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Chapter 2: About Early Music in general and the Tools you would need for improvisation.

2.1. Introduction

Before I give the word to a number of other experts[1], I must explain why I decided to include a chapter like this in this compendium. First of all, who is this whole study for and who could be interested in it and to whom it could be of any help?

On the one hand, there are EM fans who like to listen to it (live at concerts, via hard or virtual media such as CDs, DVDs and the Internet) or even play it alone or in the company. On the other hand, these are all those who as music students or graduate musicians, singers or instrumentalists, (playing some modern or wanting to learn some early instruments) for any reason want to deepen their knowledge of EM and even think of the possibility of improvising this music. This is also true for those who, as students of musicology, have at least basic theoretical knowledge[2], i.e. for my younger colleagues who are already dealing with EM as practitioners.

In this study all of them will find at least something new what could be of interest or to be useful in their further study and work. Depends on your prior knowledge about the topic of EM in general and many facettes of it in particular, it is clear that you are free to skip those parts and information that are already (well) known to you.

I thought that it would not be superfluous to remember the beginnings of emerging of interest for the so-called EM, then explain the basic settings of the historically informed performance of it today.

As this chapter is of preparatory importance, you will find in it basic information without which it would be very difficult to go further into more detailed considerations on ornamentation, improvisation, *cantare sul libro*, practical advice on how to improvise, detailed information on Italian improvisers of the 15th and 16th centuries, not to mention the improvisation on both *lire*.

What does the term “early music” at all mean? Before I became actively involved in it, depending on the countries and languages, in Croatia it was called “stara glazba” or “stara muzika” an equivalent of German *alte Musik*, Italian *musica antica*, French *musique ancienne* (or like the now completely forgotten name *musique d' autrefois*) and in English *ancient* or *old music*. Most of these names are derived from or are inspired by the Latin original: *musica antiqua*. However, already at that time (late 60's and early 70's of the last century) in the English-speaking countries the term *early music* increasingly start to be used. Analogously in German appeared the name *frühe Musik*. While I absolutely disliked this first name i.e. *ancient* or *old music* (creating at least by myself an automatic allusion to something old, rotten, dusty and dead), the new English and German terms seemed to me (and I believe to most of us, then youngest generation of EM *aficionados* and performers) much more appropriate because they imply music created and performed "earlier" and when we perform it again today, we do it as young and very lively people of our own time and for (at that time but also today) mostly younger audiences.

What could be included under that name? At the time I began to be actively involved with EM[3] the term referred mainly to music of the "pre-classical period" - that is, everything that was composed,

[1]Some of them, like T. Binkley or colleague D. Fallows, were my first teachers and role models, or advisory colleagues, and some, like Anne Smith, were colleagues with whom I played together at least once; in the latter case, during the performance of the *intermedii* for "La Pellegrina" in Siena in 1987..

[2] In most western as well as in some eastern countries, it has become normal for them to get the opportunity to perform this music during their studies.

[3] In the mid-sixties passively and from the end of sixties actively.

performed and listened to before the 1800. In the past 50 years or so, this has changed so much that even music before 1900 comes under the label EM too.

Although this earlier music should have included the music of Antiquity[4] (concrete preserved musical documents are few, but they exist), this term primarily refers to the music of the Middle Ages, Renaissance, Baroque, classical and (now) Romantic periods. Very simplified[5] we can say; the closer we are to our time, the better and more credible the information - the further we are, the scarcer and unclear it becomes. This must be faced by all those who want to deal with this music for any reason and in any way.

While in the music of later periods (closer to us), partly even in musical baroque, it was normal for composers to "endow" their performers with a “bunch” of detailed instructions on how to perform these works, from the early baroque (1600-1650) backwards they became rarer or simply non-existent. One of the reasons was that composers were almost as in a rule performers themselves who did not care that their works "must" or "may" be performed only and exclusively in a certain way *come Dio* (composer) *comanda.* Which also means that (other) performers could perform the same work in different ways, in different combinations and with their own (each time at least partially new) ornaments and improvisations.

So, creativity was expected and demanded not only from the composer but also from the performer. And, for all of us who are trying to revive today, to reconstruct or to re-create that "earlier" EM, this is where the problems begin ... Therefore, the study of the so-called performing or performance practices includes a range of sources that are not typically of a musical nature. It includes "digging" through church and city archives, judicial records and last wills, searching for everything available about performing music and the effects it had on the audience of its time in literature (poetry and prose, theatre works), iconography (depictions of musical content on frescoes, miniatures and figurative art). Many of these sources have a clear or less clear symbolic meaning, and only a small number of them may represent a "snapshot" of actual performance, especially in the case of an artist who knew how to play an instrument. Finally, organology is a theoretical discipline that deals with the research and classification of musical instruments as objects used to produce sound; it differs from organography, which only describes musical instruments (for instance, the historical-mythological representations of musical instruments) by M. Praetorius and M. Mersenne in the 17th century.

Ideally, scientists - musicologists and performers - practicians are “united” in the same person, which in the last 50 years or so has become more the rule than the exception. In the next positive case, it is a theorist who is interested in how this music, which he has been working hard on for many years, may have sounded in practice, and therefore accepts cooperation with a practician who will revive "dead notes" on paper thanks to her or his practical experience and (substantial) creativity.

Supposing that most people who might decide to read this study of mine has scarce or no knowledge about the (early or any) music in my homeland Croatia, I decide to include some explanations and information.[6]

In Croatia, primarily thanks to the pioneering scientific, journalistic and organizational activities of the late dr. Dragan Plamenac, an American musicologist of Croatian origin, as early as 1935, there was his initiative that led to the activities of the first "Zagreb Madrigalists" and the organization of

[4] And in this case the terms *ancient, alte, antica* and *ancienne* would be more than apropriate...
[5] Especially when we look back on most extensive musicological research up to nowadays.
[6] See more about that in the Chapter 7, from p. 57.66. In the case this would provoke some further questions you are very welcome to ask at ask@igorpomykalo.eu.

the so-called historical concert in Zagreb's Hrvatski Glazbeni Zavod,[7], entitled "From the Croatian musical past". As we can see, the old Yugoslavia, i.e. Croatia[8] was at the heart of the earliest movements for the revival of the EM. Who knows how things would have developed in our country and throughout Europe if this process (like everything else) had not been brutally interrupted by National Socialism and fascism, the crimes of the Holocaust and the destruction of World War II, the totalitarian "Real socialism", (to which belonged also Tito's socialist ex-Yugoslavia, from 1945 until the Homeland War.

Like the Phoenix, the EM revival movement re-emerged in the 1950s at the same time in Europe and America (and later everywhere in the world), certainly aided by radio and (later) TV, gramophone records and a number of specialized EM festivals. From the early 60's begins what we can call the real *boom* of EM. LPs (entire albums, even series) have been recorded and sold under the commercial label of "authentic" performances on "original" instruments, not only works by Baroque composers Bach, Handel, Vivaldi and others, but also works by a number of Renaissance and medieval composers and various codices such as Carmina Burana, etc. While this boom in the case of earlier, medieval and renaissance music calmed down somewhat in the late 1980s, that of baroque and classical music continues to this day. Responsible for this, (in addition to the undoubtedly high quality of highly professional performances of baroque Music) are the performances of earlier music, where the thin line dividing amateur and so called "professionals"[9] is not always clearly visible. Also, the music of later periods "closer" to us contains works such as early operas and oratorios, suites and early symphonies - all that what doesn't require too much additional "study", knowledge or special preparations from the "normal" already existing concert audience.

One of the problems of EM (which is becoming smaller over the years) is still where and how to study the technique of playing certain early instruments, appropriate singing technique and performance practice. The oldest (founded in 1933) and in many ways the best institution of its kind in the world is certainly the *Schola Cantorum Basiliensis* in Basel, and in the meantime, there is hardly any conservatory, college, music academy or university of music in Europe and the world without some modest possibilities to study at least some earlier musical instrument, singing and the like.

2.2. Early Music Revival

Interest in the music of the past is a relatively "new" phenomenon. Medieval, renaissance or baroque musicians performed mostly the music of their time. The interest in music (culture, philosophy and art in general) of Antiquity, shown by humanists and musicians (practician and theorists) in the late 15th, 16th and early 17th centuries created new forms (such as opera and oratorio), practices and instruments, but for a "real" revival of earlier music, we ought to wait until the early 18th century ...

In England, Johann Pepusch started the "Academy of Ancient Music" around 1720 to study the music of Palestrina, Thomas Luis de Victoria, William Byrd, Thomas Morley and other composers at least a century old. In Vienna, Baron Gottfried van Swieten presented home concerts of ancient music at the end of *settecento*, and it is where Mozart developed his love for the music of Bach and Handel. At the end of the 18th century, Samuel Wesley promoted Bach's music, which would mean that he preceded Mendelsohn by some 30 years ...

[7] Croatian Music Institute, the oldest music institution in Croatia, founded in 1827, organizing concerts in its concert hall, founding a music school (today the Zagreb Academy of Music), publishing the works of Croatian composers etc.
[8] Which always had a leading role in this segment of (musical but not only) so called "Yugoslav" culture.
[9]Although often the min difference is oftenn whether someone is paid for their work or does everything out of genuine passion.

In 1808, Samuel Wesley began performing Bach's organ music in a series of London concerts. Felix Mendelssohn is often credited with an important role in reviving the music of the past. He conducted the famous performance of Bach's Matthaeus-Passion on March 11th, 1829. The concert is cited as one of the most significant events in the revival of the EM, although the performance used modern instruments and the work was condensed, omitting a significant amount of Bach's original music.

In the early 20th century, music historians in the new musicological field began to study medieval and Renaissance music more carefully, preparing practical editions of many works. English choirs in cathedral churches revived these compositions, establishing a new standard and tradition in the performance of Renaissance choral music. Arnold Dolmetsch is considered a key figure in the early musical revival of the early 20th century. Dolmetsch's 1915 book "*The Interpretation of the Music of the XVIIth and XVIIIth Centuries*" was a turning point in the development of authentic (*sic*!) performances of early music.

Other important milestones in the revival of early music; In 1933, in Basel, Switzerland, Paul Sacher, along with some other prominent musicians, founded the already mentioned *Schola Cantorum Basiliensis*.

Beside Great Britain and already mentioned activities of the *Schola* in Basle, et least two Americans, one of them between and after the two world wars and other in the late 50's and mid 60's of the last century have been very important figures in the pioneering and systematic attempts to revive the EM through extensive concert touring and recording activities. First was the composer, musicologist and conductor Safford Cape (1906 -1973)[10] and other conductor and musicologist Noah Greenberg,[11] founder and leader (until his prematurely death in 1966) of an outstanding ensemble "New York Pro Musica." Grenberg toured the ex-Yugoslavia with his (small EM orchestra) and performed at the HGZ or Croatian Music Institute in 1964. It was the experience of attending that concert which decided my (early) musical and life path.

During the 70's and 80's a number of European ensembles, led by names such as Nikolaus Harnoncourt and Rene Clemencic (Austria), Gustav Leonhardt and Jos van Veldhoven (Netherlands), Philip Herreweghe, Sigiswald Kuijken (Belgium), Michael Morrow (Musica Reservata), David Munrow (Early Music Consort of London), Christopher Hogwood, Trevor Pinnock (Great Britain) and many others, made works of the medieval, Renaissance, Baroque and Early Classical periods available to a much wider public.

The early music revival changed the audience's listening habits to "classical" music by introducing them to a world of music they had generally not known before. In the long run, the methods of performance and values of the specialists of early music, especially what became known as the search for the so-called. 'authenticity 'had a lasting effect not only on the performance of the EM, but also on the performance of music from later periods.

But this revival could not be complete without the reconstruction of the instruments of the Renaissance and Baroque periods. Makers like Otto Steinkopf began meticulously reproducing

[10]1906-1973. In 1957, he founded the *Séminaire Européen de Musique Ancienne* in Bruges, and in 1961, with the support of the Calouste Gulbenkian Foundation, a similar institution in Lisbon. In the summer of 1974, I had the honour and opportunity to attend a three-week SEM seminar in Bruges, led by French musicologist Bernard Gagnepain. Although somewhat of an "antique" and rigid type even then, the seminar was truly European in the fullest sense of the word. I played and exchanged early music information and first-hand experiences with colleagues from Belgium, Denmark, Finland, France, Greece, Italy, the Netherlands, Germany, Norway, Portugal, Spain, and the United Kingdom - as the only representative from the former Yugoslavia.

