets leak and the holes are dirty, there is doubt as to the actual note which should be produced when the instrument is assembled and played through the mouthpiece. As table 1 shows, the three 'non-fingerable' pipes (2, 3 and 4) give a major chord on the fundamental of pipe 1. (The lower notes were tested on each pipe when disassembled. When replaced and blown all together, the pipes should give a somewhat lower pitch, because of the decreased wind speed.)

Table 1

Pipe	Speaking length (mm)	Lowest note at A = 440
1	347	a'
2	292	c'' sharp
3	229	e''
4	189	a''
5	153	b''

As far as playing the instrument is concerned, two methods seem to be implied: either both hands on pipe 1 with pipe 5 set to a specific note with the help

of wax plugs (see illus.8); or the left hand on pipe 1 (some wax plugging here too?) and the right on pipe 5. In both cases the instrument is comfortable to hold.



3 Manfredo Settala's 'armonia di flauti'



6 The 'armonia di flauti' dismantled



7 The tuning holes

Because of leaks in the sockets, it is not possible to check whether any of the pipes are meant to overblow at the octave. But assuming that this would anyway be so complicated as to be improbable, the available notes are as follows (see table 2).

Table 2

Both hands on pipe 1		Left hand in upper position on pipe 1; right hand on pipe 5	
Pipe		Pipe	
1	a'-b''	1	e''-b''
2	c'' sharp	2	c'' sharp
3	e''	3	e''
4	a''	4	a''
5	b'', c''' sharp, d''' or e'''	5	b''-e'''

Some insight into the attitude with which the instrument was built may be gained from a few comments on the maker's workmanship.

MUSEO
GALERIA


Adunata dal sapere, e dallo studio
Del Sig. Canonico

MANFREDO SETTALA
NOBILE MILANESE.

Descritta in Latino dal Sig. Dott. Fis. Coll.
PAOLO MARIA TERZAGO

Et hora in Italiano dal Sig.
PIETRO FRANCESCO SCARABELLI
DOTT. FIS. DI VOGHERA.

E dal medemo accresciuta.




IN TORTONA,

Per li Figliuoli del qd. Eliseo Viola. MDC LXVI

Con licenza de' Superiori.

5 Title-page of the catalogue of the Settala collection (Italian translation: Tortona, 1666)



8 The 'armonia di flauti' in playing position

The turning, quite characteristically, is very sloppy in the easier places, as is shown by the outside turning of the pipes. The wood used is knotted and somewhat lower in quality than would be expected. The window lip is parallel to the wood-ring layers, which is an extremely uncommon, and suspicious, feature (although I have seen one good renaissance recorder by 'Hier' in the Biblioteca Capitolare in Verona that is made the same way). In contrast to these signs of carelessness, the ends of the horizontal wind-distributing pipe have carved rosettes, indicating the use of a machine lathe; moreover, the general assembly plan is ingenious and complicated.

The fact that the unusual features are meticulously made, while the standard features are rather casually executed, suggests that the instrument was built with the amateur's approach, rather than in the spirit of serious musicianship. Unfortunately, the best test of this—playing music on the instrument—is precluded until restoration is carried out. Even then, there remains Kircher's distrustful comment:⁸ 'Quis tamen proprie eius usus sit comperire non licuit' ('It was not, however, possible to find its intended use').

The author is currently gathering material for a book on the renaissance flute and would be interested to hear from scholars working in the same field.

¹ Mahillon catalogue no.1117, Crosby Brown catalogue no.1844; the latter is illustrated in *Scientific American Supplement* no.1530 (1905), p.24517.

² This collection contains the instruments formerly belonging to the Liceo Filarmonico of Bologna.

³ In a letter to Manfredo's father Ludovico, Bonaventura Cavalieri addresses him as 'Sett'ale'.

⁴ These historical notes are mainly from S. Rota Ghibaudi, *Ricerche su Ludovico Settala* (Florence, 1959).

⁵ Ludovico Settala was also a doctor, and was well known for his part in helping victims of the plagues of 1576 and 1630 in Milan.

⁶ In Latin: P. M. Terzaghi, *Museum Septalianum* (Tortona, 1664); in Italian, trans. P. F. Scarabelli, *Museo o' galeria adunata dal sapere, e dallo studio del Sig. Canonico Manfredo Settala* (Tortona, 1666). The Italian translation of the catalogue is more interesting than the Latin original because Scarabelli added comments of his own 'for those people that could not visit the collection'. The Latin catalogue is reproduced in part in J. von Schlosser, *Die Sammlung alter Musikinstrumente* (Vienna, 1920). The collection was bequeathed by Manfredo to the male line of the Settala family and, in default, to the Biblioteca Ambrosiana in Milan, where eventually it went in 1751. Our instrument somehow found its way into the collection in Bologna.

