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A STUDY IN SEVENTEENTH CENTURY ORCHESTRATION

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INTRODUCTION

The purpose of this study is to examine the roots of orchestration which lie in the late sixteenth and early seventeenth centuries and trace their first century of development in Europe. An effort will be made to discover whether or not there were definite patterns of growth throughout those areas which were musically most important at that time, now known as Italy, Germany, Austria, France, and England.

The first chapter deals with the background for this study of seventeenth century orchestration, summarizing sixteenth century scoring practices. In the concluding chapter these practices will be reviewed to see how they did contribute to later orchestral practices. The second chapter presents a transition from the partially scored, essentially chamber music groups of the sixteenth century, to the earliest examples of true orchestration in the late sixteenth and early seventeenth centuries. The major portion of the study (Chapters III through VI) deals with significant works of seventeenth century composers born before 1675.* The final section presents the conclusions

*The year 1675 has been set as an arbitrary date because it eliminates such composers as Vivaldi (b.c. 1675), Telemann (b. 1681), Bach (b.1685), and Handel (b.1685), any one of whom constitutes a study within himself; and whose major works, furthermore, belong to the eighteenth century. Composer's dates given here and elsewhere in this study are taken from Baker's Biographical Dictionary of Musicians, (New York, 1958).

of the study.

For the sake of convenience much information is in chart form (see Appendices), to facilitate seeing orchestration trends at a glance, both chronologically and according to the various techniques used.

In the course of this study several questions have arisen which are difficult or even impossible to answer because of our present lack of information: How adequately were the parts scored? Were instruments used interchangeably? Were certain instruments scored because they were readily available, or were they used in an artistic sense to produce a particular tone color? How much improvisation was expected of players? Did the seventeenth century orchestra show more tendencies toward virtuosity or toward simplicity in style of playing?

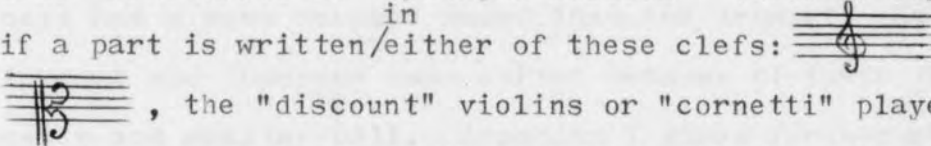
I have tried to find answers to these and many other questions by direct study of seventeenth orchestral scores, and, insofar as possible, from readings in primary sources. Because so few books have been written which deal with the subject, the tentative answers to these questions must be based largely on the scores.

Chapter I

THE SIXTEENTH CENTURY — A BACKGROUND

The sixteenth century affords few examples of scoring, and of those, very few have been available to me. Composers of the sixteenth century, for the most part, simply dismissed the problem of carefully planning the instrumentation of their compositions by such phrases as "Per voci et stromenti", "Auff allerley Instrumenten",¹ or "Buone da cantare et sonare".² Occasionally composers were slightly more definite in designating the type of instruments, as "Per Sonar d'Instrumēti da Fiato",³ (A. Gabrieli), or "Apt for Viols and Voyces",⁴ (Byrd).⁵ The reason for composers' not being more specific was probably due to the fact that there was no standard group of orchestral instruments. There was instead a great assortment of families of instruments, with many variants or "bastard" instruments in each family from which the composer could choose. Lacking any tradition in scoring for specific instruments, the composer left the choice of instruments up to the performer, who played whatever instruments were available. Indeed Dorian, in his History of Music in Performance, when speaking of early orchestras, was absolutely right when he stated that in scoring the "principle was not to have a principle."⁶

With the available assortment, how did the player choose which instrument to play?⁷ He merely chose one that

had the proper range. Players were supposed to be adept at reading the different clefs, so that presented no problem. The unspecified instrumental parts of a work were always in the same key, so transposition presented no problem. Praetorius in "Syntagma Musicum"⁸ (1615-9) says that if a part is written ⁱⁿ either of these clefs: , the "discount" violins or "cornetti" played. Tenor and bass instruments were also indicated by clefs, with no concern for balance or tone color. Therefore, the following example from the instrumental music of Andrea Gabrieli (c. 1520-1586) would probably be scored thus:⁹



Parts were often labeled "cantus, altus, tenor, and bassus" or "1^{re} and 2^{de} dessus, haute-contre taille, and basse-contre basse"¹⁰ (according to the country), to give the player an idea of the range required, with additional parts assuming numbers, "quintus, sextus", etc.

The instruments were of much lighter tone quality than present-day musical instruments, with the exception of the double-reeds; otherwise they probably would have drowned out the vocal lines they were doubling. Even the

early members of the violin family had a lighter tone than now owing to a lower bridge and fingerboard and shorter neck. The flutes (both recorders and transverse flutes) were wooden, and gave a softer, more mellow sound than present-day metal ones. Also being wooden, the cornett had a more subdued sound than the trumpet. Even the trumpet and trombone were softer because of their thicker walls and smaller bell. Appendix I gives further characteristics of sixteenth and seventeenth century instruments.

It is probable that sixteenth century orchestras leaned more heavily on the woodwinds, as the following sixteenth century collections show:

1561 Elizabethan band¹¹

Violins	Flutes Fifes Oboes	Cornetts	Drums
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1569 Verona Accademy Instruments¹²

5 sets of 5 viols, a lira, and a "rebechino"
 7 lutes, a (2 manual) harpsichord, another
 harpsichord, and a regal
 1 chest of 22 recorders (with crooks for 3
 deepest) and 2 incomplete chests
 1 case of 5 flutes, another set of 5, and 2
 incomplete sets
 2 tabor-pipes; 2 tabors ("Tamburi")
 5 crumhorns
 3 fifes
 3 trombones, with crooks and tuning bits
 5 tenor cornetts
 4 silver mounted ordinary cornetts
 8 mute cornetts
 3 dragon-belled cornetts
 1 curtal with reeds
 1 "extremely fine" Nuremberg trumpet

(36 strings, 69+ winds; total = 105+)

Instruments of King Henry VII of England¹³

109 Strings (virginals, lutes, viols, guitars, clavichords)

272 Winds (cross flutes, recorders, shawms, cromornes, hornes, cornetts, organs, bagpipes)

(Total = 381)

1582 Berlin "Hofkapelle"¹⁴

6 positive organs, 4 regals, 4 harpsichords

5 new viols and some old ones

3 trombones, each with crook (and a double crook for the bass), and 7 tuning bits

7 crumhorns (1 bass, 2 tenors, 2 altos, 2 descants)

2 tenor shawms ("Bombardte") and 1 treble shawm ("discant Schalmey")

7 recorders (1 bass, 2 tenors, 2 altos, 1 descant) and a tabor pipe with them and another missing

8 recorders (2 basses, 3 tenors, 2 altos, 1 descant) and a small descant missing

9 flutes (2 basses, 4 tenors, 3 descants)

4 cornetts, 2 with keys; 2 without

1 tenor cornett with key

7 "Schreipfeifen" (1 bass without brass "mundstuck" — crook?, 3 tenors, 2 altos, 1 descant),

1 tenor lacks its key, all but one without staples and reeds or caps.

(Strings - 9+, Winds - 53; Total = 62+)

The location of the orchestra naturally influenced the instruments used. The orchestra used in-doors was small, (around twenty-five players, according to Apel).¹⁵ The instruments were of the quieter type — the viols, flutes, etc. This type orchestra was typical of amateur musicians who just enjoyed getting together for chamber music.¹⁶ This practice was probably more common in England where the custom was to play pieces on instruments all of the

same family (whole consort) to produce a homogeneous timbre.

An Italian example of the indoor orchestra is that of the "Accademia Filarmonica" in Verona, which gave highly rated concerts in a music room in which the performers sat around a long table. At one end was a harpsichord, taken off its stand. Five or six wind players changed from one instrument to another as instructed by the musical director, who arranged the program of voices and instruments so as to avoid monotony of tone color.¹⁷ In this case, the conductor was the orchestrator.

Church services frequently used brass instruments to accompany choirs, notably in Venice at St. Marks Cathedral. The placing of instruments in various lofts to accompany different choirs has aroused in some the mistaken idea that polychoral style originated in St. Marks.¹⁸ This practice of scoring for the rather boisterous instruments such as organs, trumpets, cornetts, sackbuts, and bassoons, was probably furthered by the fact that the churches were considered places of secular reunion where people went to hear good music (if possible, above the chatter of loud-voiced ladies among themselves and with their attendant cavaliers, none of whom showed any semblance of devotion).¹⁹ No doubt the brass instruments gave a thrilling sonority echoing along the stone walls of the churches.²⁰

Instruments were frequently used in theatrical produc-

tions, such as Shakespeare's plays. In these, Shakespeare was his own orchestrator, because his text usually names the desired instruments. For example, Act II Scene I of "Merchant of Venice" prescribes "A flourish of cornets when the Moorish prince comes in."²¹ To give another example, Lord Buckhurst in his tragedy "Gorbuduc" or "Ferrex and Porrex" (1561) specified before each act the instruments he wanted played:²²

First, the Music of Violins. . . .
 2nd act. The Music of cornets.
 3rd act. The Music of flutes.
 4th act. The Music of hautbois.
 5th act. Drums and flutes.

The rather astounding orchestra used by Al. Striggio (1535-c.1595) in his Intermezzo, "Psiche ed Amore" calls for forty-four instruments.²³ They are listed (in the preface, most likely), but probably were not specifically designated in the score.

Outdoor instrumental combinations leaned heavily on the wind instruments, and consisted of much larger groups. There were quite a number of uses for outdoor groups, and these influenced the instruments used.

German towns employed a group of musicians for playing "tower music" or chorales and sonatas on brass instruments from the town tower, usually at 10 a.m. and 6 p.m.²⁴

Outdoor shawm bands were popular. One of these bands (1584) was the Norwich Waits, known for "beeyng a Whoale Noyse".²⁵ Shawms were certainly appropriate outdoor in-

struments, according to Mersenne's statement: "Ils sont le son le plus fort et le plus violent de tous les instruments, si l'on excepte la trompette."²⁶ It is understandable that the Norwich Waits changed from shawms to recorders for indoor civic receptions, etc.

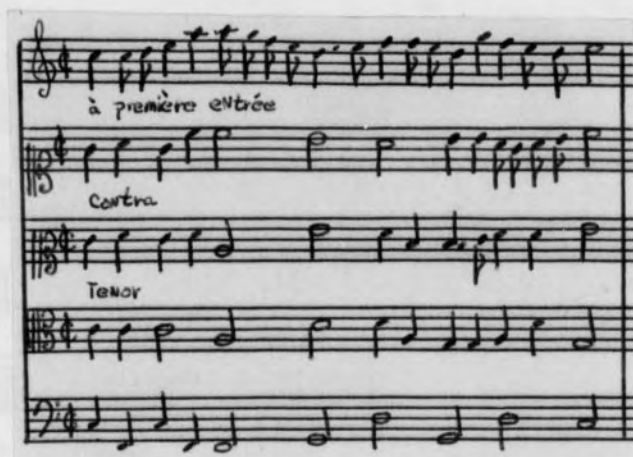
There were frequent ceremonial and festive celebrations, some outdoors, some inside, which used quite a number of instruments.²⁷ Vincenzo's coronation on September 22, 1587, at the court of Mantua deserves a description as a typical celebration.²⁸ It was held in the Interior of San Pietro which was decorated with drapes of cloth and gold, silk, taffeta, satin, velvet, and brocade. Gowns worn by all were of similiar materials, and displayed a dazzling abundance of colors and jewels. A large number of musicians played and sang "concerti for organ, voices, cornets, and trombones". After Vincenzo's speech abolishing half the taxation of wine, "A harmonious concerto of trombones began to be played, placed on an elevation of marble, just above the door of the church toward the piazza, and at the same time there was an outburst of cannon, of drums, small and large, of cries of joy, even of horses neighing, and of so many bells that in such a noise truly the onlookers could not understand their own words."

Whether or not the concerti mentioned above had the instrumentation actually written in the parts is doubtful; it was probably taken for granted that brass instruments

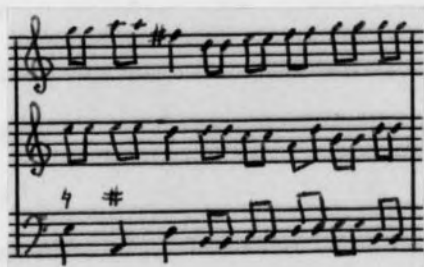
should play.

Baltasar de Beaujoyeaux (? - c.1589) was a little more specific in his "Balet comique de la Royne" produced in 1581 to celebrate the nuptials of Margaret of Lorraine to the Duke of Joyuse.²⁹ The orchestra was divided into groups including a small organ, oboes, flutes, cornetts, sackbuts, strings, lutes, lyres, and harps, so placed (some on-stage) that they accompanied a particular tableau or dance. Baltazarini even went so far as to draw pictures in the score of the desired instruments, and according to Carse, included quite accurate pictures of a bass viol and another viol, as well as some "less happy" representations of cornetts and other wind instruments.³⁰ The parts themselves were scored only for "Superius, 2nd Superius, Contra, Tenor, and Bassus". The unwritten overture was intended to be improvised by "oboes, cornetti, trombones, et autres instruments de musique", and was probably a noisy preliminary flourish, typical of that time.

Few devices were used in scoring in the sixteenth century, but it is necessary to mention them to be able to compare them with later developments. On the whole, the parts were quite simple, with little differentiation between the several instrumental parts, as this example from the first dance from "Balet Comique" shows.³¹



A device which had its origin in the sixteenth century, but was not common until much later, was the repeated note figure. One of the earliest examples is from one of the "Diologo Musical" by Baldassare Donati (1520-1603) from "Guidizio d'Amore" of 1599.³² The repeated note figure was to lead eventually to the device of bowed tremolo.

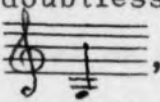


Though not too common, repeated notes played by wind instruments, later leading to double and triple tonguing, had their beginnings with Andrea Gabrieli as this example from "Aria della Battaglia, per sonar d'Instrumenti da Fiato" shows:³³

From these examples, it can be seen that by the end of the sixteenth century, only the most meagre attempts had been made at orchestration, the most ambitious being by such composers as Striggio and Baltazarini. These scattered and unformulated ideas were given better definition by Thomas Morley and Giovanni Gabrieli, with whom the next chapter is concerned.

Chapter II

FIRST ATTEMPTS AT TRUE ORCHESTRATION

Until quite recently, it has been generally thought that the first example of instruments being specified as an ensemble occurred in Giovanni Gabrieli's "Sacred Symphonies I" of 1597. Recent research on the part of Dr. Sidney Beck has revealed that Thomas Morley's (1557-c.1603) "First Booke of Consort Lessons" (1599) may be the first important orchestration milestone.³⁴ The title of this collection of pieces by "divers exquisite Authors" (merely edited by Morley) gives its instrumentation: "for sixe Instruments to play together: viz. the Treble Lute, the Pandora, the Citterne, the Base-Violl, the Flute, and the Treble Violl."³⁵ The flute was doubtless an alto or bass recorder, its lowest note being , out of the range of a transverse flute.³⁶ Until recently, the parts for each instrument were scattered, with a cittern part in the Bodleian Library at Oxford, a flute part in the British Museum, a treble viol part in the Royal College of Music, a pandora part in Christ Church (with another copy elsewhere), while the treble lute and bass viol parts had disappeared altogether.³⁷ Though Morley was careful in designating the instruments, the dedication of the collection (to Lord Mayor of London) would have one believe that he would not be greatly concerned if those instruments were not used: "They be set for diverse Instruments: to the end that whose

skill or liking regardeth not the one, may attempt some other."³⁸

On the other hand, Gabrieli's "Symphoniae Sacrae. . . Tam vocibus, quam instrumentis. . ." is more definite in its scoring than the inscription would indicate. It actually designated specific instruments within the body of the score, and was even printed in part books for the instrumentalist's convenience.³⁹ This was the first time that instrumental parts were scored independently of vocal parts.

Giovanni Gabrieli (1557-1612) had the advantage of living in Venice, the wealthiest and most cosmopolitan city in Italy, with its many receptions and celebrations. Furthermore, he was organist and composer at St. Marks and had access to its good assortment of instruments⁴⁰ and performers. It was for the latter that he developed his "concertato" style, or method of contrasting of voices and instruments for the sake of color.⁴¹

The following combinations from different sections of the "Sacred Symphonies I" illustrate his use of concertato style:⁴²

2 cornetti answered by 2 violas.⁴³

1st cornett, 1st viola, 3rd (tenor) trombone, tenor and bass voices; answered by 2nd cornett, 2nd viola, 1st and 2nd (bass) trombones and alto voice.

1 accompanied choir (various instruments) answered by a cappella choir.

Some of the vocal motet scores indicated doublings for particular instruments, and, according to Flower, the instruments took over the parts when they went out of comfortable vocal range.⁴⁴ There was no distinction between the capabilities of the voices, trombones, violins, or cornetts.

Unquestionably, the highlight of the 1597 "Sacred Symphonies I" is the "Sonata Pian e Forte" which further exemplifies Gabrieli's desire for contrast. "Sonata Pian e Forte" was the first composition to differentiate between dynamic levels. This is not indicated by special signs within the body of the music as in later compositions, but in the title, which, translated, reads [Music to be] "Sounded Soft and Loud". It is achieved by having two choirs of instruments: First choir— 2 alto trombones, 1 tenor trombone, and 1 cornett; Second choir— 1 viola (!), 2 tenor trombones, and 1 bass trombone, which play softly when used singly, and loudly when combined.⁴⁵

This combination of six trombones, one cornett, and one viola seems quite strange to modern ears, but it must be remembered that sixteenth and seventeenth century trombones had a softer and less brilliant tone quality. The cornett was not very loud, so in lightly scored passages, the viola could be heard as the treble member of its choir.

G. Gabrieli's "Sacred Symphonies II" of 1612 also had effective scoring and used the concertato style, such as

the "Suscipe Clementissime" for six voices and six trombones.

In his motet "In Ecclesiis"⁴⁶ for organ, three cornets, viola, and two trombones, Gabrieli achieves wonderful concertato effects by contrasting ensembles such as full chorus, solo quartet, instruments alone, and instruments doubling the voices at the octave. The ending of this composition illustrates one of the rare occasions of differentiation between instrumental and vocal writing, in which the instrumental parts could be performed only by trained virtuosi.⁴⁷

Though the Morley collection may prove to have been the first music designating particular instruments for particular effects, it was Gabrieli who had more influence over later composers such as Monteverdi and Heinrich Schütz, as will be seen later. Because of Gabrieli's use of light and dark contrasts through different dynamic levels, and his glowing color obtained by orchestration, Leichtentritt has justifiably compared his polychoral music to the art of Titian, Paolo Veronese, and Tintoretto.⁴⁸

Chapter III

ITALIAN CONTRIBUTIONS IN INSTRUMENTATION
BY COMPOSERS OF THE EARLY SEVENTEENTH CENTURY⁴⁹

Introduction of Basso Continuo

During the time Gabrieli was working in Venice, there was a small Florentine group called the Camerata⁵⁰ which developed a new style of singing called monody, in reaction against sixteenth century polyphony. In monody, instead of all musical parts being of equal importance, the melodic line and bass parts became most important.⁵¹ The inner parts were not even written down, but were designated by a type of musical shorthand called "figured bass", in which numbers placed under or above the bass line indicated the chords, inversions, dissonances, accidentals, etc. Of course this affected instrumentation. Instruments capable of playing chords (harpsichord- and lute-type instruments) were needed to realize the basso continuo; and since the bass register of these instruments was relatively weak, they were always required to be doubled on the bass line by a low-pitched instrument (bass gamba or bassoon). The instruments were usually not scored in the parts, as this typical example of a ritornello from Peri's "Euridice" (1600) shows:⁵²



It could have been played by any one or all of the instruments mentioned in the Preface⁵³ (gravicembalo,⁵⁴ theorbo, large lute), plus a lira grande.⁵⁵

The instrumentalists were expected to improvise by "realizing" the figured bass, that is, by filling in the missing chord tones. It was understood that appropriate embellishments were to be included. Therefore, two instrumentalists might not perform the same piece in the same way. In fact, the same instrumentalist might not perform the same piece in the same way twice.

Methods of Orchestration

As already explained, many early works of the seventeenth century did not call for any particular instruments, but assumed that appropriate basso continuo instruments would play. Other Camerata works which exemplify this are as follows: Peri's "Daphne" (1597), Caccini's "Euridice" (1600), and Gagliano's "Daphne" (1607).

