Telemann's Fantasias: a Fantastic Source of Inspiration

How can I improve my improvisatory skills, using Telemann's Fantasias?

Robert de Bree (recorder)

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Dedicated to Rachel, without whom the Gardens of Fantasy would have remained in the season of Winter: Amor Docet Musicam

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Introduction

Telemann's *Fantasias* have fascinated me from an early age. Although at the time I did not understand what made these pieces so special, I felt a richness in them equaled by few others in the baroque solo "recorder repertoire". Equally, I have, to greater and lesser extents, been drawn to improvisation throughout my life, whether in the shower, in the theatre or at a Jazz club with my clarinet. In my Masters topic I am trying to combine these two elements, Telemann's *Fantasias* and my love for improvisation, into one project. The premise of my research is to improve my skills in improvisation. I hope as a result to be able to improvise my own solo fantasias, using Telemann's as a source of inspiration.

When I started studying at this conservatory I was very happy to discover that "improvisation" is integral to performance in the world of Early Music. The Grove Dictionary of Music defines improvisation as follows:

The creation of a musical work, or the final form of a musical work, as it is being performed. It may involve the work's immediate composition by its performers, or the elaboration or adjustment of an existing framework, or anything in between.

In Early Music the most common forms of improvisation rely on the latter part of the definition, in the sense that they are usually rooted in pre-existent material. There are four categories into which we could divide these forms. First and foremost is the practice of figured bass, which involves the realisation of an improvised accompaniment from a notated bass line on chordal instruments. The use of numbers denotes certain chords or harmonies, although sometimes the numbers are not notated, and players realize chords from the implied harmony. Ornamentation is another key form of improvisation, involving the application of either small one-note ornaments (graces), or, where appropriate, the elaboration of pre-existent melodic material by longer runs (passagi) which sometimes almost obscure the original material.¹ For example, Corelli's famously elaborate ornamentation (as supposedly notated in one of the editions of his Op. 5 Violin Sonatas), or the ornamentation exemplified in Telemann's instructive Methodische Sonaten. Thirdly, several practices exist which make use of a melody or harmonic progression, such as improvised counterpoint over a tenor or improvisation on a ground bass. Finally, the most free of improvisational practices rely rather on knowledge of a genre and current musical idiom to stimulate the formation of the whole piece, rather than the elaboration of existing material. These are exemplified by the 'prelude' (as explained by Hotteterre in L'art de Preluder), the 'fantasia' (taught by C. P. E. Bach in his Versuch) and the 'toccata' (as described by Forkel in relation to J. S. Bach's organ improvisations).

Truly excited by all these different ways of improvising, I threw myself at the first opportunity to try my hand at it: I took a deep breath, barely listened to the famous 'Folia' progression, played many notes and felt content with my facility to come up with notes not prescribed by someone else. Not long after, the violinist James Hewitt and I decided to form an ensemble, which naturally grew towards improvising. However, we soon realised that we were somehow limited by the results of our improvising. A meeting with Charles Toet lead the Maestro to wonder: "But, in which style are you actually improvising?"

¹ For a comprehensive discussion of ornaments and the terms graces and passaggi, see H-M Brown, **

After our lesson with Mr. Toet, I began to realize that in my flights of improvisatory delight, I was playing many wrong notes, such as fifth and octave parallels, random (unprepared) dissonances: too many follies make a folia a little foolish. Indeed I wasn't quite sure exactly *what* I was playing. Similarly, in our group improvisations, our approach to the bassline was somewhat disorganized and the results lacked coherence and structure. By focusing on a particular style (the late 16th-century Italian diminution practice) we were able to immerse ourselves in the language and its grammar and consequently bring more unity to our approach. Therefore the end result was more meaningful. This experience made me realise that a concentrated approach to my own improvisation was necessary for me to progress to the next step.

So far I had focused mainly on bass variations and diminution practices in the 16th and 17th century. But, as the recorder had its time of glory during the 18th century, I felt that it would be interesting to turn the page and have a closer look at this particular period. But how should I go about this practically? Improvisation is by definition tied to the present by the ropes of forgetfulness. We have no sound recordings of 18th-century musicians improvising. Since we came to the conclusion that it is impossible to know how pieces were played in the past, it is even harder to attempt to understand a practice in which the notes proper are lost to us.² Or are they? To what extent might some compositions, for which we have extant notational sources, have been improvised? Could we use them as templates? It is clear that preludes (J. J. Hotteterre, *L'art de Preluder*, Paris, 1719), dance movements (F. E. Niedt, *Musikalische Handleitung*, Hamburg, 1700), and fantasias (C. P. E. Bach, *Versuch*, Berlin, 1753), were improvised and there are written versions of such pieces in abundance. They may serve as models to us now, much like the recorded improvisations of Jazz masters serve the students of more recent music.

I chose Telemann's Fantasias as a frame of reference for the following reasons:

- 1. They give an overview of different forms, styles and genres current in the 18th Century. Barthold Kuijken, in the introduction to his edition of the Fantasias, expresses much the same sentiment: "Could there be a didactic intention, as expressed by J.S. Bach in his Two-part and Three-part inventions: '... not alone to have good inventions, but to develop the same well, and above all to arrive at a singing style in playing and at the same time to acquire a stronger foretaste of composition.'?"
- 2. The high baroque is a time in which the number of pieces written for a single, monodic, instrument is small. An important element in music is counterpoint, inherited from earlier times as one of the basic organizational principles of western music. Even in solo pieces, a suggestion of polyphony and harmony is made. Telemann is a master at pseudo-polyphony, as illustrated in the *Fantasias*. Fugues and fugal entries are emulated. By exploiting the tessitural possibilities of the instrument, he is able to evoke different voices (bass, alto, soprano), whilst also connecting the registers melodically to form a single integrated line.
- 3. The pieces are small and idiomatic (for the traverso) and therefore the analytical scope is easily manageable.

 $^{^2}$ See Taruskin's debate on authenticity in *Text and Act* (reference), in which the author points out how much of historical performance has to be invented and to what extent the interpretation of data, the style of performance and our tastes are modern (or post-modern), despite the efforts being valuable and, in my personal opinion, necessary.

4. Telemann was one of the most celebrated composers of his time. According to J. Mattheson in his *Ehrenpforte* (Hamburg, 1740): 'People sing the praises of Lully; they speak very highly of Corelli; only Telemann is above all praise'.

Although I pointed out above that many fantasias were subject to improvisation (as described by C. P. E. Bach and Tomas de Santa Maria), I do not personally believe that Telemann's fantasias are written down improvisations or necessarily a formalisation of an existing practice of improvising flute players. I'm therefore not trying to enliven an old tradition, but rather use it as a stimulus for my personal improvisations. The *Fantasias* are also a result of Telemann's style as a whole, and with a repository of about 1000 pieces it is impossible in a Masters degree to become acquainted with it to such an extent that a veritably *Telemanian* Fantasia is viable. The end result is not going to be the thirteenth Telemann Fantasia. I will try to exploit this resource to its fullest, without it becoming an essay in parody. To reiterate, by focusing on specific repertoire I wish to hone my improvisatory skills.

On a side note, I could never get this thought of my head: should recorder players play Telemann's *Fantasias*? The composer himself reasoned in his 1718 autobiography:³

Nein / nein / es ist nicht genug /daß nur die Noten klingen /Das du der Reguln Kram zuMarckte weist zu bringen.Gieb jedem Instrument das / wases leyden kann /So hat der Spieler Lust / du

hast Vergnügen dran

A comment in *Hamburgische Auszüge aus neuen Büchern und Nachrichten von allerhand zur Gelahrtheit gehörigen Sachen*, 1728, by an anonymous reviewer echoes much the same sentiment on the use of instruments in Telemann's music and his knowledge of their properties. Maybe *Fantasias* for the recorder would have been composed differently? Is it not more 'authentic' to improvise one's own, rather than to try to emulate the Traverso on the recorder?

³ Telemann, "Lebens-Lauff mein Georg Philipp Telemanns" (Frankfurt, 1718). The quotation is a translation from S. Zohn, *Music for a Mixed Taste* (Oxford, 2008)

Methodology

My research will be presented in two ways: the first part, which is more practical, in the form of a lecture, and the second, in the form of a written text.

Part 1

I am researching several ways of improving and learning improvising, trying to relate myself to ideas I found in contemporary autobiographies and theoretical treatises. The treatises I reference are mainly the ones Telemann published or specially mentioned, with the exception of F. E. Niedt, whose treatise was pointed out to me by my coach Patrick Ayrton. I shall present my findings and thoughts, listed below in bullet points, in the form of a lecture.

- F. E. Niedt writes that the distinction between dances (allemande, courante, sarabande, etc.) is found in small differences. He gives one harmonic pattern and teaches how to improvise the dances. Even C. P. E. Bach, in his *Versuch*, gives a harmonic outline for improvising a *free* fantasia.

- What I try to learn from Telemann, is also the technical approach to the feigned polyphony. I analyzed the different types and approaches, consulting Fux's *Gradus at Parnassum* (Vienna, 1725) and Marpurg's *Abhandlung von der Fuge*, (Berlin, 1753), and practiced them separately.

- An idea coming from earlier diminution practices and adopted by treatises such as Quantz's *Versuch*, (Berlin, 1752), Hotteterre's *L'art de Preluder* and Agricola's *Anleitung zur Singekunst*, is the build-up of an arsenal of figures or clichés, which can be used to play in a more idiomatic style. As Telemann's oeuvre is immense, I restrict myself to the Fantasias for ideas. A symposium in Basel on clichés in stylistically improvisation first guided me to this idea.

- Copying (and playing) the fantasias. Telemann and many others mention in Mattheson's *Ehrenpforte* that the main guise in which they learned music and composition was by copying the music of others.

- Beside harmony as a guide for improvisation, form or genre may be as well. Through analysis I will try to find models that may be helpful as shorthand for large-scale structures, as one of the issues with improvisation is short sightedness, resulting in short-term planning and the lack of an overall unity. Recently I found the book 'Bach and the Patterns of Invention' by Laurence Dreyfuss, which I hope will give me an insight into a slightly less anachronistic approach to the analysis of the Fantasias.

- Heinichen proposes three necessities for a composer: knowledge, natural talent and good taste. The third according to him is acquired by "the opportunity to listen continuously to good music in order to gain sufficient experience."⁴ Petri, 1767 also suggests listening to 'good' music to become experienced in music. I apply this idea by listening to Telemann's music, to find out whether this influences my improvisation and in which ways.

- Improvisations are ephemeral. The best way to learn is to spot mistakes. In order to do this I make recordings to analyze what happened, especially to see the influence of different learning

⁴ George J. Buelow, *Thorough-Bass accompaniment According to Johann David Heinichen*, (London, 1992), p. 325.

methods. Another option would be to try to write my own fantasias.

- Having started a class on improvisation, generally in an earlier style, I try to teach others what little I experienced in the field of (idiomatic) improvisation. This in any case leads to a stern analysis of one's ways and how improvisation may or may not be learned.

Part 2

Beside this more practical research a few hitchhiking questions came up along the way, which I could not possibly leave by the side of the road. I will address these questions in the body of my written text.

- 1. By tracing the structure of contemporary educational systems, can I gain insight into an 18th-century approach to composition and improvisation and could this inform my own learning process?
- 2. Is stylistic improvisation truly possible in the context of the present day, and what are its implications?
- 3. What are my conclusions concerning my experiments with different learning processes regarding historical improvisation?

Source Material

The version of Telemann's Fantasias used for my research is the 1987 Musica Rara (MR 2167) edition, edited by Barthold Kuijken, in which both a facsimile of the only extant source (Brussels Conservatory, littera T 5823) and a modern transcription are printed. In his preface, Barthold Kuijken reasons that the original printing date may have been 1727-1728, despite the fact that Telemann himself lists the 12 Fantasias in his autobiography (Mattheson's Ehrenpforte) between two works, one composed in 1731 and the other in 1733. However, the Fantasias themselves have no date attached to them and the list is, overall, not ordered by date. Kuijken believes that the printing date is earlier as it seems to be one of Telemann's first attempts at engraving after moving away from the more old-fashioned movable letter-type.⁵

Although the title page suggests that these pieces were to be played on the violin,⁶ Kuijken makes a strong argument for appropriating the repertoire for the traverso. Due to the lack of idiomatic double stops characteristic of the genuine violin fantasias, and the use of range, which is perfectly fitted to the traverso, and neglects the lowest string of the violin. Kuijken also refers to the lack of a truly identifiable composer for these pieces. Although Telemann mentions himself to have composed these pieces in his autobiography, the extant source only mentions his name in pencil on the 'wrong' title page. He tries to prove stylistically that the fantasias are Telemann's and does so very convincingly in my opinion, even though he acknowledges that no conclusive data can be presented: 'there is of course still no absolute proof that Telemann is the composer of these Fantastias. The clues provided by the style of engraving and the presence of 'Telemann' written in pencil on the 'wrong' title page, have already been mentioned. Another point worth considering is who else could have written them?'

⁵ See, for example, D. Krummel, Sadie. S (eds.), *Music, Printing and Publishing*. London, 1990, for more information about methods of printing in the 18th Century.

⁶ The words '*Fantasie per il Violino senza Basso*' are included on the title page, leading Kuijken to believe that it may have been wrong considering the suitability of the repertoire for the flute, and the lack of idiomatic writing for violin.

The Fantasia: Genre, Form or Approach?

In the 16th Century, derivatives of the Greek term *Phantasia* were used to denote 'imagination', or 'caprice'. Although some compositions use this title, generic or formalist concurrence between denomination and content does not exist at this time. The use of the term *fantasia* refers rather to the musical imagination, invention or the act of improvising on an instrument. Due to the fact that the *Fantasia* resists fitting into a formal or stylistic category, it is possible to consider other terms which occur in relationship to or interchangeably with the *Fantasia* as part of its compositional tradition; such terms include *Preamble, Tentos, Voluntary, Automaton, Capriccio, Canzon* or *Fuga*. For example, a collection of *Ricecares* might be referred to later as *Fantasias* by the same composer.

The realm of the *Fantasia* especially distinguishes itself from other compositional forms in that it does not '*express the passion of any text*',⁷ and is thus able to stand alone as a purely abstract instrumental form. The other characteristic is the use of imitative techniques. Diego Ortiz, for example, writes in his *Trattado de Glossas* (Madrid,1553) about Fantasias: "*The harpsichord plays well-ordered chords, and the viol should enter with elegant passages...Some points of imitation may be played, one player waiting on the other in the way that polyphony is sung.*" English composers such as Simpson and Morley focus on the development of a subject, which they described as 'a point', in their Fantasias; this 'point' was treated kaleidoscopically to show off the composer's artifice. Such a technique was taken to an extreme in the Dutch school, notably by Sweelinck, where the whole fantasia would be built up using only one 'point' as the source of material. In my chapter on Inventio I try to take a similar idea as the basis for my improvisation practice.

Another interesting compositional approach to Fantasias in the 16th and early 17th-Centuries can be seen in the 'parody' fantasia.⁸ In this case, a polyphonic model (or parts of it), *cantus firmus* or other melody was used as a basis for the instrumental composition. Although writers refer to the *Fantasia* as solely sprung from the 'fantasy' of the composer's imagination, especially with regard to improvisation, the evidence of the 'parody' fantasia suggests that such practices are nevertheless not entirely divorced from pre-existing traditions or material. For example, when it comes to the improvisation of Fantasias, 16th-century sources recommend the intabulation of vocal models as an approach practice 'fantasizing'. Indeed, both Sancta Maria (*Arte de tanier Fantasia*, Vallodolid, 1565) and Bermudo (*Declaracion*, 1555) advise the memorization of passages from vocal polyphony in order to have a repertory of pre-existing motives, insertable into the improvised fantasia at any point. This resembles later ideas, such as C.P.E. Bach's advocation of the use of a pre-existing bass line as a general outline for one's fantasia.