[11] New York 1919-1966.

wooden wind instruments: crumhorn, cornamuse, rauschpfeife, shawm, flute and early clarinets and oboes. Not to forget makers of various plucked or bowed and keyboard instruments too.

In the 21st century, ensembles, training programs, a series of concerts and recordings dedicated to the EM continue to flourish. The appearance of a number of EM festivals and specialized departments at music conservatories has made this music a regular part of America and Europe's main musical activity.

Recordings from all periods of the EM are available today, including works by some lesser-known composers. Although some major record labels have reduced funding for classical music recordings, several independent record labels, such as *Harmonia Mundi* and *Hyperion*, continue to produce EM recordings. Most of the available recorded music can be found for purchase (or download) online. Very important have been the editors and printing activities, after pioneer editions of the German publishing house Moeck, particularly widespread among amateur and professional musician have been editions by London Pro Musica, by my colleague Bernard Thomas.

Mentioning the internet, today (unlike the situation only a quarter of a century ago) it is relatively easy to find a huge amount of information, audio or video (studio or concert) recordings of EM. I mean the so-called social networks like Facebook, Twitter and platforms like Vimeo, YouTube, SoundCloud[12] and a host of others. It should not be emphasized that downloading some of the information (e.g., from Wikipedia) requires due diligence, verification and comparisons with more serious sources.

2.3. Historically Informed Performance

In addition to the Early Music Revival, it exists the term "Historically informed performance" (HIP) - significantly better than the old "authentic performance" on "original" instruments.

Let's see what it's all about and if there are any differences in relation to the first term.

The basic definition would be that HIP (also called period performance) is an approach to performing classical music, aimed at being faithful to the manner and style of the musical period in which the work was originally conceived and recorded.

The HIP is based on two key settings: the application of stylistic and technical aspects of performance, known as performance practice; and the use of instruments of that period, (which may be original historical instruments or their reconstruction) that were used at the time the original compositions were composed, and which usually have a different tone and tuning than their contemporary equivalents. Further areas of study, changes in listeners' expectations and tastes, are increasingly being explored.

Since we do not have (sound) recordings of music from the time before the end of the 19th century, the historically informed performance is largely derived from the musicological analysis of the texts. Historical discussions, pedagogical books and critiques of concerts, as well as additional historical (archival) sources, are used to gain insight into the performance practice of certain historical periods. Previous recordings (cylinders, discs, and reproducing piano rolls) from the 1890s onwards have allowed researchers of 19th-century musical romanticism to gain a very detailed understanding of this style, though not without open questions.

[12] See links in the Appendix.

Some critics dispute the HIP movement's methodology, arguing that the choice of practices and aesthetics are a product of the 20th century and that it is ultimately impossible to know how earlier performances sounded. Obviously, the older the style and repertoire, the greater the cultural distance and the increased the possibility of misunderstanding (already scarce) sources. For this reason, the term "historically informed" is now preferred over "authentic" performance because it recognizes the limitations of academic understanding, rather than implying absolute accuracy in recreating the historical style of performance.

Angela Mariani, in her book *Improvisation and Inventio in the Performance of Medieval Music* (Oxford University Press, USA, 2017), references British musicologist Daniel Leech-Wilkinson, who boldly asserts in his significant work *The Modern Invention of Medieval Music* that much of the "medieval music" performed today amounts to "new music." Mariani finds this assertion to be welcome, as it relieves performers of the expectation to justify every note and nuance historically. She acknowledges that in our current context, it's inevitable that our performances would incorporate elements of "new music."

Leech-Wilkinson's statement challenges us to confront the inherent contradiction in modern performances of medieval music: we endeavour to recreate it authentically while recognizing the impossibility of achieving complete historical accuracy. This tension lies at the core of historical performance practice, where practitioners seek to balance fidelity to historical sources with contemporary interpretation. Although the fervent authenticity debates of the 1980s have subsided, the pursuit of authenticity continues to shape the work of early music performers and scholars. Audiences often anticipate performances that offer an "authentic" glimpse into the past, even though the true historical experience remains elusive, existing only in the realm of imagination or through the hypothetical aid of a "time machine."

2.4. My opinion on some problems of today's EM performance

Although we have sources written by music theorists of a certain period, who were usually both composers and performers, their writing is often not clear enough for us and almost as a rule does not contain details about performance practice, exactly what we would be most interested in ... They, of course, wrote not for "us" or some later generations but for people of their own time, to whom all this was well known and clear. That' s why all of us who are trying to penetrate the "secrets" of the EM performance must try to clarify them with other helpful sources. These are, for example:

a) Iconographic sources[13]:

Musicologist research often overlaps with the work of art historians[14]; by searching images and drawings of performing musicians - contemporaries of a particular musical period, experts can made conclusions on (at least some) details about everyday performance. In addition to showing the ensemble's layout, the work of art can reveal details about contemporary playing techniques, such as the way of holding the bow or embouchure by playing wind instruments etc.

However, just as an art historian must evaluate a work of art according to her/his own criteria, a musicologist must evaluate the musical evidence of an image or illustration in its historical context,

[13] See also Chapter 6 and Chapter 7. For Iconography of the Lira da braccio see my study *New Contribution To The Lira Da Braccio Iconography, with Appendix, 2022* on my home page www.igorpomykalo.eu

[14]Truth be told, it should be acknowledged that the sources discovered initially by art (or literature) historians were of interest to musicology only 50 or even a hundred years later. This is understandable given the fact that musicology, unlike the general history as well as those of literature and art, is a relatively young scientific discipline.

considering the artist's potential cultural and political motivations and artistic freedom. The historical image of a musician can be an idealized or even imaginary representation (combination) of musical instruments, and there is an equal risk that it can lead to historically mis-informed performance.[15]

However, it is sometimes evident that the artist knew the instrument very well, even the technique of playing on it.

Iconography is often the only source available to us, but it cannot give us answers to some fundamental questions like; how the instruments really sounded, how they were played and how musician ornamented or improvised the music.

b) Written sources:

They can be archival (payment or other lists containing information about the name of certain professional musicians in the service of a city commune, a court or similar, how much they earned and for what services; notarial records of the last will of a person who leaves behind, among other things, a collection of instruments and/ or music, etc. In poetry, literature (prose works or plays) whether spiritual or secular, we often find even very detailed descriptions from which we learn about the various types and venues of performances, the number of performers, combinations of voices and instruments and even the reactions of the audience present.

Except in the case of Italy (culturally and musically certainly the leading "force" in the late Middle Ages, Renaissance and (at least) the early Baroque, this is also true for most other southern, central and northern European countries and for various regions of Croatia - despite the extremely difficult situation due to foreign (Venetian, Hungarian and Austrian) rule and centuries of bleeding at the crossroads or (daily) defence of Christianity against Ottoman invasion…

c) Material sources:

Partially (or rare almost completely) preserved instruments[16], based on which, as in comparison with iconographic sources, we can draw some conclusions about their construction. This allows us to make modern reconstructions of earlier instruments, and through numerous practical experiments[17] to make suppositions on reconstructing the technique of playing on them.

I give the word to several fellow musicologists, who gave equally important contributions to the research of EM as musicians - practitioners, lecturers and authors of many articles and books.

2.5 EM In the light of the writing of several leading experts

American musicologist and active musician, **Howard Mayer Brown** (1930-1993), left a series of books and articles that still form an indispensable basis for all those interested in early (especially Renaissance) music, its instruments, instrumentation, its performance practice and musical iconography. Even if I already mentioned some of the many problems connected with the performance of EM today, I think it can be done another time by Brown too.

[15]Sometimes we can't be sure if the artist simply transferred an example known to him from another template and other countries. In that case, regardless of the quality and realism of the depiction, it cannot be taken as "typical" of the place where it is preserved.
[16]Even if the body and neck of some bowed and plucked instruments are preserved, it is almost always not the case with some of "vital" parts such as strings and bow hairs or reeds of wind instruments.
[17] What I call practical, applied, musicology or musicological laboratory.

Regarding the performing practices of 15th and 16th century music[18], Brown begins by stating that today's musicians must make several fundamental decisions before they can offer a convincing performance of any composition of those periods - whether they play it or sing it, whether using a modern transcription or (facsimile) edition of manuscripts, or printed books from the Renaissance. In the case of a performance of the vocal composition, the musicians must first decide how to arrange and underlay the text below the notes. It is up to them to decide which accidents[19] [sharps or flats] should be added to those listed in the original. They must decide whether all the voices of the song should be sung, only some or only one - so will the song be sung *a cappella* by unaccompanied voices (if so, how many per part and what types of voices: boy's, male or female soprano or alto), or a combination of voices and instruments.

> If instruments are to be used, musicians must decide which, and whether the composition should be edited for instruments such as the lute (which can play all or most voices and therefore needs a special score, usually in tablature), as the player cannot perform several voices from individual parts. Musicians must decide whether to write or improvise ornaments (diminutions), if so, how complex the ornaments may be, and to which voices they should be applied.
>
> Next, they must decide at what tempo the work should be performed and how the parts written by different mensuration should be interconnected. They have to decide on which pitch their instruments should be tuned, in which temperament (*equal, mean tone*, etc.) they want to play and whether they want to transpose the written music in relation to what they usually think it is the correct relative pitch of their instruments. They must decide whether to play or sing their melodic lines *legato, staccato* or with a certain degree of separation between the two. And finally, they have to decide if they want to try to create “thinner” but clear sound without vibrato or “fatter,” richer sounds with some vibrato on certain notes or throughout the song.[20]
>
> All these types of decisions had to be made by performers in the 15th and 16th centuries. The main duty of the EM performance practice experts today is to discover how such problems were solved at the time when music originated. One of the tasks of today's performer is to decide whether the speculative solutions proposed by scientists (musicologists) are practical and can be reconstructed today and, if so, to determine to what extent they should be applied to performances in the 20th [21st] century.
>
> Throughout the Middle Ages and the Renaissance, musicians were expected to add accidents that were not indicated in written sources when performing[21]. These chromatic inflections were made mainly on cadences, where it was necessary to raise the seventh degree of the scale (or less often to lower the second degree), or to avoid *tritonus* and other unpleasant intervals, either melodically or harmonically. ...
>
> As early as the 15th century, various individuals, such as Pietrobono in Ferrara, were known for their virtuosity and skill as solo singers or instrumentalists, although it is not entirely clear whether his repertoire included types of written compositions appearing in preserved sources or

[18] *Performance Practice, Music before 1600*, The New Grove Handbook in Music, edited by H. M. Brown and S. Sadie, Macmillan Press, W. W. Norton, New York 1990, p.3

[19] About the so-called *musica ficta*, see this chapter under Wegman, from p.24 onwards.

[20] Obviously, vibrato was used but mostly as one of many ornaments and not as a constant, or as an ideal of "beautiful" tone by singers and instrumentalists later and today.

[21] The so-called *Musica ficta*, see latter, p.24.

he like other Italian *improvvisatori*, sang mostly orally transmitted repertoire, including long narrative songs.[22] ...

Sources with intabulations as well as writers on performance practice suggest that today's performers should feel at least as obligated to add *passaggi* (or at least some discreet embellishment) to cadences when performing 16th century music, as they do when performing 17th and 18th century music. It is less clear whether similar types of ornaments should be added to 15th century music, as we do not have as many different sources from the earlier period. We do not know for sure to what extent the embellishing techniques were then used by singers or instrumentalists, although a number of organ tablatures from northern Italy and Germany point to possibility that this was the case for at least some performers.

In the case of 16th-century music, the question of taste and correctness arises in connection with ornamental techniques. Some 16th-century composers objected to the way virtuoso musicians "blurred" the character of the compositions they performed, with an avalanche of fast-paced ornaments that "took away the breath" of listeners. If the goal of today's performer is to better reveal the composer's intentions, the embellishments should be reduced or removed; but if his aim is to reproduce the usual practice of the time, then he must master all the ornamenting skills taught by numerous treatises or found in numerous lute tablatures and music for keyboard instruments.

At least theoretically, there was one unchanging rhythm on which all 15th and 16th century music was based. According to the Milan choirmaster and theorist from the end of the 15th century Franchinus Gaffurius, the time of beating the pulse of a man who breathes calmly, i.e., about 60 beats per minute, was taken as a tactus. At least in the 15th century, composers, when they wanted music to be faster, wrote in slower note values, and longer note values signalled slower music. The system of proportions regulated changes in rhythm from part to part of a composition.