Some works were a bit more specific by naming the desired instruments in their Preface, although not indicating their precise musical line. Peri's "Euridice", mentioned above (also see footnote 53), is scored by this method, as is Cavalieri's Oratorio⁵⁶ "Rappresentazione di Anima e di Corpo" (1600). Cavalieri suggested the following instruments:⁵⁷ "Una lira doppia, un clavicembalo, un chitarrone, flauti, o vero due tibie all' antica". He also adds, "Un violino sonando il soprano per l'apunto farà buonissimo

effetto."⁵⁸ Thus the following portion of Cavaliere's "Animo e Corpo" for a ". . .gran quantita di stromenti" is an example of ambiguous scoring:⁵⁹



It would probably have been played by all the instruments mentioned in the Preface.⁶⁰

Little by little, however, some indication as to the desired instruments began to creep into the score itself. Both Cavaliere's "Animo e Corpo" and Peri's "Euridice" are unscored for the most part, but both include sections specifically calling for two and three flutes respectively.⁶¹ The following example from Peri's "Euridice" is typical with its melody in thirds and crossing of voices:⁶²

*Tirsi Viene in scena sonando la presente Zinfonia con un Triflauto, e canta la
 Seguente stanza; Salutando Orfeo di poi s'accompagna con gli altri del
 Coro, e con tale strumento fu sonata.*

The musical score consists of six staves of handwritten notation. The first staff begins with a treble clef and a 3/4 time signature. The notation uses diamond-shaped note heads and includes various rhythmic values such as minims, crotchets, and quavers. The score is written in a historical style and includes a key signature of one sharp (F#). The notation is arranged in a single system across six staves.

The greatest piece of orchestration early in the seventeenth century was Monteverdi's "Orfeo" (1607), which both lists a large quantity of instruments in the Preface and also specifies them within the body of the score.⁶³ This copy of the facimile is taken from the Preface.

STRUMENTI.

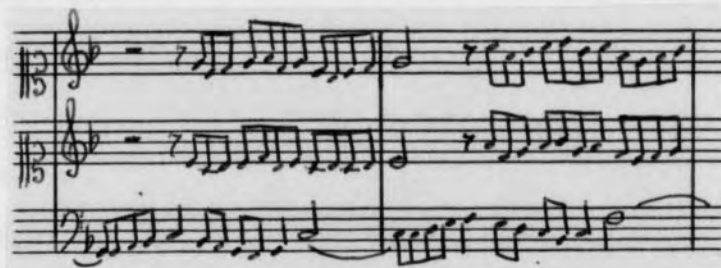
Duoi Gravicembali.
 Duoi contrebassi de Viola.
 Dieci Viols da brazza.
 Un Arpa doppia.
 Duoi Violini piccoli alla Francese.
 Duoi Chiteroni.
 Duoi Organi di legna.
 Tre bassi da gamba.
 Quattro Tromboni.
 Un Regale.
 Duoi Cornetti.
 Un Flautino alla Vigesima Seconda.
 Un Clarino on tre trombe sordine.

He began with an overture⁶⁴ scored for "Ottoni", or brass instruments. The five parts of the score are marked "Clarino, Quinto, Alto, Vulgano, e Basso". As can be seen from this example, the inner parts could be played on a valveless instrument,⁶⁵ though their naming is somewhat confusing.

"Clarino" designated the extremely high trumpet part so familiar in Baroque music which was played entirely on the upper notes of the harmonic series (between the eighth and sixteenth harmonics), a feat so impossible on today's instruments:

"Quinto" is not the fifth part nor on the fifth degree of the scale. It plays only four different notes in this score. Perhaps Monteverdi wrote the outer voices first, then added the inner voices from the bottom up, thereby writing the "Quinto" part fifth. "Alto" is not the second part but is in the range of an alto trombone. "Vulgano" has baffled many historians, but "vurgano" seems to have been the name of one of the lower open notes on the trumpet (according to Girolamo Tantini, 1636),⁶⁶ namely the "G" which the "Vulgano" plays. "Bassus" probably meant trombone.

Frequently Monteverdi partially scored parts by naming the desired instruments, but not designating a particular musical line for each, as in this example with the heading: "Questo ritornello fu suonato di dentro da un Clavicembalo, duoi Chitaroni, e duoi Violini piccoli alla francese."⁶⁷



It was doubtless scored with the two violins playing the top lines and the clavicembalo and two chitarroni realizing the bass part.

But at still other times he was quite explicit: "here enter the trombones, cornets, hand-organs" or "the other

parts to be played by three viole da braccio, and a contrabass to be touched very softly."⁶⁸

One cannot always trust Monteverdi's instructions in his Prefaces, for in "Vespers" (1610) his directions, "sex vocibus et sex instrumentis" are quite misleading. On the first page of the Doxology he indicates no fewer than twelve different instruments, not counting basso continuo!⁶⁹ The orchestration for "Tirsi e Clori" was discussed in a letter to Striggio, November 21, 1615, and the suggestions in the letter were inconsistent with the score. He described the "Ballo" section as "instrumenti a 5" and required these instruments: eight violas da braccio, one contrabass, a small spinet; adding "and if there could be two small lutes, it would be beautiful." This made a total of twelve instruments, none of which were listed in the original score.⁷⁰

Monteverdi's later works were not as elaborately or as carefully scored as "Orfeo". "Arianna" (1608) may have been an exception, for though the score is lost (except for Arianna's famous "Lament"), it was supposedly as richly scored as "Orfeo".⁷¹

By the time of "L'incoronazione di Poppea" (1642), his last work, Monteverdi had settled his style of orchestration, so that his scores had a fairly uniform look, as shown by this facsimile tracing from the Prologue, scored for strings and basso continuo:⁷²

The image shows a handwritten musical score for five staves. The top staff is labeled 'Sinf.' and the second staff is also labeled 'Sinf.'. The notation is dense, featuring many sixteenth and thirty-second notes, often beamed together. There are numerous accidentals (sharps and naturals) and some dynamic markings like 'r' (ritardando). The score is written in a historical style, possibly from the 17th or 18th century. The bottom two staves are grouped together with a large bracket on the left side.

Duplication of Instruments

The seventeenth century still retained some fondness for using instruments all of one timbre, which was possibly a residue of the sixteenth century idea of consorts. This has been seen in Peri's "Euridice", in which there were three flutes used as a trio. Francesca Caccini, daughter of Giulio Caccini, and one of the first women composers, also wrote a flute trio in her opera "La Liberazione di Ruggiero dall'Isola d'Alcina." According to Doris Silbert, it was inspired by her father's ritornello for three recorders in the song of Tirsi from his opera "Euridice".⁷³

The Overture to "Orfeo" specifies "Ottoni", or all brass instruments, as mentioned on page 21.

Monteverdi used four trombones⁷⁴ in some of his religious works, including his "Concertante Psalms", "Selva" (1641), and four Masses. In each case the four trombones could be exchanged for four violas da braccio.

Towards the middle of the century, the trend was toward the homogeneous texture of strings. The stringed instruments were much more expressive, an important element to the monodic style of writing.

After 1637 with the opening of various large opera houses, scores suggested the doubling of all parts for the practical reason of making them heard. In Monteverdi's "Il Ballo delle Ingrate" (1608), he advised that the instruments (five violas da brazzio, harpsichord and chitarrone) each be doubled if made necessary by the size of the hall.⁷⁵ The noisy wind machines in "Tirsi e Clori" prompted him to complain in the letter to Striggio (mentioned on page 23) that he could not employ beautiful harmonies and was forced to double certain instruments (three chitarroni instead of one; three harps instead of one). He was also forced to use more wind instruments than delicate strings.⁷⁶

Programatic Uses of Scoring

In the early seventeenth century, composers began to use certain instruments for the furtherance of dramatic details. Members of the Camerata were anxious to imitate the Greeks, so they chose instruments which they thought best resembled the Greek kithara and aulos. For this they chose members of the lute family (plucked like the kithara), and of the flute, or recorder family (blown like the aulos).⁷⁷

Flutes became associated with pastorale scenes as evidenced by the trio for flutes in Peri's "Euridice" (See page 20). This was supposed to have been a "solo" played on a triple flute by a shepherd on-stage, but in reality, was played by three hidden flutes.⁷⁸ "Orfeo" offers examples of flutes accompanying pastoral scenes. Francesca Caccini's opera "La Liberazione. . ." includes a "pretty little trio for recorders" as a ritornello for a shepherd's song. Flutes were specified in the Preface, but in the music they were scored only by clef:⁷⁹



Brass instruments came to be associated with the infernal world. Monteverdi's "Orfeo" offers the best early Italian example of this, with its choir of trombones and cornetts plus regal and organ, accompanying every infernal scene.

Monteverdi must also have associated drums with Hades, for, as the curtain raised on "Il Ballo delle Ingrate" (1608) showing the flaming jaws of hell, he designed a long thunderous discord, produced by muffled drums playing underneath the stage.

The music in Monteverdi's "Il Combattimento di Tancredi e Clorinda" (1624) was particularly effective in furthering the dramatic impact of the text. In it, Monteverdi pictured the agitation of battle between the two lovers Tancredi and Clorinda, by a bowing device known as tremolo. He built up to this rapid alternation of bow strokes in several stages of progressively shorter note values:⁸⁰

Stage 1 (labeled ①) shows a four-part setting in 3/4 time. The top staff has a whole note, followed by a half note, and then a quarter note. The bottom three staves (violin, viola, and cello/bass) play a rhythmic pattern of quarter notes. A '3' above the first measure indicates a triplet. Stage 2 (labeled ②) shows the same four parts, but the top staff now has eighth notes, and the bottom three staves play a pattern of eighth notes. A '3' above the first measure indicates a triplet.

Stage 4 (labeled ④) shows the four parts with sixteenth notes. Stage 5 (labeled ⑤) shows the four parts with thirty-second notes, representing the final stage of the tremolo effect.

By the time the sixteenth notes were reached, the excitement

on the battlefield was at its highest peak.

This device occurred again in "Il Ritorno di Ulisse in Patria" to describe the battle scene between Ulysses' and Penelope's suitors.

In "Il Combattimento. . ." he further added to the dramatic impact the sounds of swords clashing, imitated by the strings of the viols being plucked (*pizzicato*).⁸¹

Qui si lascia l'arco e si strappano
le corde con due diti

gio va dan-si con po-mi infel-on-i-ti e cru-di

"Orfeo", besides having instrumentation suited to different scenes,⁸² afforded instrumental character delineations. Orfeo was often accompanied by the organo di legno and chitarrone, while Charon was always accompanied by the regal. Less important characters were accompanied by the clavichord.⁸³ Monteverdi did not carry this character "leit-motif" idea into his other works, but it was employed by Heinrich Schütz as will be seen in the following chapter.

Not in association with a plot or characters, but decidedly for programmatic purposes, is the "Capriccio Strava-

gante" (1627) by Carlo Farina (fl. 1635), for four strings. It is a truly "extravagant" attempt at imitating dogs, cats, chickens, trumpets, soldier's pipes, lyre, and tambourine.⁸⁴ In an appendix to "Capriccio Stravagante" Farina explained how to produce these prototechniques.⁸⁵

Cats

Musical score for 'Cats' in 4/4 time. The score consists of four staves. The top staff is in treble clef with a key signature of one sharp (F#). The three lower staves are in bass clef with a key signature of one sharp (F#). The notation includes various rhythmic patterns and accidentals, with some notes marked with 'b' and 'f'.

Hens

Musical score for 'Hens' in 3/4 time. The score consists of three staves. The top staff is in treble clef with a key signature of one sharp (F#). The two lower staves are in bass clef with a key signature of one sharp (F#). The notation includes various rhythmic patterns and accidentals, with a section marked '[sic]' in the middle staff.

Dogs

Musical score for 'Dogs' in 4/4 time. The score consists of four staves. The top staff is in treble clef with a key signature of one sharp (F#). The three lower staves are in bass clef with a key signature of one sharp (F#). The notation includes various rhythmic patterns and accidentals, with some notes marked with 'x'.

Pipes

Musical score for 'Pipes' in 4/4 time. The score consists of four staves. The top staff is in treble clef with a key signature of one sharp (F#). The three lower staves are in bass clef with a key signature of one sharp (F#). The notation includes various rhythmic patterns and accidentals, with some notes marked with 'f'.

Lyra

Musical score for 'Lyra' in 3/4 time. The score consists of four staves. The top staff is in treble clef with a key signature of one sharp (F#). The three lower staves are in bass clef with a key signature of one sharp (F#). The notation includes various rhythmic patterns and accidentals, with some notes marked with '#'.

Soldiers' Pipes

Musical score for 'Soldiers' Pipes' in 4/4 time. The score consists of four staves. The top staff is in treble clef with a key signature of one sharp (F#). The three lower staves are in bass clef with a key signature of one sharp (F#). The notation includes various rhythmic patterns and accidentals, with some notes marked with 'f'.

Tambourine

Musical score for 'Tambourine' in 4/4 time. The score consists of three staves. The top staff is in treble clef with a key signature of one sharp (F#). The two lower staves are in bass clef with a key signature of one sharp (F#). The notation includes various rhythmic patterns and accidentals.

Drums

Musical score for 'Drums' in 4/4 time. The score consists of one staff in bass clef with a key signature of one sharp (F#). The notation includes various rhythmic patterns and accidentals.

Instruments were frequently important to the plot of the drama, though they were hidden from sight. Often the

actors would themselves pretend to be playing the instruments while those off-stage were actually playing, according to Charles Burney:⁸⁶ "On many occasions it was recommended for the actors to have instruments in their hands, as the playing, or, appearing to play on them, would help illusion more than a visible orchestra." Monteverdi, for his "Tirsi e Clori", instructed that the performers should stand in a half circle, like a half moon. At each corner of the half circle should be a chitarrone and a clavicembalo as continuo instruments (one for Tirsi; one for Clori). They were to be held and played, but he added that it would be better if Clori could have a harp instead of a chitarrone. In fact, actors were sometimes required to play instruments with the hidden orchestra, while they were not needed on-stage. This must have been difficult for the heavily costumed actors, and may have had some bearing on the orchestra's being hidden, i.e., for convenience's sake.

Monteverdi, probably more than any other composer, realized the true dramatic importance of the instruments, because most of his works bear the warning that instruments should be played "in imitation of the meaning of the text."⁸⁷

Rapid Alternation Between Instruments

Quite rapid "dialogue" between different instruments was not uncommon in the early seventeenth century and may have been inspired by G. Gabrieli's somewhat more conserv-

active alternation between instruments and choirs of instruments. Paolo Quagliati's (1555-1628) "Sfera Armoniosa" (1623) shows an example of the rapid alternation of the theorbo with other basso continuo instruments.⁸⁸

The image shows a musical score with four staves. The top two staves are vocal lines with lyrics: "pri O fi-li-ce mia can-te — O fe-li-ce mia sor-te Al-ma mia gio-ia — Al-mia mia gio-ia". The bottom two staves are basso continuo parts. The first staff is labeled "Tiorba NON sonate." and the second staff is labeled "Sonata la Tiorba Sola la tiorba Seguitate". The score includes various musical notations such as clefs, notes, rests, and accidentals.


Much of the alternation between instruments in "Orfeo" comes as a result of the character delineations.⁸⁹ The dialogue of characters necessitates the alternation of their instrumental accompaniments. The alternating of instruments is not always forced into a pattern by the singers' dialogue, however. A significant exception which recurs more than once is the chorus for nymphs and shepherds from Act II, in which the clavichord alternates with the harp and chitarrone every measure:⁹⁰

The image shows a musical score with two staves. The top staff is labeled "Clav." and the bottom staff is labeled "A. chit.". The score shows a series of chords and notes, with the two instruments alternating every measure. The notation includes clefs, notes, rests, and accidentals.

Introduction of Various Instrumental Devices

Dynamic contrasts

Dynamic markings were not too common in the early seventeenth century. Either the voices and instruments followed the rise and fall of the melodic line, or dynamic contrasts were taken care of by the scoring, as in Gabrieli's "Sonata pian e forte". Abbreviated symbols must have been used somewhat in the first part of the century, considering the words of Domenico Mazzocchi (1592-1665) in his Preface to "Partitura de Madrigali" written in 1638: "the... letters F.P.E.t for Forte, Piano, Echo, and trill are already common affairs known to all."⁹¹ They may have been "common affairs", but it seems that Monteverdi was one of the very first to write them in the parts. Directions to the players in "Orfeo" and "Tirsi e Clori" read: "...a contrabass to be touched very softly."⁹² "Il Combattimento" contains a curious thing in all parts simultaneously. It would seem to be a type of subito:⁹³



notes were supposed to be played with one bow stroke, a practice that dated back to 1617 with Marini's works (c. 1597-1665).⁹⁴

Muted instruments were known to the early seventeenth century, but the only early score calling for this particular type of dynamic control was "Orfeo", which used three muted trumpets. Most history books ascribe the first use of muted strings to Lully (1686), but Mersenne wrote

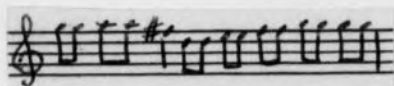
of it as early as 1636, four years after Lully was born.⁹⁵

Bowing methods

Monteverdi receives credit for another important instrumental device mentioned heretofore — bowed tremolo. This device was first used in "Il Combattimento" (1624). According to several accounts, when Monteverdi showed his players how the tremolo should be played, they were quite amused and at first refused to "shake a cord sixteen times in a single bar".⁹⁶ Other composers who used tremolo were Marini and Usper. Repeated notes in the melodic line had been becoming more common in many works, as a foreshadowing of the tremolo.⁹⁷

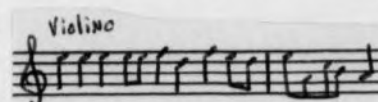
Donati, "Diologo Musical"

(1599)

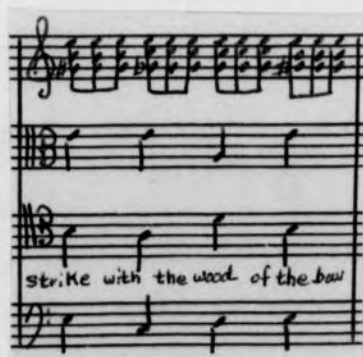


Quagliati, "Le Sfera Ammoniosa"

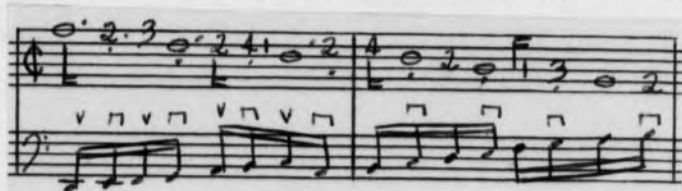
(1623)



Col legno bowing, or bowing with the wooden part of the bow in rhythmic patterns, was first introduced in 1627 by Carlo Farino in "Capriccio Stravagante". This work also called for the devices of double stopping and harmonics.⁹⁸



Scores of this period did not indicate up-bow or down-bow. Ganassi's method (1542) used dots for down-bows and lack of dots for up-bows, showing that the problem was considered.⁹⁹



Legato was the usual style of bowing. Ganassi recommended that long notes be played with full bows, and short notes with short bows.¹⁰⁰ Agricola⁽¹⁵²⁹⁾ recommended that whole bows be used for all note values.¹⁰¹ Mersenne said it was even possible to play an entire "courante" on one bow!

Pizzicato

Plucking the strings has already been mentioned with the credit for this innovation being attributed to Monteverdi. His "Qui si lascia l'arco e si strappano le corde con duoi diti",¹⁰² canceled by "Qui si ripiglia l'arco",¹⁰³ was not so eagerly seized upon by other composers as was tremolo. Incidentally, players of today pluck with only one finger instead of two.

Employment of Obsolete Instruments¹⁰³

Since the first of the seventeenth century, members of the violin family had been gradually attaining more attention, but composers as a whole favored the viols.

However, when parts were unscored, they were probably intended for viols. Otherwise, the music would indicate something like the following: "Un violino sonando il soprano per l'apunto, farà buonissimo effetto."¹⁰⁴

In his attempt to imitate the Greeks, Cavalieri scored for "due tibie all'antica"¹⁰⁵ (in default of flutes). This is a confusing bit of orchestration (see footnote 61), but shows well the "musicological" spirit of the Camerata in trying to be antiquarian. This scoring for "tibie" seems to be an isolated case.

Cavalieri also calls for a strange instrument in his "Aria", "Io piango Filli".¹⁰⁶ It is scored for two "Flöten" and tenor, but the flutes could have been replaced range-wise by two "sordelline".¹⁰⁷

"Orfeo's" instruments were, for the most part, familiar to sixteenth century instrumental groups; and though the instruments were not obsolete, some of them soon became so. These instruments included one of the lesser used members of the viol family, the "violini piccoli alla Francese", and the woodwind instrument, the "flautino alla Vigesima seconda". Both of these instruments played in the very high register, which probably had something to do with their becoming obsolete as more melodic and expressive music became predominant.