The biggest influence in the world of *Fantasias* came from Italy, where they were played on keyboards, strummed instruments and in ensembles of instruments, but, notably, not as solo pieces for melodic instruments such as the violin or flute. Looking forward to Telemann's *Fantasias*, we see few predecessors in the 16th Century written specifically for a wind

⁷ Mersenne, *Harmonie Universelle*, (Paris, 1636-37)

⁸ This is part of a long-established tradition of Parody composition dating back to the 15th Century. Renaissance composers use pre-existing *cantus firmi*, often taken from a popular folk song (notably, the famous 'L'homme arme' which generated a whole tradition of parody masses), as the basis for their Masses.

instrument. Pieces for solo wind instruments are found in diminution treatises and called *Recercare* (as for example in the works of Bassano and Virgiliano).⁹ Bassano specifically refers to the *Recercares* as practicable compilations of the diminutions he gives as examples of ornamented intervals. In Spain the use of the term fantasia (also called *Tiento*) often had didactic connotations, as did Bassano's *Recercares*.

In the 17th Century, the century in which instrumental music starts to come into its own, a huge collection of solo pieces for the recorder was printed in The Netherlands: *Fluyten Lusthof* (1646, Amsterdam) by Jonkheer Jakob van Eyck. This collection and others are usually based on the principles of the diminution treatises: taking a pre-existent melody and creating variations on it in different note values. However, a small number of pieces in these collections are not based on pre-existing material, notably two short fantasias. Brooks makes a point for the existance of improvising violinists, based on a manuscript found in Breslau, which contains the only other 17th-Century solo Fantasias that I know of.¹⁰ These use a returning motive, fuge-like imitations (like Bassano's *Recercares*) and have resemblances to actual pieces by Lappi, Molinaro and others. These pieces are most closely related, it seems, to the violin and flute fantasias by Telemann, but a link between Telemann and the collection is doubtful. Some of Bassano's *recercares* and some diminuted vocal lines of madrigals and chansons can be found in the Breslau collection as well, pointing towards an equality in terminology between the fantasia and *recercare*, the idea that this is a practice manual and the wide dissemination of the 16th-century Italian diminution practice.

In the 18th Century the fantasia is still often described as a "completely free genre" (Brossard, 1703). Kollman (1796) even says some of the 'true fire of imagination' is lost if the Fantasia had to be written down, reiterating the strong component of improvisation associated with the tradition. Like its older sisters, the 18th-Century fantasia was not formless at all: in its experiments with form, harmony and texture, it could even be argued that it behaves as a commentary or overview of contemporary genres.¹¹ Richards' wonderful book,¹² comparing the fantasia as seen by musical critics to the descriptions of English gardening, points out how the ideal garden would look rigid and have unexpected turns and visages, but all according to meticulous planning. Some of Telemann's Fantasias adhere to this more modern type of Fantasia, including dramatic changes of affect and small differing movements following each other in quick succession.

In the 18th Century there was no incline in the production of soloist material for wind instruments. The didactic element is still very strong, however, showing that soloist wind pieces are not usually concert material. Several small solo pieces are to be found in tutors for amateurs. Hotteterre's *Preludes* and Quantz's pedagogical *Caprice et l'autres pieces pour l'exercises de la flute* are of the same vain. So maybe Kuijken, as mentioned above, was indeed not far off feeling

⁹ G. Bassano, *Recercare*..., Venice, 1585; A. Virgiliano, *Il Dolcimelo*, 1600?

¹⁰ Brooks on the composer Ettienne Nau in Early Music 32.1, February 2004

¹¹ See for example Peter Schleuning, *Der Fantasiermachine*, Archiv für Musikwissenschaft, 27. Jahrg., H. 3. (1970), pp. 192-213 for a more extensive coverage of the Fantasia as an arena for experimentation.

¹² A. Richards, The Free Fantasia and the Musical Picturesque, Cambridge 2001

an educational intent behind the Fantasias. Quantz even chose one of the fantasias as a competition piece to consider which flute player's technique was better than the other's (Marpurg). Hotteterre's *Ecos*, the *Pieces* published and partly composed by Mr. Braun (Paris, 1740), and one piece each by J.S. and C.P.E. Bach are the only examples of music for solo wind instrument that I know of composed for performing. So, again, its appears that Telemann's fantasias are the only ones in the solo wind instrument repertoire.

The Fantasia was never again as popular as it was in the ages before, but in Telemann's life time finds its niche in German keyboard music. Telemann's instrumentation of his Fantasias therefore stands out against the norm of his epoch, as he wrote fantasias for flute, gamba, violin and harpsichord. He sold two fantasias (for gamba) every second thursday, so they must have also been in demand by amateurs.¹³ In the realm of string music, not many pieces in this genre exist either. Why did Telemann write these collections? I think the answer could be found in improvisation: I imagine a young Telemann improvising on his instruments, just by himself, trying to invoke the music of his time on a flute or violin.¹⁴ Indeed, in his autobiographies he tells his readers that he is self-taught and considering basso continuo he says: "I grabbled away at the keyboard untill I found the most necessary rules for Generall Bass myself".¹⁵

In the latter half of the 18th Century the culmination of the Fantasia is with the keyboard player C.P.E. Bach, who was apparently able to improvise for hours and express so many diferent affects that he was particularly famous for his improvised Fantasias. As Sorge notes in a treatise devoted solely to the Fantasia the aim is now to express affects, going from one extreme to another.¹⁶ Nevertheless the 'English Garden' element mentioned earlier, the meticulous planning, remains an important ingredient. Telemann's 12th Fantasia in the Flute collection especially hints at this later practice, showing the versatile and always up-to-date Telemann at his best. The Fantasia as a whole thus resists categorization. The repertoire of solo wind music is principally founded in pedagogical works. However, Telemann's Fantasias for Flute are not part of this trend and are unique in this sense. I believe that the collection is a kaleidoscopic overview of the current genres and forms in Telemann's time, including Ouvertures, dance forms, Capriccios and a Toccata. Telemann even goes as far as to include fugual writing in his monodic flute Fantasias, a feat not met by any other composer that I can find. Thus, with regards to genre, or form, they can perhaps best be seen as a compositional approach; the composer sharpening his compositional tools on the difficult object of solo flute music.

¹³ S. Zohn, *Music in the Marketplace*, Journal of the American Musicological Society, Vol. 58, No. 2 (Summer 2005), pp. 275-356

¹⁴ He started off learning flute, violin and harpischord, for which the fantasias are written.

¹⁵ Mattheson, Organistenprobe, Hamburg, 1718

¹⁶ A. Sorge, Anleitung zur Fantasie, oder Zu der schönen Kunst das Clavier wie auch andere Instrumente aus dem Kopfe zu spielen, (Lobenstein, 1767)

Analytical methods

"Although most analystis believe that the historical appropriateness of a theory is a dead issue the received wisdom is that theory so often follows practice that theory need only concern itself with logical consistency and explanatory power - it is my belief that historical propriety, and with it the belief in a plausible reconstruction of Bach's thought, is an indispensable component of analysis. In the simplest sense, historical propriety. means avoiding explanations for a piece of music that one can assert to have been utterly inconceivable to the composer" Laurence Dreyfuss¹⁷

A study such as this requires the use of harmonic and fugal analysis. However, I was keen to try and avoid looking at these pieces through the lens of our inherited analytical traditions from the 19th-Century schools of harmonic thought. I was fascinated by Joel Lester's book "Composition in the 18th Century", which reads loud and clear about the dangers of our anachronistic analytical approach to the music of the 18th Century, and advocates knowing more of the contemporary approaches to the theoretical aspects of music: '*It is central to this study that the first priority of a historian of ideas is to understand how the original authors thought*'. Of course, primary source reading has it problems, and much gets lost in translation. However, having studied at length, for example, Fux and Marpurg's theories of fugal writing,¹⁸ I felt better equipped to analyse the quasi-fugal writing in the Fantasias, and attempted to use their language and theoretical preoccupations as tools with which to inform my own analysis.

¹⁷ L. Dreyfus, Bach and the Patterns of Invention, Londin, 1998

¹⁸ A useful accompaniment to these sources is A. Mann, *The Study of Fugue*, New York, 1965, repr. 1987.

Counterpoint

Counterpoint is one of the oldest precepts of Western Music. Although Telemann's solo Fantasias are monodic, many movements are undeniably conceived contrapuntally. This is achieved through the stratification of the tessitura to evoke different voices, for example. Getting to grips with polyphonic techniques will bring my improvisations to another level.

Telemann published his intention to publish a translation of Fux's seminal *Gradus at Parnassum*, but the plan never reached fruition, or the translation is not extant¹⁹. In the words of Lester, 'Of all the major theoretical treatises in the Western tradition, *Gradus ad parnassum*...has remained in practical use the longest. It was quickly hailed as a pedagogical classic by Fux's contemporaries'.²⁰ From an analytical perspective, this seemed the logical place to start; given that Telemann himself read the work, I felt that it would be useful to compare the polyphonic writing in the Fantasias to the rules of counterpoint outlined by Fux.

Fux's basic principles

A short overview of Fux's terminology follows in order for the ensuing discussion to be enveloped in understanding:

According to Fux, there are three types of motion in two-part counterpoint:

Oblique motion - one voice moves, the other is stationary Contrary motion - two voices move in opposite direction Parallel motion - two voices move in parallel direction

He categorises intervals as follows:

Perfect consonants: the unison, fifth and octave. Imperfect consonants: the third and the sixth. All other intervals are dissonants.

How to achieve correct interval progressions:

Perfect -> Imperfect - by all motions Imperfect -> Imperfect - by all motions Imperfect -> Perfect - contrary motion or oblique Perfect-> Perfect - by contrary or oblique motion

The five species of counterpoint:

First species; for every note in the tenor, one other note is written

Second species; two notes in the counterpoint for 1 in the tenor; the second note must be consonant unless approached by step.

¹⁹ Singen ist das fundament der dingen, p.167, footnote 48

²⁰ J. Lester, Compositional Theory in the Eighteenth Century, Cambridge, Massachusetts, 1992, p. 31

Third species; 4 notes in the counterpoint for 1 in the tenor. 1 and 3 of 4 should be consonant, unless 1, 2 and 4 are, in which case 3 can be dissonant. Third can always be filled in, even if dissonant.

Fourth species; syncopation: displacement of note against note by half note. Beginning of syncopation has to be consonant, the end can be dissonant. Resolve downwards.

Fifth species or Florid counterpoint; a combination of all the species.

Telemann's use of counterpoint in the Flute Fantasias

In monodic writing, counterpoint can only ever be implied. Since on the flute two notes can not sound at the same time, counterpoint is latent in the relationship between two notes played after each other. So an interval of a quarter note duration will become two eighth notes.



Fantasia 1, Vivace

Usually the lowest voice occurs on the beat, but this is not always the case. A choice can be made depending on the clarity of the voice-leading (the voice which might be more obscure should come rhythmically first) or to accent one or the other.



Fantasia 10, A tempo Giusto, see bars 4-8; the pattern of strong and weak beats regarding the lower voice changes in bar 7.

Other rhythmical methods are used to distinguish the two voices, but the equal duration of the two notes leads to a stronger equality between the voices and is therefore the common approach. Sometimes one voice has more notes and the other more stationary voice will only be touched on briefly, sacrificed to the greater importance of the melodic invention.

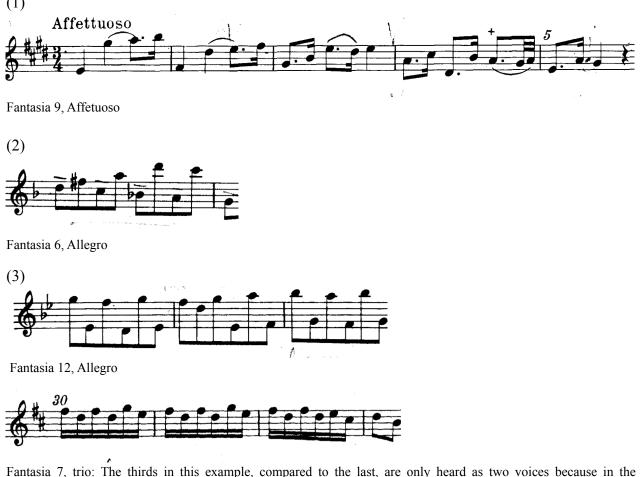


This procedure is usually used when there is a distinct division between bass line and melodic line.

The two voices are most distinctly heard differently by the use of (1) different functions: bass and

melody, (2) contrary or oblique motion, (3) difference in range (4) difference in character.





Fantasia 7, trio: The thirds in this example, compared to the last, are only heard as two voices because in the composition one expects a wind trio in the Ouverture. Otherwise the figure may not have seemed contrapuntal, but rather a singular melodic flourish or the delineation of a chord.



Fantasia 12, Allegro: bar 32: The second voice is accented by a slur

In very few places, Telemann even manages to invoke a three part harmony, using the registral differences and differences in the characterization of the voices. Telemann seems to usually use this construction in sequences, probably in order for dissonances and voice-leading to become clearer through reiteration of the same procedure.



Fantasia 10, A Tempo Giusto



Fantasia 11, Vivace

Equality in three voices by three partite division is uncommon. A small hint is created in the following example, but is rather the expression of a chord, then true counterpoint.



Fantasia 8, Spirituoso

In no other place does Telemann experiment with three-part counterpoint. The following example, which is my own writing, shows another reason why sequences are more suitable for invoking three parts. In order to have the parts in a multifariously voiced piece come out, the focus on a subject or inventio is lost. In order to make the voices different enough, I tried to rhythmicize them differently. The result on a monodic instrument is a highly rigid rock formation, which at its best hints at a three-part undercurrent.



Using all the different methods, three parts can more or less be implied, but the success in this case strongly depends on performance practice as well. One part is the bass line, the other a middle part emphasized by the slur and its rhythmical placement and the third part is set apart by being in the higher end of the register and is played with staccato dots.



When string players execute fast arpeggios used in solo pieces, they often touch on the bass only shortly, delineating the harmony through this bass note and a fast arpeggio of the chord. Interestingly, with one exception, Telemann does not use these fast ornamental notes. Only fantasia 5 hints at this practice:



Fantasia 5, Largo

I myself would feel like such an approach differentiates the two voices even more strongly: the one rather accented but short at the beginning of the beat and the other softer and unaccented, but much longer. Quite possibly this is another argument for my section on invention (see below): Telemann's first priority is invention, which is developed and has a distinct character, whilst the contrapuntal quality of the whole is of a slightly lesser importance.

Discussion of Fuxian experiments

The implication of full harmony in Telemann's Fantasias, which in Fux's two-part writing is not there, does not render Fux's treatise useless for my purpose. The most important thing that I learned from it is a facility with intervals, and particularly which intervals can follow on from what comes previously. This is especially true for the preparation of dissonance. I spent some time experimenting with tenors that Fux discusses in his Gradus; I looked at his examples, his contrapuntal solutions, wrote my own versions of the exercises and attempted to play these on the recorder using the techniques of creating latent counterpoint in a single melodic line described above. However, as I discovered, the examples are hard to translate to the recorder. The result was more convincing contrapuntally when the upper voice was an octave higher, thus stratifying the line into two distinctive voices. Having solved the contrapuntal conundrum, I was still not convinced by the sounding result. The lack of a functional harmonic grounding or maybe the lack of an overall melodic integration result in an empty musical result. Perhaps the implied harmony in Telemann's works makes up for the crudeness of only two voices. Or, when it comes to real counterpoint, without a harmonic bass movement, one really needs to hear the intervals sounded at the same time. Maybe this is the reason that Telemann's predominant intervals in the contrapuntal sections are thirds and sixths (and tenths), so that the 'sweet' intervals soften the harmonic emptiness.