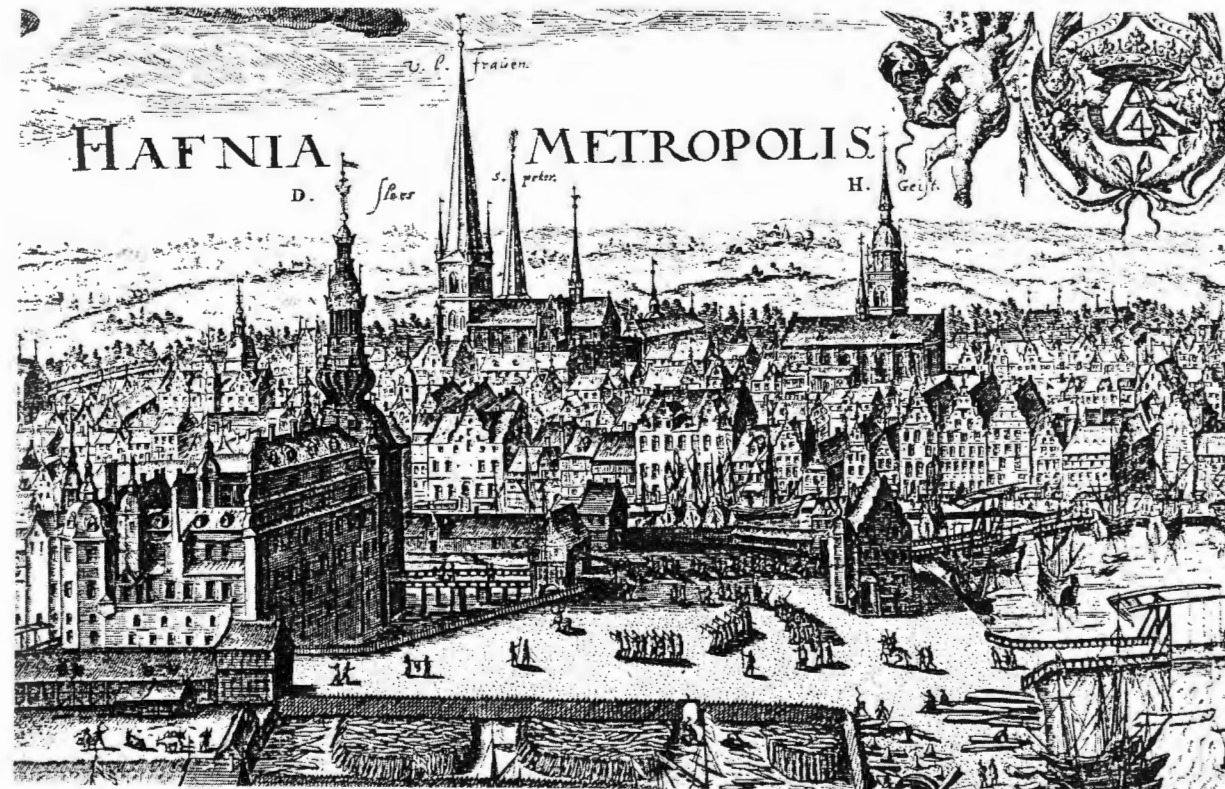
⁷ The word 'armonia' means an assembly of several woodwind instruments. The word 'regola', here translated as 'tuning', is synonymous with 'formula', 'prescription', or 'set of rules'. 'Flauto' has been translated as 'recorder', as opposed to 'piffaro', which in the same catalogue means a transverse flute. The last item—the 'triflauto'—recalls the instrument mentioned in Peri's *Euridice* of 1600.

⁸ A. Kircher, *Musurgia universalis* (Rome, 1650), pp.505-6: 'Misit non ita pridem ad me praenobilissimus ac ingeniosissimus Vir. D. Manfredus Septalius amicus sincerissimus aliud exoticum instrumentum fistulare, cuius iconem hic exhibemus; constat 5 fistulis quorum 3 ABC axi FG insertae, reliquae duae DE intra axem videntur circummagi, quis tamen proprie eius usus sit comperire non licuit.'



A renaissance correspondence concerning trumpet music

Peter Downey



1 Copenhagen at the height of Danish power, before the disastrous Thirty Years War: engraving by Jahan Dircksen, 1611. In the lower half of the picture can be seen 16 trumpeters and a timpanist playing in the courtyard

In 1548 Augustus, Elector of Saxony, married Anna, daughter of King Christian III of Denmark. As a result, the royal Danish court at Copenhagen and the electoral Saxon court at Dresden became closely linked in the political and in other spheres; this link survived well into the 17th century. Of particular interest is a correspondence of 1557 concerned with court trumpeters and their music, for it deals with the latter in a detail unsurpassed in any other renaissance source.

The letters from which the following passages are taken are preserved in the Royal Archive in Copenhagen. The first is from King Christian III and was sent to Elector Augustus on 3 February 1557. It is

found in the 'Auslendises registrant de annis 1556-57', where it comes as an addition to a document dealing with various non-musical matters. The entire letter is on ff.220-24 (the material presented here is from ff.222v-223v). The second letter is found in the section 'T.K.U.A. Sachsen. A III. Forskellige Akter og Dokumenter 1555-1764 og udaterede', and is dated 5 April 1557. It is in fact the second letter of that date from Elector Augustus to King Christian III, and replies to the king's letter of 3 February. The transcription retains the spelling and contractions of the original. Words expanded or supplied editorially in the translation are here enclosed within square brackets.