Shawms were undoubtedly much used in the early seventeenth century, but few scores call for them. Monteverdi

used them in his "Vespers of 1610" and again in his "Magnificat septem vocibus et sex instrumentis". In the latter work he refers to them as "fiffari".¹⁰⁸

Virtuoso Demands on Performers

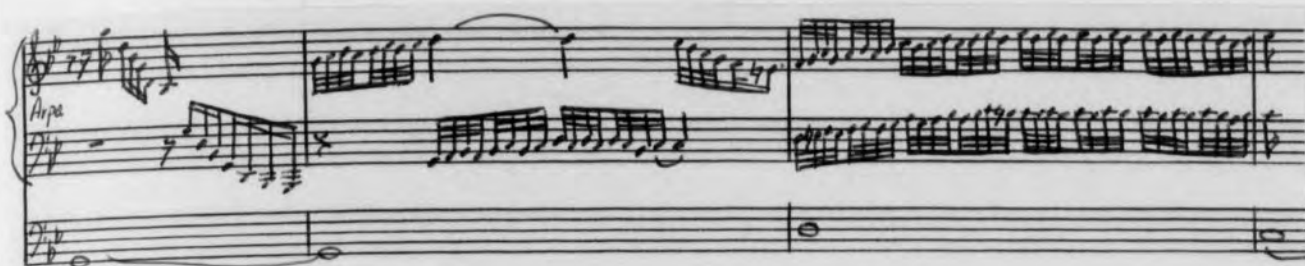
Instrumentalists were probably capable of playing more technically difficult passages than are found in most seventeenth century orchestral literature, with the exception of "Orfeo". Tempos in the seventeenth century were slower than today, and few seventeenth century works have note values faster than sixteenth notes. Instrumental ranges were so much smaller than today's, that fifth position was a staggering height to violinists!¹⁰⁹ The climax of "Orfeo", 'Possente Spirto', provides some of the most difficult writing. The following violin duo is interspersed between equally florid vocal sections:¹¹⁰

Violino I

Later:

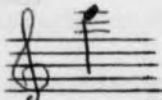

Next the cornetts play passages equally as florid as the violins':

Lastly, the harp shows its facility:



There are other spots of difficulty such as the Ritornello #6 for "Ottavini", or octave flutes, played and sounding an octave above the written notes:¹¹¹



This made the flutes' highest note  sound .

It is rather curious that Ritornello #7 was scored for five-part violes, but the first chord (which is repeated three more times throughout the piece) contains six notes.¹¹²



This chord could be intended for the clavicembalo and chitarroni which play immediately before and after the ritornello, but if not during, it meant double-stopping for one of the viole parts. It is not hard to imagine that Monteverdi intended double-stopping, since by 1617, only ten years later, Marini called for triple-stopping in one of his violin sonatas.¹¹³

Nothing is said about the instrumentalists having to improvise on his part in "Orfeo". Of course the basso con-

tinuo had to be realized by several instruments, but the other instrumental parts seem written out in full.¹¹⁴ Quagliati, in "La Sfera Armoniosa", was quite explicit in his Preface's "Instructions for the Violin": "Nell' opere concertate con il Violino, il Sonatore ha da sonare giusto come sta adornadola con trilli, & senza passaggi".¹¹⁵

Complexities of Chiastic Scoring

The orchestration genius, Monteverdi, was not content with all the scoring innovations in his masterpiece, "Orfeo", but went a step farther and organized everything into a great chiastic structure, balanced in each part. The accompanied dialogue between characters with ritornelli interspersed, while showing musical variety, at the same time balance the orchestration. There is cohesion and balance between the various acts, by the re-appearance of several ritornelli and sinfonias, sometimes scored the same, sometimes **varied**.¹¹⁶ The complex nature of such a work can readily be seen, but it took the mind of a Monteverdi to avoid a monotonous stodginess in this pattern of scoring.

Shift of "Klangideal"¹¹⁷

Surprisingly enough, with all its remarkable contributions, the score for "Orfeo" represents a Renaissance rather than a Baroque type orchestra. The Baroque ideal

was toward the lighter, more expressive quality of the strings; Monteverdi's "Orfeo" contained more non-stringed instruments than stringed instruments. "Orfeo"¹¹⁸ was more comparable with Striggio's orchestra, with Beaujoyeux's, or with G. Gabrieli's. His later works, though not possessing the instrumental varieties of "Orfeo", are actually more advanced from an orchestration standpoint. The Camerata's works were even more advanced in orchestration than "Orfeo", because in each composition the emphasis was on stringed instruments. Woodwinds only added color in very special places. So it was with Monteverdi, by the time he wrote his last work, "L'Incoronazione di Poppea". In a sense it can be said that Monteverdi's works represent a transition from the Renaissance ideal to the Baroque ideal of orchestration — they show the gradual shift of emphasis from wind instruments to strings.

Chapter IV

SPREAD OF ORCHESTRATION TO OTHER COUNTRIES

IN THE EARLY SEVENTEENTH CENTURY

Countries other than Italy were much slower in adopting the idea of scoring for particular instruments. Germany, despite the Thirty Years War (1618-1648), was more aggressive than some of the other countries. Austria made a few contributions by composers otherwise unknown. England retained her sixteenth century habit of writing for viols; and France did not even enter into the picture.

G. Gabrieli and Monteverdi seem to have been the two main influences on scoring in other countries. The German Heinrich Schütz (1585-1672) absorbed elements of the style of both of these composers by studying with them in the years 1609-12 and 1628-9, respectively.¹¹⁹

Gabrieli's Influence

Many other German composers followed the sixteenth century practice of not specifying the instrumentation. On the other hand, composers such as Samuel Scheidt (1587-1654) and J. H. Schein (1586-1630), who did call for particular instruments, were like Gabrieli, because in scoring for instruments such as cornetts, viols, and recorders, they were striving for colorful instrumental settings to use in concertato style with the voices.

Unlike his contemporaries, Schütz was not usually a careless orchestrator. His "Psalmen Davids" (1619) were carefully planned, with almost every Psalm showing a different kind of sonority. A few of these sonorities included: (compare with Gabrieli's, page 14).¹²⁰

Choir I

- (1) 4 viols
- (2) 2 trombones & 2 voices
- (3) 3 cornetts & voice
- (4) lute & voice
- (5) 3 cornetts, bassoon, & voice
- (6) 2 violins & voice

Choir II

- 4 cornetts & trombone
- 2 trombones & 2 voices
- 3 trombones & voice
- 3 viols
- 4 trombones
- 5 bassoons & voice

Choir III

- (1) a cappella
- (2)
- (3) a cappella
- (4) 4 trombones
- (5) a cappella
- (6) 2 cornetts & voice

Choir IV

- a cappella
-
-
-
- a cappella
- 4 trombones, voice, & double chorus

[Read (1) through all four choirs, etc.]

Sometimes Schütz gave the player a choice between two instruments as in Psalm 150 for "3 cornetti o Violini", "2 tromboni o fagotti", and "cornetto o flauto".¹²¹ Nevertheless, when there was a solo within the body of the score, Schütz designated the instrument to play it, even though it was not the first named in order of preference.¹²²

Psalm 136 was even scored for Timpani.¹²³ The timpani player was obviously meant to improvise, however, because he had no independent part and certainly could not have played the trumpet's music.

Schütz's "Sacred Symphonies" (I-1628, II-1647, and III-1650) were modeled after Gabrieli's, and the first set particularly shows the master's influence. Once again the instrumental groups were quite colorful and varied.

"Fili mi Absalon" from "Sacred Symphonies I" has achieved fame because of its sombre introduction of four trombones setting the mood for the tragic lament sung by bass voice.

Carse remarked that perhaps Schütz showed a special fondness for bassoons in the "Sacred Symphonies". He

pointed out that some of the vocal numbers were accompanied by nothing but three bassoons which, in the Sinfonias, "solemnly chase one another up and down in scale and arpeggio passages."¹²⁵

"Sacred Symphonies II" contains one number influenced by Gabrieli's "Sonata Pian e Forte" from his "Sacred Symphony I". Schütz's piece has "Forte" and "Piano" written in the vocal parts. It also includes the tempo markings "Praesto" and "Tarde".¹²⁶

Monteverdi's Influence

Elements of Monteverdi's style can be found in Schütz's work even before the years 1628-9 when he studied with Monteverdi. In his Easter Oratorio, "Historia der Auferstehung Jesu Christi" (1623), as in "Orfeo", there is association of instruments with particular characters. The Evangelist is always accompanied by four violas da gamba and the other characters solely by organ.¹²⁷

Viola da Gamba I

Viola da Gamba II

Viola da Gamba III

Evangelist

Viola da Gamba IV (oder Basses Generalis)

Da der Sabbath vergangen war, Maria Mag-da-le-na, und die andre Maria, welche versetzt wird In-co-bi und Se-lo-me,

The gambas must have given an ethereal sounding background to the Evangelist, which changed abruptly (even the basso continuo gamba was tacet) when another character entered.

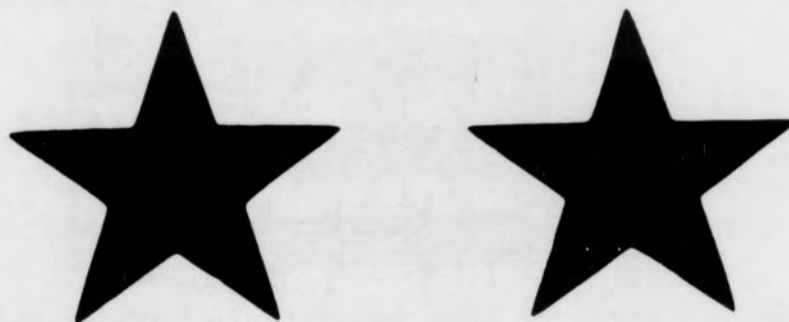
Another work to use character scoring was "Seven Last Words from the Cross" (1664). In this work, all voices are accompanied by only basso continuo except for Jesus, who has an instrumental background. The instruments are not specified, but probably should be strings.¹²⁸

Schütz reached his highest peak in character scoring in his Christmas Oratorio, "Historia der freuden — und gnadenreichen Geburt Gottes und Marien Sohnes Jesu Christi" (1664). In it he surpassed his master in linking persons with tone colors. His character-instrumental associations were as follows:

Shepherds (3 altos)	Flutes and Bassoon
Wise men (3 tenors)	Violins and Bassoon
High Priests	{ Trombones
Scribes } (4 basses)	
Herod (bass)	Trumpets
Angel	2 Violas
Evangelist	Continuo

The accompaniment for the Evangelist is opposite from what it was in the Easter Oratorio. Shepherds are asso-

CORRECTION



***PRECEDING IMAGE HAS BEEN
REFILMED
TO ASSURE LEGIBILITY OR TO
CORRECT A POSSIBLE ERROR***

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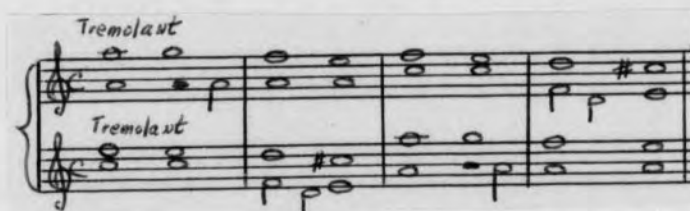
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Scribes } (4 basses)	
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Angel	2 Violas
Evangelist	Continuo

The accompaniment for the Evangelist is opposite from what it was in the Easter Oratorio. Shepherds are asso-

ciated with the pastorale sounding flute. Perhaps Schütz associated Herod and the Priests and Scribes with hell, because he had them accompanied by brass instruments. The "good" characters he associated with strings, and therefore scored the wise men with violins and the angel with two violas. When this music was first published, it was in the continuo reduction only, but advertized that full parts could be rented "for a moderate fee."¹³⁰

There is possibly a slight attempt at chiastic scoring in "Seven Last Words", in which a symphonia occurs near the beginning and again near the end. This may be purely coincidental, but may have been deliberate, though on nothing like as great a scale as "Orfeo".

The "Sacred Symphonies III" show imitation of Monteverdi's "Il Combattimento" in using the bowed tremolo.¹³¹



Schütz's works, like both Gabrieli's and Monteverdi's, make some technical demands on the players. In the following example, the bassoon is treated like the stringed instruments, and if the note values are any indication of tempo, the bassoon player would have to be rather facile to keep up with his more active partners.¹³²

Violino I

Violino II

Fagotto

Innovations

Vocal text painting was a common thing all through the sixteenth century, but Schütz adapted it to instrumental writing in the Psalm 150 of the "Psalmen Davids". He appropriately scored the words "Lobet ihn . . . mit Posaunen" with trombones.¹³³

Trombone solo

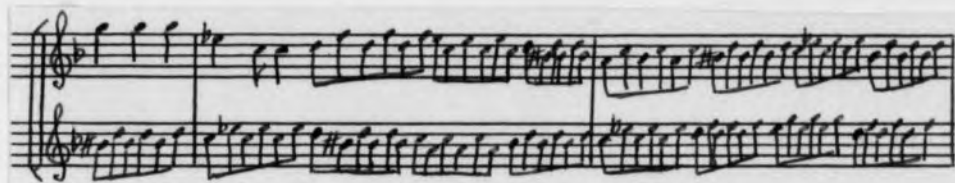
Trombone solo

Trombone solo

lo-bet ihn, lo-bet ihn, lo-bet ihn mit Posaunen.

Fingered tremolo was uncommon to the early seventeenth century, but Schütz may have an example of it in his "Sacred

Symphonies III", if this unscored work is intended for strings.¹³⁴



Two rather unusual Austrian compositions cannot be said to be in imitation of either Gabrieli, Monteverdi, or Schütz. Christopher Strauss's (1580-1631) "Requiem" (published in 1631) represents the first attempt to have an instrumental ensemble imitate bells. Below is an excerpt from the beginning instrumental introduction entitled "Symphonia ad imitationem campanae".¹³⁵

Another masterpiece commissioned for the Austrian cathedral at Salzburg, but actually written by an Italian, is Orazio Benevoli's (1605-1672) "Festmesse für 53 Stimmen" (1628) which was a pioneer^{work} in writing for a huge number of vocal and instrumental parts. Indeed, no monumental work of the past three centuries can compare to the fantastic appearance of this score in fifty-three parts!¹³⁶ (See following page.)

The instruments play quite an important part having frequent soli, and are rarely doubled with the voices. Sections are used antiphonally such as opposing string or brass choirs, or woodwinds against brasses. At one point both string orchestras are in unison. The flutes and oboes are usually paired in one way or another. This example shows the most usual way, with first flute and first oboe doubled and second flute and second oboe doubled, all at the unison, with the third and fourth flutes in thirds playing filler.¹³⁷

2 Hawthorns

4 Flauti

Ripieno

Ky - ri - e, Ky - ri - e
Ky - ri - e e - ley - son, e - ley - son, e - ley -

8 voci
in
concerto
CHORO I

CHORO II
4 Violoncelli

CHORO III
4 Flauti

CHORO IV
3 Tromboni

CHORO V
8 Voci
in
concerto

Ripieno

Ky - ri - e, Ky - ri - e
Ky - ri - e e - ley - son, e - ley - son, e - ley -

The Viols are frequently doubled with the trombones and

CHORO I

2 Hautbois

CHORO III

4 Flauti

2 Clarini

2 Cornetti

CHORO IV

3 Trombe

Ripieno

Ky-ri-e, Ky-ri-e

CHORO V

8 Voci in Cornette

Ky-ri-e, Ky-ri-e

2 Violino

4 Viola

I. LOCO

4 Trombe

Timpani

II. LOCO

4 Trombe

Timpani

The VIOLAS are frequently doubled with the trombones and

CHORO

3 Trombe

CHORO V

8 Voci in Coroletta

2 Violino

4 Viole

I. LOCO

+ Trombe

Timpani

4 Trombe

LOCO

II Timpani

Organo

Basso Continuo

Handwritten musical score for a choral and orchestral piece. The score includes parts for Choro (3 Trombe), Choro V (8 Voci in Coroletta), 2 Violino, 4 Viole, I. LOCO (+ Trombe), Timpani, 4 Trombe, LOCO (II Timpani), Organo, and Basso Continuo. The lyrics "Ky-ri-e, Ky-ri-e" are written under the vocal parts. The score is written on multiple staves with various musical notations including notes, rests, and dynamic markings like "Ripieno".

The VIOLS are frequently doubled with the Trombones and

The viols are frequently doubled with the trombones and trumpets, but have a slightly more florid part. The clarini are comparatively isolated, and are used in duo fashion. In tutti passages, the brass instruments contribute short motifs in "punctuation" fashion. The whole composition, consisting of eight choirs, is held together with a "master" continuo (the two vocal choirs having a smaller continuo). The master continuo is composed of violoncellos, double basses, bassoons, bass-lute, 2 organs, clavicembali, lutes, harps, and other instruments.¹³⁸ In the last movement, "Plaudite Tympana", the organs from both continuo parts double, with the trombone from Choir IV, in canon more or less welding all parts together.

So magnificent is this setting of the mass both for choral as well as instrumental writing, that Leichtentritt has described it as being a translation of the term "Baroque".¹³⁹

Chapter V

DEVELOPMENT OF MORE IDIOMATIC WRITING FOR INSTRUMENTS IN ALL COUNTRIES DURING THE MIDDLE OF THE CENTURY

Composers from Italy, Germany, Austria, France, and England during the middle part ¹⁴⁰ of the seventeenth century carried on the ideas introduced by their predecessors, mainly the early Italians. Though few real innovations can be attributed to the middle of the century, the instrumental writing is more characteristic for the instruments and more differentiated from the vocal writing.

Further Development of Established Practices

It must be remembered that not nearly all of the works written by the middle of the century were orchestrated. However, in those that were, the composer frequently had a coloristic idea in mind. Contrast was the main objective, particularly to the Italians. It became stylish to contrast the violins with the viols, as evidenced by Stefano Landi's (c.1590-c.1655) "Il San Alessio" (1632), Luigi Rossi's (1597-1653) "Il Palazzo Incantato" (1642), and Marc' Antonio Cesti's (1623-1669) "Il Pomo D'Oro" (1667). "Il Palazzo Incantato" uses two violins as well as a complete five-part group of viols.¹⁴¹ The

softer toned viols accompany the vocal parts, allowing the voices to sing without forcing, while the fuller sounding violins are interspersed between vocal phrases. "Il Pomo D'Oro" has been compared to Monteverdi's "Orfeo" in its use of tone-color for each scene. Like Monteverdi, Cesti chose cornetts, trombones, and organs, to depict Hades. Cesti saved the trumpets for martial scenes. The earthquake scene in Act IV has a dramatic impact because of its lack of any instrumental accompaniment.

Dynamic contrasts became more common. Echo effects were achieved by contrasting dynamics at short intervals as shown in the following examples. Notation for dynamics was not standardized, but varied according to composer. Landi's "Sinfonie" from "Il San Alessio" uses the conventional "forte" and "piano":¹⁴²

The image shows a musical score for five instruments: Violino Primo, Violino Secondo, Violino Terzo, Arpe Lesti Tiorbe & Violini, and Basso con Pli Gravi. The score is divided into three measures, each with a dynamic marking above it: *forte*, *piano*, and *forte*. The first measure is marked *forte*, the second *piano*, and the third *forte*. The notation shows various rhythmic patterns and melodic lines for each instrument, illustrating the dynamic contrast between the sections.

Lully (1632-1687) preferred the terms "fort" and "doux" as exemplified in his ballet "Xerxès" (1660):¹⁴³



The Musical Prologue of his "Alceste" (1674) specifies "Hautbois fort; les Violons doux".¹⁴⁴ This would seem inevitable anyway, but the terms "fort" and "doux" are obviously dynamic indications since they are later applied to the trumpets.

Matthew Locke (c. 1630-1677) in "The Tempest" (1675) offers the first English example of dynamic indication. It occurs almost three-quarters of a century after "Sonata pian e forte", showing England's typical slowness in accepting European practices. Locke notates dynamic levels by "Soft", "Soft and slower by degrees", "Lowder by degrees", and even "Violent".¹⁴⁵



The "Violent" section given above corresponds to "agitato" sections of Monteverdi's works, in that the repeated sixteenth notes would sound like a bowed tremolo.

No available scores from the middle of the century indicate muted instruments for dynamic effects. They were

revived only in the latter half of the century by Lully and Buxtehude.¹⁴⁶

Neither was Monteverdi's device of pizzicato seized upon, but tremolo was more readily adopted. It was used by Landi, Merula, and Cesti. The latter composer's "Il Pomo D'Oro" indicates what is doubtlessly supposed to be a tremolo, by a mysterious wavy line ~~~~~ drawn over the note.¹⁴⁷

Instruments obsolete at that time were occasionally included in scores of the middle seventeenth century. The relatively little used timpani came to assume more importance. This was mainly due to Lully, who may have introduced the kettledrum into the theatre orchestra.¹⁴⁸ He used more timpani than any other composer, allowing one for each pitch since the drums had no adjustable pedal. "Xerxès" (1660) calls for three,¹⁴⁹ but "Cadmus" (1673) needs five:¹⁵⁰

The image shows a musical score for two groups of instruments. The top group, labeled 'TROMPETTES', consists of three staves of music. The bottom group, labeled 'TYMBALLES', consists of two staves of music. The notation is dense with many beamed notes, indicating a tremolo effect. The score is written in a historical style, likely from a 17th-century manuscript.

In "Xerxès" the timpani accompany strange instruments which Lully designated as "Trompettes marines". These

surely cannot be the medieval "Nuns' fiddles", or one-stringed instruments played entirely on harmonics with fifty sympathetic strings vibrating inside their long wooden bodies! The range of the music suits seventeenth century trumpets, probably the instruments Lully intended:¹⁵¹

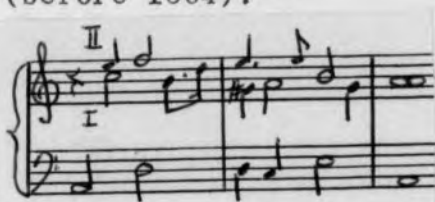
The image shows a musical score for five staves. The top staff is labeled "Trompettes marines" and the second staff is labeled "TIMBALES". Both parts are in the key of D major (one sharp) and common time (C). The score consists of five staves of music, with the top two staves for the trumpets and the bottom three for the timbales. The music features rhythmic patterns and melodic lines characteristic of 17th-century French instrumental music.