The third and second species of counterpoint will be discussed together. As soon as more than one note in the one voice is set against the other, the rhythmical solution to the counterpoint is less convincing. The result looks more like a particular rhythmic motive than a true counterpoint. Nevertheless the suggestion is awakened by Telemann, the lower part being a bass, rather than a tenor:



Fantasia 3, Vivace



Fantasia 7, Tripla from the Ouverture

The fourth species of counterpoint occurs quite often in Telemann. It is remarkable, however, that dissonances are sometimes approached without preparation:



Fantasia 2 Vivace: dissonance is not prepared, but the motor behind it is harmony, not polyphony. bar 27-29

The fifth species of counterpoint is a combination of the above and does not need to be specially discussed.

Fux and Telemann

Fux proposes that the most successful counterpoint employs contrary motion. An example of Telemann's use of this was given above. Telemann mostly adheres to this principle. When parallel motion is used it concerns 3rds, 6ths and 10ths. These intervals are also the ones that Telemann uses most frequently in his contrapuntal writing, often not taking account Fux's notion of *varietas*: the mixture of different kinds of intervals following each other up. Compared to Fux's own melodies, which were of course modally based, Telemann's voice-leading is more rooted in contemporary 18th-century harmonic thought.



As can be seen from the second Fantasia's Vivace (see above), chromaticism is used to differentiate one voice from the other. In line with Fux's rules of dissonance preparation, the suspensions (for example the F in the first bar which is suspended into bar 2) are all prepared accordingly. In this example we also see Telemann's use of appoggiatura: the G sharp rising to the A, the F in bar 2 falling to the E, and the F sharp rising to the G. This example then, also shows Telemann's use of counterpoint in the Fantasias at its best: there is both a sense of two independent lines in an emphatic dialogue *and* the sense of one melodic line, harmonically expressive through the use of appoggiatura. Furthermore, Telemann also uses the tritone in two-part counterpoint. Although normal fourths are generally used in oblique motion only, and not on the strong beats of the bar, there is for example this usage in Fantasia 4, Andante:



These examples show that Telemann's counterpoint is not merely a two-voice texture, but also bases itself on the implication of a full harmony.

Fugue

As already mentioned above, Telemann's Fantasias stand out clearly against the sparse background of the Baroque repertoire for solo wind instruments in the light of the sophisticated use of imitative and fugal procedures. And, as Alfred Mann points out: '[Fugue] suggests the essence of polyphony, the most intricate expression of the complex language of Western music.'²¹ As discussed earlier, one of the distinguishing features of fantasias throughout the centuries is its strong polyphonic component. The fugue was also a field of improvisation, at times, and as a genre, lives next door to the fantasia.²² Indeed, like the fantasia, fugue is more of a compositional process than a form. Consequently, fugue is a pertinent subject of study within the scope of my research. Telemann himself mentions that he was planning to write a composer's manual, combining the writings of Fux's *Gradus ad Parnassum*, Heinichen's *Generalbass Schule* and his own teaching.²³ Fux's *Gradus ad Parnassum* therefore seemed the best place to start to learn about fugual procedures. I also studied Marpurg's book, *Abhandlung der Fuge*, on the side, as it was in its first issue dedicated to Telemann.

After a small introduction about Fugue, I shall discuss Fux's theories of fugal writing. After a comparison to the fugues in Telemann's Fantasias, I will apply the outcomes to my improvisation. In Marpurg's book I found many ideas for the formulation of fugues in my improvisation, and thus I have a source of material that is not too closely related to Telemann's Fantasia Fugues, as producing a pastiche fugue in the style of Telemann is not my aim.

Fugue in context

The term fugue was first introduced around the 14th Century, in relation to music based on canonic imitation. The term fugue has been used since then both to denote a piece as a whole, or a compositional technique (as described by Tinctoris in 1475) as part of the composition. The main characteristics of fugue throughout history are: the lack of text, and therefore the invention being the composer's rather than a predisposed cantus firmus, and the use of imitative counterpoint, like the Fantasias.²⁴ Like the Fantasia, the fugue as a denomination and concept was intermingled with others, such as *ricercare*, fantasia and *tiento*. These terms are all related to each other in that they hint at and rely on the composer's fantasy playing with musical structure, which is not dependent on one clear genre or form.

In the 18th century, Bach is seen as the master of fugue. The most important fugal repertoire was written for keyboard instruments. Vocal fugues, inherited from the 16th and 17th century, were still an important compositional technique (as exemplified in the choruses of Bach's Mass in B minor), but generally did not emerge as pieces in their own right. Fugues for other instruments were less in vogue. The lute repertoire still contains some examples, and pieces including fugues for string instruments are scarce but extant (J.S. Bach's partitas and sonatas, Telemann's Fantasias).

²¹ A. Mann, *The study of Fugue*, introduction, New York, 1985, p.

²² Ibid.

²³ Grove Article, Telemann – Theoretical Works

²⁴ See my discussion of the Fantasia as a genre above.

Fux, although seemingly trying to consolidate 17th-century theory, is clearly a child of his own time.²⁵ His treatise was widely read and gives a clear overview of the basic components of fugal writing. At this time fugal theory was not a consolidated technique, as it is taught in institutions nowadays. Bach's preference for certain models have lead to the standardization of a model, which was not recognized as such in the 18th Century. Marpurg's detailed description of all the different species of fugue contradict a single approach to fugue. Having not been taught the technique of fugue in an institutionalised setting, I therefore feel able to approach the writings of Fux and Marpurg without the baggage of 21st-century preconceptions.

Fux: step by step

In this chapter Fux's methodology for two-part fugue is in focus. Fux starts to talk about fugue after having taught counterpoint in 2, 3 and 4 voices(see above). He first shows imitation at different melodic intervals. As with the two-voice counterpoint mentioned earlier, the application of examples to the recorder is more successful when the voices are further apart and when the rhythmic units are not too diverse. This is contrary to intuition and renaissance teaching, which ask for rhythmic variety in the voices to make them more distinguishable. In the following example I tried to rework Fux's first example of imitation to a recorder environment. This proves difficult:



My own example of imitation at the 6th showing a bigger imitation interval and simpler figuration:



It proves relatively hard to improvise using this approach to imitation. Later on, when it comes to

²⁵ Fux himself after all writes that he describes the workings of Palestrina's Counterpoint. As Lester points out, Fux nonetheless stands in his own epoch's shoes (J. Lester, *Compositional Theory in the 18th Century*, Harvard 1996). Also it is compelling to note that Telemann himself was aware of such distinction, although not in relationship to Fux's treatise per se. He prefaces his *Fast allgemeines Evangelisch-Musicalisches Lieder-Buch* with remarks on how he changed many old Chorale melodies from the way they are known in his time to the original melodies, based on the necessities of mode.

fugue, the advantage of having a subject which returns and is relatively small (as in Fux's *Gradus*) and thus easily analyzed in terms of contrapuntal possibilities, proves easier to improvise. One approach to improvised imitation sprang to mind however: the canon. I came across this improvisation of canons in the Leipzig Improvisations Festival in 2011, where a workshop was given taking in account certain interval progressions which would lead to a framework avoiding clashes. For example a canon with a comes, the imitating voice, starting a 5th higher than the leader, or instigating voice, has the following melodic possibilities for the next note: staying at the unison, going down a second or fourth or, going up a third, fifth or seventh. This proves applicable to the recorder imitations as well.

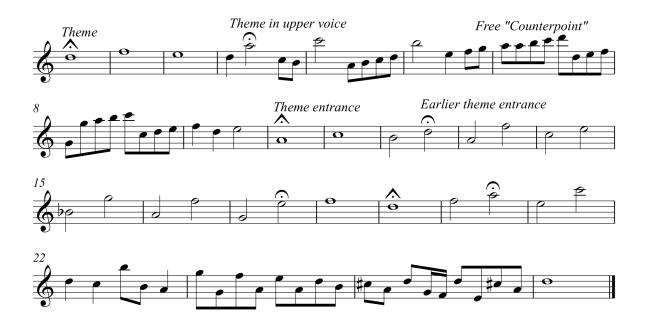


Fux says Fugue is much like imitation, in the sense of two voices following each other, but mentions two elements particular to the fugue: there is a subject which is taken over by the other part and there is need to stay within the mode. The definition of the theme, or subject, is also tied to the idea of mode. The theme should not have any sharps or flats in it, because they would be notes outside of the mode.

A narrative will probably not shed little light on the shape proposed by Fux, so an interpretative scheme can be seen below:

Part 1	Part 2
Statement of the theme	
Counterpoint to second statement	Statement of the theme a 4th below or a 5th above
Short 'episode' of free counterpoint cadencing on the 5th of the mode	
Statement of the theme on another tone,	Answering statement of the theme before
marked by a rest or skip	Part 1 has finished its theme
Episode of free counterpoint cadencing on the 3rd of the mode	
Statement of the theme in either part, followed by the other as closely as possible, leading in close imitation towards a cadence in the final of the mode	

An example for recorder:



Fux and the Fantasias

This chapter is devoted to the comparison between Fux's fugal rules and Telemann's Fantasias themselves. Differences between the two may be either stylistic or technical. By the latter I refer to the solutions to limitations which the instrument's monodic nature imposes, so the small register and the fact that two notes can not be play simultaneously. Plus, using a slightly different model than Telemann's, I may be able to improvise more idiosyncratically and prevent my fugues from sounding like a mere reflection of Telemann's written work. In the fantasias there are three movements which can really be seen as an attempt at fugal writing, in which a subject is restated with counterpoint and a structure similar to Fux's is apparent. Those are Fantasia 1 (Vivace, bars 11-26), Fantasia 6 (Allegro) and Fantasia 7 (Alla Francese (the part in 3). The general approach in these is the same in all, so it will suffice to discuss the first Fantasia. Telemann does not approach fugue modally, as Fux does in two parts. This means that a theme can indeed have modulations or chromatic alterations.

Analysis of the Fugue in the 1st Fantasia

Subject and countersubject

The subject of the first fantasia is a very simple one. 2 Fourths going up, starting a third apart and a cadence.



The subject cadences in the mode of the piece, which is contrary to Fux's advice. Consequently there has to be a little connecting modulatory tail to the next subject entry. The rhythm of the subject leaves space for a second voice to be inserted on the off-beat. Like in general with Telemann's flute counterpoint, the voices are rhythmically equal in duration.

The countersubject is not extremely intricate. Again, Telemann prefers the usage of imperfect

intervals. Although he tries to include contrary motion, given by Fux for instance as a rule of thumb both to avoid contrapuntal mistakes and to enhance the sense of polyphony, quite a lot of parallel motion in imperfect intervals occurs. This is a clear distinction to Fux's two-part fugues. Too many 'open' perfect intervals will apparently not give too harmonious a feeling to the ear. The huge leaps to the voices are in fact the common feature characterizing them as two audibly distinct voices. The beginning of the line is a real melody and really different from the jumping fourths in its conjunct motion, but the parallel 4th leap is dangerously close to sounding accompanimental. The third entry uses the same countersubject and in fact so does the fourth, altering but one note in the main part of the subject, hinting strongly at invertible counterpoint (according to Fux an "ingenious manner of composition"). The 4th entry's cadence is now turned in to a flourish of sixteenths note, mainly in parallel thirds but adding a 7th which is ingeniously (and covertly) 'tied over' to become a fourth on the tonic, giving it the energy to conclude with a final statement of the theme. This final statement has a different countersubject! Starting on a (prepared) seventh, it reiterates IV and adds a reminder of one of the episodes to the second half of the theme, resulting in an interesting hint at counterpoint.

The methods which drew my attention for my own usage:

- the sixteenths around the cadence, increasing the speed of the composition and hinting at where may lie the limits of this pseudo-polyphony:



If the subject were to have faster note values, counterpoint is barely possible to add in this temporally dissected way. Also, the smallness of the intervals makes us rather believe we are hearing a chordal embellishment or outline, rather than an added voice. Only the fact we heard the theme before several times, makes the counterpoint credible.

- The preparation and suggestion of the tied dissonance. One truly hears this:





As Fux says using tied notes is one of the main edifices of counterpoint and fugue in particular, we must look at ways to transport this texture to the flute, which is done here proverbially.

- The daunting harmonic move in the last statement of the subject shows how the counterpoint can be moulded, even if the texture is so sparse.



In the sixth Fantasia the harmony and use of the tie are so excellent that it will conclude this section:



Structure

The structure of the fugue resembles much of what Fux proposes.

Subject in tonic with modulatory tail.

Second entry: Subject at V, countersubject 1

First episode: the invention of the fourth sails on a harmonic structure of falling fifths moving to IV

Third entry: Subject at IV

Second episode: takes the previous episode's harmonic idea of falling fifths going back to I Twice the statement of the original subject with differentiated countersubjects with a codetta for extra harmonic closure

The entrances of the subject are quite close to what Fux describes. What lacks clearly is the diminution of the (temporal) imitation interval towards the end, i.e. the subjects never intertwine. The Cadence points are a bit different from Fux's, but in the chapter on three-part fugues he says that any imperfect or perfect cadence may be used (as long as it happens upon a new subject entrance). Also this fugue is harmonic rather than modal. This is clearest in the episodes, which in Fux's writing are mainly contrapuntal, voice leading with a harmonic final, whereas Telemann's are ornamentation on harmonic structure, or even to a harmonic end. The ingenious mastery of material makes this an exemplary fugue as a model.

Marpurg and his definitions

Fascinating is Marpurg's detailed description of all the different kinds of fugue and imitation. The different classes of fugue are defined by:

-the melodic interval between the imitations
-the organization of *dux* and *comes*-the diminution or augmentation of the theme
-the part in the bar where the entrances come
-interrupted imitation (whereby the imitating part is disjointed by rests)

-being a mixture of all of the above (*fuga mixta*).

Other definitions are whether the theme is built of stepwise motion or not (fuga composita or

incomposita) and whether it goes up or down (authentica or plagalis resp.).

Marpurg also writes about different types of imitation, most of which were already described in the organization of the fugue. A few have not passed the revue though:

- -Perfect versus Imperfect imitation
- -Inverse imitation (the intervals are inverted: a third up after inversion goes down)
- -Reversed imitation (the theme is played 'backwards', starting from the last note)
- -Canonic imitation (exact imitation)
- -Periodic imitation (imitation only of the beginning)

I find it important to start improvising having a general plan of what I will do. It is very clear that as soon as this is not there the improvisation gets lost. Marpurg's possibly excessive descriptions provide a great handle bar to steer the improvisation, without defining it compositorially. The ideas I did not find in Telemann or Fux are the inversion, the reversed imitation, the augmentation and diminution and the interrupted imitation. These I experimented with in the example below using another of Telemann's themes.

Partimento Fugue

In my experiments with harmony the Partimento is discussed further. A small part of the partimento practice, however, will be discussed here: the partimento fugue. Partimento was used in the Neapolitan conservatories from the 17th century, but later spread, among other places to Germany. The partimento fugue is the 'crown' on a student's studies. Sanguinetti points out that through improvising partimenti, students would have learned everything about composition and improvisation: thorough bass training, harmony, counterpoint, form texture and motivic coherence. In teaching there was a distinct difference between two concurrent approaches to learning Fugue: one was through partimento (improvised at the keyboard, sometimes neglecting proper voice leading) and the other was through writing strict vocal fugues. With the former the student had an overall planning of his fugue, but not always the time or the technical space to invoke a fully voiced counterpoint, with the latter the student was given only the exposition and had to think about all the compositorial choices.

The Partimento fugue has no one good 'solution'. It is clear, though, that there was almost never a real countersubject: the accompaniment differed from entrance to entrance. This is interesting, because it means that even on the keyboard one does not need to improvise a strict fugue for our 18th-century colleagues not to have looked down on us. Using the partimento for my own fugues is a little bit difficult, in so far that the implications of the harmony in more than just two voices (which is as many as Telemann usually manages to 'hint at' in his Fantasias) is hard to express on my instrument. Experiments in this area were therefore organizationally interesting, but did not inform my fugal improvisations much. They will thus not be discussed here.