It is almost impossible to know at what relative pitch[23] music was played or sung in the 15th and 16th centuries. Some fixed-pitch instruments (such as large church organs and recorders), of course, have survived from the Renaissance to the present day, but they do not always give us clear answers to our questions. For example, in many organs the pipes have been changed since they were built originally, and in the case of some recorders we cannot always be sure at what pitch they actually played. Anyway, the relative pitch seems to have varied from time to time as well as from place to place. ...

Instruments with frets, such as the lute, *cittern*, and viol, were usually played with a temperament that was close to what is now called *equal*, although theorists have not yet been able to fully justify or explain it. Some viol and plucked instruments players tried to adjust their frets unevenly to achieve the so-called *mean tone* tuning. Some 16th-century writers acknowledge the imperfection of intonation resulting from a combination of different types of instruments - for example the work of Ercole Bottrigari *Il Desiderio* - but consorts of voices and instruments that sang and played with three different tunings, *just*, *mean tone* and *equal*, however, were common in the 16th century. The musicians have obviously found some system to overcome this problem in a satisfactory way.

[22] On Pietrobon(o) and some works in his repertoire, see L. Lockwood, *Music in Renaissance Ferrara 1400-1505* (Oxford, 1984), 96-108, who also cites earlier studies on improvising poets-singers, at Italian courts of the 15th century. See in the Chapter 6, p.23.

[23] See later in this chapter under Kenneth Kreitner. p.19.

Brown believes that we will probably never know about some of the qualities of performance during the 15th and 16th centuries, such as whether musicians regularly slowed down on cadence, changed the dynamics of individual notes or whole phrases, regularly used *crescendo* and *diminuendo*, emphasized the main note of some phrases. If so, did they have a whole range of different accents to revive different types of music: in short, did Renaissance musicians shape phrases and appreciate the types of phrasing that give us so much pleasure and the impression of making music alive?[24]

In his article "The Work is not the performance"[25] **Thomas Binkley** (1931-1995) says, I quote:

> Early music flows, as any music does, from practice to practice with modest changes from time and place to time and place. What applies to one kind of music may easily apply to another; what I write below about medieval music surely has bearing upon most other music as well.
> Very different performances of the same work occur. This not only draws our attention to the differences between performances as versions of works, but also invites the observation that the work and the performance are two quite different things. The relationship between the two is experienced in different contexts: improvisatory deviation from the score, use of good and bad sources, adequate or inadequate presentation of style or, in the case of historical performance, of historical information, and so on.
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> Just as a work may receive multiple performances, it may have multiple exemplars. Each manuscript version of a piece of music, no matter how much at variance with other versions, is usually equally valid as a representation of that piece, and each performance is a valid event in itself, separate and apart from the notes in the manuscript. Differing manuscripts often do present quite different musical details, not necessarily of equal quality but each with a separate claim to validity. Thus, we might legitimately encounter multiple different and valid performances of the same work. This is perhaps more likely in some repertories than in others, depending upon the level of control by the composer over details in the 'score', as well as the accidents of transmission.
>
> It is fundamental to the establishment of sensible performance priorities that the written work was often really nothing more than a model for the performance. There are philological priorities for analysis of a work and there are performance-determined priorities appropriate for its performance. These priorities are not at all the same.
>
> What we know of early music is limited to a large degree to the documents reflecting the compositional process (the manuscript containing the notes), but not the performance. Performance must be reconstructed theoretically from many sorts of documents and respecting the need to hypothesize well-founded but not provable performance situations.
>
> Not long ago one scholar suggested that we should add nothing in the performance of monophonic vernacular song that is not in the score, for 'these notes at least we know were sung'. I think we need not be so suspicious of performance done convincingly and appealingly. To limit performance to the sketches that have been preserved would be to limit the performance to a rendition of only the model. The one thing we can say for certain about the performance of that music is that the notes as we see them did not constitute the performance. To find out what did, we must examine the elements of performance, working back, I suggest, from an imagined performance that is historically plausible.

[24] Answers to some of those questions could be found by A. Smith, from p.26.
[25] Thomas Binkley, The work is not the performance, p. 36 et seq., In: *Companion to Medieval & Renaissance Music*, ed.: T. Knighton and D. Fallows, J.M.Dent & Sons Ltd, London 1992

In the next paragraph, Binkley enters an area that always contained a certain amount of improvisation, orality:

> **Balance of oral and literacy**
>
> A performance always contains some degree of orality. A primary orality is found in any completely unwritten (non-literate) practice while a secondary orality consists in performance in some way based upon a written 'score', even when it is not identical with it. Just as we may speak of a primary and secondary orality, we may speak of primary and secondary literacy. As we move from primary orality (completely oral) to primary literacy (complete dependence upon the written score), there are three levels to consider. The first level of literacy reflects the model with variations attributed to some secondary writing - variants. The next level introduces in the writing unnecessary difficulties, obstacles such as puzzles or notational curiosities which require solution, and which create a class of insiders (who understand) and outsiders (who do not). The boundaries of the third level are fixed by the idea that what is not contained in the notation is not part of the work, and presumably must not be done. No one today would seriously suggest that the troubadour repertory is an example of either the second or the third levels of literacy.
>
> It is probably fair to suggest that twelfth- and thirteenth-century monophonic vernacular song (*troubadours, trouvères, Minnesang*, etc.) is far more oral (level one) than the polyphonic song of the following century, and that the polyphonic songs of Lescurel and Adam de la Halle reflect more orality than those of Machaut. This is seen in the unsystematic, pragmatic notation of the earlier models as opposed to the (relatively) systematic practice of Machaut and later composers.
>
> But no serious performer today expects to find in manuscripts and early prints all that he needs to know in order to perform correctly even the pitches and rhythms of any of this music (let alone the articulation, phrasing, tempo, instrumentation and so forth). The oral tradition supplied the missing information that is now lost. The information that was considered important and necessary to identify a composition in terms of its musical literacy was written down; the information that concerned practices shared between pieces and that falls outside the world of literacy, was imperfectly transmitted.
>
> The solution to this apparent dilemma must be looked for in period-specific practices. We will hardly profit much more in the performance of Renaissance and Baroque music by consulting still more manuals on diminution, ornamentation or articulation (presuming of course that well-known sources have indeed been consulted). We will profit immensely if we consult literary theory. (Doni has been on the tip of the tongue for a few years now.) I suggest we try to connect our performance priorities with those of earlier times.

The remaining part of Binkley's text contains some more precise reflections and information on rhetoric and memory which I would prefer to quote in chapter 6., p.10.

2.6. What factors are very important for EM revival in general and for improvisation in particular?

The order I have chosen is random and does not follow the "importance" of one of the problems over others.

2.6.1 Mode:

Liane Curtis[26], says the following about them:

Definition

In music of the Middle Ages and Renaissance, the modal system provides sets of pitches with a designated primary pitch, or final, with other pitches organized around and prioritized by that final. The mode of a piece suggests ranges, melodic content, and where cadences occur; and these features affect other musical characteristics as well. …

From the eleventh century to the end of the Middle Ages, descriptions of mode by music theorists were fairly stable. Presentation of the final and sets of pitches of the modes are frequently found, both in the Middle Ages and in modern discussions of mode (see ex. 1). They illustrate an aspect of the modal system, but the modes should not be equated with scales: principles of melodic organization, placement of cadences, and emotional affect are essential parts of modal content.

Example II-1 Curtis and Schubert, Eight modes [27]

Each mode contains a particular fourth and fifth. The modes sharing the same final are a closely related pair. Odd-numbered modes, those with both their constituent fifth and fourth above the final, are called authentic, while even- numbered modes, with the fourth falling below the final, are plagal. While the final is generally the most frequent cadential pitch in a particular mode, as well as the usual ending pitch, the confinal is also suitable for ending a piece, as well as an important cadential point. The confinal is a fifth above the final in authentic modes, and a third above in plagal modes. The exceptions are the places where the confinal would fall on *b,* which, because it could be either soft (flat) or hard (natural), was not accepted as a confinal (or final).

Because of the desire to avoid the F - B♮ tritone, the use of Bb in the fifth and sixth modes was commonplace from the eleventh century onwards. The use of a flat signature in other modes usually indicates the transposition of the mode upwards by a fourth.

All eight modes developed together, but the plagal modes are traditionally considered subsidiary to the authentic. The ancient Greeks gave their modes the names of particular tribes. The medieval use of the ancient Greek names illustrates the derived status of the plagal modes, since each is a ‘hypo’ (Greek for ‘under’ or ‘beneath’) version of its related authentic. Since medieval understanding of these ancient modes was flawed, today it is more consistent and practical to use the traditional designation of the modes with the numbers one to eight.

Classifying function

The modal system was used as a means of classifying medieval and Renaissance music, both chant and polyphony, and this function is frequently emphasized in scholarly literature today. The steps taken to assess the modal content of a piece are in themselves significant analytical approaches.

[26] Liane Curtis: Mode, pp.255-264, in: *Companion to Medieval & Renaissance Music*, …
[27] See Music Examples A. Ch. II-1 Curtis & Schubert ex.1.

The use of distinct species of fourth and fifths (tetrachords and pentachords) provides each mode with unique melodic content. Marchetto da Padova and Johannes Tinctoris are among the late-medieval theorists who present these species as fundamental melodic building blocks (see ex. 2).

The choice of mode determines which set of species will dominate the melodic content of a piece. Since fifth and sixth modes traditionally use B♭, they appropriate the intervals of the fourth species of fifth. The seventh and eighth modes share the intervals of the first species of fourth with modes one and two. The use of fourths or fifths from modes other than the main mode of a piece is called commixture, which can be considered as the modal equivalent of modulation.

The mode of a piece, then, can be classified by observing the use of the final, confinal, ranges, and species of fourths and fifths. That there are a few pieces that defy unambiguous categorization illustrates the flexibility of the modal system: the guidelines served composers as a stimulus and resource rather than as rigid and narrow rules. While medieval theorists discuss mode in terms of melody, we must remember that this melodic aspect is essential to every voice of a polyphonic piece, and moreover, melody is inseparable from other aspects of musical content. The whole character, mood, or affect of a piece of music - what Rhau refers to as 'nature' - is generated by the composer's response to and use of mode.

Affect

The concept of modal affect - the idea that particular modes evoke specific emotions and responses - originated with the ancient Greeks. Some modern scholars dismiss modal affect because of the divergent qualities which are attributed to various modes, and because theorists rely in differing degrees on the ancient descriptions of modal ethos. Rather than brushing the concept of modal affect aside because of certain inconsistencies, we should find the widespread interest in the subject remarkable and significant. Musicians - those who wrote about music, at any rate - clearly express a commitment to the concept of modal affect, and signify that this was an important aspect of mode.

Composers were aware of the general affects of mode but they also felt that they could, for certain reasons, work around these standard affects. In many cases, it was a challenge to compose in ways contradicting the usual affect of the mode, a challenge that could be taken 'provided', as Heinrich Glarean says, 'that the happy genius of such as Josquin Desprez ... is present'. …

Today, performers can benefit from observing the consistencies in compositional approach and musical character and that are often associated with certain modes. The manifestations of mode varied in different periods, genres, or regions: a group of pieces unified in function and geographic origin can often be found to share musical traits that correspond to their modal orientation. For some repertories, features that are aligned with mode are not readily apparent, and thus mode, while still an underlying element, was probably not a primary compositional consideration. On the other hand, when features of character correspond with the mode, it seems likely that it played an important role in the compositional process.

Mode as a compositional tool

In the late fifteenth and sixteenth centuries, theorists discussed the application of the modal system to polyphony in increasing detail. These more self-conscious explanations result from both a humanistic desire to explain music with approaches grounded in ancient theory and from a

willingness to depart more readily from medieval traditions and to give their treatises a more practical value. ...

An expanded and multi-dimensional view of mode suggests that it not only influenced the basic melodic material but affected other aspects of musical content, such as mensuration, harmonic content, and phrasing. The principles described by Tinctoris and other theorists, defining modal content by means of finals, ranges, and the species of fourths and fifths, can be used to assess the basic modal orientation of the pieces in question.

Mode in the sixteenth century

In the sixteenth century, numerous manifestations of the importance of mode are present, and should be considered by performers. These include:

1.Patterns in the use of commixture, the use of another mode besides the main mode of a piece. For instance, in the motets from the period of Josquin, the use of the eighth mode in a third-mode piece is common, while commixture with the first mode in a third-mode piece is not only rare, but usually of special significance when it is employed. Glarean's discussion of Josquin's use of first mode within his third-mode setting of *De profundis* is extraordinarily detailed.