A horn-type instrument possibly resembling the hunting horn, or forerunner to the French horn, is first mentioned in the latter middle part of the century. This instrument actually belongs to the eighteenth century. The first ^{extant} German opera "Seelewig" (1664) by Sigmund Theophilus Staden (1607-1655) includes an instrument called a "Thick Horn".¹⁵² Lully's "Princesse d'Elide" (1664) calls for "trompes de chasse".¹⁵³ Carse mentions that there are other doubtful instances in which this type of instrument is used, but he does not cite examples.¹⁵⁴

Few virtuoso demands were made on performers during the middle of the century. Up until this time, the greatest technical demands were those in "Orfeo" which have al-

ready been discussed. Ranges were gradually extended, causing more frequent clef changes within parts.¹⁵⁵ Cesti's "Il Pomo D'Oro" asks a little more of instruments by way of range than other scores of the period. But even these demands are so trivial as compared with "Orfeo's", that they are hardly worth quoting here.

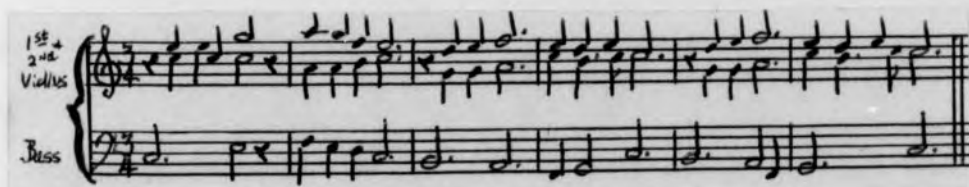
Rarely was any emphasis placed on the first player in a section, making it unnecessary for the principal to have any greater technical facility than any of the other players. The musical lines of instruments crossed each other so frequently as to make the second player often more important than the first, as in this example of Carissimi's "Jonas" (before 1664):¹⁵⁶



and Lully's "Alceste" (1674):¹⁵⁷



Strangely enough, in Cesti's "La Dori" (1661), the voices are crossed in only one place — the first measure:¹⁵⁸



Significance of these Developments in Creating an Instrumental Style of Writing

One of the most important developments thus far in orchestration is that the instrumental music was becoming idiomatic to instruments and even to particular instruments. But though the instruments could easily play the vocal lines, voices would have found it much more difficult or even impossible to sing some of the instrumental lines such as this example from a Merula Canzona (1639):¹⁵⁹



Voices could never be expected to sustain a tremolo for measures on end. Neither could they, with all their combinations of range, achieve nearly all of the contrasts in color afforded by the instruments. The confines of the vocal range were no longer observed by the instruments. In short, they had broken their ties with vocal music. Gone was the time for "Apt for voices or viols" writing: the instruments were recognized for themselves.

There was also differentiation between writing for strings and winds. Trumpets were reserved for fanfare type writing, flutes for pastoral scenes, and so on.

Writing for stringed instruments became idiomatic through the employment of greater ranges, dynamic shadings, bowed tremolo, pizzicato, and double stops. Now that composers had "discovered" the merits of the different instruments, orchestration was able to progress into a more refined art in the latter part of the seventeenth century.

It has already been seen that the orchestra has shifted its main emphasis to strings, and toward the latter part of the century, more particularly towards the violin family, woodwinds and brass, had as yet been used rather sparingly. But through Lully, Rameau, and Purcell they began appearing in orchestral works in groups of two's and three's of each type. Similar scores where the stringed instruments were not used a standard part of the orchestra. The scoring of the Italian composer Corelli (1686-1713) led to a form of composition known as "concerto grosso" which consisted pitting a small group of instruments (the "concertino") against a large group (the "concerto grosso").

Growth of New Devices from Old Ones

The association of instruments with certain colors or characters continued, but became less stereotyped. The flute no longer necessarily accompanied pastoral scenes, as seen in Monteverdi's "Venus and Adonis" (c. 1624) ¹⁶¹ where they are omitted from the pastoral scene, but used later in the

Chapter VI

ORCHESTRATION PRACTICES LEADING TO
GREATER TECHNICAL PROFICIENCY OF THE PLAYERS
AND THE BEGINNINGS OF A MORE STANDARDIZED ORCHESTRA
IN THE LATE SEVENTEENTH CENTURY

It has already been seen that the orchestra has shifted its main emphasis to strings, and toward the latter part of the century, more particularly towards the violin family. Woodwinds and brasses had as yet been used rather sporadically. But through Lully, Buxtehude, and Purcell they began appearing in orchestral scores in groups of two's and three's of each type. Musical scores show that the timpani were becoming more and more a standard part of the orchestra. The scoring of the Italian composer Corelli (1653-1713) led to a form of composition known as "concerto grosso" which entailed pitting a small group of instruments (the "Concertino") against a large group (the "Tutti").

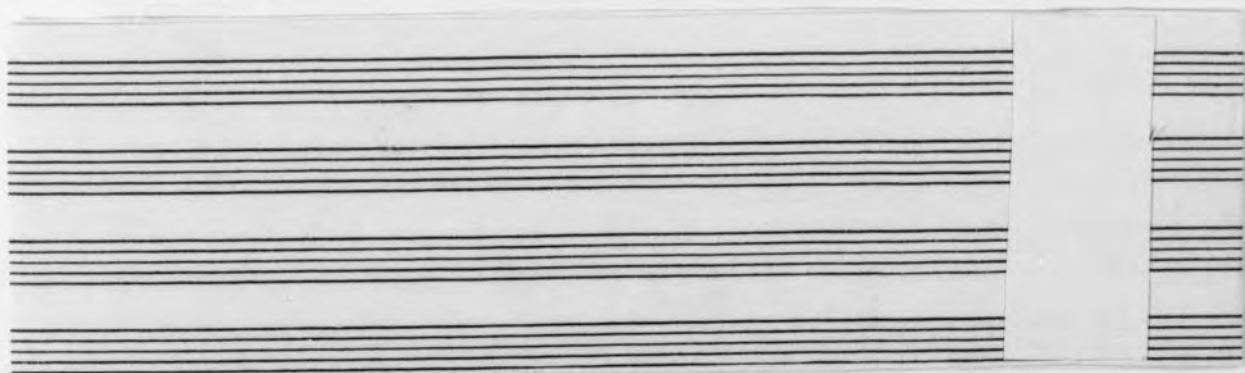
Growth of New Devices from Old Ones¹⁶⁰

The association of instruments with certain scenes or characters continued, but became less stereotyped. Flutes no longer necessarily accompanied pastorale scenes, as shown in Blow's "Venus and Adonis" (c.1685)¹⁶¹ where they are omitted from the pastorale scene, but used later in the

score for a love scene. Purcell, in "Dioclesian" (1691)¹⁶² has two flutes accompany the soprano solo, "Charon the Peaceful Shade", — far removed from the brass and regal used by Monteverdi to depict Charon! The brass instruments, so long associated with hell, were used by Buxtehude for quite a different purpose in his Wedding Cantata of 1672.¹⁶³

A somewhat different use of character scoring was used in George Christoph Bach's Cantata, "Siehe, wie fein und lieblich" (1689), in which he used three gambas symbolically for the Trinity.¹⁶⁴

Text painting became more common, possibly because texts lent themselves better to accompaniment than ever before. Purcell's solos "Sound the Trumpet" and "The Airy Violin" naturally suggest trumpet and violin accompaniment.¹⁶⁵ An example from Buxtehude's cantata "Mein Gemüth erfreuet sich" shows to what length composers did go to follow the text:¹⁶⁶





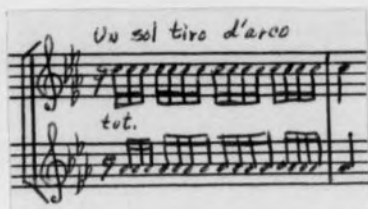
Another amusing bit of text painting occurs in Purcell's "St. Cecilia's Day Ode" in which the sign, www , speci-


fies the accompaniment to the words "the jarring, jarring seeds of matter".¹⁶⁷

Dynamic markings became more common, particularly through Lully, Buxtehude, and Purcell. In Corelli's orchestral works, the instrumentation in concerto grosso style takes care of the dynamic contrasts. The use of muted trumpets was revived from the early part of the century, particularly by Buxtehude, who used not only muted trumpets, but muted clarini and trombones also.¹⁶⁸ Muted strings were first introduced in 1686 by Lully in "Armide",¹⁶⁹ and later used by Charpentier in his "Médée" (1693).¹⁷⁰ Buxtehude sometimes combined muted strings and muted brass.¹⁷¹

For further dynamic contrast, instruments were hidden off-stage to make them sound far away. Steffani's "Alarico" (1687) hides one section of instruments ("Trombe di dentro"),¹⁷² while his "Niobe" calls for a hidden orchestra of viols "In scena nascosta".¹⁷³ Lully's directions in "Alceste" (1674), "Les voix et les instruments s'éloignent ensemble" probably means that the voices and instruments are to sound softly, as if off in the distance, rather than actually to sing and play from off-stage.¹⁷⁴

Bowed tremolo became a commonly used device. It was notated by the word "Tremolo", a wavy line , or by . Rapidly repeated notes were not always played as bowed tremolo, but were occasionally supposed to be played in one bow, as ⁱⁿ this example from Steffani's "Niobe" (1688):¹⁷⁵



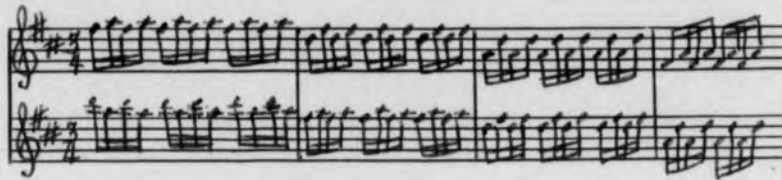
The same effect is achieved in two of Bruhns' Cantatas by tying repeated notes thus: .¹⁷⁶ In Steffani's "Niobe" the flute has to parallel the string's rapidly repeated notes by quickly tongued notes or possibly by flutter-tonguing.¹⁷⁷

The image shows a musical score for five instruments: Flauti, Violini (two parts), Viola, and Bassi. Each instrument part is written on a staff and features rapid, repeated notes, illustrating the effect of flutter-tonguing or double tonguing.

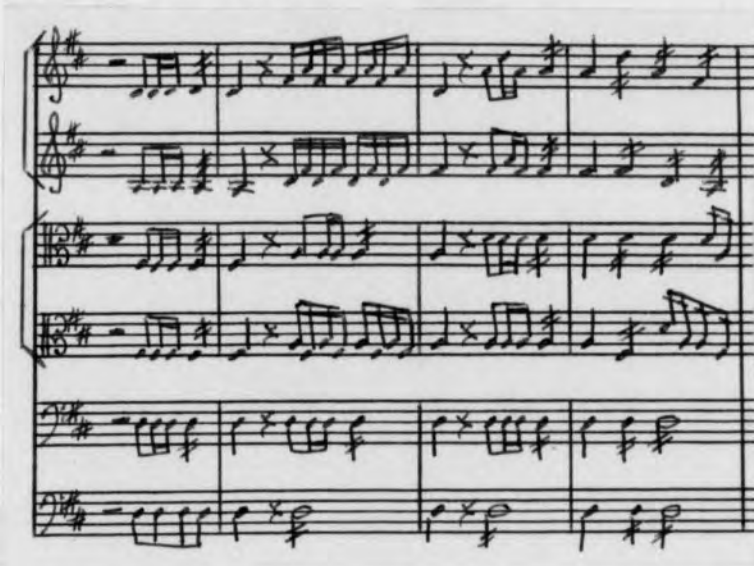
Double tonguing had been in use since the sixteenth century and was insisted upon for sixteenth notes.¹⁷⁸ Our modern method of "T-K-T-K" was considered too explosive, so that the softer "T-R-T-R" or "di-ri-di-ri" was used. Agricola says:¹⁷⁹

"If a piper you'd live to be
learn you well your "diridiridee"
which belongs to the notes small
lest you look a fool before all."

A few more examples of fingered tremolo can be found. The earliest example is from Corelli's "Concerto Grosso" #7 (for date see footnote 180), in which finger tremolo occurs in the two upper violin parts:¹⁸¹



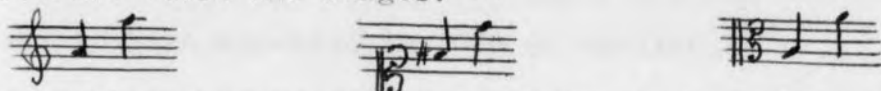
Pallavicino (1630-1688) in "Gerusalemme Liberata" (1688) combined bowed and fingered tremolo, and used the latter in three voices at once.¹⁸²



Pizzicato was still unrevived. Perhaps there were no battle scenes that called for the clashing of swords.

There are a number of examples of specifications for odd instruments or instruments not in common use in the late part of the century. Some of Lully's ballets include rustic instruments: bagpipes, castanets, guitars, and "tambours di Basque".¹⁸³ A march in "Isis" (1677) used musettes (bagpipes) in unison with drums and violins.¹⁸⁴ Another rustic instrument called for in Draghi's "Balletto di centauri. . ." and Steffani's "Niobe" (1688) was the piffero, a term designating one of a number of instruments

such as the shawm, fife, or bagpipe.¹⁸⁵ In Draghi's "Balletto" there are parts for three pifferari, each with different clefs and ranges:¹⁸⁶



Here again, the exact instrument for each part could be chosen only by its ability to cover the range demanded by the part.

Curious instruments called "flatt trumpets" were used by Purcell in his music for Queen Mary's funeral. Today's authorities say that the "flatt trumpets" must in actuality have been high-pitched trombones. Their ranges were:¹⁸⁷



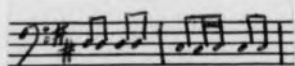
The obsolescent tenor oboe is found in Purcell's "Dioclesian" (1691).¹⁸⁸ This is the first appearance (in scores which I have consulted) in over one hundred years, since the "Intermedi of 1589". Also the bass flute, soon to go out of common use, was found in two late works: Lully's "Le Triomphe de L'Amour" (1681) and Purcell's "St. Cecilia's Day Ode" (1692).

A tenor instrument called the "Viola da collo" was called for by Pallavicino in "Gerusalemme Liberata" (1687). Since "collo" is the Italian word for neck, it follows that the instrument was probably held under the chin. Possibly the instrument itself was not rare, but this name does not occur in any other scores.¹⁸⁹

Bukofzer mentions that Fux was partial to an instru-

ment known as the "chalumeaux", or forerunner to the modern clarinet. It is possible that the chalumeaux occurred before the end of the century, since the clarinet was supposed to have appeared in 1690 or earlier.¹⁹⁰

The timpani continued to resume importance in orchestral scores. To be sure, timpani parts were not always written down, but the familiar tonic-dominant (usually in the key of C) was understood. One of the few scores using any other pattern was Charpentier's "Médée" (1693) which calls for tonic and leading tone in the key of D:¹⁹¹



Advancements in Technical Proficiency and Their Effects

Demands on the players' technique continued to grow. The stringed instruments were given more florid parts than the winds, probably in an attempt to imitate the human voice. Such rapid note values as thirty-second and sixty-fourth notes were sometimes found, but their speed would, of course, depend on the tempo of the piece. Composers whose writings contain these melismatic string parts were Pallavicino (1630-1688), George Christoph Bach (1642-1697), Johann Michael Bach (1648-1694), Krieger (1649-1725), and Steffani (1654-1697). The following example from Pallavicino's "Gerusalemme Liberata" (1687) shows the use of sixty-fourth notes in imitation of vocal embellishments

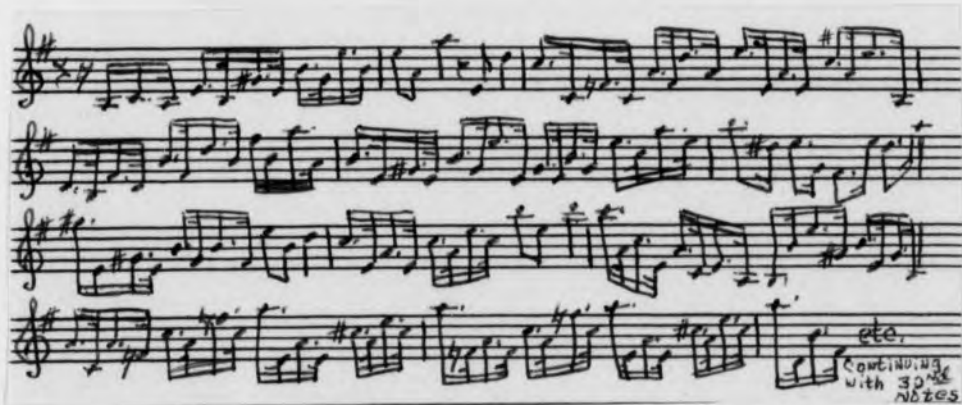
occurring at phrase endings.¹⁹² The tempo marking is "allegro".



Each gamba (three in all) in turn had to be able to play the following theme from George Christoph Bach's "Siehe, wie fein und lieblich" (1689).¹⁹³

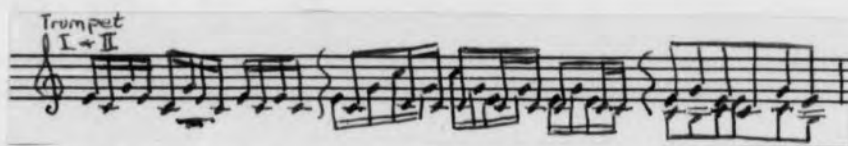


The difficulty of playing this preceding example would, of course, be dependent on tempo, which is not given. The following quotation from Krieger's "Wie bist du denn. . ." (c.1697) shows a combination of sixteenth and thirty-second notes and string crossings.¹⁹⁴



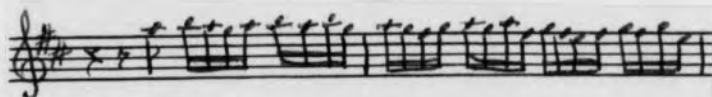
The wind parts, though not nearly so melismatic as the string parts, were harder in different ways. Trumpets, (or clarini as they were called when playing in the extremely high register), were sometimes asked to play rapid notes of fanfare character. This example is from Johann Christoph Bach's "Es erhub sich. . .", and was naturally

played without valves.¹⁹⁵



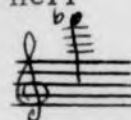
The clarini were often expected to play for long stretches in the highest register of the instrument on open notes.


Two similiar examples for clarini are from Buxtehude's Cantata, "Alleluja",¹⁹⁶ and an aria from one of Steffani's operas, respectively.¹⁹⁷




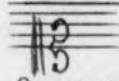
To make things difficult for the flutist, Pez, in his "Concerto Pastorale", apparently thought nothing of writing twenty-eight measures without a breathing point. His norm was about twenty-five measures, at which point he might give the poor flutist as much as a sixteenth note rest.¹⁹⁸

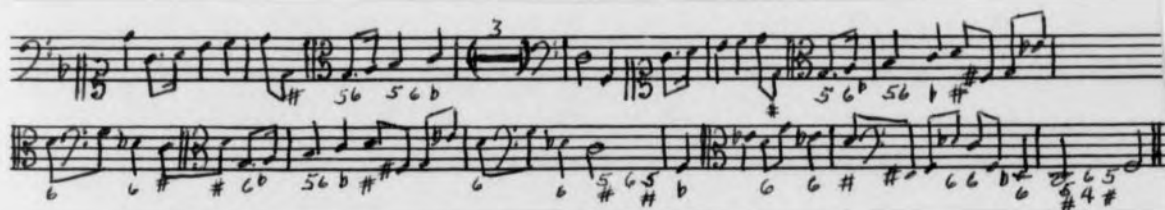
The range of all instruments was extended, but particularly that of the strings, since there were no mechanical problems to limit the player's facility. A chronological list of range development can be found in Appendix III, but a few of the more extreme examples will be given here. In Johann Michael Bach's "Ach bleib bei uns, Herr Jesu Christ", the first and second violini are given



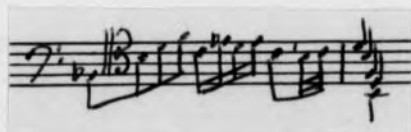
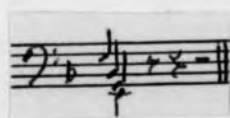
and  respectively.¹⁹⁹

In Johann Christoph Bach's "Es erhuh sich. . .", two trumpets are given their second partial to produce, which is difficult to do unless the embouchure is extremely relaxed: . ²⁰⁰

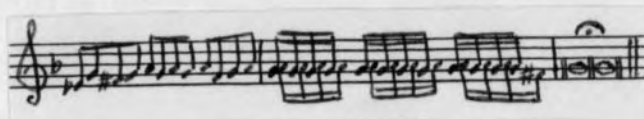
Clef changes within parts aided the players by avoiding leger lines. Treble instruments were expected to play in both treble (G) and soprano clef (). Parts ordinarily in alto, tenor, or bass clef, frequently changed to another one of these three clefs. The continuo part of Theile's Passion is particularly remarkable for its frequent clef changes:²⁰¹



Multiple stops were becoming more common, particularly at cadences. Bruhn's "Paratum cor meum" contains quadruple and quintuple stops; the former occurring in the first gamba part, and the latter, adding only one note, in the second gamba part.²⁰²



Of a somewhat different nature are the double stops in Johann Christoph Back's "Mein Freudin".²⁰³



The double stops in the penultimate measure would sound like a bowed tremolo.