Another of Telemann's themes

Using the themes from Telemann's fantasias for my own improvisations makes a lot of sense: no other examples of "flute fugues" exist, so surely Telemann chose these themes specifically for their adaptability to the flute and its harmonic 'limitations'. Nonetheless, a knowledgeable audience will soon recognize Telemann's theme. I experimented with different counter subjects to

Telemann's Fugal flute themes, but Telemann's are very effective and prove in improvisation often to be the ones coming out (this could also have to do with the fact that knowing Telemann's Fantasias very well from a player's point of view, the status quo of the actual piece interferes with the 'in-the-moment' improvisation modus). So, eventually using Telemann's themes may not be as satisfactory in practice. However I think the structural approach is still an extremely helpful and valid underlay for any other fugal improvisation until I reach a mature-enough level in improvisation.

Learning the improvisation of fugue implies a lot of writing. After extensive experimentation with merely playing, it was clear that this is not the first mode to work with. One has to know which implications a theme has, especially since not all counterpoints can be implied on the recorder. It is also not easily imprinted on the mind, that these broken intervals are actually sounded at the same time: I hear them as a melody rather than as a sounded interval. This may not seem important, but an approach to for example dissonance is much easier when the texture is heard as two notes sounding together. Also, which intervallic progression could follow, is heard in the inner-ear naturally, if intervals are heard like they would sound on the keyboard. It is therefore even more important than just the practice of the possibilities inherent in the theme and which developmental procedures might be applied to the episodes.

Finally I will show the use of one of Telemann's other fugue themes, such as the following from his *Fugues Legeres* et *Petit Jeux*:



Theme reverse or inverse (is the same in this case) in bar 5; theme in diminution in bar 13, and at the same time in the bass stated in augmentation, speeding up to the normal speed towards the conclusion.

This slightly crude version leads to the thought that the element still missing very strongly in my discussion is harmony. Without harmony the different parts (structurally) do not fit in to eachother properly, if the right modulations are not used. As stated in the last chapter, Telemann's counterpoint is also not merely a two-voice texture, but bases itself on the implication of a full harmony. We shall therefore now look at Harmony and its relation to the Fantasias.

Harmony

Indeed Telemann says that a canon can not be written unless one masters modulation, melody and thus the approach to harmony.²⁶ In this section I will deal with several of the harmonic features in Telemann's Fantasias. I will look at the cadence, modulation, longer stretches in the same key as seen through the *règle d'octave* and the organ point. Most Fantasias can be analyzed completely by looking at the above mentioned structural points. I will discuss shortly how this relates to the practice of Partimento. A conclusion as to how this relates to improvisation and an exemplary *Fantasia* finish this section.

Cadence Points - Hotteterre

In musical rhetoric cadence points figure as the punctuation of a speech. They delineate the basic structure of paragraphs, sentences and sub clauses. Hotteterre describes these cadences in his L'Art de Preluder, published in Paris in 1719, as related to the Prelude Caprice. The preludes for a solo wind instrument he gives musical examples of in his treatise are very short (10 bars on average), except for the last two. The latter have a continuo part added, to make it easier to see the different cadences that Hotteterre reaches. All the degrees (the dominant is the fifth degree, for example) of the key are touched on. Hotteterre warns that it is not normal for a prelude to use all the degrees. Indeed, earlier on, Hotteterre describes which degrees are normally touched on, depending on the mode (major or minor):

- In major one cadences on the 5th, 6th, 2nd and 4th degrees
- In minor one cadences on the 3rd, 5th, 4th and 7th degrees.

Hotteterre points out that there is almost never a cadence on the 3rd in the major mode. Not all cadences have to be used, but these are the ones which could occur. In the preludes we are talking about a practice in which the bass is not a player in the field, like in Telemann's Fantasias, and can only be hinted at. Modulation is therefore done melodically, through a so-called *note sensible*, the leading tone of the new key (#7). Another option is the introduction of the flat 7 of the dominant in the new key (which is also the 4 in the new key), but this has softer aural modulatory connotations.

Two types of cadences are described: the perfect and the imperfect. The perfect one ends on I and the imperfect either ends on V (plagal cadence), on III, or on VI. The last option is not used by Hotteterre as it is merely implied by the bass. The perfect cadence is generally reached by a standard melodic cadence formula using the note sensible. The two imperfect versions cadence on the degree melodically without using a leading tone. This means that for the plagal cadence for example, a cadence ends melodically on the fifth degree in the scale.

How do Telemann's Fantasias relate to these ideas?

It turns out that Telemann in fact uses **exactly** the cadence points described by Hotteterre. Small exceptions are the lack of the cadence on VII in the minor mode and the use of cadencing on III in the major mode. It could have been possible that the laid out pattern of degrees is also in a particular order. When Telemann uses all the degrees, I can not find sufficient evidence to say he

²⁶ Singen ist das Fundament der Dinge, p. 111

follows a particular order of the degrees. However, in smaller pieces, the 5th, 6th and 3rd degree are much more common than the others. In fact if any rules could be given it would be that there is always a cadence on the first degree followed almost always by a cadence on the fifth degree. Also, often the first and fifth degree are reiterated in the *Fantasia* elsewhere, which I find the strongest point against a linear adoption of Hotteterre's cadence sets. Interestingly, in his *Fast allgemeines Evangelisch-Musicalisches Lieder-Buch* (Hamburg, 1730) Telemann points out modulatory patterns for an organist's preluding. Indeed he describes cadences on the degrees as proposed by Hotteterre, using more cadences and starting, as it is a *prelude*, often on V. Five cadence points are given before to reach the final cadence.

Most smaller movements indeed work merely on basis of I-V | V-I, in which the two halves are usually repeated and the movement usually alludes to a type of dance. Logically the first half should end on a dominant or possibly on I to return to the beginning smoothly. Telemann sometimes uses III to begin the second half.

Also the Dolce in the sixth Fantasia starts the second half on III, here even without any modulatory preparation.

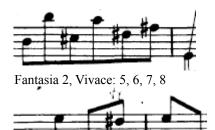
The cadences in Telemann's Fantasias are not only dependent on the note sensible, but often strengthened by the use of a bass line, a second line in the lower register of the flute, played on another rhythmical moment to imply the sounding together of the two. Such bass lines exist in many guises, but the most common ones expectedly are 3, 4, 5, 1 and 5,6,7,8.



Fantasia 5, Allegro: Cadence only through note sensible



Fantasia 3, Vivace: 3, 4, 5, 1



Fantasia 1, Allegro: 3, 2, 1

Telemann also applies the imperfect cadences described by Hotteterre.



Fantasia 5, Largo, Cadence on V like Hotteterre describes it.



Fantasia 2, Vivace: An example of the Neapolitan 6 and an imperfect Cadence

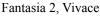
Modulation is often approached in the way Hotteterre describes it, using the note sensible.



Fantasia 7, Presto: modulation from G to D, in the 5^{th} bar in the example, by introduction of the note sensible (c sharp) and the flat 7 (g). The modulation itself takes only one bar, in some cases even less.

Telemann's use of the note sensible is often in combination with a bass note. Usually the flat 7 of the dominant, which in combination with the note sensible becomes the interval of a tritone. This interval is normally not allowed by Fux in two part counterpoint. It therefore here must invoke a full harmony, namely the dominant in its 4th inversion.





Telemann uses several other techniques to modulate beside the Hotteterrian ones described above: 1. #VII7; Although the diminished seventh chord could be seen as an ornamentation of the note sensible, I would like to bring it to the fore here specially, because Hotteterre in his description of the use of the note sensible only shows a harmonization as a dominant seven. As we will see later in the section on Ellipsis, certain more daring usages of harmony were not avoided, and thus, here, the #VII7 could be used as an important chord.



Fantasia 6, Dolce: Diminished 7 chord is used to move from d minor (I) to g minor (IV)

2. In some cases, modulation happens more by use of the bass line. Although a note sensible is involved, since it is part of the dominant chord without which most harmonies will not be arrived at, I felt that there are certain points at which the modulatory drive comes rather from the bass and its implied harmony than from the melody: from the bass;



Fantasia 1, Vivace: Modulation IV7, #IV7, V, I64, V (or VII, #VII) activated through bass motion

3. A typical device is the use of sequence to modulate. This may happen through a circle of fifths, or by moving the sequence a second up or down. Again, eventually the modulation is fortified by the use of the note sensible, but the motor behind the modulation is not merely the introduction of this note.



Fantasia 11, Allegro: modulation through circle of fifths



Fantasia 12, Allegro: modulation through a stepwise sequence



Fantasia 10, Allegro: modulation through a sequence in thirds

4. In the 11th Fantasia we find a 7-6 sequence to move through the degrees:



The Theme/modulation bar technique.

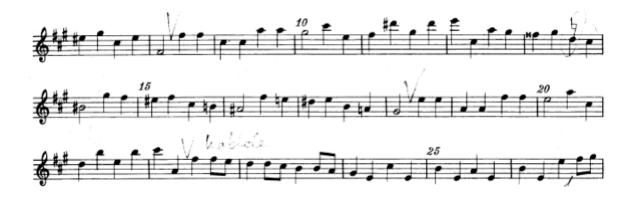
Telemann's fantasias are highly motivic. Meaning that very often one motive will be dealt with in the whole fantasia. One could call it a rondo form. Often Telemann uses a recurrent theme which cadences in the tonality it starts. **A modulation bar** or motive is added after which the next theme entrance, usually at the fifth degree, is stated. The modulation bar upon its several returns becomes the central of the composition's development. It is here that the material is worked out, whilst the theme in general does not change, except for its tonality. I mention it here because this technique is as defining a principle as one can get to in relationship to Telemann's Fantasias. Mattheson indeed refers to this approach in his description on Loci Topici:

"By this device many pretty themes or subjects are invented. These may be carried through or developed very cleverly. It is especially effective when a repeated phrase takes turns with other intervening ones... one voice does not merely repeat the same sounds uttered by another, but answers them in the same form either higher or lower. This can happen within one voice as well. The ear loves almost nothing better than such a return of the subject.."²⁷

An example from the 10th Fantasia, Presto:

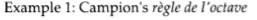


²⁷ J. Mattheson, *Volkommene Capelmeister*, paragraph 30/31 "Concerning Melodic Invention", translated by Buelow



Règle d'octave

One of the most beautiful openings of a piece by Telemann I find the opening from the sonata in C major from the Essercizzi Musici (1740). Only in my basso continuo class did I realize that harmonically speaking this piece is based on the most normal harmonic progression in the Baroque, as put forward by Francois Campion-: the *Règle d'octave*. This rule of the octave makes it easier to remember standard harmonizations for the different bass notes in a key, but is also a fantastic fundamental approach to improvisation. Above we described the different arrival points and the motions and moments directly related to the modulation. The *règle d'octave* is a perfect approach to the moments when a key has been affirmed. *Règle d'octave* as put forward by Campion²⁸:





From Thomas Christensen's "The Regle de l'Octave in Thorough-Bass Theory and Practice" Acta Musicologica, Vol. 64, Fasc. 2 (Jul. - Dec., 1992), pp. 91-117

It is the tapestry under several (parts) of the fantasias. Fantasia 9 is the clearest example:



The *règle d'octave* can be interrupted at any point in the stepwise motion. Especially when going up, any two consecutive notes are a potential IV, V for a modulation. The idea in number 2 in the

²⁸ Francois Campion, *Traite' d'Accompagnement et de composition selon la r'egle des octaves de musique,* Paris 1716

section on modulation is directly related to this. What I am talking about are little bass line patterns which can be described as part of the *règle d'octave*, but then cadence in a different key.

Hotteterre in his L'Art de Preluder proposes to use the framework of a scale to improvise off. In fact, this is exactly what the *règle d'octave* is. A scale in which every degree has its designated harmony, as to be able to move through it without having to think every step of the way. Telemann also seems to use Hotteterre's melodic '*règle d'octave*':



Fantasia 9, Vivace

Organ Point

The organ point could also have been discussed in the part on polyphony. Oblique motion is described by Fux as the movement of one voice against another stationary one. Nevertheless, it is discussed here, because I feel that in Telemann's fantasias the harmonic connotations of organ point are stronger than its polyphonic connotations. C. P. E. Bach advices to finish ones Fantasia with an organ point.²⁹ Telemann uses the organ point in his fantasias in one out of 3 ways: (1) as an opening statement, (2) to add suspense for a listener not knowing what will happen next, (3) to invoke more tension towards the end of a movement, for example by pausing the movement towards a tonal centre or extending it. The stationary factor is not necessarily always the Bass. Sometimes the organ point is ornamented by the use of an echo.



Fantasia 11, Allegro: Organ point as opening statement



Fantasia 12, Dolce: Organ point to evoke suspense through arpeggios I, V64, I combined with rests.



Fantasia 9, Allegro: In the example's first bar the movement could have finished, but an extra flourish, over an organ point is given, to extending the tonal iteration.



Fantasia 4, Andante: An organ point does not necessarily imply that the bass is always the stationary; here one finds

²⁹ Versuch uber die wahre art das klavier zu spielen, C.P.E. Bach 1762, facsimile of 1954, Lindau, p. 130

the soprano lying in wait on the high b flat.

Partimento

We have now defined cadence points, moments of modulation and moments, both stationary and mobile (the organ point and règle d'octave respectively), within a clearly denoted frame of tonality. To reiterate: many of the movements in the Fantasias can be analyzed using only these categories. The division of my analysis of the Fantasias into categories is a useful way for me to organise my approach to improvisation.

It was rather incredible for me, to find out that a similar approach originates from 17th-Century Naples: the Partimento. According to Kris Verhelst's April 2009 handout, Partimenti would deal with basic cadences, the rule of the octave, bass motions and scale mutations.³⁰ Verhelst quotes Gjerdingen saying: "Partimenti were instructional basses from which an apprentice was expected to re-create complete compositions at the keyboard." Sanguinetti's thoughts are quoted thus: "A *Partimento* is a linear guide for the improvisation of a keyboard piece. It is written, but its goal is improvisation."

The German F. E. Niedt uses a method similar to Partimento in his *Musikalische Handleitung* published in Hamburg in 1706. I am very grateful to my coach Patrick Ayrton who pointed this source out to me. Niedt's approach to modulation is very similar to Telemann's and Hotteterre's. His first suggestion for modulation indeed involves the use of a little bass motive: I, I6, II65, V, I. Further Niedt uses the *note sensible*, but in the bass, to modulate and gives options to move through the keys by sequential movements. Niedt gives a whole list of examples of diminution, showing that not much material is needed really to improvise a great many different pieces: what needs to be trained is ones ability to vary around a nucleus endlessly.

This will be discussed in more detail in the section considering *Inventio* below. What is of great importance is the main idea, that of recycling. For Niedt this idea also applies to a learned bass progression. One progression suffices to improvise a whole set of dances.³¹

Considering dance movements Niedt states that in case a reprise is necessary, the first half should cadence on the fifth degree. Niedt's model (in major) has cadences on I, V, VI and I again. This resembles Telemann's smaller, usually final, movements exactly! Niedt then goes on to show different examples of *pieces*, dance movements, and how the bass should change accordingly. Unfortunately, not much is said about the requirements each dance movement should have otherwise. He concludes by saying that now one knows how, by being very arduous, thousands of inventions can be elaborated through such a model.

Ellipsis

C. P. E. Bach describes in his Versuch the term Ellipsis as "pretending to move into a new key through a formal cadence and then taking another turn. This and other reasonable deceptions make a good fantasia" (Versuch, Part II, Chapter 41, §8). It basically implies the sudden change of harmony, without a purposeful modulation and preparation. This can be done either through

³⁰ Partimenti, the craft of a forgotten culture; from a lecture on partimenti in the Royal Conservatory of the Hague

³¹ Niedt p. 135: "From one and the same bass one could make many more, even hundred, allemandes."

enharmonic relationships, or by a truly sudden change of harmony. Interestingly, in his musical journal *Der Getreue Musicmeister* Telemann describes a few of these chords, referring to them as "a few sudden entrances of far away chords" (Einige plötzliche Eintritte in entfernete Accords, p. 24). As can be seen bellow they make possible the modulation from a C major chord to a C sharp major, or C major to F sharp Major chord.