2.The close associations of certain genres of texts with particular modes. In the early sixteenth century, the second mode was generally chosen to set lamentation texts. The practice of using standardized types of melodic *exordia* for each mode meant that these phrases not only signalled the mode of the piece, but also indicated the text content. The importance of modal affect in this respect is obvious.

3.The modal ordering of pieces in printed collections suggests that modal content should be considered in organizing programmes. Pieces could be arranged into sets with related or complementary ranges and affect, and the surrounding pieces in the original sources might be considered for performance as well.

4.The many ways mode is used to heighten the meaning of the text being set. One of the most obvious ways is when an abrupt commixture (change of mode) accompanies a sudden shift in the text; for instance, a shift in voice from narrator to first person. Changes of mode can also emphasize individual words and phrases. Patterns in these kinds of relationships need further investigation by scholars.

Conclusions

An attempt to understand and interpret early music should include a consideration of contemporary theoretical material. Mode is a part of this theoretical background to compositional practice, but the theorists do not tell the entire story. After beginning with their discussions, we must then turn to the music itself, and look for ways in which use of certain modes meant the consideration of certain styles, characters, textures, and metre. Performers should compare pieces in the same mode, as well as pieces sharing mode and mensuration, in order to examine the emotional range, and musical gestures of such pieces, since the areas of overlap may indicate a shared concept of modal affect. Mode serves as a part of this musical language, not just as sets of theoretical rules, but as part of the stylistic value system that provided compositional vocabulary and guidelines.

Canadian musicologist and pedagogue **Peter Schubert**[28] says following about the modes:

> Modes function in Renaissance music the way keys do in later tonal music. In a general way, they define which notes are more important than other notes, they give a sense of direction, they give a piece a special "feel" or "sound," and they give closure at the end of a piece (the sense that we have come back to where we belong). A melodic line is said to be "in" a mode in much the same way that a line can be "in" a key.
>
> Modes use the natural ("white") notes in the diatonic arrangement, with a few occasional accidentals. Intervals in the diatonic arrangement are measured in terms of the number of letter-named notes they contain (e.g., a third spans three notes). Intervals are further distinguished by their quality, determined by the particular size of the step (for example, a major third contains two steps of a major second, while a minor third contains a step of a major second and a step of a minor second).

The Twelve-Mode System[29]

Renaissance writers argued about different modal systems a lot; we have chosen to use the very logical twelve-mode system here. The criteria that we will use for defining them are:

1.The final note in a melodic line. If the line ends on D, the mode is first or second; E, third or fourth; F, fifth or sixth; G, seventh or eighth; A, ninth or tenth; and C, eleventh or twelfth. Each mode also has a Greek name (see Ex. 1-la).

2.The range of the line. It is normally an octave, built either above the final or above the fourth below the final. The former is the range of the authentic, odd-numbered modes: the latter the plagal, or even-numbered modes. In the Greek nomenclature, the names of the plagal modes begin with the prefix "hypo-" ("below"). The last note (final) in a plagal melody lies in the middle of the range; in an authentic melody, at the top or bottom. In practice the modal octave may be exceeded by a step at either end. If the melody goes farther than that, the mode is called "excessive"; if the melody covers both the plagal and authentic ranges, its mode is said to be "mixed"; if the melody covers less than an octave, it is called "incomplete."

3.The species of fourths and fifths. The types ("species") of fourth and fifth are numbered according to the positions of the semitones and tones enclosed within them (T = whole tone, S = semitone). For instance, the TTST fifth is called a "fourth species fifth" and it occurs in two locations in the natural diatonic system (some species of interval only occur in one location, as shown in Ex. 1-lb). When a species of interval is characteristic of more than one mode, the whole octave must be examined to determine the mode. The species of fourth and fifth give a mode its "sound," so you should learn to sing the different species and to identify them aurally. The end points of the various species of interval can be stressed by skipping to and from them or by using them as turning points in a melody.

4.Characteristic notes. The end points of the characteristic species of fourth and fifth are the characteristic notes of the mode. They are always the final and the fifth above (or the fourth

[28] Peter Schubert, *Modal Counterpoint, Renaissance Style*, Second Edition, New York Oxford Oxford University Press, 2008.

[29] In 1547, Swiss music theorist, Henricus Glareanus, published the *Dodecachordon,* in which he solidified the concept of the church modes adding four additional ones: the Aolian (mode 9), Hypoaeolian (10), Ionian (11) and Hypoionian (12).

below) the final. Thus, if we hear or see a melody that is continually emphasizing the notes E and B, we can be sure that melody is either in the Phrygian mode or the Hypophrygian.
The structural features of the twelve modes are illustrated in Example 1-la. The numbers of the modes (circled), their constituent fourths and fifths (bracketed and numbered), their finals (whole notes), and their Greek names must all be memorized. It is fairly easy if you begin by remembering that D is number one in all things (it is the first final and the lowest note of the first species fourth and fifth), that odd-numbered modes have the final at the bottom, and that B is not a final. Five of the octave spans (A-A, C-C, D-D, E-E, and G-G) contain two different modes; in order to tell them apart (the Hypomixolydian from the Dorian, for instance) you need to look at the final.

Example II-1 Schubert ex. 1-la The twelve modes[30]

As an aid in memorization, you may find it helpful to compare scales of modes with scales of major and minor keys. For instance, the ninth and eleventh modes resemble A minor and C major, and you can think of the Dorian as a minor scale with a raised sixth degree, the Lydian as a major scale with a raised fourth degree, etc.

Accidentals and Transposition

An occasional B♭ may be used without changing the mode. As we have seen, the principal reason to use a B♭ is to avoid a tritone skip or outline. No other accidentals are to be used except for leading tones at cadences, which arc supplied for you in the early exercises.

Transposition

If a B♮ occurs in the signature, we take this as an indication that the mode has been transposed. Its final note and the extremes of its range are a fourth higher or a fifth lower than in the natural system, but its characteristic arrangement of semitones is the same. The names of such modes include the name of the new final (e.g. "*F*-Ionian" or "*A*-Hypophrygian"). In a piece with a *B*♭ in the signature we can expect to find *E*♭ used in the same way that *B*♭ would be used in the system with all natural notes; to correct a tritone without changing the mode (see Ex. l-3h). You may not use a *B*♮ in the context of the system with one flat. Key signatures other than the one with one flat are rarely used in Renaissance music, and will not be considered here.

The Importance of Mode

Range

Unlike keys, modes establish the outer limits of the range of a melody. The limits of melodies were based on vocal ranges, and for the most part these were limited to a tenth or twelfth. Within this range, the concept of mode further restricted melodic activity to a little more than an octave, with the notes at the extremes of the octave having a special importance (they are the final or the fifth). This aspect of mode is a little hard to grasp for us, since the range of more recent music has been expanded, and in polyphonic music it is hard to hear extremes of a single line. Mode will help you avoid lines that meander around over a great range, a common mistake in early counterpoint studies.

Skips and Outlines

[30] See See Music Examples A. Ch. II-1 and II-2 Curtis and Schubert.

A melody will tend to stress the important notes of its mode by placing them at melodic turning points or at the extremes of skips. The species of interval enclosed in the skip or outline identifies the mode, and the emphasis on these notes gives consistency to the melody. Other skips and outlines can be used for contrast (see Ex. l-3j).

Cadences

Cadences are like punctuation at the ends of phrases. In a single line, cadences are usually made by a descending step. Mode determines the right notes on which to conclude the piece and most phrases. Then cadences can be made on other notes to provide contrast (see Ex. l-3i).

Expression

Renaissance authors believed that the different modes were appropriate for different moods or emotional states that we call affects. The Mixolydian, for instance, was sometimes considered happy, the Dorian serious, and the Aeolian sad, although authors did not always agree with one another.

I decided to add (even if repeating something already quoted from Curtis and Schubert) what about *modi* say **Angela Mariani** in her excellent book *Improvisation and Inventio…*[31]

Modes in modern Western music are often introduced to the student by way of a system based on a series of diatonic "scales" corresponding to the white keys of the piano. These scales and their mode names are shown in Table 4.1:

Table 4.1. Mode Names (Modern Usage)

Ionian	CDEFGABC
Dorian	DEFGABCD
Phrygian	EFGABCDE
Lydian	FGABCDEF
Mixolydian	GABCDEFG
Aeolian	ABCDEFGA
Locrian	BCDEFGAB

In order to facilitate quick aural recognition of the modes, music theory students are often encouraged to think of these modes as "altered" versions of the major and natural minor scales, as shown in Table 4.2:

Table 4.2. MODES AS "ALTERED SCALES"

Mode	Alteration	Position of altered note

[31] Angela Mariani: *Improvisation and Inventio in the Performance of Medieval Music*, Oxford University Press, N. York, 2017

Ionian	(same as major scale)	
Dorian	natural minor with raised sixth	DEFGABCD
Phrygian	natural minor with lowered second	EFGABCDE
Lydian	major with raised fourth	FGABCDEF
Mixolydian	major with lowered seventh	GABCDEFG
Aeolian	(same as natural minor scale)	
Locrian	natural minor with lowered second and fifth	BCDEFGAB

> For a person trained in either classical or popular Western music, hearing modes in terms of these alterations helps identify modes when we hear them in folk, rock, or other vernacular musics, or in classical and church music that borrows from folk, medieval, or Renaissance musical material. …
>
> However, our twentieth-and twenty-first-century ears are trained to hear music in terms of functional harmony, and modern musicians naturally gravitate toward hearing these modal musics in the context of chordal accompaniment. …
>
> To learn the language of modes for the purpose of medieval music, musicians must learn to think of mode in a different way, immersing themselves in a musical language that is not simply a matter of "altered" major or minor scales and is not based on the concept of tonal harmony (even if it sounds "tonal" to modern ears).
>
> **Medieval Mode: A Brief Historical Background**[32]
>
> Far from being just a series of intervals or an "altered" octave species scale, a medieval mode consists of a collection of melodic phrases, patterns, incipits, gestures, and cadences that appear in a particular mode, in both sacred chant and secular melodies. This way of identifying the character of a mode involves far more than simply looking at the last note of a piece to determine what the final of the mode must be.

Mariani's descriptions, explanations and examples which follow are so important that only a detailed study of her above-mentioned book would help those seriously interested.

There is another important thought of Mariani concerning the link between the memorisation and the Guidonian hand:

> Both the *Rhetorica* and Cicero are speaking quite literally of creating architectural images in the mind. Using the framework of this image, content that needs to be memorized is placed in very specific locations. A very famous musical example of a locational mnemonic image is the "Guidonian hand," found in Guido D'Arezzo's eleventh-century pedagogical and theoretical treatise *Micrologus*, in which the notes of the medieval hexachord system (*ut, re, mi, fa, sol*, and *la*) are visualized on the joints of the hand rather than in a graph or chart. Figure 3.11 illustrates the hexachord system as it might appear in a chart:

[32] See Music Examples A. Ch. II-3 Mariani, Modi and Species.

Figure 3.11 The medieval hexachord system[33]

Figure 3.12 shows how this same data was illustrated through a mnemonic placement technique that located each note of the hexachord on a joint of the hand. A number of variations on this image exist in medieval and later treatises.
Figure 3.12 Hexachord placement, modelled after the Guidonian hand.[34]

The concept of "mode" is covered in most introductory or undergraduate music theory classes. Beyond that, unless a musician engages with jazz, traditional folk, non-Western, or early music, its practical application is seldom emphasized. …

To learn the language of modes for the purpose of medieval music, musicians must learn to think of mode in a different way, immersing themselves in a musical language that is not simply a matter of "altered" major or minor scales and is not based on the concept of tonal harmony (even if it sounds "tonal" to modern ears).[35] …

2.6.2 Pitch in the Renaissance:

Kenneth Kreitner[36] says about that following:

The modern pitch standard of a' = 440 (that is, the custom among Western performers and instrument makers of placing the A above middle C at a pitch corresponding to 440 hertz or cycles per second) is the result of an international conference held in London in 1939. Before that time, various pitch standards prevailed in various cities and institutions, and before precise measurement of pitch became possible in the nineteenth century, these local standards varied a great deal: eighteenth-century flutes, for example, survive with a half dozen or more interchangeable middle joints of different lengths to accommodate the tuning notes a travelling flautist might encounter. The adoption of an international pitch standard today is thus an enormous convenience.