Improvisation is expected of players in Purcell's "Dioclesian". First the chorus sings a fortissimo passage on a C major chord, "Sound all your instruments!", after which the players are instructed to "Flourish with all instruments in C-fa-ut key."²⁰⁴

The number of keys in which instruments were expected to play was expanding. At one time, C and F were considered about the only keys having notes suitable for instruments. (A glance back at key signatures of musical examples quoted in this study will substantiate this.) Occasionally G or B^b were used. But by this time, composers had also adopted the keys of E^b, D, A, and E. This was due, in part, to improved mechanism in the wind instruments, which, by this time, had one or two keys. (See Appendix I)

Transposition must have been a matter of course with seventeenth century musicians, because most of the organs (at least in Germany) were tuned a tone too high, and in order to play with them, church instrumentalists had to play everything a step higher.

With the development of more technically demanding music, there came a differentiation of players. First and second violin were no longer always used interchangeably, with their lines frequently crossing. Instead, the first violinist was expected to be more accomplished than the second, and was given harder and more exposed music to play. This was true of pairs of clarini, flutes, oboes, and other instruments. Even the bombarde (bassoon) was given a solo in Buxtehude's motet, "Benedicam Dominum."²⁰⁶

The desire for contrast, whether between different instruments or different dynamic levels, had continued to grow; and towards the last part of the century a form combining the two ideas had its beginning. This was the "concerto grosso" form, combining a small (hence softer) group of instruments, with a larger and louder group, the "ripieno" or "tutti". This form was brought to its height at the end of the seventeenth century by the two Italian composers, Corelli and Torelli, though compositions in this form were also written by Fischer, Pallavicino, Steffani, Heinrich and Johann Christoph Bach, and others. The "concertino" (or "favoriti", as it was called by the two Bachs), was a solo group which was designed for the better players. This group could be any combination of two or more instruments. Corelli stabilized his "concertino" by always using two violins and a 'cello and basso continuo²⁰⁷ pitted against a string orchestra. According to Berger, two

players must have read from the same part while playing Torelli's "Concerti Grossi", because Torelli's manuscript disregarded the problem of page turns, possibly expecting one of the two on the part to turn while the other played.²⁰⁸

In Corelli's Concerto Grosso #6, the first violin receives so much more emphasis than any other member of the "concertino", that it actually foreshadows the solo concerto.²⁰⁹



Beginnings of a Standardized Orchestra

It is impossible to say that the late seventeenth century afforded any one standardized orchestra. For among such patterns as Lully's orchestra "Les Vingt-quatre Violons du Roi" with its formula of:²¹⁰

6	1 st violins
4	2 nd violins
4	3 rd violins
4	violas
6	basses
24	strings

and Corelli's "concerto grosso" pattern, there were still such monstrosities as Freschi's "Berenice" (1680) with this stupendous setting:²¹¹

Chorus of 100 virgins
 Chorus of 100 soldiers
 Chorus of 100 horsemen in iron armor
 40 cornetts on horseback
 6 mounted trumpeters
 6 drummers
 6 ensigns
 6 sackbuts
 6 flutes
 12 minstrels playing Turkish and other
 instruments
 Etc.

A glance at the last few pages of Appendix III, however, will show that on the whole, the orchestra was more or less narrowing down to strings (in four or five parts), two flutes and/or oboes, sometimes a bassoon, two or three trumpets and/or cornetts, possibly two or three trombones, kettledrums, and basso continuo. Effective instrumental combinations had been worked out, such as two oboes and bassoon,²¹² trio of flutes, cornetts and trombones, trumpets and drums, and trumpets and oboes.²¹³

The orchestra and instrumental groups described above have come a long way from the assortment of instruments used in Striggio's "Psyche ed Amore", Gabrieli's "Sacred Symphonies", or Monteverdi's "Orfeo". The following section of "Conclusions" will attempt to summarize and evaluate the progress orchestration had made during the seventeenth century.

CONCLUSIONS

The reader will recall that in the Introduction several questions were asked which this paper proposed to answer, if at all possible.

How did late sixteenth century scoring practices contribute to later orchestral practices? They contributed very little, except for the practice of actually scoring particular instruments for particular musical lines. Late sixteenth century orchestras were large and composed of any instrumental groupings; seventeenth century orchestras were smaller and more refined, emphasizing the delicate stringed instruments. Seventeenth century orchestras were not influenced by sixteenth century instrumental ensembles nearly as much as they were influenced by the new style of composition — monody.

How adequately were the parts scored? This varied according to time, composer, type of composition, and locality. Towards the latter part of the seventeenth century compositions became more thoroughly orchestrated, but there were still works which were undoubtedly intended for certain instruments, though those instruments were not indicated in the score.

Were instruments used interchangeably? There is really little evidence from the scores, aside from a few which clearly give a choice of instruments to be used, or state verbally

the composer's lack of concern over which instruments should play. As for scored works — it cannot be proved, but it is certain that instruments must have been used interchangeably.

Were instruments scored because they were readily available, or were they used in an artistic sense to produce a particular tone color? Both — composers made use of available instruments because importing instrumentalists was not the custom. Towns, churches, and even wealthy families owned collections of instruments from which composers could choose a variety of tone colors.

How much improvisation was expected of players? Here again, it is impossible to say, because scores rarely indicated improvisation. Of course the basso continuo had to be realized. Fanfares were no doubt expected of the brass instruments to summon people to their seats before plays. Appropriate embellishments were expected of players, though they were not always indicated in the music. When these embellishments were indicated, instrumentalists did not necessarily observe them, but were free to omit them or add others at their discretion. However, at least one orchestra (Lully's) discarded the idea of any embellishments except those written in the music, in order to avoid discrepancies in ensemble.

Did the seventeenth century orchestra show more tendencies toward virtuosity or toward simplicity in style

of playing? The main tendency was toward simplicity, though by the end of the century the technical demands were becoming greater. The technical demands could not reach beyond the capabilities of the instruments, however, and most of the instruments were in quite primitive condition.

In conclusion, several general observations should be made. First, the emphasis on wind instruments in the sixteenth century shifted to strings in the seventeenth century. One reason for this is that the new monodic style of writing needed a soft and well-blending accompaniment (afforded by strings) to prevent the vocalists' having to strain. Second, the growing feeling that music was an art rather than a complicated study in counterpoint led composers to choose the more expressive instruments capable of lovelier tone quality and better intonation — hence the strings. The experimental spirit led composers to discover that strings were capable of more variability in tone color than the winds, through the devices of tremolo, pizzicato, double stops, etc. Third, music was becoming more idiomatic to particular instruments, with the aid of those devices just mentioned.

In summary, I would say that there seem to have been definite patterns of growth throughout those countries which were musically most important in the seventeenth

century. To be sure, the pattern was jagged at times, but it was one of progress in the works of individual composers, in the various countries, and indeed, in Europe as a whole.

1. John Carver, History of Organ Music, New York, 1923, p. 32.
2. Giacomo Benvenuti, ed., Federico e Giovanni Monteverdi in Musica Strumentale in due parti, Monumenti dell'Arte Italiana, Roma, 1908, pp. 1-14.
3. Carver, loc. cit.
4. Carver states that in these physical specimens of the early 17th century, they simply doubled, or tripled, the works were usually accompanied by a basso continuo. All text was given throughout. Monteverdi, His Life and Works, says that the earliest of these were 1580, particularly of the early 17th century.
5. Frederick Dorian, History of Music, New York, 1912, p. 111.
6. It is necessary to have a general idea of the state of the period in which the music was written. Appendix I describes in more detail (individual instruments) they occur in sources, and that for every instrument there are five or six others of similar type. The sixteenth century consisted of a "mixed" consort, including violins, lutes, flutes of instruments. A "consort" included instruments all of one kind and dedicated chamber music.
7. Carver, op. cit., p. 32. Monteverdi's works were written in the early 17th century and doubtless apply to the early 17th century.
8. Benvenuti, op. cit., p. 14.
9. Carver, op. cit., p. 32.
10. Carver, op. cit., p. 32.
11. Carver, op. cit., p. 32.

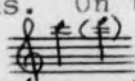
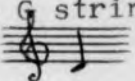
FOOTNOTES

1. Melchior Franck, "Two Pavans", from Newer Pavannen, Galliardien, und Intradien, (Wakefield, Mass., 1940), Robert D. King, ed., p. 368. (Bound manuscript.)
2. Adam Carse, History of Orchestration, (New York, 1925), p. 22.
3. Giacomo Benvenuti, ed., "Andrea e Giovanni Gabrieli et la Musica Strumentale in San Marco", Instituzione e Monumenti dell'Arte Italiana, (Milano, 1931), I, 36.
4. Carse, loc. cit.
5. Note that in these phrases, instruments were called for in connection with voices, whose musical line they simply doubled, or sometimes played alone. The works were usually accompanied madrigals, so the vocal text was given throughout. Henry Prunières in Monteverdi, His Life and Works, (London, 1925), p.11, says that the madrigal was rarely sung a cappella after 1580, particularly at the Court of Mantua.
6. Frederick Dorian, History of Music in Performance, (New York, 1942), p. 62.
7. It is necessary to know something about the instruments of the period to understand how they were chosen. Appendix I describes the main instruments in some detail (individual variants will be taken up as they occur in scores), but it must be remembered that for every instrument listed, there are about five or six others of varying sizes, in its family. The sixteenth century orchestra was a "broken" or "mixed" consort, including members of various families of instruments. A "whole" consort ("chest" of viols, "set" of recorders, "nest" of cornetts) included instruments all of one type and usually indicated chamber music.
8. Carse, op. cit., p. 33. "Syntagma Musicum" was written in the early seventeenth century, but would doubtless apply to the late sixteenth century also.
9. Benvenuti, op. cit., I, 54.
10. Words correspond to voice parts.
11. Carse, op. cit., p. 22. The terms "band" and "orches-

tra " were used synonymously at this time.

12. Anthony Baines, Woodwind Instruments and their History, (London, 1957), p. 239.
13. Willi Apel, Harvard Dictionary, (Cambridge, Mass., 1955), p. 357.
14. Baines, op. cit., p. 240.
15. Apel, op. cit., p. 129.
16. Families wealthy enough owned their own chests of different instruments for these get-togethers.
17. Baines, op. cit., pp. 239-40.
18. Divided choirs were used in many churches lacking lofty choir galleries. Curt Sachs, in Rise of Music in the Ancient World East and West, (New York, 1943), p. 59, points out that antiphonal singing can be traced back to Biblical times: "When the children of Israel had walked upon dry land in the midst of the sea and were saved out of the hand of the Egyptians, Moses himself struck up the holy tune to glorify the Lord, and all men joined the leader's voice, while the women responded antiphonally. . ."
19. Prunières, "Opera in Venice in the XVIIth Century", Musical Quarterly, (January 1931), XVII, 1.
20. Praetorius mentions choir director's laying of planks across beams in various alcoves above their churches in order to obtain different sounding combinations. John A. Flower, Giovanni Gabrieli's Sacrae Symphoniae (1597), (University of Michigan doctoral thesis, 1955), I, 95.
21. Charles Burney, A General History of Music, (New York, written in 1789, no publication date), II, 271.
22. Ibid., p. 268.
23. See Appendix IV for differing accounts of instrumentation, too lengthy to be given here. Note that in both accounts there is a larger number of deeper-toned wind instruments than of trebles.
24. Johann Pezel, "Sonata #1" from Original Tower Music for Ensemble of Five Brass Instruments, (New York, 1939), Robert D. King, ed., inside cover notes.

25. Baines, op. cit., p. 241.
26. Ibid., p. 220.
27. Trumpets were almost always used. In the early seventeenth century (possibly also in the late sixteenth century) at the court of the Danish King Christian of Kopenhagen, there were fifteen trumpeters (six mounted). Also, seventeen German trumpeters were imported from Dresden for coronation celebrations. Carse, The Orchestra in the XVIII Century, (New York, 1950), p. 42.
28. Leo Schrade, Monteverdi, Creator of Modern Music, (New York, 1950), p. 153-4.
29. "Balet Comique de la Royne" was not actually a comedy. "Comique" was the generic term for "dramatic". "Balet Comique" is the earliest ballet with extant music. Prunières in L'Opéra Italien en France avant Lully points out that the work was Italian in origin. Baltasarini (as he is frequently called) first appeared in Paris in 1567. It is generally supposed that he merely compiled the work and did not compose it all; but at any rate, the Italian influence shows through it in his colorful scoring.
30. Carse, History of Orchestration, p. 24.
31. Ibid., p. 25.
32. Ibid., p. 29.
33. Benvenuti, op. cit., p. 113.
34. Dr. Beck is on the New York Public Library staff. Unfortunately, his book on Morley's "Consort Lessons" will not be published for another two or three months. Recently I was fortunate in talking with his wife, Blanche Winogron (Mrs. Sidney Beck) — who was in Greensboro as a member of the Rococo Ensemble — who insisted that the Gabrieli work was unscored and that the Morley work (of two years later), was definitely scored with most of the parts being unplayable by any other instrument due to their tablature notation. This is not in agreement with my findings, but unfortunately, I am not able to get a clear picture since the Beck book is as yet unavailable.
35. Morrison Comegys Boyd, Elizabethan Music and Musical Criticism, (Philadelphia, 1940), p. 163.

36. Ibid.
37. Dr. Beck has found the two missing parts and gathered the scattered parts which will appear in his forthcoming book.
38. Boyd, op. cit., p. 164.
39. Part books for "cantus", "altus", "tenor", and "bassus"; then "quintus" through "duodecimus" were printed. When there were more than twelve parts, two parts for a single motet would be printed in the same part book and indicated "1" and "2" ("duodecimus 1" and "duodecimus 2") so that two players read from the same book.
40. In the instrumental collection c.1610 were: 8 violins, small viols, 2 tenor viols, 3 large viols, 2 cornetts, 1 bassoon, 3 trombones, and 4 theorbos. (Hans F. Redlich, Claudio Monteverdi, His Life and Works, (Oxford, 1952), p. 179.) There were doubtless some flutes and shawms also, because Monteverdi used them in his "Vespers of 1610". There were also two permanent organs and a little organ "del terzo grado". (Prunières, "Opera in Venice in the XVIIth Century", XVII, 4.)
41. Several amusing accounts have been given about the singers (about thirty) and instrumentalists (about twenty) at St. Marks. It seems that most of the singers also played some musical instrument, and the haughty instrumentalists were always quarreling with the singers, complaining that they should join the instrumentalists. The singers protested that they played only in church, not at balls or public places like the fiddlers. The instrumentalists even tried to get the organists to pay them tribute, until finally the Procuratori had to forbid them to molest singers or organists, or play instruments for hire other than in the church. Ibid., pp.3-4.
42. Carse, History of Orchestration, p. 26.
43. Ibid., p. 25. Carse says the parts marked "violini" were for violas because they were in alto clef and went too low for treble violins. On the true violin, no notes above third position  were called for, and the G string was not used, eliminating the notes below . This indicates that, for Gabrieli, the violin was just a substitute for the voice.

44. Ibid., p. 74. If so, the words could possibly have been gotten from other vocal parts, except that the parts were so contrapuntal that the words could not be understood anyway. It is interesting to note that the music is remarkable for its accuracy, but that the text is quite erroneous with inconsistent spelling, punctuation, captalization, and word placement.
45. Davidson and Apel, Historical Anthology of Music, (Cambridge, Mass., 1957), I, 234.
46. Ibid., Davidson and Apel classify "In Ecclesiis" as a late work.
47. Manfred F. Bukofzer, Music of the Baroque Era, (New York, 1947), p. 24.
48. Hugo Leichtentritt, Music History and Ideas, (Cambridge, Mass., 1938), p. 84.
49. I am including in "early" seventeenth century, works up until c.1630. In the case of composers whose works span from 1600 beyond 1630, I am discussing these later works also, rather than break the continuity of the composer's style by waiting to discuss them in a later chapter.
50. The Camerata met at the residence of Count Bardi to discuss different trends of the arts, and review works by members of the group, which included: J. Peri (composer and singer), Giulio Caccini (composer and singing teacher), Galilei (composer and father of the astronomer Galileo), Gagliano (composer), Cavallieri (composer and Roman citizen), and Rinuccini (poet).
51. According to this, "monody" is a misnomer, since the two parts are both important. The melodic line was indispensable, but the bass part was important enough to be doubled always. It seems that a name reflecting the duality of the parts should have been chosen.
52. Example taken from the actual manuscript on display in the Library of Congress, Washington, D.C.
53. In the Preface, Peri lists his instruments by giving credit to their players: "Behind the scenes, music was played by gentlemen illustrious by noble blood and excellence in music: Signor Jacopo Corsi, whom

I have so frequently named, played a gravicembalo; Signor Don Grazia Montalvo, a theorbo; Messer Giovan Battista del Violino, a lire grande; and Messer Giovanni Lapi, a large lute." [Oliver Strunk, Source Readings in Music History, (New York, 1950), p. 375.]

54. I.e., harpsichord.
55. Large bowed lyre, a chord instrument with as many as twenty-four strings. (Donald J. Grout, Short History of Opera, (New York, 1947), I, 52.) A viola da gamba, according to Groves Dictionary of Music and Musicians, (London, 1954), VI, 198.
56. "Anima e Corpo" is actually a sacred drama with allegorical personifications of Time, Life, the World, Pleasure, the Intellect, the Soul, and the Body. (Groves, op. cit., II, 127.) The reason for its being called an Oratorio was that it was first performed at the Oratorio della Vallicella, St. Philip Neri's Church in Rome. Its name, in this case, designated a locality, just as sonatas "da chiesa" and "da camera" designated localities — "church" and "chamber" respectively.
57. Ibid., also, Burney, op. cit., p. 565.
58. "And if a 'violin' should play the principal part it would have a very good effect."
59. Redlich, op. cit., p. 96.
60. According to the Aufführungspraxis of the seventeenth century, instrumentalists were often expected to play more than one instrument in a performance. Actors were even expected to play instruments occasionally. This would minimize the number of instruments able to play at the same time, since each player could choose only one instrument. Therefore the tutti passages might not have been played by all the available instruments.
61. Sources differ on the number of flutes in Cavalieri's "Animo e Corpo". C. Hubert H. Parry in Oxford History of Music, (London, New York, 1938) II, 40, lists two flutes. Groves, op. cit., II, 127, mentions two flutes and "Tibie all'antica", while Burney, loc. cit., lists "Due flauti; o vero due tibie all' antica". The "tibie" is confusing because it refers to a double-reed instrument of the oboe family. The flutes were actually recorders, according to Doris Silbert, "Francesca Caccini called 'La Cecchina'", Musical Quarterly,

(January 1946), XXXII, 60.

62. Jacopo Peri, "Le Musiche Sopra L'Euridice", (Rome, 1934), Enrico Dufflocq, ed., facsimile of original, p. 11.
63. Claudio Monteverdi, "L'Orfeo, Favola in Musica", Tutte Le Opere, (Venice, 1938), G. Francesco Malipiero, ed., Frontispiece. There were about thirty-nine instruments, according to the facsimile, but Monteverdi evidently wants two "flutes alla Vigesima Seconda" (though he lists only one) since he has two musical lines in thirds scored for flutes. (See p. 37).

The "Arpa doppia" is another problem, since the double harp was not invented until the beginning of the nineteenth century. According to the score, its range included four octaves, and extended into the contra octave, sometimes written as GG:



This could be the reason for the nomenclature, since the term, "doppia", was used in England around this time (though referring to single and double virginals). Prunières in Monteverdi seems to interpret "arpe doppie" as two harps, from the use in his sentence "Two cornetti, succeeded by two harps ("arpe doppie") replace the violins in the succeeding stanzas. . . ."

64. Monteverdi went a step further than any other composer in writing an overture for "Orfeo", which he called a "Toccata". It was more or less a fanfare, the type played at every play or opera to signal quiet in the audience. However, Monteverdi did not leave his overture to the improvisation of the players, but wrote it out in full.
65. Parry, op. cit., p. 51. In fact, all the parts could possibly be played on an 8' trumpet.
66. Carse, History of Orchestration, pp.45-6. See note 2.
67. Monteverdi, op. cit., XI, 41.
68. G. Francesco Malipiero, "Claudio Monteverdi of Cremona", Musical Quarterly, (July 1932), XVIII, 392.
69. Ibid., p. 156. See Appendix IV for instruments used.
70. Ibid., pp. 105-6.
71. Apel, op. cit., p. 520; Prunière's Monteverdi, p. 80.