In his fantasias, Telemann also applies the Ellipsis from time to time. The following examples will suffice to illustrate the usage:

Fantasia 1, Vivace, bar 30. Raised step same theme, V for V.



Fantasia 2, Vivace: C major steps without cadence in to d minor theme



Fantasia 2, Adagio: a sudden diminished on the sharp 4, should lead to a minor V, but we are suddenly flipped back to C major in the last couple of beats.



Fantasia 3, Vivace/Largo: Telemann presents a huge preparation for D, yet ends on a V for b minor. Suddenly the next Largo is in D major after all.



Fantasia 4, Allegro: In this last example one may see several elipses, or rather, from bar 32 the harmonic direction seems to change every bar, untill finally bar 38 reaches the dominant for I, B flat major.

Other Harmonic remarks

The following remarks have nothing to do with the structural approach to harmony. They give merely an insight in the fancy fullness of a composer such as Telemann. I give it here to indicate areas in which more ideas can be found in improvisation.

* The Presto from the twelth fantasia is the only movement to have a B part with a notated key change (major vs. minor), in opposition to the A part. In the same fantasy, the first movement is the only movement not to finish in I or V. It finishes in III, without any reiteration or resolution towards I.

* In the eleventh Fantasy Telemann plays in the Allegro with a cross relationship between the c sharp as part of the A major organ point and the C as part of the D7 to return to G major:



* Hotteterre gives two melodical *canevas* to serve as a model for improvising. The stepwise motion *canevas* was discussed above. Hotteterre also notes the option of a chordal *canevas*, basically an arpeggio. Telemann rarely uses this canevas explicitly (although the *grave* from his second fantasia takes this canevas as the soul of its invention), but there are moments in which he delineates seventh chords and even nineth chords, through this procedure.

Conclusion

An example of all the methods here discussed, as applied to practical fantasizing can be found in the Appendix. As the example shows, harmonically a fantasia can be built up from a bass line or little bass lines, connected to each other through modulations and ended by different kinds of cadences. The above considerations of harmony in fact make it possible to construct the harmonic framework for endless amounts of fantasias. I find it interesting to see the limited range of cadences given by Hotteterre to be valid for Telemann. Those critics calling him disdainfully a *Vielschreiber* (Polygraph) maybe do not realize the compliment hidden in their criticism: the ability to vary endlessly, leading time and again to different results, is one which merely a few posses. It is therefore remarkable that, considering all fantasias have this similar harmonic taste, the movements feel extremely distinct from one another.

The reason for this must also partly lie in the way these basic structures are clothed further by Telemann. These harmonic structures give a lot of possibilities to get lost as well, in a torrent of musical seaweed. A conciseness in the musical elements sailing on a harmonic flow, and the consequent ability for the improviser to remember chunks of the improvisation, are in my opinion enclosed in the secret of *Inventio*.

Rhetoric

To be able to improvise I have so far looked in to several compositional features: one might say the materials the composer has in his (or her) workshop. I have mainly tried to do so in the light of contemporary theoretical writing. Nevertheless, an analysis of Baroque music can never be done without looking at one of the major qualifying forces behind its composition and how composers thought about their craft: rhetoric and the affections. It is in this theory that we find the basic drive behind composition and the medium through which it could be discussed. This implies that my thoughts before trying to render an improvisation should focus on which affect I try to express, and only secondly consider which compositional technique I use where and how. This may sounds less important than it is: It is very easy to get lost in the theoretical world of what is allowed and not, and find oneself in a small perspective looking at which note comes next, rather than in a big perspective, trying to build a narrative, an argument with rhetorical tools. Even though Telemann himself may not have conceived of the Fantasias from the perspective of rhetoric, it is clear that he had classes in rhetoric in school.³². So Telemann knew about rhetoric and it was not an idea foreign to him to use it in music. Most importantly, Telemann himself also refers, in reply to some questions about canon, to the art of music lying in awakening all kinds of emotions in people's moods.³³

An introduction about rhetoric in the form of a small summery from Dietrich Bartel's book "Musica Poetica" will open the door to further discussion.³⁴ More detailed information considering Rhetoric can be found in Bartel's excellent book. Following this I will discuss how this theory could inform my improvisations. First I will discuss *inventio*; how to arrive at an idea, how to use an *inventio* or motive for a whole movement. *Dispositio* concerns the planning of ones 'speech'. It is counter-intuitive to consider *dispositio* in an improvisatory plane of existence, but even in improvisation a basic plan should exist before playing, whether subconsciously or consciously.³⁵ The *Elaboratio* will discuss the *Figurenlehre*: ideas for elaboration of the harmony from the perspective of ornamentation and the relationship between the expression of an affect and certain figures. The use of a repository of such figures, from Telemann or elsewhere is discussed. Finally the conclusion will inform the reader of the use of rhetoric in improvisation.

³² Die Lieder der Singenden Geographie von Losius-Telemann Zugl. ein Beitrag zur Deutung der Umwelt Georg Philipp Telemanns während seiner Schulzeit in Hildesheim um 1700 Hildesheim: Lax 1962. The writer shows that several hours per week were spent on authors from antiquity, including Cicero. Rhetoric was taught separately as well. This data concerns one of the schools which Telemann attended

³³ Singen ist das Fundament zur Musik in allen Dingen, p. 109/110

³⁴ D. Bartel, Musica Poetica musical-rhetorical figures in German Baroque Music, Nebraska 1997

³⁵ In my case the improvisation has to be based on a more conscious plan. It seems that only after many years these considerations become a natural instinct to the performer and have to be engaged with less on the foreground of ones attention

Introduction

The central issue in baroque music is the "portrayal and arousal of the affections",³⁶ but no unified theory exists concerning the techniques to be used to do so. Different writers consider either the modes, dance genres and other forms, types of rhythm, intervals and interval combinations as approaches to this arousal. All writers advice the examination of the text, but considering that in solo improvisation on a recorder no text is involved, I will leave this issue aside.³⁷ In German compositional theory in the 18th Century, the affections and music are discussed through the medium of Rhetoric.

For German Baroque composers the world and therefore music still had to do with the numerical order of things. Hence the possibility for anyone to learn composition and to know how the audience would react to a certain part of the composition physically: this was all based on theoretical knowledge.³⁸ Only later in the Century does the composer's own empirical knowledge become the basis for his work. Kircher is the first to introduce the following rhetorical steps of developing ones oratory material as organizing principles in to the musical world: inventio, dispositio and elocutio. This merging with, researching and adaptation of the rhetorical world in the German Baroque is not as strange as it may seem, if we know that both Rhetoric and Music were often taught by the Cantor. More on this can be found below.³⁹ These principles help to organize ones approach to composition, be it in writing texts or compositions. *Inventio* deals with determining the subject and gathering information, *dispositio* focuses on logically arranging the material and *elocutio* relates to the actual wording and extra devices for greater emphasis. The rhetorical figures find their place in the last, which is one of music's emphases within the study of rhetoric. Although the figures started of rather as metaphors (as unusual usages of a word or words) to decorate the speech or composition, eventually, the figures became tied to specific affects and gained therefore a more structural importance.

Inventio

"The composer first chooses a theme or subject whose material is to become the basis and foundation for the represented and evoked affection."⁴⁰ Second and third the composer chooses the key, the meter and the rhythm in relation to the affect. In the case of a fantasia there is no text, so an affect can be chosen at random. The affects generally to be seen expressible in music are:

Love;

³⁶ A very bizarre power bestowed on to music is related to us by Telemann in the autobiography published by

Mattheson in his Ehrenpforte: "he wanted to inform me, just before my departure to Eisenach in 1708, about a rare secret which I should tell the Duke of Gotha, after receiving from him a certain sum which we would share between us. The secret was this: using music not only to direct all the activities of a foreign minister, a general on the battlefield, etc., but to issue orders as well."

³⁷ Nevertheless in my final discussion I mention the possibility of using a text to inform the affect of my improvisation

³⁸ R. Descartes - Les Passion de l'âme, Amsterdam 1649 & A. Kircher - Musurgia Unversali, Rome 1650

³⁹ see "Part 2, question 1

⁴⁰ D. Bartel, Musica Poetica musical-rhetorical figures in German Baroque Music, Nebraska 1997

Mourning and Lamentation; sorrowful: harsh or grating intervals and harmonies as well as syncopated rhythms; especially the semitone dissonance because of its small span. Further a slow tempo. (these intervals in fast tempo = rage)

Joy and Exultation; consonant and perfect intervals in the major keys, using faster rhythms. Leaps, a high tessitura and fast dance movements belong to this category.

Pity and Weeping; slower tempi and smaller intervals (minor second)

Fear and Pain; harsh harmonies and a moderate tempo

Presumption and Audacity;

Admiration or Astonishment;

The age-old conundrum of modes possessing specific singular affects, dating back to Ancient theory, was contested by most of the Baroque writers.⁴¹ Writers agree that keys and modes *can* express an affect, but not which ones. Agreement seems to lie mainly in the differentiation between major and minor and the fact that the choice of key does influence a composition. Tempo indications also had specific affective connotations.⁴² Mattheson defines all the dance movements by affect as well. "In an age where all musical composition was directed toward expressing and arousing the affections, the correlation between specific dances and their affections resulted in the dance form assuming a predominant role in structuring both sacred and secular, instrumental and vocal music."⁴³

The invention is usually related closely to the text to be set by the composer. Most ideas considering the operation of invention are therefore related to the subject of the text, as it would be in the rhetoric of the orator: "The musical expression of a word was frequently accomplished through the use of musical-rhetorical *hypotyposis*-figures, devices through which the meaning of the words are 'enlightened in such a way, that they seem to spring to life'."⁴⁴ An elaborate adaptation of the ideas in Rhetoric to music regarding the *loci-topici* comes from Mattheson. Although several ideas are not so useful for my solo improvisation (for example the locus related to who is going to play the composition) it gives a rich overview of compositorial ideas and creative approaches to the development of one's *inventio*. The following paragraphs will not deal with the *loci-topici* in such a broad way, but rather exemplify the first steps within a concept which could almost be developed beyond the stretches of the imagination.

The unity of composition and way ideas are related to each other in the *inventio* is approached through the *loci-topici*. Invention does not merely have to do with the subject matter itself, but also with the way one arrives at it. The *loci-topici* basically refer to the ways an invention could be arrived at and what the invention could entail in an actual composition. It is rather like brainstorming; a study of possibilities. In the art of fugue, it would be here where the composer or

44 D. Barthel, Ibid.

⁴¹ For example J.D. Heinichen in his lengthy introduction to *Der General-Bass in der Composition*, Dresden 1728

⁴² The Italian terminology for tempo denominations was for example related to specific affects according to Mattheson's *Der vollkommene Capellmeister*, Hamburg 1739: Adagio – Sadness; Lamento – Lamenting; Lento – Relief; Andante – Hope; Affetuoso – Love; Allegro – Consolation; Presto - Desire

⁴³ D. Bartel, ibid.

improviser considers (a) possible countersubject(s), (a) motive(s) related to the invention for the different episodes and maybe a related pedal point. A general idea of which entrances and cadences could be reached leads to the actual *dispositio*.

In this light Kuhnau describes in his preface the permutation of a motive.⁴⁵ In permutation the notes are reordered mathematically to see which other motives can be won from the same musical material. This is one approach to using an invention to its fullest.



The idea of invention is thus the study of possibilities. It entails knowing the different possibilities *implied by an invention*, much like C. P. E. Bach writes to Forkel about his father being able to tell which compositional options a player had once he started improvising a fugue. Indeed similar procedures as to fugue can be applied to this permutation (inversion, reversion, augmentation, diminution, etc.) This idea leads to several advantages:

- A movement is coherent, for it is based on one and the same underlying invention

- It is easier to remember what came before. After all in a narrative, it is important to be able to refer to the past. Also improvising with repeats is easier in this way.

- Knowing all the possibilities encapsulated in an invention will lead to a huge variety of pieces to spring forth from a single idea.⁴⁶

It is interesting to note here that Telemann's inventions used in the fantasias already melodically incorporate the bass or the approach to the harmonic or polyphonic technique, thereby not separating it from the melody but integrating the polyphony as a concept inherent to the piece.



Fantasia 2, Vivace: two voices are integrated in an *inventio*. The invention itself consists of expressive chromatic sixths, in which the two-part essence is encapsulated.

A similar point regards rhythm in general: the fact that, immediately after key and meter, rhythm is brought to the fore, to fortify the invention's relationship to the intended affect, shows that it is an integral part to the motivic play in Baroque music.

⁴⁵ J. Kuhnau, *Musicalische Vorstellung einige Biblischer Historien*, Leipzig 1700

⁴⁶ "Strangers often asked Bach to play to them between the hours of divine service. On those occasions he was wont to select and treat a theme in various ways, making it the subject of each extemporization even if he continued playing for two hours. As a beginning he played a Prelude and Fugue on the Great Organ. Then he developed it with solo stops in a Trio or Quartet. A Hymn-tune followed, whose melody he interrupted in the subtlest fashion with fragments of the theme in three or four parts. Last came a Fugue, with full Organ, in which he treated the subject alone or in association with one or more accessory themes." J. N. Forkel/Terry, *Johann Sebastian Bach His life...*, New York 1920

An invention is therefore not necessarily merely a selection of tone material. Laurence Dreyfus analyzes different inventions in Bach's compositions.⁴⁷ He includes here the use of a dance movement, a modulatory passage, a motive and its constituents, the implication of a motive or a technique. Invention is thus a very big field, in which one tries to have a variety of possibilities in one's head.

This means that the true practice of an improviser does not necessarily lie with the practice of diminutions, the theoretical learning of harmony or the pattern memory of typical Baroque figuration. Rather, it lies in the study of possibility. A small example, which could be continued infinitely, will be given concerning different possibilities for the small subject expressed above. First different permutations are given. Since interval combinations have their own affective meaning, not absolutely but by comparison, one could choose two versions of the invention to set up against each other. A big area is the study of different counterpoints to be added to the subject. Especially since on the recorder this implies a bit of practice (the harmonies are not sounded at the same time). Furthermore the invention could be a bass, or could be used as a melodic canevas, such as pointed out by Hotteterre. The application of different rhythms can lead to extremely versatile versions (see for example bar 63). Finally the subject should be investigated on fugal usage. The Bachian approach to invention per se, with all its connotations of compositional vigor and knowledge are for now left on the side. It will take time before I will start seeing such bigger structural implications. Eventually, it would be interesting to try to start thinking as a composer, indeed investigating every invention meticulously.

My development of this invention could be compared to a small overview of Telemann's development of an invention or motive. This is shown in the example following my own. As can be seen by my indications, in the Allegro of the 6th Fantasia a motive goes through the episodic parts of the fugue. The schematic overview of the permutations used by Telemann show several ideas. First of all no one analysis is right: an analysis is inspired by one's taste. Also, the variety of outcomes shows that this neither one way was necessarily the one Telemann considered these variations. Indeed, what may inform eventually the choice of one permutation compound versus the other, may have more to do with the expression of the affect and the mobility through the piece of this affect. If intervals, rhythms, harmonies and other compositional methods have affective implications, it means that at every point the use of devices is a commentary on the basic affect. If the basic motive of a sad piece is the chromatic small intervals in equal notes, then a rising sequence or falling one, a change of rhythm to a more agitated colour, or the standing still on an organ point against the small movement of intervals, all inform the listener of a narrative against the grid of the choice of the basic affect, meter and mode. In Telemann's case, we could see the motive from the 6th Fantasia's Allegro to move from a modulatory bridge to becoming an imitation subject, than the melodic heightening of a falling sequence eventually into #VII, the use

⁴⁷ L. Dreyfus, *Bach and the Patterns of Invention*, Cambridge 1996. In *Fanfare*, July/August, 1998 B. D. Sherman summarizes: 'Many writers have assumed that by an invention Bach meant the theme at the beginning of a piece - a fugue subject, say, or the opening ritornello in a concerto. Dreyfus shows that there's more to it. A Bach invention is a sort of musical "mechanism" that "ensures its own transformation." It includes, in other words, not only themes (more accurately, "thematic complexes") but also their implications for development and elaboration. In a fugue subject, for example, typical implications might include what happens when the subject is turned upside down or combined with itself. In a concerto theme, they might include what happens to the theme's constituent parts when transposed to the relative-minor key. Thinking through such implications was part of what Bach did when coming up with an invention. These implications were themselves part of the invention.'

of the motive softened by the slur and augmentation and the commentary on the motive through an organ point. The exact meanings can only be grasped at and are not of importance here, they will matter rather when improvising oneself.