There are, of course, variations: some orchestras, for example, have adopted a slightly higher pitch for a more brilliant sound. But perhaps the most significant system of alternative pitch standards over the last few decades has been that adopted by performers of Baroque music on historical instruments. In the pursuit of historical authenticity, many of these players have taken a pitch standard slightly lower than our a' = 440 - most often an alternative convention of a' = 415 (a semi-tone below modern pitch) - but sometimes adopt other standards to conform with the supposed pitch of a particular time and place or to fit a particular historical wind instrument.[37]

The success of this 'Baroque pitch', both in musical terms and as a source of snob appeal, has led performers and scholars of Renaissance music to wonder about their own pitch standards. However, the question is much more difficult for the fifteenth and sixteenth centuries than for the eighteenth: clues corresponding to those that gave us Baroque pitch are just not there. Wind instruments from the Renaissance (recorders, flutes, cornetts, and organ pipes are the most useful indicators) are scarcer and more likely to have been damaged or altered; the original key of an instrument or pitch-name for an organ pipe is often not known (it is hard, for example, to distinguish a recorder in F at high pitch from one in G at low); and Renaissance theorists are uniformly silent or ambiguous on the matter. Besides, much of the music that concerns us is vocal rather than instrumental, and estimating the vocal ranges of Renaissance choirs is a slippery

[33] See Music Examples A. Ch. II-4 Mariani, Fig.3.11.
[34] See Music Examples A. Ch. II-5 Mariani, Fig.3.12..
[35] For more details, please check in the Mariani's book.
[36] Kenneth Kreitner: Renaissance pitch, p. 275-283, in: *Companion to Medieval & Renaissance Music*, …
[37] That is, some organs that have been preserved in their original condition and, accordingly, with the original pitch.

calculation at best - all the more so in the cases of boys, falsettists, and castratos, whose vocal techniques, and thus ranges, in the Renaissance remain more or less conjectural.

In short, whatever the historical validity of modern Baroque pitch may be, we cannot provide anything nearly as precise for music before 1600. The best we can do is to examine what role pitch standards played in the musical life of the Renaissance, and establish the implications of that role for historically-informed performance today. This article will focus mostly on the sacred polyphony of the later fifteenth and sixteenth centuries because the performing forces and conditions for this music are relatively well understood; but many of these observations must have applied to earlier repertories as well as to secular music.

Fixed and flexible pitch standards

The crucial question here concerns the relationship between written and sounding pitch in the music of the Renaissance. Was this relationship more or less consistent, at least locally, like ours today (and if so, how did the various local pitch standards differ from our a' — 440)? Or was it much more flexible, a function of each individual performance and its particular forces? This proves an exceptionally difficult question, not susceptible to easy answers or direct proof: no [siund] recordings survive from the Renaissance to compare with the notation, nor, for lack of an intelligible vocabulary to describe pitch standards, is there any unequivocal evidence from contemporary commentators. Modem scholarly opinion has tended to swing back and forth between fixed and flexible pitch, and the time may have come to find a course between them.

First of all, it should be established that local pitch standards did exist in the Middle Ages and Renaissance, at the very least among instrumentalists, for whom precise and consistent tuning was essential: most woodwinds and cornetts of this period were made in one piece, and thus their pitch was established by the maker and could not be much altered by the player. Any group of instrumentalists that included woodwinds or cornetts and played together regularly must perforce have adopted a single pitch standard, and this standard must in effect have become the dominant pitch for the entire musical institution: in 1420, for example, Alfonso V of Aragon ordered a small organ for his chapel, 'tuned to the minstrels'. Assuming that this organ was used with the singers of the royal chapel, the singers, the instrumentalists, and the organist of the Aragonese court must all have been subject, at least sometimes, to a single standard of pitch. This must have been true, even if undocumented, just about everywhere.

Yet just as clearly, for most European choirs, especially before 1500, performance with instrumentalists was the exception rather than the rule for liturgical monophony and polyphony alike; and this dominant tradition of unaccompanied singing makes the notion of flexible pitch much more plausible. When singing a cappella, singers would take a pitch from their chapelmaster or a *tenorista*, who, so far as we know, found this starting pitch without recourse to a musical instrument. For these choirs, the pitch level of a performance was completely at the whim of the director, who would have known the vocal limits of his choir and the ranges of the repertory, but who could rely on memory and judgment rather than on fidelity to an outside standard. The notated pitch and the performing pitch of a piece would thus have been quite independent, their relation flexible according to the capability and preference of the individual choir. In other words, the highness or lowness of the notes on the staff indicated, in effect, not their absolute highness or lowness in performance, but their position relative to one another and the position of the semitones and tones in their scale.

This point is often a difficult one for modern musicians to accept. The idea that an A on the treble-clef staff means approximately 440Hz in the ear and never, except by prearrangement (as in transposing instruments) 256Hz, is so basic to our musical experience and our understanding of

what musical notation means, that it is hard fully to imagine a world in which such a custom had not yet developed. Yet one such world, and a most significant one, has existed even within recent memory:

flexible pitch governed the performance of Gregorian chant at the time of Vatican II just as it surely did in the Middle Ages. …

Musicians in the Renaissance were disinclined to use leger lines as extensively as we do today; instead, they employed a much wider variety of G, C, and F clefs, adjusting the clef of a particular vocal line rather meticulously to fit its range. A soprano (or C1) clef at the beginning of a voice part, then, was generally a pretty good indication that it would not go below B or above E (see ex. 1).

Example II-6 Kreitner ex.1 Soprano key (CI): range, ex.2 "Chiavi naturali" and Ex.3 "Chiavette"/ [38]

In the fifteenth century, these clefs varied a good deal from piece to piece; by the late sixteenth century, however, they had crystallized into a few stereotyped combinations. The basic clef combination, often called 'normal clefs 'or *chiavi naturali*, was soprano-alto-tenor-bass, and it outlined a set of ranges that a modern male choir, with falsettists or boys on the top line, finds quite practical (see ex. 2).

The importance of pitch promises only to increase as our understanding and performance of Renaissance music continue to grow and improve. At the moment [1992], however, there is no obvious choice for an alternative pitch standard paralleling the one that has developed for Baroque music, nor any easy answer to the more fundamental question of fixed and flexible pitch. So perhaps the best advice for now is caution. Flexible pitch and clef-codes have been widely accepted, and indeed both have much to recommend them in a good many cases, but they must be applied cautiously: they are all too effective as a scholarly cloak over compromise and lazy thinking.

2.6.3 T. McGee on Tempo:[39]

Once the rhythmic flow of the individual parts has been considered, it is necessary to determine the speed at which the entire composition moves. Once again, we are dealing with a difficult topic which has been treated by several scholars but without total agreement. It would appear that even when we have finally understood the information that has come down to us, we will have only general rules to which we can look for basic ideas. As in performances today, there were undoubtedly many factors that influenced the tempo of a given composition during the early centuries. The tempo of any work should be adjusted to accommodate the particular voices, instruments, and conditions of performance such as accoustics. My intention here is to obtain some idea of the norms of tempo during the early period so that modern performers will have somewhere to begin.

The music of the early centuries has no obvious indication of tempo - at least nothing as clear as our contemporary metronome markings and speed words (*allegro, lento*, and so on). The tempo was indicated by the shapes of the notes, and for some of the repertory this was further altered by mensural signs that indicated the relative value of certain notes and the pace of the composition.

[38] See Music Examples A. Ch. II-6 Kreitner ex.1, 2 and 3.
[39] McGee, T.J.: *Medieval and Renaissance Music,* See Music Examples A. Ch. II-7 McGeeTables 1 and 2; II-16 Table of notes and rests in mensural notation and II-12 Schubert ex.1-3 and 1-4.

The system was complex but yielded the same amount of flexibility available in our modern system. …

The commonly used tempo during the early centuries was the 'the pulse of a man at rest' we are told by Ramis de Pareja in 1482, and it would appear from earlier writings and from the music that with certain modifications this was true of the earlier centuries as well. In the absence of easily available time pieces, the most convenient pacing device was the heartbeat, which was not exactly the same for everyone but was as accurate a measurement as was needed. With an approximate beat established, the composer could use the notation to vary the subdivision or to assign the beat to various levels of notes.

The basic note shape that determined tempo changed from century to century, always becoming one of lesser value: composers continuously wrote in ever smaller note values, which caused the pacing note to move more slowly until it was finally changed to a faster value, and this in turn encouraged them to write even smaller values. This apparently continued until the mid-sixteenth century, when note values became somewhat standard. At that point performers took even more liberties with the tempo, eventually destroying the system and leading to the use of speed words and finally metronome marks.

Richard Sheer on Tempo to 1500[40]

Tempo, that is, 'the rate per unit of time of metrical pulses in performance '(*The New Harvard Dictionary of Music*), in particular the speed to be chosen at the beginning of a piece of music, is something about which musicians in the fourteenth and fifteenth centuries either agreed totally or in which they had no interest whatsoever. Nobody, with the exception of one theorist who tried to relate the speed of notes to divisions of the hour (a remarkable feat considering that no one had watches or even clocks with second hands), seemed to think that it was a matter worth discussing. We, unfortunately, want to know about such things, and the lack of guidance from the period itself is a bit frustrating. We can only assume that, in determining tempo, they, like us, responded to the cues of the notation itself. …

We have the testimony of Michele Savonarola, a fifteenth-century Italian doctor, and apparently the only person ever specifically to relate the speed of the pulse to the tempo of the music of his day. Doctors may have thought the pulse was 'musical', but they seemed to have been interested mainly in the musical proportions, and, contrary to what may be popular belief, the music theorists who mention pulse (Ramos, Gaffurius, Zarlino), do not, in fact, relate it to tempo, but instead present it as analogous to the *tactus* or beat because it, like the *tactus*, was believed to be divided into two equal parts. …

The reader will perhaps have noticed by now an assumption that runs through this chapter, mainly that there was a '*tempo giusto* '(a commonly recognized tempo norm) employed in the period c. 1300-1500, even though that tempo might itself change over time. This is a common belief among scholars, and it seems to be supported by the evidence, although it flies in the face of modern musical experience in which pieces can have tempos that are fast or slow or in between. In fact, there was recognition of tempo differences in this period. There was an old tradition of varying the tempo of chants depending on the importance of the feast (the most solemn feasts were to have the slowest tempo), and the practicalities of the liturgy might also influence tempo; papal masters of ceremonies occasionally instruct the papal choir to speed up or slow down depending on the length of liturgical action. Should we consider these things when we perform sacred music of the fourteenth and fifteenth centuries? Should there not be a

[40] Richard Sheer: Tempo to 1500, in *Companion to Medieval & Renaissance Music*, …

difference in the tempos of sacred and secular pieces? Secular music of the fifteenth century may appear too slow if the semibreve *tempo giusto* of sacred music is applied to it. And certainly, dances were performed at different tempos.

Ephraim Segerman: Tempo and tactus after 1500[41]

This article considers how tempo was written about in the sixteenth century, and attempts to estimate the speed of the standard tempo that musicians thought of as unexceptional. The sources are more than somewhat ambiguous on this matter, so recourse is made to examining seventeenth-century sources, which are much more explicit. Analysis of the latter indicates that tempos in earlier music seem to have been rather slower than those felt appropriate by modem scholars and performers, and gives a better perspective on what sixteenth century tempos might have been.

Fundamental to the question of tempo is how it was thought of by the musicians themselves. Sources from the late fifteenth to the eighteenth centuries usually related tempo to an up and down movement of the hand. The word 'tactus 'applied to the tempo as governed by this motion as well as its indication by the time signature. Other words for tactus were measure, full stroke, *mensura, compas, misura, battuta, Schlag*, *ictus, percussio* and *praescriptum*. Tactus related only to tempo and not to rhythm. It included both up and down motions, a full cycle. The relationship between the tactus and the reciprocating hand movements was likened to that between the pulse and (their concept of) the reciprocating beats of the heart, called individually '*diastole* and *systole* or *arsis* and *thesis.*

There is less ambiguous seventeenth-century information favouring the crotchet. The most precise early writer on tempo was Praetorius (1619). He wrote that at a good moderate speed *('wenn man einem rechten mittelmassigen Tact helt')* there were 160 'tempora 'in a quarter of an hour. Sachs (1953) calculated this to be crotchet = 85 MM since early theorists associated 'tempus 'with a *breve*.[42] Praetorius wrote much about tactus as a governor of tempo and how it related to time signatures, but the above relationship between tempo and the breve did not relate to tactus. It is likely that Praetorius did not feel that tactus needed mentioning because it was ordinary, i.e., 'alla semibreve.'