72. Redlich, op. cit., opposite p. 110.
73. Silbert, loc. cit. Actually, G. Caccini's "Euridice" was supposedly unscored and I have found no other references to the three flutes. There are quite a number of references to Thyrsis's song accompanied by three flutes in Peri's "Euridice", however. See p. 26 for an example of the facsimile of the F. Caccini flute trio.
74. G. Gabrieli used six trombones in "Suscipe Clementissime" from the "Sacred Symphonies II". They were used antiphonally with a six-voiced chorus. Bukofzer, loc. cit., suggests that they were probably placed in various lofts of the church. It is undoubtedly from his teacher, Gabrieli, that Monteverdi got the idea of using several trombones.
75. Schrade, op. cit., p. 245.
76. Ibid., p. 303.
77. Until quite recently, the aulos was thought to have been a flute-type instrument, so members of the Camerata were justified in scoring for it. However, it is now known to have been a double-reed type instrument, always consisting of two pipes. Apel, op. cit., p. 62.
78. The practice of concealing the orchestra off-stage was continued into the latter half of the seventeenth century. See Appendix III, "Orchestra's Placement".
79. Silbert, op. cit., p. 59.
80. Monteverdi, "Libro Ottavo. Madrigali Guerrieri et Amadori", op. cit., vol. VIII.
81. Carse, History of Orchestration, p. 47.
82. Dorian, op. cit., p. 68, says that every scene was accompanied by instruments best suited to its particular character, with only a few uses of tutti.
83. See p. 21 or Appendix IV for a list of "Orfeo's" instrumentation.
84. Harold Gleason, Music Literature Outlines, (New York, 1950), series II, pp. II-15 and II-25. (Examples from p. II-25.) and Maurice Winton Riley, "The Teaching of Bowed Instruments from 1511 to 1756",

- (University of Michigan doctoral thesis, 1954), p. 242, (Available on microfilm.)
85. Burney, op. cit., p. 435.
 86. Ibid., p. 565.
 87. Malipiero, loc. cit.
 88. Paolo Quagliati, "La Sfera Armoniosa" and "Il Carro di Fedeltà D'Amore" from Smith College Archives, (Northampton, Mass., 1957), Vernon Gotwals and Philip Keppler, eds., XIII, 70. (Facsimile of original score.) "Il Carro" toured on an oxcart in the carnival of 1606 with five singers and five instrumentalists ("the exact number which an ambulant cart could contain" — according to Burney). The cart was comparable to our modern mechanized floats, from which masked actors performed in the pre-Lenten festivities. Burney translated the following quotation from Della Valle's treatise which first appeared in Vol. II of the works of Gio. Battista Doni, Florence, 1763:
". . .on which account it pleased extremely, as was manifest from the prodigious concourse of people it drew after it, who, so far from being tired, heard it performed five or six several times; there were some even who continued to follow our cart to ten or twelve different places where it stopt, and who never quitted us as long as we remained in the street, which was from four o'clock in the evening till after midnight."
 89. See Appendix II for a chart of "Orfeo's" scoring.
 90. Monteverdi, "Orfeo", I Classica della Musica Italiani, (Milano, 1942), Giacomo Benvenuti, ed., IX, 69.
 91. Apel, op. cit., p. 252.
 92. Monteverdi, Tutte le Opere, II, 41.
 93. Ibid., p. 153.
 94. Bukofzer, op. cit., p. 377.
 95. Riley, op. cit., p. 365.
 96. Carse, History of Orchestration, p. 50. Malipiero, "Claudio Monteverdi of Cremona", loc. cit.
 97. Donati example taken from Carse, History of Orchestration, p. 29. Quagliati example taken from

- Quagliati, op. cit., p. 34.
98. Gleason, loc. cit.
99. Riley, op. cit., p. 42.
100. Ibid., p. 361.
101. Ibid.
102. "Here leave the bow and strike the chord with two fingers.", Davidson and Apel, op. cit., II, 12.
103. Actually most of the instruments used are now obsolete, but I use the term in reference to instruments obsolete or in very little use during the early seventeenth century.
104. See footnote 58.
105. Burney, op. cit., p. 565.
106. Given in Arnold Schering, Geschichte der Musik in Beispielen, (Leipzig, 1931), p. 186; comments on p. 17. I have been unable to determine whether or not this is a portion of a larger work.
107. "Die Flöten sind vorgeschrieben, können aber laut Beischrift auch durch 'sordelline' ersetzt werden." Ibid., p. 17. The "sordelline" is a bagpipe type instrument also known as the Italian musette.
108. Redlich, op. cit., pp. 127-8.
109. Carse, History of Orchestration, p. 46; Dorian, op. cit., p. 66.
110. Instrumental parts quoted from Monteverdi, Tutte le Opere, II, 93, 95, and 98, respectively.
111. Ibid., pp. 47-8.
112. Monteverdi, Tutte le Opere, II, 50.
113. Bukofzer, op. cit., p. 53.
114. I mention this because he was careful in "Possente Spirto" to write out a plain vocal part for Orfeo as well as a highly embellished one. Monteverdi, Tutte le Opere, II, 64.



115. "In the concerted pieces with the violin the performer must play exactly what is written, ornamenting it with trills and without flourishes." Quagliati, op. cit., one page before p. 1.
116. See Appendix II.
117. "Sound ideal" — characteristic "sonority" of the period. Apel, op. cit., p. 702.
118. Also the orchestras for "Arianna" (1608) and "Vespers" (1610).
119. Gleason, op. cit., p. III-29.
120. Taken from various combinations throughout Schütz's Complete Works. Basso continuo is not listed but accompanies each of the groups given. The basso continuo practice was not influenced by Gabrieli, but by members of the Camerata or by Monteverdi.
121. Heinrich Schütz, Sämtliche Werke, "Psalms of David", (Leipzig, 1885), Philip Spitta, ed., III, 34.
122. Ibid., p. 41.
123. "Trombette (e Timpani)", Ibid., p. 182.
124. Groves, op. cit., V, 646. Bukofzer, op. cit., says 1629 for "Sacred Symphonies I".
125. Carse, History of Orchestration, p. 57.
126. Schütz, op. cit., "Sacred Symphonies III", Guido Adler, ed., VII, 77. The words in quotation marks are italicized in the score, but I am assuming that they were in the original score.
127. Schütz, op. cit., "Die Evangelischen Historien", I, 6.
128. Groves, op. cit., V, 647.
129. Ibid., p. 649. However, this example taken from Schering, op. cit., p. 230, is scored for "2 violen".
130. Bukofzer, op. cit., p. 410.
131. Schütz, op. cit., VII, 183.
132. Schütz, op. cit., "Deutsche Concerten", XIV, 43.
133. Schütz, op. cit., II, 46.

134. Schutz, op. cit., VII, 58.
135. Christopher Strauss, "Missa Pro Defunctis", Denkmäler der Tonkunst in Österreich (Wein, 1896), Guido Adler, ed., LIX, 1. (Usual abbreviation for this series is DTÖ.)
136. Leichtentritt, op. cit., p. 118.
137. Example on following page is from DTÖ, X, 10.
138. Leichtentritt, loc. cit.
139. Ibid.
140. I have included in this discussion works written before the year 1675.
141. Carse, History of Orchestration, p. 56.
142. Ibid., pp. 53-4.
143. Jean-Baptiste Lully, Ouvres Complètes, "Les Ballets", (Paris, 1932) Prunières, ed., II, 156.
144. Ibid., "Les Operas", II, 26.
145. Parry, op. cit., pp. 288-9.
146. Buxtehude's Wedding Cantata of 1672 is an exception. However, it will be discussed with the rest of Buxtehude's works in the section dealing with the latter half of the century.
147. Carse, op. cit., pp. 62-3.
148. Nathan Broder in a lecture (October 27, 1958) at the University of North Carolina made this statement. Drums had been used by composers since 1565 (Striggio). Monteverdi used muffled drums in "Il Ballo delle Ingrate" in 1608. These drums probably were not required to have a definite pitch. Benevoli used four kettledrums in his Mass, but this was for a performance in the Salzburg Cathedral, not in a theatre.
149. Lully, op. cit., II, 162.
150. Ibid., I, 146-7. The score is not very clear as to which instrument plays what, but assuming that the timpani ("tymballes") play the lowest line, they must play five notes.

151. Ibid., II, 162.
152. Information obtained from lecture notes of Nathan Broder taken by Joan Moser, University of North Carolina, during the fall of 1958 in Dr. Broder's course on the History of Orchestration.
153. Carse, History of Orchestration, p. 20.
154. Ibid.
155. That is, if modern scores have the same clefs as the original ones.
156. Davidson and Apel, op. cit., II, 46.
157. Ibid., p. 84.
158. Parry, op. cit., p. 174.
159. Ibid., p. 314.
160. A chronological listing of these devices can be found in Appendix III which is a Thesaurus of Orchestral Devices.
161. John Blow, "Venus and Adonis", (Monaco, 1949), Anthony Lewis, ed., (observation).
162. Henry Purcell, Works, (London, 1900), Sir Frederick J. Bridge and John Pointer, eds., IX, 17.
163. Nathan Broder lecture, October 27, 1958.
164. Karl Geiringer, Music of the Bach Family, (New York, 1954), pp. 23-4 and 84-5. The number three is important throughout this cantata. The title page is inscribed in water colors with symbolic pictures: a three-leafed clover representing flourishing concord, a triangle with three rings to denote sweetness, and a padlock uniting three chains to emphasize firmness. There are three solo voices and the three measure theme is introduced three times by each voice.
165. "Sound the Trumpet", male alto solo from "Gloucester's Birthday Ode", Purcell, op. cit., (1891, Wm. H. Cummings, ed.) IV, 24. "The Airy Violin", alto solo from "St. Cecilia's Day Ode", ibid., (1891, J.A. Fuller Maitland, ed.), VIII, 57.
166. Andie Pirro, Dietrich Buxtehude, (Paris, 1913), p. 264.

167. Purcell, ibid., VIII, 35.
168. Cantata, "Ihr lieben Christen, freuet. . .", to give one example. Denkmäler Deutscher Tonkunst, (Leipzig, 1903), Max Sieffert, ed., XIV, 129. (This series usually abbreviated as DdT.)
169. Grout, op. cit., I, 122-3; Parry, op. cit., p. 238.
170. Parry, op. cit., p. 250.
171. Walter E. Buszin, "Dietrich Buxtehude on the Tercentenary of His Birth", Musical Quarterly, (October, 1937), XXIII, 465.
172. Denkmäler der Tonkunst in Bayern, (Leipzig, 1911), Hugo Riemann, ed., II, #2, p. 72. (This series usually abbreviated as DTB.)
173. Ibid., (1912) IXX, part 2, p. 35.
174. Lully, op. cit., "Les Operas", II, 222.
175. DTB, op. cit., (1912), p. 62.
176. "Die Zeit meines. . .", Landschaftsdenkmale der Musik, (1937), Herman Zinck, ed., I, 14. "O Werter heil'ger Geist", ibid., vol. II, (observation).
177. DTB, op. cit., (1912), p. 53.
178. Baines, op. cit., p. 43. An estimated tempo of the sixteenth century quarter note is $\text{♩} = 85$, requiring double-tonguing to be done at a slower speed than now.
179. Ibid., p. 42.
180. The first definite publishing date of these concerti grossi is 1714, but according to Corelli's contemporary, George Muffat, they were played in Rome as early as 1682. An even earlier publishing date is 1677; however, this date is questionable. Bukofzer, op. cit., pp. 222-3.
181. Mario Rinaldi, Arcangelo Corelli, (Milano, 1953), p. 307.
182. DdT, LV, 64.
183. List taken from Nathan Broder lecture, October 27, 1958.

184. Carse, op. cit., p. 77.
185. Apel, op. cit., p. 584.
186. DTÖ, LV-LXIV, 33.
187. Purcell, "Funeral Music for Queen Mary", (Wakefield, Mass., 1940), p. 3. Edited by Robert King for two B^b cornets, trombone, and baritone. This edition is transposed up a fourth, but I have lowered it and also transposed the cornet parts. My examples should now be in the original key.
188. Groves, op. cit., VI, 999.
189. At least the name is unique in my findings.
190. See Appendix I.
191. Parry, op. cit., p. 251.
192. DdT, LV, 187,
193. Reichsdenkmale Deutscher Musick, (Leipzig, 1935), Max Schneider, ed., II, 22-3.
194. DTB, VI, part 1, pp. 136-7.
195. Geiringer, op. cit., p. 31.
196. DdT, IV, 172.
197. Grout, op. cit., p. 113.
198. DTB, vols. XXVII-XXVIII. (observation.)
199. Reichsdenkmale Deutscher Musick, II, 64.
200. Geiringer, op. cit., p. 49.
201. DdT, XVII, 129.
202. Landschaftsdenkmale der Musik, I, 126 and 101, respectively.
203. Reichsdenkmale Deutscher Musick, II, 135.
204. Purcell, op. cit., IX, 24.
205. Buszin, op. cit., p. 470.
206. Pirro, op. cit., p. 238.

207. Stewart Deas, "Arcangelo Corelli", Music and Letters, (January 1953), XXXIV, 9; and Parry, op. cit., p.356.
208. Jean Berger, "Notes on some Seventeenth Century Compositions for Trumpet and Strings in Bologna", Musical Quarterly, (July 1951), XXXVII, p.354.
209. Bukofzer, op. cit., p. 226.
210. Ibid., p. 146; and Prunières, "Lully and the Academie de Musique et de Danse", Musical Quarterly, (October 1936), XXII, 544-5 says about fifty musicians. This would include the wind and percussion players.
211. Groves, op. cit., VI, 204.
212. Originated by Lully, according to Nathan Broder's lecture, October 27, 1958.
213. Especially favored by Torelli, who used them in quick, imitative dialogue.

Appendix I

DESCRIPTIONS OF INSTRUMENTS

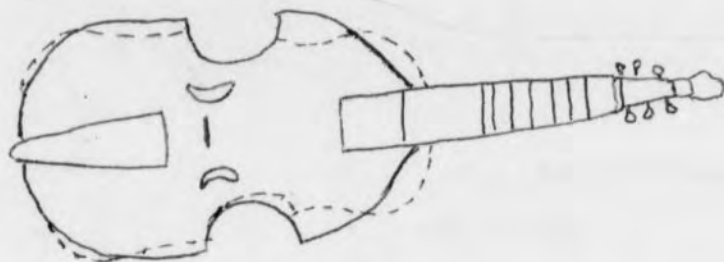
This necessarily brief description of the various instruments will attempt to point out the difference in sound produced in the seventeenth century as compared with present-day instruments and their sound. More detailed descriptions can be found in Sachs' History of Musical Instruments, Geiringer, Musical Instruments, Carse, Musical Wind Instruments, and Baines, Woodwind Instruments and their History; not to mention the two primary sources of the period: Praetorius, Syntagma Musicum, Vol. II, and Mersenne's Harmonie Universelle.*

Stringed Instruments

Bowed string instruments of the late sixteenth and seventeenth centuries can usually be classified as belonging to one of the following families: viola da gamba, viola da braccio, or violin.

The violas da gamba (also called "viols" or "gambas") were played on the leg (hence the name "gamba" or "leg"). Their six strings were tuned in fourths and thirds. Thinner wood, a flat back, shorter neck, lower bridge and fingerboard, finer strings, and smaller sound holes all contributed to the gamba's smaller and more delicate sound than members of the violin family.

*Tracings are taken from Carse, History of Orchestration, and Apel's Harvard Dictionary.



Their light bows and method of underhanded bowing gave forth a less weighted tone. The tone quality was unique in that each note was made to sound like an open string by the use of gut frets. Vibrato, so common to the violin family, was used only for ornamentation by the viols.

The violas da braccio (also called "violas" or "Bratschen") were held on the arm against the chest. This manner of holding allowed for a wider-waisted instrument, because nothing hindered the bowing (such as the knees in gamba playing). Also, there were only four strings tuned in fifths like the modern violin. A bulging back, round shoulders, "F" sound holes, and thick strings, caused violas da braccio to have a fuller tone than the viols, and foreshadow the modern violin tone.



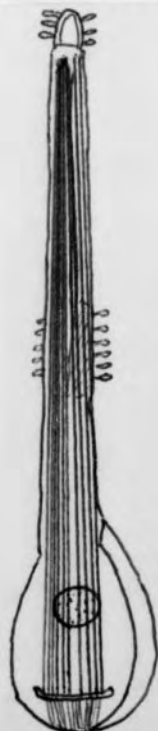
The violin family was not common until the latter part of the century, though the violin, viola, and cello had been completed in almost their present form by the

middle of the sixteenth century. These early violins were somewhat smaller and less reinforced than modern ones. This cut down on their volume, which, nevertheless, was louder and more expressive than the viols.

The members of the plucked stringed groups include the lutes and other closely related types: the theorboe and chitarrone. The number of strings varied, but eleven strings in six courses (or groups of two in octave or unison doublings) was usual. They were tuned in fourths and thirds. Drones and sympathetic strings were frequently added. The chordal style of playing these instruments made them valuable as basso continuo instruments. Most of these plucked instruments had pear-shaped bodies with highly rounded backs and elaborately carved rose holes. Their tone, too, was softer than the present day guitar with its flat back and open rose hole.



Lute



Chitarrone

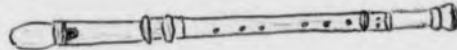


Theorboe

Woodwind Instruments

The woodwinds, like the viols, were made in families. Their mechanism was in a very rudimentary stage with only one key being common. Cross fingering for accidentals was necessary, but caused such poor intonation on these old instruments that it was deplorable to trained ears. Scarlatti is known to have said, "My son, you know that I hate wind instruments, they are never in tune." (Carse, The Orchestra in the XVIII Century, p. 161.)

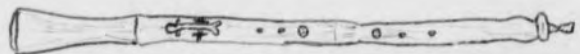
The highest members were the flutes which came in two types: fipple and transverse. The fipple flutes, or recorders, had seven finger-holes and one thumb-hole, permitting a range of over two octaves. Its tone quality was less penetrating than the transverse flute, as well as being less colorful, and harder to control.



The transverse, or German flute, was made of wood in contrast to present-day metal ones. It obtained only one key by the end of the seventeenth century, and its faulty cross-fingerings caused Hawkins to remark even as late as the eighteenth century: The German flute "still retains some degree of estimation among gentlemen whose ears are not nice enough to inform them that it is never in tune." (Carse, Orchestra in the XVIII Century. p.161.)



The oboe (or shawm, in its more rudimentary stages), was made in three sizes, each having six finger-holes and a little finger-hole. The latter was bored on both sides of the instrument to accomodate either right- or left-handed players. The unused hole was filled with wax. In the event of a key, a double "wing" was put on which could be depressed by either hand.



The seventeenth century oboe was played with a coarser reed than that used now, causing it to emit a louder, less controlled tone.

The bassoon (bombard, dulcian), was distinguishable from the tenor oboe by its doubled back tube. Its range covered two and one-half octaves, facilitated by three keys added by the end of the seventeenth century.



The clarinet was supposedly invented by Denner in 1690 according to Carse. Farmer, in Turkish Instruments of Music in the Seventeenth Century (1937) mentions an earlier "clarionet" of horn made in England and played by monks at the Holy Sepulchre. At any rate, no similiar instrument was called for in seventeenth century scores.

Brass Instruments

Paralleling the yet primitive status of woodwind instruments, the brass instruments had no valves, and the production of most notes, other than the harmonic series, was difficult or even impossible.

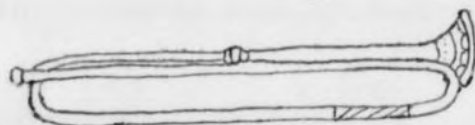
The highest treble member of the brass family, or cornett, was actually not made of brass, but was a wooden tube into which finger-holes were bored. Its classification as a brass instrument was due to its trumpet-like mouthpiece. Cornetts were of two shapes: straight ("cornetti muti") or curved. There were at least three sizes, each with body and mouthpiece joined as one piece. A leather coating prevented leakage of air on curved cornetts with glued seams.



The serpent, or bass member of the cornett family, was the shape of a large "S". It is hard to imagine the sound of this elephantine instrument, with its irregularly bored finger-holes—supposedly the forerunner to the tuba.



The trumpet had a tube length of seven or eight feet, normally tuned in D or C. Crooks facilitated playing in different keys. The thick walls of the trumpet caused it to have a less penetrating sound than today's instruments. The rather muffled quality was further enhanced by a bell with very little expansion. Mutes were used, but they raised the pitch a tone higher.

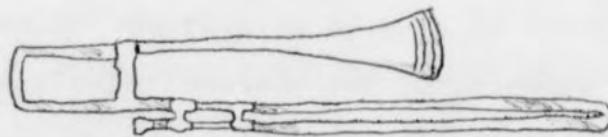


Carse (in "Chromatic Trumpets of the Renaissance", Musical Quarterly, XXXVI #1) mentions a slide trumpet capable of playing all chromatics. However, none are specified in seventeenth century scores which I have consulted.

The hunting horn was very rarely called for. It consisted of a plain pipe coiled in a circle large enough to be carried over one's shoulder. Lack of valves or crooks necessitated the use of hand-in-bell techniques for humouring out-of-tune notes and notes not in the harmonic series.