Life of a motive_____











Dispositio

Dispositio concerns the planning of one's 'speech': even in improvisation a basic idea should exist before playing, whether subconsciously or consciously.

Exordium (introduction); arouses the attention. This could be in the form of a prelude or opening ritornello.

Narratio (factual account); advances the intention or nature of the composition. This could be the entrance of the vocal part or concertante.

Propositio (point to be made); presents the actual content or purpose of the composition. This could be for example the fugal theme.

Confirmatio (supporting arguments); is often presented together with the confutatio as contrasting processes to strengthen the *propositio*. This could be attained through varied and artful repetitions to reinforce the propositio.

Confutatio (rebuttals). This could be expressed by suspensions, chromaticism, or contrasting passages, all of which, when resolved, strengthen the original theme.

Conclusio (concluding comments); an emphatic end. This could be in the form of the repeat of the ritornello, a climax or a pedal point.

As such, the form of the improvisation can be lead by these basic structural factors in the rhetorical idiom. These factors are then periodicized by use of cadences. Modulations will move from one part in the speech to the other, eventually leading to the opening key. A quiet piece will have fewer modulations than a fiery one. The affect of the piece will also decide what type of ornamentation will be applied to the basic voice leading implied by the choices of harmonic components. As can be gathered from this tumultuous paragraph, all the priorly discussed matters influence each other vice versa. As such, a triangle exists between the decisional powers of affect/ invention, form and harmony. The absolute command of all the involved parts will eventually lead to exciting and varied improvisations, which are meaningful and stylistic at the same time.

The First Fantasia could be seen as having the rhetorical form described by Mattheson and others:

Exordium, bar 1-4, an introductory prelude. Narratio, bar 5-10, in this the contrast in the movement to come is brought forward. The end of the section in V, together with the opening upward gesture indicate that the real subject of the composition is yet to come: the propositio. As in the example given above, indeed the propositio is a fugal theme, bar 11 to 24. In bar 25 the confutatio and confirmatio are given together, two contrasting themes, one the adagio note and the other the little acciaccatura downward flourishes. Then the rhythm from the Narratio is referenced to make up the Conclusio. One could see the following Allegro as the real conclusio, as the Vivace in fact ends in a rather open V, rather like a rhetorical question.

Another approach to *dispositio* could be found in the use of "form or genre". I refer her to dance types and genres such as the sonata, the concerto, the ouverture, the aria, etc. These forms and genres entail certain organizing principles to material in the inventio. The ordering of the material could be done by use of a concerto principle for example. Ritornello and solos would alternate, in which the solos have some distinctive features.



Concerto with a 5 bar sentence structure rather than more usual bipartite structures

The options within this realm are endless. Descriptions of a myriad of forms and genres can be found in Walther's Lexicon, Mattheson's Capelmeister, Niedt's Musikalische Handleitung, Quantz's Versuch and elsewhere. The inspiration for an improviser which can be gained from improvising against a grid is endless, especially in a time where so many different genres and styles live side by side, delineable by comparing one dance to the other, one description to another or combing descriptions: the *sonate auf concertenart* for example combines elements of the sonata and of the Concerto. Other combinations could therefore be investigated too, even if no evidence necessarily exists. As the principle is the same as the one elucidated above in the concerto example, I do not feel it is useful to give more examples. It remains only to point out that 'form or genre' sometimes has an influence on the category of invention as well. Especially if one takes in account Mattheson's description of the dance forms, defining specific affects connected to specific dances. Eventually the division in extemporization between invention and disposition is an illusion, since during improvisation the two will merge as a dual act, the form or disposition of the elements influencing the elements, the invention, and vice versa.

Elaboratio

The *elaboratio* in music consists of ornamentation. In the *inventio* one decides on the musical material. The *dispositio* is instrumental in deciding which of the ideas from the *inventio* will be

selected for this improvisation and in which order events may unfold themselves. Ideas for elaboration of the harmony from the perspective of ornamentation and the relationship between the expression of an affect and certain figures can also be found in the numerous discussions on elaboratio; a meeting between inventio and elaboratio is unavoidable. The use of musical figures in the musical rhetoric was two-fold in its origin: firstly, one wanted to be able to analyze compositions and their affective quality, secondly as figures used by 16th-Century performers as ornamentation to heighten expression. The latter category was then slowly adopted and explained through this repository of *figuren*. The *figuren* thus move from ornamental background to expressive foreground. In fact, this *figurenlehre* made it possible to explain why the use of these figuren was not wrong. Although they were contrapuntally erroneous, through the explanation of these 'errors' as devices, the balance between theory and practice could be restored. The figuren eventually also make it possible for instrumental music to be as affective as textless music. The text is not necessary anymore, as the *figuren* are imbued with the normally textually implicated affects: "The source of the musical figure is no longer the text but the affection which lies at the heart of the text. This facilitated the transfer of the musical-rhetorical figures to instrumental music, away from a primary focus on text-expressive vocal music."⁴⁸ Nevertheless, the devices are there to express general affects, not literal thoughts, although in the original text-setting the figure would have been tied to a specific word or sentence and, subsequently, image. Mattheson in fact warns against merely learning patterns, fearing that the resultant composition would become a patchwork. Unfortunately Telemann has not left us his own textual repository of figures and the availability of lists is vast. In the future an exhaustive study of Telemann's Harmonische Gottesdienst⁴⁹ and the relationship of the findings to the contemporary writing on figures may lead to a more 'eloquent' speech in my improvisations.⁵⁰

One *figur* found in the Fantasias was already discussed above:⁵¹ the *ellipsis*. Scheibe in his *Critischer Musicus* qualifies this notion as such: "..the breaking off of a passage which one only begins but does not completely finish. It occurs in two forms. First, one can suddenly break off and remain silent in the middle of a passage in a vehement affection. Or one can alter the expected ending notes of a passage and proceed to a completely foreign and unexpected chord."⁵² The ellipsis is a figure which lives on the brink between a compositional method and an expressive device. Several figures relate to the use of fugue, imitation, homophony or the retrogression of a melody. These are clearly tools in the composer's box, which have in their own right an affective result, but are not the expression of an affect in itself. Likewise, the ellipsis is a compositional technique: the introduction of an unexpected rest or an unexpected chord or harmonic development. Yet, this figure has very clear affective connotations: a scare or a sudden

⁴⁸ Bartel

⁴⁹ In The Harmonische Gottesdienst Telemann suggests the use of instruments to play the parts of the voice. There is thus a close relationship between instrument and text. Also the affective qualities of key, meter, rhythm and instrumentation could be investigated here.

⁵⁰ Scheibe in his introduction to his list of musical-rhetorical figures also notes: "Thus one learns to differentiate between the figures' form and content through vocal music."

⁵¹ See Harmony

⁵² Translation from Bartel's book; *Der Critische Musikus* was a music journal, published from 1736 to 1740 with Telemann's encouragement.

change of scene for example. The *dubitatio* is a figure which mainly expresses an affect. Nonetheless, it is a concept clearly related to a compositional idea: ambiguity in the composition gives rise to the possibility to afterwards strongly affirm, keeping the listener in suspense.

Most of these *figuren* turn out to be compositional tools or musical devices, most of which through 'modern-day analysis' would have been spotted as well. They are thus nominally interesting for a non-anachronistic expression of analysis, but beside terminology do not add much new conceptual thought concerning the process of composition itself. A few figures did however interest me, in relationship to improvisation: in particular the *symploce* (a musical passage which repeats its opening phrase at its conclusion), *interrogatio* (giving devices for the expression of a question, like a phrygian cadence), *distributio* (individual motifs or phrases of a theme are developed before proceeding to the following material) and the various figures of dissonance (for example *consonantiae impropriae*, the use of false consonances.). The lists of *figuren* will consequently keep informing me as a reminder of the **possibilities** in improvisation. Forkel's list is especially interesting, although slightly late, in giving notated musical examples. The *figuren* are an interesting excursion through the minds of 18th-century composers.⁵³ But, if one wants to really get to know a city and its inhabitants an excursion will not suffice.

Melody

In the change towards the Galant, melody became more important. It even becomes the ruling factor in music, given importance over counterpoint and harmony. "Melody however is in fact nothing other than the origin of true and simple harmony, in which all intervals follow after, on, and behind another; just as these very intervals and no others are perceived in harmonized phrases simultaneously."⁵⁴ Mattheson devotes several paragraphs to explain melody's predominance and as can be seen from the quotation above, melody in fact *is* harmony. This description alludes to the very essence of Telemann's fantasias, melody brought to the fore as the skeleton upon which the other garments of music are draped: harmony expressed by melody.

Not withstanding the importance of melody, little can be found explaining the creation of melody. Mattheson writes proudly, that he is the first to devote any theoretical writing to it. The use of *loci-topici* is suggested to aid the invention of melody. Interesting is the suggestion to come up with several, maybe three ideas, and putting them together in one melody. The separate ideas may not be original, according to Mattheson, but the combination of them in the composer's creation are idiosyncratic, because 'probably' no one used that particular combination before. Furthermore, Mattheson advices "facile, clear, flowing and lovely or charming melodies. The elaboration of these basic properties of melody are not of much help to us now. Practically we should use a varied combination of small intervals, specifically seconds and thirds. The melody should not be too long, revolve around one passion and take in account the proper use of interpunction. Mattheson specifically mentions that the melodies should have something familiar to the audience, food for thought for us, modern improvisers: how do we improvise stylistically, including something familiar, without it sounding like plagiarism?⁵⁵

⁵³ Descriptions of *figuren* exist from earlier times as well

⁵⁴ J. Mattheson, Ibid.

⁵⁵ This will be discussed in the second section of Part 2, see below.

The Final Fantasia

As an Appendix, I include a Fantasia showing all the different ideas and techniques which were surveyed above, starting from an invention taken from Heinichen, through the use of the disposition and the different harmonical, imitative and further compositorial approaches. The basic model found above consitutes the following:

Decide the Affect

Find an invention which fits with the affect

Use someone's 'good' invention or put together ones own

Glance through the options in the mind

Could the invention be a fugue theme, imitative, counterpoint above and below, where are the dissonant possibilities in the counterpoint, diminution & augmentation, different rhythms, the division in to different motives/themes, the other loci topici

Decide the disposition

Which cadence points, where to modulate, which form or genre, is the theme coming back or is it going to be a linear improvisation

The use of some figures to enhance the 'text'

This will probably happen during the improvisation, but an idea or may come up in the meditation on the subject

Executio

Part 2

By tracing the structure of contemporary educational systems, can I gain insight into an 18th-century approach to composition and improvisation and could this inform my own learning process?

Telemann and his educational background

Musicians in the 18th century learned music through the following routes: through their family (W.A. Mozart), through teachers (G. F. Handel), at school (Lutheran cantorates) or were selftaught (Telemann, Scheibe). Telemann describes his musical development in his autobiographies. Considering his development he notes how he acquired different styles: for example the Polish style, the French style, the Theatrical style and the Italian style. His 'development' is thus a fruition of the combined seeds planted by the different styles in his compositional being, blossoming into the "mixed style."⁵⁶ This mixed style is not a defined style, although it is said to 'take the best from all the different styles' (Heinichen). The learning process is thus one in which passing through all the European styles, one improves one's craftsmanship. A teacher was not always deemed necessary for this. Several musicians describe themselves as autodidacts: Telemann was allegedly scared from the keyboard by a near-fossilized 'contrapuntist' from the old days, who bored Telemann with his lacking feeling for melody. Telemann remembers copying out a lot of music. Composing music came to him as a natural curiosity. A circle of listening, copying and writing would probably have led to a self-assessing approach in which the three approaches feed of each other. Telemann does not mention improvisation as such in his autobiographies anywhere, so we are left to guess what he may have learned or encountered. *quotation about grabbling at the keyboard* From the school he attended in Hildesheim, a description of the subjects taught was found. This description was written down a bit before Telemann was at the school, but is at least indicative of current ideas concerning curriculum. The focus lay specifically on the classics, Latin and Greek, and Rhetoric. So at least in this area, his education must have been detailed and he will have known about the principles of Rhetoric. Next I will describe shortly the teaching at the Lutheran Lateinschulen.

Learning in a Lateinschule

Bartel asserts that "virtually all German Lutheran musicians would have attended these schools". ⁵⁷A Lateinschule was a school related to the church. Students would sing in its choirs and teachers were often related to the ecclesial system. Telemann was in any case involved with such schools later in his life, as he writes a letter about the payment of the choir which was related to it. Education in Germany was zealous.⁵⁸ From the moment Luther advocated the teaching of all children and music as only second to theology itself, musical education got a boost in the 16th century. Luther's wish, for the music to express and even preach the words in the service, and the cantor's teaching, of the two subjects music and rhetoric alongside of each other, fortified a connection between rhetoric and music, suggested already by the Renaissance investigation of the Classical sources. According to several ordinances, which were sent to schools to inform them of pedagogical requirements, boys should learn both *musica choralis* (chant) and *musica figuralis*

⁵⁶ S. Zohn, *Music for a Mixed taste*, Oxord 2008; Zohn discusses Telemann's use of style and genre and how this relates to the prevalent idea of *Gouts Reunit*

⁵⁷ D. Bartel, *Musica Poetica*, London, 1998, p. 65

⁵⁸ My main source considering education in the Lateinschule is J. Butt, *Music education and the art of performance in the German Baroque*, 2000

(polyphony). Together with the rise of textual expression, due to Luther's advocacy, the Italian style came in vogue, which demanded stronger performance abilities on behalf of the performer. The wish for more music required specific teaching and resulted in several treatises, or rather, primers on music specifically directed at schoolboys, which can be found to have been disseminated throughout Germany. Most of those only discuss the rudiments of music. Coclico's is an exception, for even composition is dealt with.

It is the type of primer like Coclico's which influences the later primers and treatises. Composition, but more often Performance started to be described and taught. As the function of the cantor slowly turned in to that of a director musices, being in charge of the music in the town, his need for instrumental musicians increased. Through private teaching he could make up for shortages which may have arisen. He also was admonished to give extra lessons to those children who showed *talent*, whereas in the past every one was administered equal education. Another change set on in the 17th Century: the teachings of Comenius became extremely popular and a widespread phenomenon in Europe. His ideas focused the student's learning process. It was important to time the introduction of new subjects well and rather than learning by heart as the process at the rote of the educational system, understanding what is being learned is more important. For example: rather than learning a 'Forrest of diminutions" by heart, one should understand the processes behind the improvisation and composition and the construction of variations on the inventio. Nearing the middle of the 18th Century, exercises start to be mentioned in primers. These exercises are mainly around scales, in different intervals. Of course in relation to singing this has to do with training the facility of the voice. Nonetheless, it is close to what Jazz Musicians do as well, to prepare a technique ready to support their improvisational ideas. Also in L'Art de Preluder, Hotteterre publishes 'Traites', little exercises for the fingers in a book to learn improvisation. Technical exercise, although behind the curtains of modesty and professionalism, I think was a feature of every day life for the Baroque musician.