Another seventeenth-century theorist who related tempo directly to time measurement was Mersenne (1636). He was a scientist intent on exploring possibilities, and was not interested in the popularity or dignity of one practice as compared to another. He wrote that musicians 'make the measure /tactus/ last more or less as they wish', and for convenience in illustration assumed a one-second tactus in 'alla semibreve', (also mentioning that musicians took two seconds and four seconds). In the one-second semibreve tactus, he associated the hand movements with the diastole and systole beats of the heart, with a second being a rather slow pulse beat. …

Stronger evidence supporting the hypothesis that the standard tempo and its standard notation did not change markedly during the sixteenth and seventeenth centuries is from Neusidler (1536) who indicated that the four crotchets in the semibreve tactus should be counted 'gently '('*fein gemach*') *'eins, zwei, drei, vier'*, which is similar to the recommendations of Mace and Simpson. Lanfranco (1533) indicated that the hand movement of the tactus was governed by a healthy pulse. This is ambiguous as to whether one or two pulse beats were in each movement. Johannes Buchner (c. 1520) related the tactus to a man's leisurely stride. If the left and right steps of the

[41] Ephraim Segerman: Tempo and tactus after 1500, *Companion to Medieval & Renaissance Music, …*
[42] Double whole note in modern notation, see Music examples II-12 Schubert, ex.1-4.

stride corresponded to the up and down of the tactus, then one tactus equalled either two or four pulse beats, depending on how slow 'leisurely 'meant and how fast Buchner's pulse was.

2.6.4 Rob C. Wegman: Musica ficta[43]

The term "musica ficta" has two meanings, which are only partially related. In medieval and renaissance music theory, the term was applied to a departure from what was considered "correct" tonal vocabulary. Study of musica ficta in this sense can help us to understand how medieval and Renaissance musicians conceived and visualized notions of pitch, step, and scale, and how their understanding of these notions developed in response to changing musical practices. In current musicological usage, musica ficta applies to the performers' and editors' application of accidentals not specified in practical sources. ....

Medieval theorists defined the range and nature of the tonal material in a system called the Hand (*manus*). Music whose tonal material remained within that definition was described as 'true' or 'proper' (*musica vera* or *recta*). Music whose tonal material exceeded that definition was called 'false' or 'feigned' (*musica falsa* or *ficta*).

The system of the Hand comprised a nearly diatonic scale spanning two octaves plus a sixth (G to e´´). That scale was formed by the conjunction of two sub- systems. The first of these defined the order of the available steps, and indicated the rank of each step by a serial letter. These letters were, in ascending order:

Γ A B C D E F G a b c d e f g aa bb cc dd ee

The term *ficta* applied to all steps not defined in the Hand. Thus, any step that involved the irregular placement of a hexachord along the serial letters was considered 'feigned'. D *fa*, for instance, would be a feigned step since it implies a hexachord, starting on A, in spite of the fact that the step is identical, in terms of pitch, to its 'true 'counterpart, D *sol-re*:

	Γ	A	B	C	**D**	E	F	G	a	b	c	etc.
feigned			ut	re	mi	**fa**	sol	la				
true	ut	re	mi	fa	**sol**	la						
				ut	**re**	mi	fa	sol	la			

The standard way of indicating the placement of an irregular hexachord was to locate its central *mi-fa* progression. In the case of a hexachord on A, for instance, the C should be marked *mi*, through either of the signs ♮ or ♯ (which tend to mean exactly the same thing; see ex. 3a). The intervallic context then dictated that C and F be sung as C♯ and F♯. Note that in ex. 3a, the performance of F as F♯ is implicit (from our point of view), and cannot be specified by a *mi* sign. Only if the F is also *mi*, in a different hexachord, can it carry the sign ♮ or ♯ (ex. 3b).

Example II-8 Wegman, Ex. 3 Place of progression mi-fa /[44]

Other *ficta* steps were those outside the range Γ *ut-ee la* (G - e´´). The first step to exceed the Hand at the upper end was *f* ", which step was conceived (and frequently indicated) as *fa* in a feigned hexachord on c ´´ (see ex. 4a). At the lower end, a feigned F below Γ *ut* could be implied by notating a *fa* signature in the bass clef (see ex. 4b).

[43] Rob C. Wegman: Musica ficta, in: *Companion to Medieval & Renaissance Music*, …
[44] See Music Examples A. Ch. II-8 Wegman, ex.3.

Example II-9 Wegman, Ex. 4 Ficta out of hand /[45]

> The concept of musica ficta was defined in negative terms (that is, *ficta* = not *recta*), and its meaning depended on the definition of its counterpart, *recta*. The latter definition, as we have seen, was comparatively narrow (*recta* = anything in the Guidonian Hand, that is, in effect, the diatonic scale but with B♭ and B♮ as equal partners). …

That is not to say that there is no room for more initiative on the part of present-day musicians. Modem performance practice of pre-1600 music could benefit substantially from the restoration of solmization as a living practice. It would increase understanding of the structure and notation of medieval and Renaissance music, and would stimulate a more critical attitude towards editions. Both editor and performer need to think in the concepts and categories of medieval and Renaissance musicians, difficult though that is. Only then will we be able to distinguish our limitations and strengths from those of the men whose music we wish to revive.

2.6.5.P. Schubert about solmization[46]:

In the Renaissance, musicians used a different solmization system from the ones we use now (fixed or movable "do"). They used a six-note scale pattern called the hexachord that contains only one semitone, in the middle: TTSTT. The lowest note in the pattern is called *ut* and the notes that follow in ascending order are named *re, mi, fa, sol*, and *la*. The semitone occurs between *mi* and *fa*. If you are sight-reading within the span of a hexachord, all you need to remember is the position of the semitone—all the rest of the intervals are whole tones. This makes clef reading a piece of cake!

The medieval pitch system, which Renaissance musicians inherited, contained all the natural notes plus *B*♭. In this eight-note world, the diatonic hexachord can be found in three locations: starting on *C*, starting on *F*, and starting on *G*. The names *mi* and *fa*, then, can refer to *E-F* (in the natural hexachord), *A-B*♮ (in the soft hexachord), and *B*♮*- C* (in the hard hexachord).

Example II-10 Schubert Ex. 3-1 and 3-2 /[47]

Renaissance solmization is like movable *do* with incomplete scales. You can pretend that *ut* in the natural hexachord (on *C*) is the first degree of an incomplete C-major scale, while *ut* in the soft hexachord (on *F*) is the first degree of an incomplete F-major scale. Since each of these "scales" is only six notes long, you have to change hexachords when you exceed the six notes. For instance, if you want to sing a scale from *C* up an octave to *C*, you start on "*C ut*" and when you get to "*A la*" you change its name to "*A re*" and continue on up in the hard hexachord:

Example II-11 Schubert Ex. 3-3 /[48]

The importance of this solmization system is that the names of the notes reflect the exact diatonic transposition. For any pattern or melody that is accurately transposed, the names of the solmization will be the same in both versions, but the notes will be different.

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[45] See Music Examples A. Ch. II-9 Wegman, ex.4.
[46] Peter Schubert, *Modal Counterpoint*, …
[47] See Music Examples A. Ch. II-10 Schubert ex. 3-1 and 3-2.
[48] See Music Examples A. Ch. II-11 Schubert ex. 3-3; for Notation, see II-12 Schubert ex. I-3 and 1-4, II-13 Schubert ex.I-5a and 5b, ex.I-6 and ex.I-7, as well as II-14 McGee, original notation, ex.2.1a and II-15 McGee, modern notation, ex.2.1b.

2.7. Anne Smith:

For the end of this chapter, I decided to add some more quotes from a very important and interesting book by a colleague Anne Smith[49]. I begin with what the author says about **metric hierarchy**, articulation, and rhythmic flexibility, which in fact builds on what has been said about this in section 2.6.3. Tempo of this chapter.

> It is now [2011] common knowledge in the performance practice of the 18th century that musicians of the time understood their music as having been composed within a metric hierarchy, in which certain notes—the stronger ones of whatever unit was under scrutiny—were perceived to be "better" than the others. As a consequence, notes of the same value were not played entirely equally; the "better" ones were lengthened or accentuated in comparison to others. This hierarchy was perceived at all levels, from that of the measure down to that of the individual beat. A large portion of the character attributed to certain meters, to certain dances, is a product of the codification of this metric hierarchy. This differentiation between the weight of notes of similar appearance, however, was also made at the level of the faster note values, best known in the context of French *inégalité*, in which the first of two notes of equal notated value was lengthened and the following one shortened in such a way that it becomes linked to the next (longer) one by means of articulation. Although this sort of "inequality" among smaller note values is perhaps best known in French baroque music, other nations had their own versions of this as well, as is indicated by the instructions for many kinds of instruments that call for some sort of alternating pattern in their articulation.
>
> Not unsurprisingly the basis for this metric hierarchy may be found in the music of earlier eras. Indeed, the concept of tactus is one of the features that radically separates music of the 16th century from that of later periods. Today we see the measure as being the basic unit of rhythmic organization in which a certain number of notes of a specific value is "beaten" to establish the tempo. In contrast to this, theorists between the end of the 15th century to the middle of the 17th century speak of marking the space of a measure by means of a movement that is related to the pulse, or other natural phenomena of a twofold nature. Adam of Fulda is the first to speak of this movement in *De musica* (1490): "The tactus is the continuous motion of the ratio contained in the measure—It is nothing other than the necessary and appropriate measure of the mode, tempus, and prolation." Or as Lanfranco writes in 1533, the *battuta* is nothing other than "a certain sign formed in imitation of the movement of a healthy pulse by the elevation and lowering of the hand." Martin Agricola explicitly describes the coordinating function of the movement in his definition of tactus:
>
> > The tactus or beat, as it is commonly executed, is a constant and moderate movement of the hand of the singer, by means of which—as it were a guide—according to the signs /note values/, the simultaneity of the voices and notes of the music are correctly directed and measured.[50] …
>
> The fact, however, that the figurative notes in a composition often were played in an unequal manner in other countries as well can be seen in Sancta Maria's book on playing the clavichord. Indeed, he devotes an entire chapter to the method of playing in good rhythmic style in which he writes:
>
> > Concerning a good rhythmic style of playing /*tañer con buen ayre*/… note that it

[49] Anne Smith: *The Performance of the 16th - Century Music*, Oxford University Press, 2011.
[50] Martin Agricola, *Musica Figuralis Deudsch*, (Wittenberg: Georg Rhau, 1532: facsimile, Hildesheim: Georg Olms Verlag, 1969)

> requires that semiminims be played in one manner and quavers in three. The manner to be employed in playing semiminims consists of pausing on the first and hurrying the second, and to the same degree pausing on the third and hurrying the fourth, and so on for all the semiminims. This is done as if the first semiminim were dotted, the second were a quaver, the third again dotted, the fourth a quaver, and so on. But observe that the semiminim that is hurried must not move too quickly, but somewhat moderately. …

All these references to rhythmic inequality in the performance of the smaller, figurative note values, indicate that this was a widespread practice. A regular *inégal* rhythm at the level of semiminims seems to have been standard for Hugenot France and in Spain. Rhythmic delicacy and freedom were obviously cultivated in diminutions. What remains to be investigated is how this rhythmic inequality varied according to time, place, and repertoire. Naturally the accentuation and flow of each language will have affected the singer's basic approach to its musical realization. This in turn will have influenced the instrumentalists, leading to differences in articulation, whether they be ones of fingerings on keyboard and plucked instruments, of tonguing on wind instrument or of bowing on string instruments. A study of the notation of the period in relation to these forms of rhythmic flexibility might also bring new insights. This is one of the areas of 16th-century performance practice where much may still be discovered.