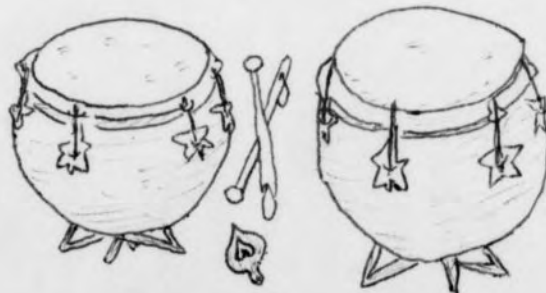


The most important bass brass instrument was the trombone, which was mechanically one of the most perfect instruments of the Baroque period. According to Praetorius, there were four different sizes. Mersenne describes the positions of the slide which are still used today. Like the trumpet, thick walls and a small bell gave the trombone a more mellow timbre, suitable for accompanying cornetts and trumpets.



Percussion Instruments

The most important percussion instruments and the only ones ever definitely indicated were the timpani or kettledrums. Illustrations in the works of Virdung, Praetorius, and Mersenne show these drums in practically their present-day form, equipped with tuning screws. Pedals were as yet unknown.



Keyboard Instruments

Highly important to the Baroque was the harpsichord with its strings plucked with jacks and giving forth a much more tinkling sound than the modern piano, with its hammer-struck keys. The jacks were of leather and of quill, giving two distinctly different tone colors. Each set was single strung, giving the characteristic quiet sound of early Baroque instruments. The color of the keys was usually the reverse of what is found today on the piano, and unfortunately for harpsichord players, the hand span was not standardized. The range was from three to four octaves.

The early Baroque organ had wooden flute pipes, giving it a light transparent color. The timbres of different stops were sharp and contrasting, but not harsh, because the wind pressure was low.

The tiny regal had reed pipes and could be conveniently transported because it could be folded.

Appendix II

CHART OF CHIASTIC SCORING

IN MONTEVERDI'S "ORFEO"

"Il Prologo"

Ritornello #1	"Violes)	Ritornello #1
"La Musica"	(Clav.)	
Ritornello #1	(Violes)	
"La Musica"	(Clav.)	
Ritornello #1	(Violes)	
"La Musica"	(Clav.)	
Ritornello #1	(Violes)	
"La Musica"	(Clav.)	
Ritornello #1	(Violes)	
"La Musica"	(Clav.)	
Ritornello #1	(Violes)	

Act I

2nd Shepherd (Clav.)Chorus of Nymphs and shepherds (Clav. A. Chit.) ← Clav. A. e Chit.Nymph (Clav.)"Balletto" — Chorus of Nymphs and Shepherds
(Ott.Arpa e Clav.)
(Later: Clav. e Chit.)

Ritornello #2 (unscored — 6 parts) ← Rit. #2

Shepherd (Clav.)Orfeo (Clav.)Euridice (Clav.)"Balletto" (Harp, Chit., e Clav.)
(Later: Clav. e Chit.)

Ritornello #2 ←

Chorus of Nymphs and Shepherds (Clav.A.Chit?)2nd Shepherd (Clav.)

Ritornello #3 ← Rit. #3

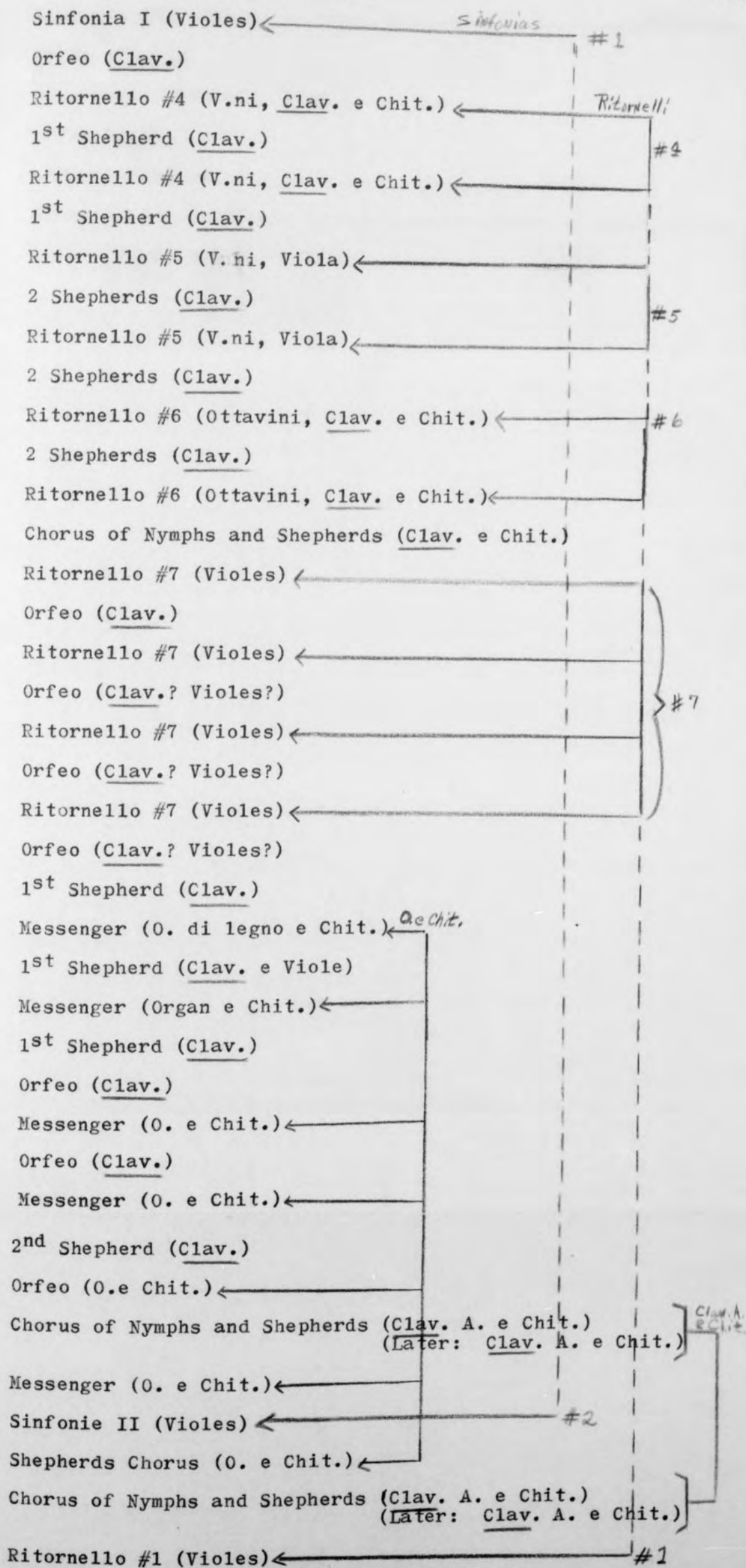
Chorus of Shepherds (Clav.)

Ritornello #3 ←

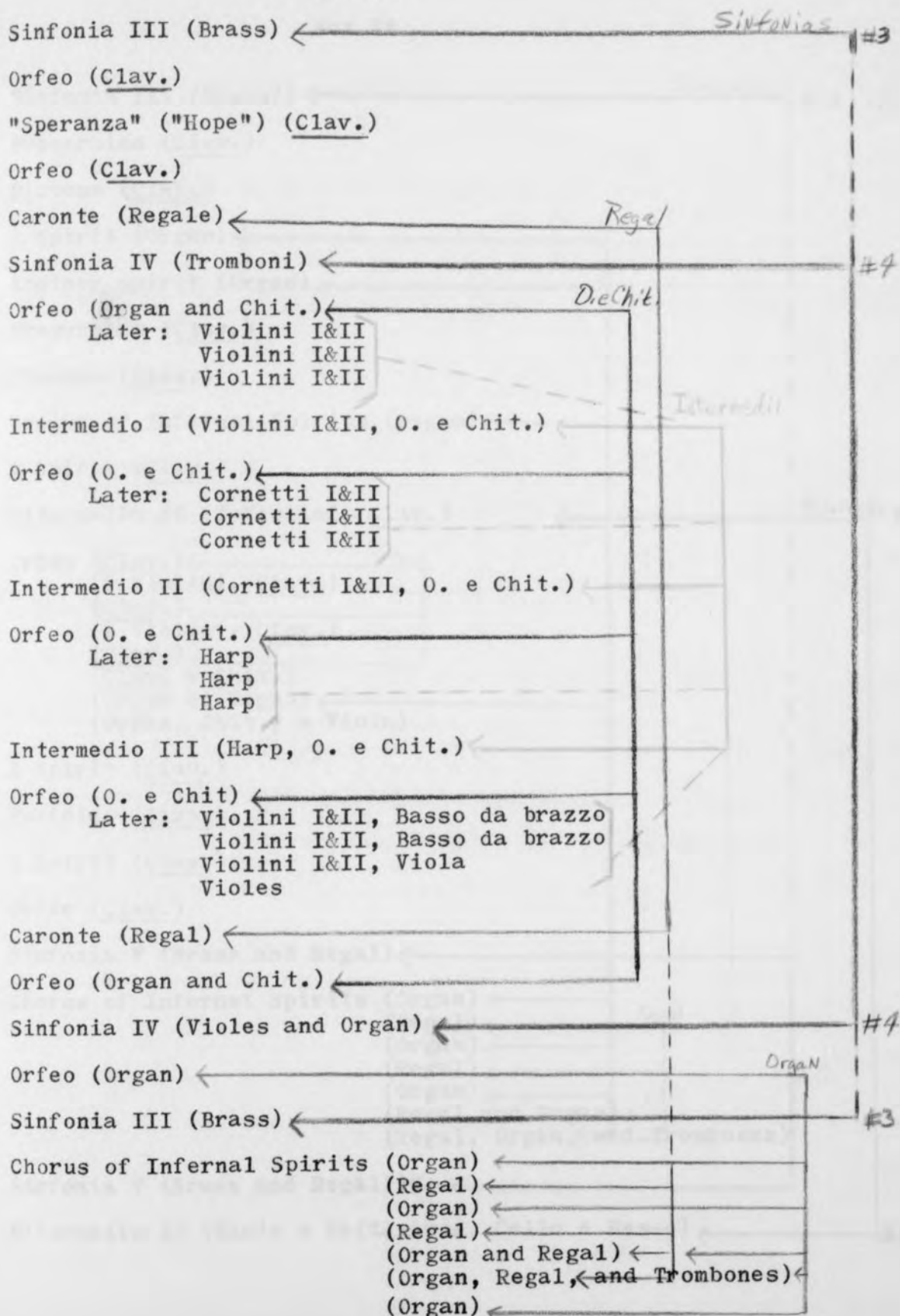
Chorus of Shepherds (Clav.)

Ritornello #3 ←

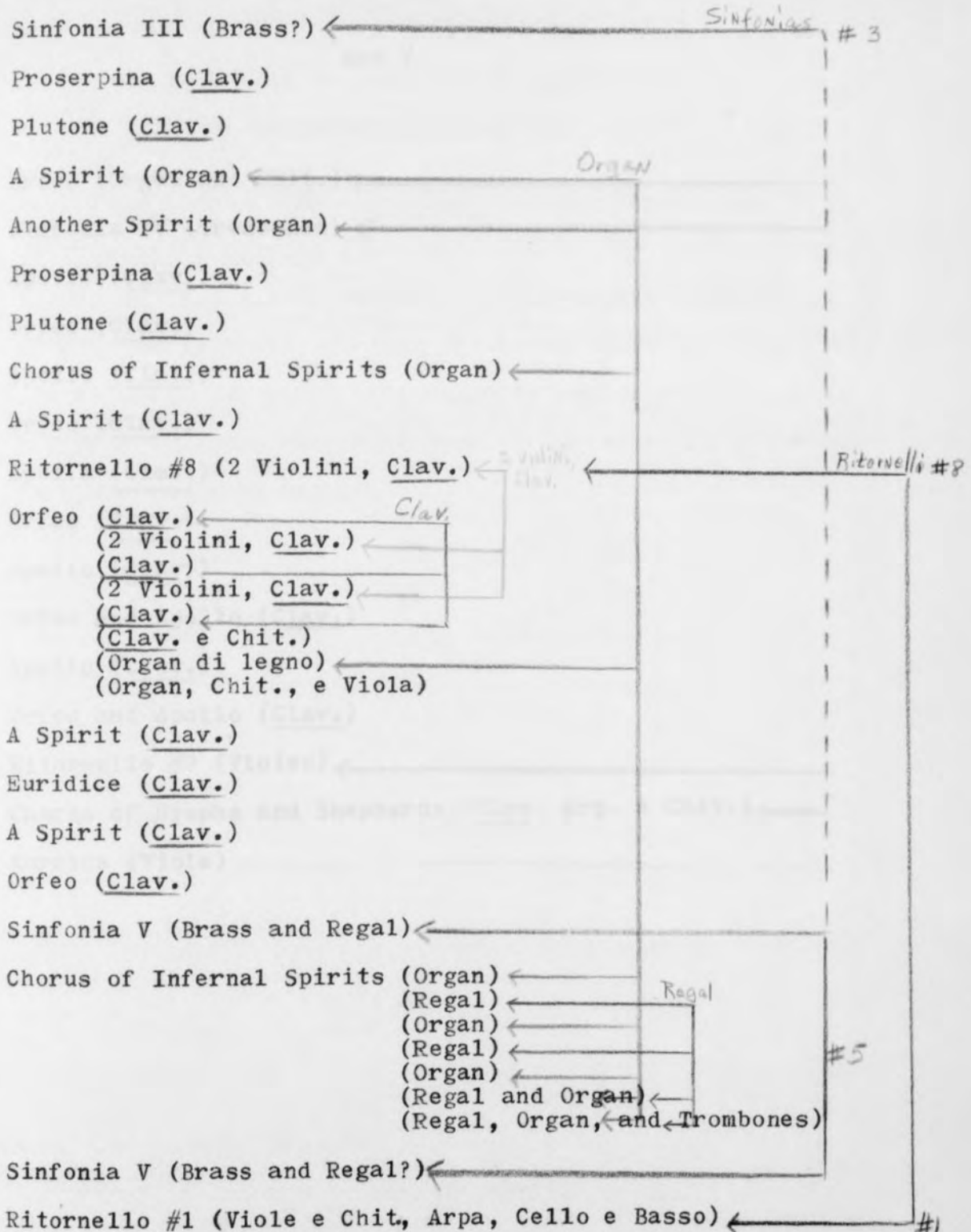
Chorus of Shepherds (Clav.)Chorus of Nymphs and Shepherds (Clav. A. e Chit.) ←



Act III



Act IV



Appendix III

Act V

TREASURIES OF SEVENTEENTH CENTURY

ORGANISTAL DEVICES

- Orfeo (Organ and Chit.) ←
- Sinfonia IV (Trombones) ←
- Apollo (Clav.)
- Orfeo (Clav.)
- Apollo (Clav.)
- Orfeo (Clav.)
- Apollo (Clav.)
- Orfeo (Clav.)
- Apollo (Clav.)
- Orfeo and Apollo (Clav.)
- Apollo (Clav.)
- Orfeo and Apollo (Clav.)
- Ritornello #9 (Violas) ←
- Chorus of Nymphs and Shepherds (Clav. Arp. e Chit.) ←
- Moresca (Viola) ←

Div. Appendix III

THESAURUS OF SEVENTEENTH CENTURY

ORCHESTRAL DEVICES

This chart is modeled after Gardner Read's Thesaurus of Orchestral Devices (New York, 1953). It differs from Read's in that I have charted my information chronologically as much as possible, so that the development of the devices can be seen. Although this chart is not exhaustive it is a fairly thorough representation of the material which has been available to me.

	G. Gabrieli	"Sacred Symphonies I" (Each section illustrates different groupings)
	G. Gabrieli	"Toccata" (2 choirs)
	Monteverdi	"Orfeo" (Each scene scored for group of instruments according to particular of scene)
	Monteverdi	"Sinfonia musicale a otto voci" (Double chorus)
	G. Gabrieli	"Sacred Symphonies II" (Each choir represents different groupings)
	Schütz	"Christ ist erstanden" (Choir of viols and choir of trombones)
	Schütz	"Psalmen Davids" (Each Psalm scored for different type of sonority)
	Schütz	"Die mit Thränen säen" (2 choirs)
1628	Benevoli	"Mass in 53 Parts" (6 instrumental choirs. Definite groupings within choirs)
1634	Landi	"Il San Alessio" (2 violins pitted against other instruments)
	Neri	Ensemble Sonatas (Solo and tutti contrasts)

Division of Instruments

into Choirs or Groups

- | | | |
|------|-------------|---|
| 1581 | Baltazarini | "Balet Comique" (Division into groups according to particular scenes) |
| | G. Gabrieli | "Canzon septimi toni #2 (2 unscored groups) |
| | G. Gabrieli | "Sonata octavi toni" (2 unscored groups) |
| | G. Gabrieli | "Canzona" ("Tutti" against highly figurative "concertino" of a few instruments) |
| | G. Gabrieli | "Canzona quarti toni" (3 choirs) |
| 1597 | G. Gabrieli | "Sacred Symphonies I" (Each section illustrates different groupings) |
| 1602 | Bonelli | "Toccatà" (2 choirs) |
| 1607 | Monteverdi | "Orfeo" (Each scene scored by group of instruments according to character of scene) |
| 1610 | Viadana | "Sinfonie musicali a otto voci" (Double chorus) |
| 1615 | G. Gabrieli | "Sacred Symphonies II" (Each choir represents different groupings) |
| | Schütz | "Christ ist erstanden" (Choir of viols and choir of trombones) |
| 1619 | Schütz | "Psalmen Davids" (Each Psalm scored for different type of sonority) |
| | Schütz | "Die mit Thränen säen" (2 choirs) |
| 1628 | Benevoli | "Mass in 53 Parts" (6 instrumental choirs. Definite groupings within choirs) |
| 1634 | Landi | "Il San Alessio" (3 violins pitted against other instruments) |
| | Neri | Ensemble Sonatas (Solo and tutti contrasts) |

- Dialogues Between Instruments
- 1667 Cesti "Il Pomo D'Oro" (Group of viols used in one scene as opposed to violins in others)
- 1675 Lully "Thésée" (Different acts scored differently)
- Draghi "Balletto di Centauri" (Strings, woodwinds, and brasses grouped separately)
- 1676 Stradella "Oratorio di S. Gio. Battista" ("Concertino" and "concerto grosso")
- 1680 Corelli "Concerti Grossi" ("Concertino" and "tutti")
- 1681 Heinrich Bach "Ich Danke dir, Gott" ("Favoriti" and "cappella")
- 1681 Lully "La Triompe de L'amour" (Flute quartet)
- 1683 Buxtehude "Benedicam Dominum" (3 choirs)
- 1686 Lully "Acis et Galatée" (Contrasts strings and woodwinds)
- 1691 Purcell "Dioclesian" (2 oboes and tenor oboe used against strings and trumpets)
- Schmelzer "Balletto di Spiritelli" (Winds used against strings)
- Buxtehude Motet (6 instrumental choirs accompanying 6 vocal choirs)
- Krieger "Ein feste Burg ist unser Gott" (Different pairings within group as a whole)
- Krieger "Mein Herz dichtet ein feines Lied" (2 identical instrumental choirs)

Dialogue Between Instruments

- | | | |
|------|---------------|--|
| | G. Gabrieli | "Canzon Seconda" (About 10 measures of pairing within choir) |
| | G. Gabrieli | "Canzon Quarta" (Alternation at interval of about 3 measures) |
| | G. Gabrieli | "Canzon septimi toni #2" (Imitation between 2 choirs) |
| | G. Gabrieli | "Canzon quarti toni" (Imitation between 3 choirs) |
| | G. Gabrieli | "Benedictus" (Imitation between 2 instrumental choirs each accompanying group of voices) |
| 1634 | Landi | "Il San Alessio" (3 violins pitted against other strings) |
| 1665 | Ahles | "Misericordias Domini" (Between 2 violins) |
| 1669 | Cesti | "Il Pomo D'Oro" (Dialogue between 2 violins and cembalo with voices) |
| | Purcell | "Abdalazor" (Quick slashing entrances of voices) |
| | Buxtehude | "Min Gut er Med Mig" (Dialogue between voices and strings) |
| 1681 | Heinrich Bach | "Ich danke dir, Gott" (Dialogue between upper and lower strings) |
| 1692 | Torelli | "Sinfonia" (Close alternation between oboe and trumpet) |