Most primers which surpass the compendium type mention improvisation. In most cases this concerns a small section on improvised diminutions and appropriate ornaments for singing. The diminutions were often explained through the *Figurenlehre* (see above-> Rhetoric). These diminutions move from the musician's field to the composer's field in the range from the 17th till the 18th Century. As theorists try to explain how the use of these diminutions and affective dissonances relate to compositional practice, composers start using them by themselves. In this way the performer's practice informed the composer. Finally, a very informing quotation from Petri about learning music: "Listen to a lot of music, become experienced in ensemble practices, learn a chordal instrument (which will give you an insight in the whole of music), study thorough bass and the scores of great masters."

Partimento teaching in Italy.

Another area in which we know something concerning teaching are the conservatorii in Italy. What a Partimento is has already been explained in earlier parts so will not be further elaborated here. Especially in Naples, the teaching of composition gives a fantastic insight in the way improvisation was one of the main ingredients in teaching through Partimento. Most sources relating to Partimenti are either manuscripts of teachers or so called *zibaldone*: little notebooks the students had to notate the newly learned materials. The basic build up would consist of: 1. Rules 2. Figured partimenti 3. Unfigured partimenti 4. Fugues

The rules were usually basic definitions of compositorial materials (such as the organ point). The partimenti would start off with small patterns to be learned by rote, such as cadential patterns or modulatory progressions. Building up to unfigured partimenti and eventually fugues. Usually the figures or patterns in the partimenti implied a certain motivic realization. Although not one 'good' solution exists, the 'Master' would supply certain partimenti in order for the student to be able to work on those elements he still had to improve. Sanguinetti– points out that " 'Partimento' allows a global compositional training, learning thorough bass, harmony, counterpoint, form, texture and motivic coherence through improvisation." Together with this improvisatory, 'empirical' approach, students would busy themselves with the more 'hardcore' written counterpoint. *Writing and 'grabbling' away at the keyboard would inform each other.*

Conclusion

"...in order to master the discipline of composition, the baroque composer therefore spent much time copying and then imitating the works of established masters. Together with the study and acquisition of theoretical knowledge, the composer also practiced his empirical skills by observing human behaviour, recognizing as well as analyzing psychological phenomena on the basis of acquired theoretical knowledge."Bartel p. 35

Learning music was, as far as I can gather from this cursory overview, a matter of hard work. Although some do understand that there are differences in talent, the main view adopted by in the German Baroque is that composition is a learnable art, as a consequence of the logical mathematical relationships between the number, as created by God, reflected in music, the human body and the world. What was therefore important was to learn against a grid of styles and the compositions of others. The investigation of the workings of these musical events and the reason behind their effectiveness, lead to an understanding of underlying procedures, much as Comenius "new" teaching methods invoke, at the beginning of the 17th Century. While learning by rote still persisted, the emphasis was moved towards a more humanist frame of mind. The fantasia and music for solo wind instruments have been shown to generally have had didactic intentions. My approach to learning improvisation (composition) through this genre is therefore probably not so far from a 'Historically plausible' approach to learning. (what is the approach...*)

The questions, raised as a consequence of the will to further ones understanding of the music, lead by themselves to a conduct of research natural to the performer (of the music and the research) and imply an autodidactism resembling Telemann's own. It is clear that in the teaching of Partimento a Master would have selected which path of learning needs to be taken. The Master gives assignments and Partimenti to further improve the student's skills in both improvisation and composition. Again an accent becomes apparent on catering for the student's need. I had not expected that this approach would be found in 18th Century music teaching. Furthermore, it stands out that the Partimenti were an improvisatory form of learning, like the building blocks in LEGO, introduced to the student to be able to play with them. Each LEGO block has its own combinatorial and musical implications, which are learned through experimentation.

Mattheson Capellmeister, pt. 2. ch. 4.**: "a composer might make a collection of all the pleasing motives which he has encountered, order them according to chapter and title, and when the need arises, gather counsel and consolation from them, but this would result in ragged patchwork." It is therefore rather the collection of ideas around an invention which make sure not several motives are being used in a composition, leading to this warned-for patchwork. As stated before, it is the invention, lead by the call of a chosen affect, which leads the way to Rome: and since every way

leads to Rome, an endless amount of variation is possible in the realm of invention. Bartel opens our eyes to "the Baroque inclination to control the natural forces by means of an overarching and unifying form, which is also reflected in contemporary architectural or garden design."

A next step in my learning process could therefore be made through an immersion in compositional ideas, as well as a further immersion in the Fantasias. I have started reading Telemann's letters and interesting ideas about the composer's musical world can be traced there, as well as a consolidation, but maybe also refutation of the empirically found evidence. It would be interesting to use Telemann's complete letters and writings to come to a picture of his ideas on composing and possibly improvising. It would also be extremely interesting to look at Walther's Lexicon and Mattheson's Ehrenpforte, for the autobiographies of musicians. Here at least a sketch of the approach to education may be found.

Petri about learning music: "Listen to a lot of music, become experienced in ensemble practices, learn a chordal instrument (which will give you an insight in the whole of music), study thorough bass and the scores of great masters."

Is stylistic improvisation truly possible in the context of the present day, and what are its implications?

M. Storoni, R. Dalmonte and M. Baroni published a very interesting article in which a computer programme (LEGRE) was written to compose arias in the style of the 17th-Century Italian composer Legrenzi. Answering the question, what style means, the writers looked at general notions of style in sociology: "Style is a replication of patterning, whether in human beaviour or in the artifacts produced by human behaviour that results from a series of choices made within some set of constraints." (Meyer, 1989) and: "A style captures aspects of cultural or personal identity." (Dickinson, 1965) The writers emphasize that style is denominated by the regularity of repeated features, and that no style can be perceived in an absolute way: the differences of styles can be defined only in comparison to others. So, the notion of style is based on cliché and taste; the true factor in knowing music, not possibly taught through a book.

Their hypothesis was that "a family resemblance exists among features created by the same system of choices." This is obvious thinking in terms of the computer, but how about the choices of the composers of the 18th Century? We cannot know what a composer thought or what his choices may have been, but, a system of choices is something else: this is a system of compositional choices of which the outcome may be tested against the compositions of the time. A system which may be learned from the composer's long-gone mind, but if a similar process can be set-up, leading to a composition which in our present-day mind is stylistically similar, then the latter is of lesser importance. The main point being, that our analysis of those pieces will lead to a reiteration of the style, as far as our feeling for 'taste' finds it similar, which is, as many 18th century writers (Heinichen was already mentioned before) point out, the final decision maker in music and art.

The results of the experiment show that a 20-minute learning period is not enough to truly grasp a style: "The contradictions in the responses of the experts also show that the ability to recognize styles is fundamentally based on a long and cultivated familiarity with each specific style". We know this. But, interestingly, even the baroque specialists often identified LEGRE as a real composer. The researchers pointed out that the data shows that most people, including well-trained musicians and the baroque specialists were inconsistent in the reasoning behind their choice. This means that it is not logic which determins these choices per se, but taste. The results were better when the same text set by LEGRE and by Legrenzi were put next to each other. Vice versa, in stylistic improvisation, using models is a good way to learn, but in order for my fantasias not to resemble Telemann's too much, I have to not use too many similar ideas, but rather take 'the system of choices' that is at the very root of the process.

A beautifully set-up experiment, in my eyes, is the last one, in which listeners were 'trained' on 20 minutes of arias composed by the programme LEGRE. Afterwards they were asked to recognize LEGRE's style in arias by the early Italian Baroque composers Ross, Legrenzi (whose arias were the basis of the programme) and the stylistically later Domenico Gabrieli. Rossi and Legrenzi came out with an equal score, showing Gabrieli to be clearly recognizably part of a different style. Indeed Rossi and Legrenzi are much closer to each other, and thus, also as concluded from the other experiments, the computer did actually manage to compose pieces in an

early Italian baroque style. This an amazing feat for the programmers, but may also point towards the possibility of improvising in a style. We are not programmable, but the programme's 'system of choices' was set up by humans and their human analysis: a grammar. It is my conviction that getting to grips firmly with the grammar of the baroque will eventually lead to convincing improvisations. Nevertheless, one must argue that music is eventually there for the listeners and so, those features which can not be detected by a listener may not have to be taken in to account in stylistic analysis⁵⁹. But, there is a difference between those stylistic traits which can be perceived by any listener and those which can be perceived by someone who is already knowledgeable in the style.

As in the classical research on experts in chess, a master needs but a few seconds to remember every piece on a chessboard, even if the pieces have no necessarily logical configuration. This difference between the 'kenner' (experts) and 'liebhaber' (amateurs) is a difficult issue. Telemann himself says the art of music exists in: *Dass man vermittelst harmonischer Satze (1) in Gem"uthern der Menschen allerhand Regungen erwecken und auch zugleich (2) durch solcher S"atze ordentliche und sinnreiche Verfassung den Verstand eines Kenners belustigen k"onne.* ⁶⁰Translation: the art of music is in the harmonic setting which (1) raises in the mood of people all kinds of emotions, and at the same time (2) through the ordering and rich of mind structure of such settings enthuses the mind of an expert.

How can an expert be convinced? Probably he or she will think badly about the performance beforehand. We somehow do not believe it is worth improvising in a style in which so much has already been written at such a high level. People contemporary to us who *are* still traveling this path are people in Pop and Jazz Music. But also Jazz musicians have certain styles within which they improvise. What do they think about stylistic improvisation? Patrice Madura compares creative thinking, as described and tested through the Torrance Tests of Creative Thinking (focusing on the "generation of fluent (manyfold), flexible (varied) and original (unusual) ideas"), with musical creativity, from the perspective of vocal jazz improvisation. It is clear that "variety, elaboration and originality meant little without stylistic knowledge and musicianship." Thus style establishes a framework, without which improvisation loses meaning. Madura also stresses that it takes years of extensive studying through listening, imitation and practice to get a grasp of a musical style. But the author wonders, does a patchwork of known figures surmount to improvisation in a style or even 'creative thinking'? Where is the originality?

Even in Jazz music these questions are being raised. As far as I can see, Jazz music has been an unbroken tradition from its inception to its current form, unlike the Early Music revival. Of course, as we can observe, listening to recordings of classical music from the beginning of the 20th century, many things have changed in the way these works would be performed now; a tradition or style is not a unified nor a static body of cultural identity, as culture itself is not static either. Nevertheless this problem lives among Jazz musicians: most of the players I know started off by listening to recordings, imitating and then trying to find their own style. If a style with an

⁵⁹ Quantz notes in his *Versuch*: "Rarely do we follow that surest of guides, our own feelings;" So, we should not ignore our sense of taste.

⁶⁰ My own translation: the art of music is in the harmonic setting which (1) raises in the mood of people all kinds of emotions, and at the same time (2) through the ordering and rich of mind structure of such settings enthuses the mind of an expert.

unbroken tradition, like Jazz, also deals with the issues of originality in stylistic improvisation, then why do we find improvisation and composition in a re-discovered style such a problem in terms of its originality or it merely being 'a patchwork of pieces by Telemann, Vivaldi and Bach'? We face the same problems, except, because we are separated from that past, surely we should feel *more* inclined and able to free ourselves from the reigns of our masters (Bach, Handel, Telemann, etc.). The only difference is that the prerogative of most forms of Jazz is improvisation. The distinction then is between improvisers who have created their own recognizable, personal style of improvisation, and those who merely construct improvisatory jenga towers, which, if one too many clichés were to be taken out, falls over. I personally find it very hard to get beyond mere imitation, but as the above proves, the question of originality itself is even in contention in Jazz Music.

In Jazz music, as in Baroque, the study of improvisation revolves around the repetitive practising of harmonic models and melodic riffs or clichés. In the German Baroque, some of these clichés are standardized in the vast amount of musical-figures in the domain of rhetoric. Such evidence suggests that creativity follows standard models and standard patterns. Since the mechanism of our mind works on the associative, an idiosyncratically new thought cannot be build anyway.⁶¹ Creativity deals with those LEGO building blocks in ever variant ways. Nevertheless, a concept not based on an earlier idea or patterns of thought cannot be arrived at by virtue of our human nature, in my opinion. These patterns can be seen as a repository of words that contribute to the formation of a musical language, which in turn contributes to the construction of a piece of music as an event. There is a danger, however, in the use of such an approach: the patterns may become reliant on mere cliches. In 1923 M.-D Calvocoressi writes about innovation and cliche in music, at a time where the audience and contemporary classical music were still closer. He describes cliches as such: "Materially, cliches occur in idiom or in disposition. They are either materials out of which the structure is made or lines on which it is erected. That is, they consist of ready-made modes of expression or of progress to which a composer resorts, not under the impulse of creative imagination, but mechanically - be it through habit, through poverty of mind, or as a matter of principle."⁶² Cliché can therefore easily become like a verbal tick; at its worst annoying and meaningless recurrence.

However, cliché, as described by the teachers of Basel's Historical Improvisation Department (at the yearly improvisation symposium in 2009 which I attended), is one of the fundamental ingredients on which a musical style is founded. A cadence for instance, is a cliche that we can not live without. Other clichés, such as the alberti bass, may to some already have the more negative connotation of cliché, whilst the modern-day practice of the half-tone raising bridge in pop music is to many as cheesy a cliche as returning from Holland with a piece of Gouda. Clichés, the recurrence in a style or language of certain key phrases or concepts, provide a necessary a framework in which to build up our understanding of the whole. Calvocoressi compares cliche to the 'dead' and 'live' metaphor in language, where a newly-introduced word,

⁶¹ See for example C. Norris. "Structuralism, post-structuralism.", *Grove Music Online. Oxford Music Online*, (accessed March 1, 2012).

⁶² M.-D. Calvocoressi - The musical times january 1 1923 (accessed 31/01/2012)

becomes 'awesome',⁶³ and then quickly loses its original meaning in favor of the new one. But, years later, those persistent cliches which find their way into our standard idiom therefore become part of that body of our verbal exchange which give extra meaning to what we say.

Cliché thus defines our cultural identity immediately: someone who says 'that was tubular' is referencing Californian surf 'dudes' in the latter part of the last century. Style and culture are clearly interlinked. Calvocoressi's problem therefore does not lie with the use of cliche in itself, but with the recurrence and accumulation of them. He relates to the possible mechanical origin of a problematic cliche. One interpretation of this may be the mechanical application of a *Figurenlehre*, a learned set of affective devices to one's improvisatory practice. Merely glueing one stock figure to the next is like saying words in an unknown language in random order. It is possible that in the improvisation of Baroque music the approach is also too mechanical: it is based solely on constructions of the mind in adherence to the analysis of a style which we do not live ourselves or cannot contextualise with socially, since the social structure evoking the traits of the style is lost to us. Perhaps it is a matter of time before improvisation in baroque styles becomes common practice, also among instrumentalists other than organists? Maybe the improvisation in this style is still a 'neologism'?

Conclusion

It is clear, listening to improvisers like Rudolf Lutz (teacher of improvisation in the Schola Cantorum Basiliensis) that it is possible, after years of study, to improvise stylistically with very satisfying and convincing results. Lutz also refers to the linguistic relationship between improvisation in music and in speech, and compares the knowledge of a style with the knowledge of a foreign language: "The improvisational, i.e. immediate command of this basic technique [developing the student's abilities from ostinati] is like the verbal command of the grammatical and syntactical rules of a language. In language lessons, too, a verbal-improvised relationship with the language has a beneficial effect."

Everybody uses language slightly differently, "in their own style". Everybody has his or her own voice. In music much the same is true. In my improvisation, it is a goal to try and go beyond the basic grammar of cliché, and to develop my own distinctive style and particularities. Lutz puts it as follows: "Stylistic aspects are studied in the light of continuous analyses, and over time a personal style develops in the particular 'language'. In this, a personal style can develop, which is in essence the individual arrangement of the parameters of an epoch." A similar goal may have been envisioned by a young composer in the 18th Century: after all, we all want to surpass the training of our Master and establish our own musical personality. Indeed, according to Mattheson, "One must arrange the borrowed materials in such a way, that they assume a more beautiful and improved expression than in their original context." (*Capellmeister*, pp. 131-132).