2.7.2 Rhetoric of counterpoint

For our scope Anne Smith's opinion on rhetoric of counterpoint is very interesting[51]:

> In this chapter we will be investigating the role of eloquence, of the expression of affect in the 16th century. Although this is something that we associate with later baroque periods, there is abundant evidence for the 16th century that all musicians, singers or instrumentalists, were expected to perform in a dramatic, speaking manner. Early in the 16th century it was realized that certain aspects of rhetoric could be applied to music, in that—just like an oration—it was written to move an audience. What we will be pursuing here is how these elements were utilized to convey the meaning of the text. In this context we will be examining the only known contemporary analysis of a musical work from the 16th century in terms of rhetorical figures. This method of analysis can then be used as a means of understanding the structure of the music we ourselves perform, so that it too can begin to speak as dramatically as it did in former times.
>
> **Expression in Performance**
>
> We commonly assume that understanding the text was of lesser importance in 16th century music than in later eras: the text underlay is less precise; each voice brings its own text independently from the others; the Council of Trent reacted to complaints that the words could not be understood in polyphonic music, and so on. But do we not complain of similar things today, that we cannot understand what certain singers are singing because their diction is poor or because they are singing a language they do not understand? Would this cause us today to assume that the singers did not care whether they were understood or not?
>
> Be that as it may, the following quotations will show that already at the beginning of the 16th century the eloquent expression of the text was of great importance to musicians. In 1504, Vincenzo Calmeta, the biographer of the great poet and improviser Aquilano Serafino, wrote that "in the recitation of his poems he was so ardent and he joined the words with the music with such judgment that the souls of the listeners— whether scholars, mediocre, plebian, or women—were equally moved." And similar to Claudio Monteverdi a century later, who in the words of his

[51] Anne Smith: *The Performance* …; in any case very interesting also about improvisation.

brother Giulio Cesare said that it had "been his intention to make the words the mistress of the harmony and not the servant," Calmeta further claimed that those singers

> ...exercised excellent judgment who, when singing put all their energy into expressing the words well when they are of substance; and they make the music accompany them in such a way that they are the masters accompanied by servants in order to appear more honourable, not creating the affects and the meaning from the music, but the music from the sentences and the affects.

That this was not only expected of singers, but also of instrumentalists is revealed in various excerpts from Silvestro Ganassi. In his tutor for the viol, *Regola Rubertina* (Venice, 1542), he required that one use all the means available to bring the text alive, comparing the musician to an orator:

> With words and music in a happy vein or in a sad one, one must draw the bow either strongly or lightly, according to the mood; sometimes it should be drawn neither strongly nor lightly, but moderately, if that is what the words suggest. With sad music, the bow should be drawn lightly and at times, one even should make the bowing arm tremble /vibrato?/ and do the same thing on the fingerboard to achieve the necessary effect. The opposite can be done with the bow in music of a happy nature, by using pressure on the bow in proportion to the music. In this manner, you will see how to make the required motions and thereby give spirit to the instrument in proper proportion to every kind of music.... What I have said has as much purpose and necessity for a viol player as for an orator, who must be bold enough to express shouts, to make gestures and movements at times, to imitate laughing and crying or to do whatever else seems appropriate, according to the theme. If my reasoning is correct, you will find that the orator does not laugh while uttering tearful words. By the same token, the performer of music in a happy vein will not bow his head or use other movements suggesting sadness, because that would not be an artistic rendering of nature. Instead, it would be a denigration of the true purpose of art.

And in his instruction manual for the recorder *La Fontegara* (Venice, 1535), he compares the expressive colours of the human voice with the hues used by artists in painting:

> ...just as the worthy and perfect painter imitates everything created by nature by varying his colours, you can imitate the utterances of the human voice with a wind or a stringed instrument. And as if it were real, the painter imitates the effects of nature with various colours and this because /nature/ produces various colours. Similarly, the human voice is also varied according to its pipe /air tube/ with more or less boldness and with various /modes of/ expression. And if the painter imitates the effects of nature with various colours, the instrument should imitate the expression of the human voice by accordingly dosing the air and /imitate/ the darkening of the tongue by means of the teeth. And I have made the experience and heard of other players who have made the words of the /music/ understood with their playing, so that one could have easily said that nothing was lacking from that instrument other than the form of the human body, just as one says of the fine painting that only the breath is lacking.[52]

…

All of this leads us to the conclusion that a great degree of expressivity was demanded of the musicians of the time. That this was not solely limited to musical aspects of a performance, but extended to visual ones as well, such as body language and gestures, is also frequently

[52] Silvestro Ganassi, *La Fontegara*, (Venice, 1535; facsimile edition; Bologna: Forni Editore, 1980), ch. 1.

mentioned. Ganassi's interest in eloquence once again comes to the fore here when he writes for viol players:

> Your motions should be proportioned to the music and to the word setting. Whenever the music is set to words, the limbs of one's body must move accordingly. Furthermore, there should be appropriate movements of one's eyes, hair, mouth and chin; the neck should be inclined more or less toward the shoulders according to the mood suggested by the words.

As we have seen, all musicians, but particularly singers, were expected to deliver performances much as orators did, seeking to move their audiences with their delivery of the text. An anonymous account of the performance of the tragedy *Alidoro* in Reggio 1568 in honour of Barbara of Austria, Duchess of Ferrara, speaks of the leading female singer who with a

> ...most mellifluous voice ... had a natural talent for acting ruled by art ... And all the time she was singing, her gestures and movements and the expression on her face and in her eyes corresponded exactly to the various conceits with which she so subtly beguiled us that she made everyone fear and hope and feel joy and sadness by turn as seemed to her most fitting.

Her entire activity on stage was devoted to communicating the affects of the music.

Emilio de 'Cavalieri—in reference to his composition, *Rappresentazione di anima e di corpo*—speaks more generally of the demands placed on the actor/singer in stage music:

> .... he should express the words well, so that they may be understood, and accompany them with gestures and movements, not only of the hands but also with steps that are efficacious aids in moving the affections.... The theatre or hall, in order to be appropriate for such a performance of music, should not seat more than 1000 persons, who should be comfortably seated for greater silence and their own satisfaction. For if it is presented in very large halls it is not possible for everybody to hear the words; and the singer would have to force his voice, which would cause a lessening of the affect; and so, much music without being able to hear the words becomes tiresome.[53]

It is of interest to note, that even in a hall that seated 1,000 people, it was expected that the entire audience be able to understand the text, as this was essential for the performance. This is a goal that we need to emulate.

And finally, we have Nicola Vicentino's breathtaking remarks concerning singing in ensemble or consort. Vicentino was a pupil of Adrian Willaert, the *maestro di cappella* in Venice from 1527-62 and probably the most highly respected composer in Italy in that period. …

He further suggests that one listen to a good orator to gain understanding in how these techniques should be used to move an audience:

> The experience of the orator can be instructive, if you observe the technique he follows in his oration. For he speaks now loud and now soft, now slow and now fast, thus greatly moving his listeners. This technique of changing the tempo has a powerful effect on the soul. For this reason music is sung from memory, so as to imitate the accents and effects of the parts of an oration. What effect would an orator have if he were to recite a fine oration without

[53] From the preface of Emilio de 'Cavalieri, *Rappresentatione dell' anima & del corpo*, (Venice: G.F. Bonfadino, 1601).

> organizing accents, pronunciations, the fast and slow movements and the soft and loud utterances, it would not move the listeners. The same is true of music. If the orator moves listeners with the devices described above, how much greater and more powerful will be the effect of well-coordinated music recited with the same devices, but now accompanied by harmony.[54]

Finally, Vicentino writes that music should be sung from memory rather than from written parts, citing preachers and orators as examples, who at that time did not usually read from a script. Obviously, the interaction with the audience, the exchange of glances, was seen to be an important part of a persuasive performance.

> It is much more pleasing if music is sung from memory than from written parts. Take the example of preachers and orators. If they recited their sermons or orations from a script, they would lose favour and face a dissatisfied audience. For listeners are greatly moved if glances are matched with musical accents.

His comparison with preachers and orators demonstrates the extent memorization practices still held sway in the middle of the 16th century, substantiating the observations of Mary Carruthers discussed in Chapter 2, and suggest that this is one of the means we should employing to gain contact with our audience.

These quotations make it eminently clear that throughout the 16th century musicians were expected to give eloquent expression to the affects contained in the music thereby moving the audience. It therefore makes sense that theorists began making the association between classical rhetoric and music, as both oration and music had similar goals.

The influence of humanist rhetoric[55]

Today rhetoric in music is most often associated with the rhetorical figures or gestures (both musical and physical) of the 17th and 18th centuries. Nevertheless, in the course of the humanist movement in the 15th century, the antique sources on rhetoric were rediscovered and soon became part of the gentleperson's basic education. …

But what did being persuasive mean in terms of 16th-century music? Perhaps Adrian Coclico, with his definition of a poet-musician, expresses this best. In his *Compendium musices* of 1552 he divides musicians into four different categories. The *theorici* belonged to the first two categories and were either those who laid down the foundations of music or the mathematicians who were concerned with mensuration and proportions. The third category, of whom Josquin was considered to be the prime example, was made up of *musici*, who were "Those outstanding musicians... who ... skillfully and effectively combine theory and practice, understand the capacities of music and all powers of composition, truly know how to adorn melodies and express in them all human affections, and what is most commendable in a musician, aim at /achieving/ the highest elegance."[56]

See more about that from Anne Smith and several other authors in Chapter 6.5.3? *Canterini, cantori ad lyram, arte della memoria* and rhetoric.

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[54] ibid. Smith: Nicola Vicentino, *L'antica musica*, fol. 88 (recte 94), in translation, p. 301-2.

[55] On the role of rhetoric in the improvisation of *canterini* and *cantori ad lyram*, see Chapters 6 and 7.

[56] Adrian Coclico, *Compendium musices*, (Nuremberg, 1552: Johann Berg & Ulrich Neuber); facsimile (Kassel: Bärenreiter, 1954), sig. B iv-ivY; translation in Don Harrán, "Elegance as a Concept in Sixteenth-Century Music Criticism," Renaissance Quarterly 41 (1988), p. 434.

2.7.3 What skills were expected from professional musicians?

I want to end with something that could be very interesting for all of us interested (for any reason) in EM, what skills, according to A. Smith, were expected from professional musicians of the 16th century?

Truth be told, a lot of what the author talks about (and quotes) in this chapter of her book goes directly into the field of ornamentation and improvisation. Nevertheless, I left it at the end of this chapter, as a preparation for what will be said about in the 3rd and the last, 7th, Chapter.

> Various authors speak both about what individual musicians, especially singers, were expected to be able to do as well as about what was required for a good performance in ensemble. An examination of longer passages in the writings of three of these theorists will serve as the basis for a discussion of the skills generally considered necessary for the professional musician. This discussion will, of course, not be limited to issues of technical competence, but will also extend into the realm of rhetorical presentation.

Instructions for Beginners

Sancta Maria—after having discussed where to find the notes on the keyboard, what fingerings to use, how to play trills and before explaining modes and cadences— includes two very important chapters in the middle of the first book of his *Libro llamado Arte de tañer Fantasia*: "Concerning some brief instructions by which the beginner may quickly master any work" and "Concerning the procedure one must follow to derive benefit from works." These chapters are of particular interest because they speak of the skills one needed to attain through the practice of composed works, so as to later be able to improvise fantasies. As such they give insight into what Sancta Maria considered to be most important in the performance and improvisation of counterpoint.

Let us begin with the instructions for the beginner:

> Three things are necessary for mastering any composition quickly and thus playing it more perfectly. The first is to play in accordance with the tactus, keeping it always at an equal /rate/ of time, that is, not changing it from a greater to a lesser [rate], or from a lesser to a greater. For this it is necessary to mark the tactus with the foot, and likewise to take great care with the mid-tactus, without which one can keep the tactus /only/ with difficulty; for as was noted before, we see by experience that those who do not play in accordance with the tactus err in the mid-tactus. Furthermore, it is essential to know all the rhythmic signs and to give each its entire value.
>
> The second thing is to sing each voice by itself, and to achieve a fundamental comprehension of its melodic line.
>
> The third thing is to comprehend all the consonances and dissonances contained in the work, those formed in two [voices] as well as in three or four.

The first instruction seems obvious: Essentially all beginning musicians have difficulties sustaining the beat, and thus on one level this suggestion is mere commonplace. His remarks concerning the central importance of being accurate at the mid-tactus in order to remain in rhythmic equilibrium, however, are particularly interesting. It is the precise beating of the tactus that facilitates the coordination within an ensemble, having a remarkably similar function to bar lines in later music. And experience shows that Sancta Maria's observation is true. When singing

from original notation, most rhythmic mistakes that do not stem from the rests do indeed arise when the mid-point of the tactus is unclear.

On the surface, the second instruction just seems to be a basic way of getting to know the individual lines of a polyphonic piece well. If, however, one remembers that this book was written for keyboard players and that the individual parts of the examples were not written in score, but in parts, one after another on the same page, this instruction takes on an entirely new light. What is being suggested is that one first learn each individual line (by singing it), so that one can thereafter put them together as a polyphonic construct.

And finally, the beginning musician is being asked to determine the intervallic content of each voice against the others. This stems from and serves as a foundation for the improvisation of counterpoint, one of the basic skills expected of all musicians of the time. Thus, a musician was encouraged from the very beginning to examine each composition from this perspective.

All of this may seem a bit formidable for the ongoing student, but it is nothing compared to the procedure that one must follow to gain general benefit from practicing compositions with the aim of later being able to improvise, as opposed to just being able to play a specific piece of music...

Skill criteria

Luigi Zenobi ... was one of the foremost *cornetto* players from about 1570-1600 at several important courts of the time, namely Bavaria, Ferrara, and Vienna. Towards the end of his career he was requested by a prince, whose identity has unfortunately not (yet) been discovered, to set down in writing the criteria of excellence for certain categories of musicians. One can therefore assume, that he knew from his own experience—although from his writing you can tell that he felt his own capabilities did not receive the esteem due to them from the world around him—what was required from the best musicians of the time. Nonetheless in his letter he reveals his seeming lack of knowledge of the latest developments in the musical world, clearly discussing issues of greater concern to the *prima* rather than the *seconda pratica*. Thus, the letter, written on the brink of a new musical practice, speaks of the criteria of excellence demanded of musicians of an almost bygone era.

He first turns to the question of what qualities one must have to sing one's part securely. He specifies the following:

> The first requirement is not to be ignorant of counterpoint. The second is to be secure in singing compositions with quavers /*crome*/ and semiquavers /*semicrome*/. The third is to be secure in music composed with leaps, such as sixths, sevenths, ninths, and elevenths, now fast, now slow. The fourth is to be secure in music where syncopation is mixed with artful dissonance. The fifth is to be secure in chromatic compositions. The sixth is to be secure in understanding and singing all or the greater part of proportions and *sesquialterae*,[57] which are scattered throughout old and modern works. The seventh is to know perfectly the musical signs and mensurations and the value of the notes within them. The eighth would be that on meeting with an error on the part of the composer or the copyist, he knew how to improvise a remedy to the error while singing and find his way back without help from others. Secure singing is easily said, but it is extremely difficult, if not a miracle, to find it.

[57] *Sesquialtera* (Latin, "one and a half"), the ratio of 3:2, hence the Latin name of the fifth interval; in mensural music a proportion marked by 3:2.

The first prerequisite of not being ignorant of counterpoint in my opinion refers to *contrapunto alla mente*, the skill of singing another voice to a given melody, which was part of the traditional training of all professional musicians at the time.
The second through seventh requirements deal with basic skills of singing from notation: the ability to sing fast notes, awkward leaps, and syncopations, as well as to deal with the challenges provided by the mensurations and proportions of the notational system, preferably also those used by earlier generations.[58] …

Zenobi goes on to expatiate largely on the more rhetorical skills demanded of a soprano:

> Furthermore, the soprano must have an undulating movement, he must know when to make *esclamationi* and not apply them indiscriminately nor crudely, as many do. He must know how to ascend with the voice and how to descend with grace, at times holding over part of the preceding note and sounding it anew if the consonance requires and admits it; he must know how to give rise to dissonances (*durezze* and *false*) where the composer has not touched or made them, but left them to the singer's judgement. ... he must at times render the notes with a certain neglect, sometimes so as to drag them, sometimes with sprightly motion; he must have a rich repertoire of *passaggi* and good judgement as to how to use them; he must know which are the good ones, starting with those that are made with the greatest artifice of one note, of two, three, four, five, six, seven, and eight. He must know to use them ascending or descending, he must know how to intertwine, connect, and double them; he must know how to emphasize and to avoid a cadence, he must know how playfully to sing detached and legato quavers; he must know how to begin a *passaggio* with quavers and finish it with semiquavers and begin it with semiquavers notes and finish it with quavers. He must use different *passaggi* in the same songs, he must know how to improvise them in every kind of vocal music, whether fast, or chromatic, or slow; he must know which works require them and which do not; when repeating the same thing he must always sing new ones. He must know how to sing the piece in its simple form, that is, without any *passaggio*, but only with grace, *trillo, tremolo*, *ondeggiamento*, and *esclamatione*; he must understand the meaning of the words, whether they be secular or spiritual; and where the text speaks of flying, trembling, weeping, laughing, leaping, shouting, falsehood, and similar things, he must know how to accompany them with the voice; he must use echo passages, now immediate, now separated; he must know how at times to begin loudly and then to let the voice die gradually; and at times to begin, or end, softly and then enliven it gradually; he must know how to improvise *passaggi* in skips, in syncopation, and in *sesquialtera*; he must know thoroughly which places demand them; he must start with discrimination and finish in time with those who sing or play with him; he must sing in one style in church, in another one in the chamber, and in a third one in the open air, whether it be in daytime or at night; he must perform a motet in one manner, a *villanella* in another, a lamentation differently from a cheerful song, and a mass in another style than a *falsobordone*, an air differently again; he must bring to each of these pieces a motif, *passaggi*, and a style of its own, so that the artfulness and the understanding of the singer may become manifest.

Zenobi went on further to say that all he demanded of a soprano, or the greater part of it, was also "sought in an instrumentalist, whether he plays the cornett, the viola da gamba, the violin, the recorder, the flute or similar melody instruments." The fact that Zenobi wrote that these capabilities were required also of instrumentalists is tantamount to saying that melodic instruments should play in imitation of the human voice, a demand most explicitly made by Silvestro Ganassi in the passages quoted previously … Thus, the capabilities Zenobi required of

[58] See Music Examples A. Ch. II-17 and 18.Engelke, Tables I – III.

the soprano may be understood to be those qualities demanded of all exceptional musicians, whether singer or instrumentalist. …

We are very fortunate to have the letter written by Zenobi. Due to the explicit reason for writing his letter, he expresses himself in greater detail than other writers on music of the period concerning the demands of excellence placed on the performer. Although he represents the end of an era, his employment at several of the most important courts in the latter half of the 16th century make it a document of immense importance for questions regarding historical performance practice. One might say that it serves as a gauntlet thrown down in our paths, challenging us to move forward to greater degrees of expression and skill.

Conclusion

In a very thought-provoking article, Andreas Haug speaks of how our current view of history as a "construction," an "invention" of those who write it, seems to have made it more difficult to enter into the dialogue between "history" and "performance practice," as our aesthetic perception is given an importance far outweighing the information found in the sources. He asked whether our attempts at dialogue with the sources have not declined to the extent of becoming a kind of autistic monologue. While admitting that we can never hope to create an "authentic" performance, as our world—its politics, its industry, its aesthetics, its sense of time—have changed entirely since the 16th century, we can nonetheless gain greater understanding of the music if we try and perceive it from the point of view of those who conceived it, if we, so to speak, attempt to walk in their footsteps. By engaging in a dialogue with the theorists, who were often explaining their music to the best of their abilities in order to teach schoolboys to sing it, we gain greater insight into their approach to the music.

Although we can never claim to know how the music was really performed, at least we can see if our understanding of what the theorists write brings a perceptible positive benefit to our performance today. In doing so, we will at the same time at least learn more about the music as we will be investing time in understanding its essence.

Although in this book we have been examining many basic aspects of 16th-century music in relation to its performance, it cannot be said to be merely a tutor, in which rules for the practice are laid down. Rather, by entering into dialogue with the theoretical sources, I have tried to indicate how our unquestioned view of this music has hindered an investigation of how it was comprehended at the time. In looking at the fundamentals laid down by 16th-century theorists, it becomes obvious that many of the concepts, such as solmization, mode, cadences, and compositional structure, bear greater relation to medieval music rather than to our own.

In selecting the individual topics to be covered, I have attempted to seek out those elements that have the potential of affecting performance to the very core. These range from the basic concepts of the time concerning music, such as how the parts were seen to be related to one another, to more tangible things, like solmization, articulation, cadences and mode. For me, understanding how these various elements work together to form a whole is prerequisite for a good performance. That this is merely the starting point, however, is substantiated by Diruta[59] when he wrote:

> In sum, if you wish to attain perfection in this beautiful and ingenious science, it is not enough for you to understand only what I have discussed. You must study many pieces, like different *ricercari*, Masses, *canzonas*, motets, and madrigals, and memorize them well.

[59] Girolamo Diruta, *Il Transilvano*, Libro Quarto, p. 16.

Ricercari, motets, and Masses help you to improvise well, *canzonas* to play quickly, and madrigals to achieve different harmonic effects.

What he is saying is that it is not sufficient to be proficient in the basic skills, but that one then has to study (and memorize) many pieces in order to know how to make use of them.
To these skills we need to add what we know about rhetoric of the time, we need to figure out what made these pieces moving to contemporaries in order to be able to communicate their contents to a modern audience. This involves not only a knowledge of the structure of the music, but also all of the rhetorical competencies ascribed to a good soprano by Zenobi. For example, the addition of essential graces to all of the parts of a polyphonic work would affect its performance dramatically.

At the same time, just how this understanding of the fundamentals is applied in the actual performance of the music today is something that must of necessity be left up to each individual performer. Each of us must decide how to differentiate hard and soft solmization syllables, what it means to bring out an evaded cadence, how to apply essential graces to the individual voices, and so on. Each of us must decide how we can make use of the rhetorical guidelines of the 16th century within the context of the 21st century. This, of course, will be different for each person, each ensemble, each audience, in sum for each context.

In my opinion we have only begun to scratch the surface of what is possible in the performance of this repertoire. To truly do it justice we will need to spend much time studying it, memorizing it, learning the significance their texts had within the society of the time. We will need to begin learning all the skills that were expected of 16th-century musicians at the time, ranging from singing or playing from the parts, to improvising counterpoint, to performing the music by heart. We will need to explore different forms of rhetorical presentation with an open mind.

And this is where the challenge lies for all of us who love this music. I am convinced that if we truly enter into this dialogue with the historical sources and if we have the courage to put our understanding of them into practice, our performance of the music will gain immeasurably in eloquence.

I cannot but agree with these concluding words of Anne Smith and add that in the same spirit, with the same attitude towards "beloved" Early Music, it would make sense to try to "re-create" that component of it that was so ubiquitous during the Renaissance: improvisation.

Reading again what I have chosen to quote, I found (too) many interesting details which could be of greater importance for ornamentation, improvisation, rhetoric etc. Therefore, I decided to include the most important of those in the Chapter 5. or make the cross references giving the pages where something to be find in the case of longer texts.

Another time I must stress that if you are seriously interested in the historically informed performance of Early Music you should try to read the books or articles, where I have borrowed all those citations, in its entirety. You can find those in most university libraries or buy them like I did.

To remember and repeat:

[BROWN] p.8. Performing practices of 15th and 16th century music

[BINKLEY] p.11. Balance of oral and literacy

[CURTIS-Modi] p.12. Definition, p.12. Classifying function, p.13. Affect,
Mode as a compositional tool

p.14. Mode in the sixteenth century, Conclusions

[SCHUBERT-Modi] p.15. The Twelve-Mode System

p.16. Accidentals and Transposition, The Importance of Mode

[MARIANI-Modi] p.17. Table 4.1. Mode Names (Modern Usage)
Table 4.2.Modes as "Altered Scales"

p.18. Medieval Mode: A Brief Historical Background,
Figures 3.11 The medieval hexachord system and
3.12 Hexachord placement, modelled after the Guidonian hand.

[KREITNER-The Pitch] p.20. Fixed and flexible pitch standards

[SMITH] p.26. the *notes inégales* in the Renaissance music?

[SMITH-Rhetoric] p.27. Expression in Performance

p.30. The influence of humanist rhetoric

[SMITH-Skills] p.31. Instructions for Beginners

p.32. Skill criteria (Zenobi)

p.34. Conclusion

Reading recommendations:

Companion to Medieval & Renaissance Music, ed.: T. Knighton and D. Fallows, J.M.Dent & Sons Ltd, London 1992 (Binkley, Lawrence-King, Wegman, Kreitner, Curtis, Thomas, Strohm etc.)

MCGEE, T.J.: *Medieval and Renaissance Music*, A Performers Guide, University of Toronto Press, Toronto Buffalo, London1988.

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SCHUBERT, Peter: *Modal Counterpoint, Renaissance Style,* Second Edition, New York Oxford Oxford University Press, 2008.

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BROWN, H.M.: Sixteenth-Century Instrumentation: The Music for the Florentine Intermedii MSD XXX, American Institute of Musicology, Dallas 1973
BROWN, H. M. and Luise K.Stein: Music in the Renaissance, 2nd edition (October 1998) Pearson