Dreyfus observes that whilst J.S. Bach was writing in a musical style that was unique, this was not necessarily considered an admirable trait; indeed it was at times regarded with suspicion, thus showing that the aim to be distinctive was not necessarily a prerogative of artistic currents in the early 18th Century. Indeed, according to Bartel, "the objective of baroque compositional procedure was a rational one in contrast to the subjective and individualistic one of later

⁶³ The loss of the original meaning of the word 'awesome' came to the fore in the comedian Eddie Izzard's show "Dressed to Kill"

eras." (Bartel,) If we are to trust these diagnoses, then perhaps historical improvisation should not go down the route of idiosyncracy as in Jazz music. Nevertheless, I feel that this observation downplays the stylistic diversity amongst different composers. Eventually, human beings are different from each other, whether making these differences come out is culturally preferable or not. Therefore, I believe that in improvisation, whilst perhaps not aiming for idiosyncracy per se, we should not be afraid to find our own voice either. Even if no one ever improvised a fantasia on a recorder, is it not more interesting to take the next step, than to look back, remaining ever in a stage of emulation which contemporaries would have taken for granted as step 1. Even if failure is composed into this undertaking by sheer virtue of its *hybris* character, it is still not devoid of meaning. The skills honed from the learning process are skills that any musician in the 18th Century would have possesed. Approaching this music from an angle at least remotely related to these skills will hopefully bring me closer to the way an improviser/performer would have approached music.

If we were to take such an approach in mind, perhaps we should consider what Mattheson thinks, when it comes to originality. My doubts about historical improvisation mainly revolve around whether there is any use in trying to do something new in a style which has already so many compositions. Mattheson tells us that borrowing from other composers must be admitted to be the source which is used most frequently to find one's invention for a composition: "Borrowing is permissable; the loan, however, must be returned with interest; i.e. one must work out and dispose the borrowed material in such ways that it will gain a better and more beautiful appearance than it had in the composition from which it came."⁶⁴ That is, originality was not such a concern. Where the theme of your work came from is of no importance. The fact that one plays, writes or improvises yet another *bourrée* is not important. What matters is, whether the desired affection can be brought accross. What is historical is the set of procedures applied to the idea. Finally, thinking of all the beautiful ideas in the Baroque period I conclude with Mattheson's conclusion consider the borrowing of material: "Even the greatest capitalists will borrow money when it is convenient or advantageous."

⁶⁴ J. Mattheson, Volkommene Capelmeister, paragraph 81

What are my conclusions concerning my experiments with different learning processes regarding historical improvisation?

Given the sectional nature of my approach to improvisational methods, I will firstly discuss different approaches by way of bullet-point. Finally I will draw conclusions on these, my experiences outside my master research and the above ellicited.

Discussion of approaches to learning improvisation:

- 1. **Harmonic patterns**. This was a very good approach to improvisation. As shown by Niedt, Mattheson, the tradition of Partimento and so forth, harmony and thorough bass methods formed the basis of composition and improvisation in the 18th Century. I learned that the division of harmonical thought into cadences, modulations, little bass lines which do not modulate and organ points, made an easily digestible framework. In my own improvisations I used to end up moving from C major to Fsharp major, which is clearly not desirable stylistically or otherwise, so the analysis of cadences was in particular extremely helpful.
- 2. **Counterpoint**. Counterpoint and fugue on the recorder are rather counterintuitive. These two techniques were very hard to learn, and I would have to invest many years of study to successfully realise a fugue on a monodic instrument on a given theme. However, as pointed out before, the hallmark of the process of *inventio* is having an intimate relationship with the possiblities of the ideas used in ones improvisation. Consequently, what should be studied is fugue themes and all their possible realisations; a fugue improvisation is therefore not necessarily a free improvisatory process, but rather one based on constant choices based on a group of memorized possiblities. After years of experience such processes will start to be more natural and the grasping of possibilities will become automatic.
- 3. **Diminutions/figurenlehre**. Simply learning a repository of musical motives is not necessarily a goal. As Mattheson says, this will just lead to patchwork and cliché-like use. Just as the learning of fancy expressions in a language you otherwise do not understand sounds contrived, it is dangerous to merely learn stock figures or diminutions, as is often our approach to 17th-Century diminution improvisation. Without knowledge of at least some aspects of compositional technique, this merely leads to a superficial compendium of pre-learned material which is not integrated into an organic whole. Obviously, when talking about elaboration, it is good to have knowledge of which ornamentational options exist within the framework of a style. In the future I could look at Telemann's *Methodische Sonaten*. As it was not the idea to improvise Telemann's fantasias for another time. Rhetorically, the figurenlehre could be an interesting basis, from which to gain inspiration how to raise certain affects. The ellipsis was already discussed before. The usage of many more of these figures is an aim for my future improvisation, as it will give an idea of what represented certain affects or or ideas to the 18th-Century musician.
- 4. **Copying and playing fantasias**. This seems to me to be the most 'authentic' approach to learning improvisation (and also composition). This is the approach that Telemann himself used. It is especially a good way to learn a style from the perspective of taste.
- 5. Form and Genre by themselves are merely empty containers. At first I started from descriptions of form and genre in Quantz, thinking that an exterior framework will give organisation to improvisations. However, it left me feeling rather overwhelmed. The indications

did not actually tell me what to do practically. However, coming back to some of those descriptions later having investigated other means, the ideas did prove useful on a more background level; the motor of the improvisatory boat being the knowledge of harmony with the invention hanging from affect, the descriptions are the wind in a little extra sail.

- 6. Listening. can give good ideas, but needs to be an active process. Because I play in many different styles throughout the day, passive listening does not really help. An 'assimil' approach, for example the listening to tapes of a language, in which passive listening is fruitfully adopted, was my first idea. A point of view I found only in the research on the computer programme LEGRE was the idea to leave out the 'variables' belonging to the realm of the performer. Listening to performances to get a grasp of Telemann's style is then at least partly coloured by the performance style. The connotations of these are hard to gather and so inserting compositions in to a computer programme like Sibelius to be played 'dryly' seems a more clean approach to learning styles than listening to someone's performance of the same piece. Indeed, when I prepare to improvise on a madrigal, I prefer to practice my diminutions with a computerized version, rather than a vocally or instrumentally recorded one, as I somehow notice those compositional features which inspire me and which I then consequently in performance want to accent or use in my improvisation (for example, motivically). As stated before it is not necessarily my aim to assimilate Telemann's style, rather, I hoped to listen to Telemann's music as a means to an end, hoping to find certain models aurally, for my improvisation.
- 7. Writing, is a good approach to learning as well. I found this to be true for other people as well. My improvisation class was supposed to happen all purely by memory, but when I asked my students to write variations for a bass they had understood its harmonic implications much better. Also, as Lutz says: "The question is often posed what composition has to do with improvisation? I think: a great deal. For to my mind it is true that improvisation is a spontaneous flow of musical thoughts: a composition, the well thought-out compilation of different components. However, both are linked by a shared syntactical, grammatical, rhetorical, and structural linguistic environment. If the improvising musician is in danger of becoming ever more involved in his effective cliches, the composing musician can try to find an extension of the language by means of reflection and careful weighing up. Just as improvised music is influenced by the hand, the breath, and the throat, the head can play a larger part in composition.... New musical knowledge flows in to the head."
- 8. **Teaching improvisation**: Madura argues for the teaching improvisation both by strictly following rules and and breaking them at the same time. This is possibly a bit easier in the realm of Jazz Music, as in baroque music it would be bizarre to, for example, purposefully break the rule concerning parallel fifths. The different approaches Madura advocates in combination are: the listening and accurate imitation of models, imitation and variation on the imitation, studying theoretical material, scheduled performances and assessment of creativity. These approaches are in fact close to my own. The classes that I give about improvisation is one of the most eye-opening experiences. I intended to adopt a thorough approach to my teaching style: teaching the possibilities inherent in different modulations and harmonic patterns before progressing to the improvisation and memorization of whole madrigals. It was clear however that the precepts necessary for improvisation were not part of someone's basic education. An active engagement with ones' own playing is somehow not apparent in my class. For example an exercise asking for a melody of 8 notes, lead to several students playing 7 or 9 notes. In other classes on improvisation I often noticed an unawareness of which harmony one

playes in, or which melodic note is played in the harmony. Also my own awareness and my own knowledge were put to the test and did not come out wielding a medal. It was in this class that I came to several realisations:

a. my musical memory is poor

b. memory of possibilities is more important than a literal memory of patterns.

c. writing is a much stronger way of improving ones skill than improvising or listening.

d. listening to a piece to engage with the precepts of its style is very hard. It should either be done more, or maybe turns out not to be as useful as I thought it might be. In the Baroque, people had different approaches to listening to music Specifically, hearing music more than once would be an exception and thus attention would be of a different order.

In August and September of this year I had the opportunity to improvise almost every day in a theatre play. Most music was 18th-Century baroque oriented, so I tried to stay within a style. Having to improvise a small amount every day lead to an improvement of my skill set, although the above analyses had not yet formulated my awareness of harmonical structure yet. The context of the action in the play was very inspiring. Also, every day I would surprise my colleagues by using a (more or less appropriate) well-known theme from a song, or film for example. The recognition people had with the theme gave them a much better understanding of the development of the theme. Indeed, improvising in such a way becomes much easier: the permutations applied to the theme have immediate affective and musical results in the 'audience'. The actors were very interesting to watch as well. The text and actions were rather rigidly decided on, but nevertheless the play was different each day. The ingenious actors were able to move through the play like through a house they knew extremely well, finding corners and new interesting items to show everyday.

My research brought to light several other ideas and approaches to the Fantasias and baroque improvisation, which I did not have time to elaborate on. For example, a serious delving in to compositional treatises, letters and biographies; the Fantasia style of C. P. E. Bach; the use of words to inspire the planning of a whole fantasia or set of fantasias (inspiration may come from the *Harmonische Gottesdienst*, in which a tight relationship between text, instrument and invention is portrayed, or from programmatic music such as Telemann's *Gulliver Suite*⁶⁵); the use of the voice whilst playing the recorder, which Mersenne describes; and finally the application of the figurenlehre. Having adopted several approaches to improving improvising, I am curious to find a way to formally examine and debate the effect of these different approaches in detailed experiments. This might be another direction in which to pursue this subject further.

The improvement of improvisatory skills is at its most efficient when several approaches are used at the same time. I tried to focus on one skill at a time, which gave rise to very different results. Nonetheless, at least for me, a versatile approach leads to a more holistic understanding, as the different approaches inform each other. Telemann's Fantasias informed me in every possible way. leading to an approach in improvisation and in analysis looking at the triangle between invention (affection), harmony (bass movement, modulation, cadence points, organ points and exceptions)

⁶⁵ Mattheson also notes that a true composer must be as versed as possible in the true art of poetry and its basic principles. Improvising fantasias based on the affective components in poetry of the 18th-century may be a great way to learn about the poetry, the rhetorical approach to text and the improvement of the 'affect'-component of my improvising.

and form (either rhetorical or based on style, genre or (dance) form). The most important realisation came from the meticulous study of invention and the idea that planning ahead is a basic approach, entailed in the improvisation, the elaboration of an invention, itself. I think stylistic Baroque improvisation is possible. In it the main goal should always be to raise the affect in the listener. Trying to codify a system of choices which resembles an 18th-century composer's through the analysis and composition, improvisation and gathering of compositional and theoretical knowlegde is an approach similar to that in the 18th-Century and an approach which in different areas of expertise is seen as the best methodology to style. Improvisation thus, through the prism of Telemann's Flute Fantasias, sheds light on composition in the 18th Century, made me a better musician and improviser, and made me come closer to an understanding of the richness which I felt when I first played the Fantasias.

Bibliography

I. Allihn, Georg Philipp Telemann und Johann Joachim Quantz: der Einfluss einiger Kammermusikwerke Georg Philipp Telemanns auf das Lehrwerk des Johann Joachim Quantz 'Versuch einer Anweisung die Flöte traveriere zu spielen', Magdeburg, 1971

C. P. E. Bach, Versuch über die wahre Art das Klavier zu spielen, Berlin, 1753

D. Bartel, *Musica Poetica musical-rhetorical figures in German Baroque Music*, Nebraska 1997 Thomas Christensen, Robert Gjerdingen, Giorgio Sanguinetti, Rudolf Lutz, *Partimento and Continuo Playing*, Leuven, 2010

G. J. Buelow, *Thorough-Bass Accompaniment according to Johann David Heinichen*, London, 1992

J. Butt, Music education and the art of performance in the German Baroque, Cambridge, 2000

M. R. Callahan, Techniques of Keyboard Improvisation in the German Baroque, New York, 2010

L. Dreyfus, Bach and the Patterns of Invention, Cambridge, 1996

S. Eppinger, Georg Philipp Telemann: 12 Fantasien für Flöte solo, Tibia, 1984

C. D.S. Field, et al. "Fantasia." Grove Music Online. Oxford Music Online.

J. Fux, Gradus ad Parnassum, Wien, 1725

J.D. Heinichen, Der General-Bass in der Composition, Dresden, 1728

A. Hoffmann, Die Lieder der Singenden Geographie von Losius-Telemann Zugl. ein Beitrag zur Deutung der Umwelt Georg Philipp Telemanns während seiner Schulzeit in Hildesheim um 1700, Hildesheim, 1962

J. J. Hotteterre, L'art de Preluder, Paris, 1719

J. Lester, Compositional Theory in the 18th Century, New York, 1993

A. Mann, The Study of Fugue, New York, 1965, repr. 1987.

F. W. Marpurg, Abhandlung von der Fuge, Berlin, 1753

J. Mattheson Grosse General-Bass-Schule, Oder: der exemplarischen Organisten-Probe Zweite, verbesserte und verhrte Auflage, Hamburg: Kissner, 1731

J. Mattheson, Grundlage einer Ehrenpforte, Hamburg, 1740

J. Mattheson, Organistenprobe, Hamburg, 1718

J. Mattheson, Vollkommene Capellmeister, Hamburg, 1739

M. Nastasi, "Rhetorik in der Musik Dargestellt am Beispiel C. Ph.E. Bachs und seiner Sonate in a moll fuer Floete allein", Tibia 1977

F. E. Niedt, Musikalische Handleitung, Hamburg, 1700

J. S. Petri, Anleitung zur Practischen Musik, Leipzig, 1767

W. Rackwitz, Singen ist das Fundament Eine Dokumentensammlung, Leipzig, 1980

A. Sorge, Anleitung zur Fantasie, oder Zu der schönen Kunst das Clavier wie auch andere Instrumente aus dem Kopfe zu spielen, Lobenstein, 1767

M. Storino, R. Dalmonte, M. Baroni, "An investigation on the perception of musical style

in Music perception", An Interdisciplinary Journal, Vol. 24, No.5

G. Ph. Telemann, Harmonische Gottesdienst, Hamburg, 1725

G. Ph. Telemann, Lebens-Lauff mein Georg Philipp Telemanns, Frankfurt, 1718

J. G. Walther Musikalisches Lexicon, oder Musicalische Bibliothec, Leipzig: Deer, 1732

H. Wettstein, Veröffentlichungen der Hamburger Telemann-Gesellschaft 3 - Georg Philipp Telemann 'Bibliographischer Versuch zu seinem Leben und Werk', Hamburg, 1981

S. Zohn, "New light on Quantz's evocacy of Telemann's music" Early Music Vol. 25 No.3

S. Zohn, "Telemann, Georg Philipp." Grove Music Online. Oxford Music Online

S. Zohn, Music for a Mixed taste, Oxford, 2008