Use of Echo Effects

- | | | |
|--------|-------------------------|---|
| 1595 | Striggio
G. Gabrieli | "Psyche ad Amora" (4 "Flauti dir-"
"Canzone" (Optional echo part for organ) |
| 1600 | Cavalieri | "Rappresentazione" (Echo between voices and/or instruments) |
| 1603 | Banchieri | "Fantasia" (Alternation between p. and f.) |
| 1659 | Baltazar | "Echo Aire" from a Suite |
| 1688 | Pallavicino | "Gerusalemme Liberata" (Short 2 measure phrases played by continuo instruments; repeated by full orchestra) |
| 1688/9 | Purcell | "Dido and Aeneas" (Echo dance"—2 violins have f and p contrasts) |
| | Purcell | "Abdelazor" (Quick "slashing" contrasts) |
| 1695 | Fischer | "Le Journal du Printemps" |
| 1698 | Muffat | "Florilegium secundum" (Fascicle V — f. and p. dynamics) |
| | Lully | "Xerxès" (3 trumpets) |
| | Buxtehude | "Benedicite Dominus" (4 trumpets, 3 trombones) |
| | Lully | "Cadmus" (5 trumpets) |
| | Lully | "Alceste" (3 flutes) |
| | Freschi | "Serenade" (40 cornetts, 6 trumpets, 6 drums, 6 sackbuts, 6 flutes, 12 Turkish and other instruments) |
| | Lully | "La Triomphe de l'amour" (flute quartet) |
| 1691 | Purcell | "Dioclesian" (oboe trio) |
| 1692 | Purcell | "St. Cecilia's Day Ode" (flute trio) |
| | Schelle | "Lobe den Herrn, meine Seele" (4 clarini) |

Use of Like Wind Instruments

- 1565 Striggio "Psyche ed Amore" (4 "flauti diritti"; 4 transverse flutes; 4 trombones)
- 1600 Peri "Euridice" (3 flutes)
- 1625 F. Caccini "La Liberazione di Ruggiero dall Isola, d'Alcina" (3 flutes, 4 trombones)
- 1628/9 Schütz "Fili mi, Absalom" (4 trombones)
- Schütz "Die mit Thränen säen" (6 trombones)
- Schütz "Psalmen Davids" (6 trombones)
- Schütz "Psalm XXIV" (5 bassoons)
- Schütz "Ist Nich Ephriam" (4 cornetts)
- 1641 Monteverdi "Magnificat I" ("4 Viole ovvero 4 Tromboni")
- Heinrich Bach Setting of Revelation, Ch. 12 (4 trumpets)
- 1658 Ahles "Fürchtet euch nicht" (4 bassoons)
- 1660 Lully "Xerxès" (3 timpani)
- Buxtehude "Benedicam Dominum" (4 trumpets, 5 trombones)
- 1673 Lully "Cadmus" (5 timpani)
- 1674 Lully "Alceste" (3 flutes)
- 1680 Freschi "Berenice" (40 cornetts, 6 trumpets, 6 drums, 6 sackbuts, 6 flutes, 12 Turkish and other instruments)
- 1681 Lully "La Triomphe de l'amour" (flute quartet)
- 1691 Purcell "Dioclesian" (oboe trio)
- 1692 Purcell "St. Cecilia's Day Ode" (flute trio)
- Schelle "Lobe den Herrn, mein Seele" (4 clarini)

Seventeenth Century Obsolescent or
Rarely Used Instruments

1565	Striggio	"Psyche ed Amore" ("Traverso Contralto, Flauto Grand Tenore")
1600	Cavalieri	"Io piango Filli" (2 sordelline)
1607	Monteverdi	"Orfeo" ("Ottavini", "Violino piccolo alla Francese")
	Monteverdi	"Magnificat septem vocibus et sex instrumentis" ("fiffari")
	Schütz	"Veni sancte Spiritus" (trombone grosso)
	Schütz	"Zion spricht" (trombone grosso)
1660	Lully	"Princesse d'Elide" ("trompes de chasse" — probably hunting horns)
1677	Lully	"Isis" (musettes)
	Lully	(Ballets include bagpipes, castanets, guitar, "Tambour de Basque")
	Draghi	"Balletto di Centauri" ("Piffari")
1680	Freschi	"Berenice" (12 minstrels, playing Turkish and other instruments)
1687/8	Pallavicino	"Gerusalemme Liberata" ("viola da colo")
1691	Purcell	"Dioclesian" (tenor oboe)
1692	Purcell	"St. Cecilia's Day Ode" (bass flute)
	Purcell	Two Pieces (for "Flatt trumpets" — sackbuts?)
	Schmelzer	"Balletto di Spiritelli" ("Violino piffarato", "viola piffaro")

Double Orchestra

Extremely Large Orchestras

- | | | |
|------|-------------|---|
| 1597 | G. Gabrieli | "Sonata Pian e Forte" |
| 1619 | Monteverdi | "Tirsi e Clori" (Orchestra doubled if made necessary by size of hall) |
| 1667 | Cesti | "Il Pomo D'Oro" (2 string orchestras used antiphonally in one scene) |
| 1680 | Stradella | "Sinfonia a più instrumenti" (Concerto grosso style), 8 flutes, 12 Turkish and other instruments) |
| | J. C. Bach | "An erhab. sich. . ." (24 parts) |
| | Buxtehude | "Benedicite Dominum" (28 parts) |

Orchestra's Placement
Extremely Large Orchestras

	Azzurini	"Balet Comique" (Instrumental groups placed as to accompany particular groups. Some took part)
1565	Striggio	"Psyche ed Amore" (44 instruments)
1607	Monteverdi	"Orfeo" (c.36 instruments) <small>hidden and on-stage</small>
1628	Benevoli	"Mass" (53 parts)
1680	Freschi	"Berenice" (40 cornetts, 6 trumpets, 6 drums, 6 sackbuts, 6 flutes, 12 Turkish and other instruments)
	J. C. Bach	"Es erhub sich. . ." (22 parts)
	Buxtehude	"Benedicam Dominum" (25 parts)
	Monteverdi	"Il Ballo delle Ingrate" (Muffled drums played from underneath the stage. Vocal accompaniment orchestra hidden; dance orchestra on platform in auditorium)
	Monteverdi	"Firsi e Clori" (Instruments used on-stage by singers)
	Monteverdi	"Il Ritorno di Ulisse" (in orchestra pit)
	Monteverdi	"L'Incoronazione di Poppea" (in orchestra pit)
	Locke	"The Tempest" (in orchestra pit)
	Monty	"Alice's" (Instruments play in pit, but are supposed to sound far away)
	Steffani	"Alarico" (Trumpets hidden)
	Steffani	"Niobe" (Viols hidden)

Separate Note Placements
Orchestra's Placement

1581	Baltazarini	"Balet Comique" (Instrumental groups placed so as to accompany particular groups. Some took part on-stage)
1600	Cavalieri	"Rappresentazione" (Behind scenes and on-stage)
1600	Caccini	} (Operas required "mere handful in wings.")
1600	Peri	
1606	Quagliati	"Carro di fedeltà d'amore" (Staged entirely on Thesbian ox-cart)
1608	Monteverdi	"Arianna" (Behind scenes)
1608	Monteverdi	"Il Ballo delle Ingrate" (Muffled drums played from underneath the stage. Vocal accompaniment orchestra hidden; dance orchestra on platform in auditorium)
1615	Monteverdi	"Tirsi e Clori" (Instruments used on-stage by singers)
1641	Monteverdi	"Il Ritorno di Ulisse" (In orchestra pit)
1642	Monteverdi	"L'Incoronazione di Poppea" (In orchestra pit)
1674	Locke	"The Tempest" (In orchestra pit)
1674	Lully	"Alceste" (Instruments play in pit, but are supposed to sound far away)
1687	Steffani	"Alarico" (Trumpets hidden)
1688	Steffani	"Niobe" (Viols hidden)
		"Requiem" (2 violin parts)

Repeated Note Patterns

(Leading to Bowed Tremolo and Double Tonguing)

- | | | |
|--------|-------------|---|
| | A. Gabrieli | "Aria della Battaglia per sonar d'Instrumenti da Fiato" (Repeated notes in all parts) |
| 1599 | Donati | "Guidizio d'Amore" (Violin has repeated notes) |
| | Monteverdi | "Book V" |
| 1624 | Monteverdi | "Tancredi e Clorinda" |
| 1625 | Schütz | "Sacred Symphonies" (unscored) |
| 1634 | Landi | "Il San Alessio" (unscored) |
| 1670 | Pezel | "Sonata #2" (Repeated notes in all parts at once) |
| | Werkmann | "Kommet her zu min alle" (Violin part) |
| 1673 | Theile | "St. Matthew Passion" (Repeated notes in gamba parts) |
| 1674 | Draghi | "La Laterna di Diogene" (Repeated notes in rhythmic patterns) |
| 1675 | Locke | "The Tempest" (Repeated notes in strings at "Violent" section) |
| | Buxtehude | "Gott hilf mir" (String parts marked "Largo", therefore possibly do not foreshadow bowed tremolo) |
| | Buxtehude | "Herr, ich lasse dich nicht" |
| | Kuhnau | "Wie schön leuchtet" (Fast tonguing in "Corno grande" part) |
| 1688/9 | Purcell | "Dido and Aeneas" (Repeated notes in strings) |
| 1699? | Biber | "Requiem" (2 violin parts) |




Bowed Tremolo

	Marini	Canzone
	Usser	
	Riccio	
1624	Monteverdi	"Il Combattimento" (supposedly first use)
1641	Monteverdi	"Il Rittorno di Ulisse"
1650	Schütz	"Sacred Symphonies III"
	Merula,	Canzone
1667	Cesti	"Il Pomo D'Oro" (Mysterious wavy line ~~~ may indicate type of tremolo or vibrato)
1684	Kerll	"Requiem"
	Buxtehude	"Tröst mir mein Seel in Todesnoth" (Violins marked "tremulo")
1687/8	Pallavicino	"Gerusalemme Liberata"
1688	Steffani	"Niobe" (Wavy line)
1688/9	Purcell	"Dido and Aeneas"
1689	Purcell	"Yorkshire Feast Song"
1692	Purcell	"St. Cecilia's Day Ode" (Wavy line)

Fingered Tremolo

- | | | |
|--------|------------|--|
| 1650 | Schütz | "Sacred Symphonies III" |
| 1680? | Corelli | "Concerto Grosso VII" (In upper violin part) |
| 1687/8 | Palavicino | "Gerusalemme Liberata" |
| 1688/9 | Purcell | "Dido and Aeneas" |

Legato Bowing

- 1617 Marini (Works contain some of earliest ex-
amples)
- Bruhns *erdi* "Die Zeit meines. . ." ()
- Bruhns *erdi* "O werter heil'ger Geist" ()
- 1688 Steffani "Niobe" () "un sol tiro d'arco")
- 1698 Muffat "Florilegium secundum"

Use of Harpsichord Pedal
Pizzicato

1624	Monteverdi	"Il Combattimento" (First use) <small>"Florilegium" (This may be an ed- invented by 1664.</small>
1641	Monteverdi	"Il Ritorno di Ulisse"

Use of Harpsichord Pedal

1695 Muffat "Florilegium" (This may be an editor's mark, though the pedal was invented by 1664.)

Scordatura

(Used by Biber in his violin sonatas,
but evidently not in orchestral
works of the period.)

Harmonics
Multiple Stops

1607	Monteverdi	"Orfeo" (?)
	Marini	Works include double and triple stops)
1627	Farina	"Capriccio stravagante" (Double and triple stops)
1650	Schütz	"Sacred Symphonies III" (Double stops?)
	J.C.Bach	"Mein Freudin" (Double stops in first violin part)
	Bruhns	"Paratum cor mum" (Quintuple stops in second gamba part; quadruple stops in first gamba part)

Harmonics

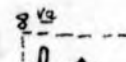


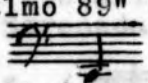
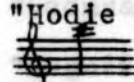





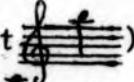









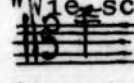


1627	Farina	"Capriccio Stravagante"
	Monteverdi	"Luce" (Muted trumpets)
	Kuhnau	"Wie schön leuchtet" (High note in second viola possibly played on harmonic)
	Duxtehude	
	Lully	"Arside" (Muted strings)
	Steffani	"Niobe"
	Charpentier	"Kados" (3 muted violins)
	Hartshude	"Ihr lieben Christen, freut euch nun" (2 muted clarinet and muted trombones)
	Hurtshude	"Gott laßt uns der Leih Begraben" (Muted trumpets)

Extreme Range Demands

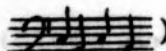
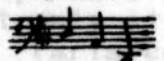
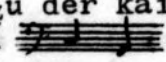





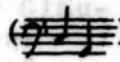
Mutes

- | | | |
|------|-------------|---|
| 1607 | Monteverdi | "Orfeo" (Muted trumpets) |
| 1672 | Buxtehude | "Wedding Cantata" (Muted brass) |
| 1686 | Lully | "Armide" (Muted strings) |
| 1687 | Steffani | "Niobe" |
| 1693 | Charpentier | "Médée" (3 muted violins) |
| | Buxtehude | "Ihr lieben Christen, freut euch nun" (2 muted clarini and muted trombones) |
| | Buxtehude | "Nun lasst uns der Leib Begraben" (Muted trumpets) |
| | Buxtehude | "Ihr lieben Christen, freut euch nun" (Cornet) |
| | Steffani | Bravura Suite (Trumpet) |
| | Steffani | "Susanna" (Viola) |
| | J.C. Bach | "Die erhub sich" (Trumpets) |
| | J.C. Bach | "Mein Traute" (First violin) |
| | J.C. Bach | "Der Wald" (First violin) |
| | Bach | "Sonata a quattro" (Violin) |
| | Krüger | "Der Herr, unser Herr" (Trumpet) |
| | Krüger | "Der Herr, unser Herr" (Trumpet) |
| | Krüger | "Der Herr, unser Herr" (Trumpet) |
| | Kahnke | "Der Herr, unser Herr" (Trumpet) |
| 1694 | Purcell | "The Fairy Queen" (Trumpet) |
| 1698 | Krieger | "Der Herr, unser Herr" (Trumpet) |

Extreme Range Demands

- Notes Demanded of Timpani 
- 1607 Monteverdi "Orfeo" (Violin , a staggering height then)
- 1628 Benevoli "Mass in 53 Parts" (First Violino )
- Kindermann "Ex Psalmo 89" (Bassoon or trombone grosso )
- 1658 Hainlein "Hodie Christus Natus Est" (Violin )
- 1667 Cesti "Il Pomo D'Oro" (Violini ; C trumpet )
- c.1669? Bernhard "Dialogue" (Bassoon  frequently)
- Buxtehude "Aria" (Bassoon ) Played octave lower?
- Buxtehude "Ihr lieben Christen, freut euch nun" (Cornett )
- Steffani Bravura aria (Trumpet )
- 1681 Stradella "Susanna" (Violin )
- J.C. Bach "Es erhub sich" (2 trumpets )
- 1689 J.C. Bach "Mein Freudin. . ." (First violin )
- J.M. Bach "Ach bleib. . ." (First violin )
- Fux "Sonata a quattro" (Cornett ; Violino and oboes )
- Knüpfer "Ach Herr, strafe. . ." (Second flute ; low tessitura)
- Knüpfer "Was mein Gott Will" (Cornett )
- Knüpfer "Machet die Tore weit" (Violin )
- Kuhnau "Wie schön leuchtet" (Second viola )
- 1694 Purcell "Great Parent Hail" (Flute )
- 1698 Krieger "Preise Jerusalem. . ." (Trombetta I )

Notes Demanded of Timpani

- | | | |
|------|-------------|---|
| 1628 | Benevoli | "Mass" (4 timpani used ) |
| 1660 | Lully | "Xerxès" () |
| 1672 | Schmelzer | "Sonata con arie zu der kaiserlichen Serenada" () |
| 1673 | Lully | "Cadmus" () |
| 1685 | Krieger | "Magnificat" () |
| 1687 | Steffani | "Alarico" () |
| 1689 | Schwemmer | "Victoria, plaudite coelites" () |
| 1693 | Charpentier | "Médée" () |
| | Schelle | "Lobe den Herrn, mein Seele" () |
| | | "Giaccone" (Unscored, changes between bass and treble clefs) |
| | | "Id Cor" (Bass cymba goes into treble clef) |
| | | "Tribulationes..." (Organ has bass and alto clefs) |
| | | "Tarantula per meum" (Gamba parts have bass and tenor clefs) |
| | | "St. Matthew Passion" (Gambas change between alto and bass clefs, and from tenor to alto clefs; continuo changes between alto, tenor, and bass clefs) |
| | Krieger | "Ihr Christen, freuet euch" (Gamba changes between alto, soprano, and bass clefs) |

Clef Changes

- 1597 G. Gabrieli "Sacred Symphonies I" (Clefs move freely, but only at beginnings of movements. Parts commonly found with two or more different clefs)
- 1615 G. Gabrieli "Sacred Symphonies II" ("Basso per l'Organo" part has two (or more?) different clefs)
- 1623 Schütz "Easter Oratorio" (4 gambas change between bass and treble clefs)
- 1628 Benevoli "Mass in 53 Parts" (Organ has 3 clefs to its single figured line: bass, tenor, and alto)
- 1645 Hammerschmidt "Dialogi oder Gespräche einer Gläubigen Seele mit Gott" (Trombone changes from bass to tenor clef frequently)
- 1649 Cavalli "Giasone" (Unscored, changes between bass and treble clefs)
- Buxtehude "Ad Cor" (Bass gamba goes into treble clef)
- c.1669? Bernhard "Tribulaies. . ." (Organ has bass and alto clefs)
- Bruhns "Paratum cor meum" (Gamba parts have bass and tenor clefs)
- 1673 Theile "St. Matthew Passion" (Gambas change between alto and bass clefs, and from tenor to alto clefs; continuo changes between alto, tenor, and bass clefs)
- 1687 Krieger "Ihr Christen, freuet euch" (Gamba changes between alto, soprano, and bass clefs)

Key Signatures Beyond

One Sharp or One Flat

1643	Kindermann	Instrumental music (2 sharps)
	Knüpfer	"Was Mein Gott Will" (2 flats and 3 flats)
1663	Cesti	"La Dori" (3 sharps, 2 flats—strings)
	Buxtehude	"Aria" (4 sharps — winds and strings)
1682	Purcell	"Hark, Damon, Hark" (2 flats in flute parts)
1686	Krieger	"Die Gerechten werden weggerafft" (3 flats and 4 flats)
1687	Krieger	"Singet dem Herrn ein neues Lied" (3 sharps for strings and bassoon)
1687	Steffani	"Niobe" (3 flats; frequent accidentals, making more flats)
1689	Purcell	"Celestial Music" (3 flats in flute part)
1694	Purcell	"Great Parent Hail" (2 flats in flute part)
1698	Muffat	"Florilegium secundum" (Fascicle V — 3 and 4 sharps; Fascicle VIII — 4 and 5 sharps)
c.1700	Krieger	"Heilig, heilig, heilig ist den Herr" (3 sharps in strings and oboe)

Chromatics and Frequent Accidentals

Improvisation Indicated in Score

- c.1600? G. Gabrieli "Canzon septimi toni #2" (Several accidentals)
- G. Gabrieli "Canzon Quarti toni" from "Sacred Symphonies" (Unscored, but accidentals in all parts)
- 1645 Hammerschmidt "Dialogi oder Gespräche einer Gläubigen Seele mit Gott" (In Dialogue V)
- 1664 Schütz "Seven Last Words" (Unscored)
- 1667 Cesti "Il Pomo D'Oro"
- 1687 Steffani "Niobe" (Chromatic passages in all parts)
- 1693 Colasse "Medea" (Not scored, but contains many accidentals)
- 1698 Muffat "Florilegium secundum" (Fascicle V and VIII)

Dynamic Indications

Improvisation Indicated in Score

1577	G. Gabrieli	"Sonata pian e forte" (implied by instrumentalism)
1581	Baltazarini Ranchieri	"Balet Comique" (Instruments specified for overture, but no music actually written down)
1691	Purcell	"Dioclesian" ("Flourish with all instruments in C-fa-ut key")
	Vanteverdi	"Vivaci e Glori" (Typical instructions in the work are "Corta bass to be touched very soft.")
	Vanteverdi	"Furcibadi e Clarinda"
		"Il San Alessio" (Corta bass al short intervals)
	Wartel	"Comae" ("Contrabasso de Viola touchi with piano.")
	Wartel	"Furcibadi de Macrigali" (B.F.E.G. for Forte, Piano, Echo, and trill see common known.)
	Wartel	"Sacred Symphonies (II)" ("Fortier")
	Wartel	"Kuslok's Movement" (f and p)
	Wartel	"Xerxes" ("loud", and "doux")
	Wartel	"The Tempest" ("soft, louder by degrees, violent, soft and slow by degrees")
	Wartel	"Alceste" (f and p)
	Wartel	"Kuslok's Movement" ("La" and "So")
	Stranella	"La Cademia d'Amore" (Gradual dynamic change, not terraced)
	Buxtehude	Cantatas (Various ones have "piano" and "forte")
1704	Steffani	"Kiobe" (p, pp, ppp, pppp — editor's marks?)
1888/9	Purcell	"Dido and Aeneas" (f and p)
1898	Fischer	"Le Journal du Printemps" (f, and d. — "fous" and "doux"?)

Dynamic Indications

- | | | |
|---------|-------------|---|
| 1597 | G. Gabrieli | "Sonata pian e forte" (Implied by instrumentation) |
| 1603 | Banchieri | "Fantasia" (Short echo passages between p. and f.) |
| 1607 | Monteverdi | "Orfeo" |
| 1619 | Monteverdi | "Tirsi e Clori" (Typical instructions in the work are "Contra bass to be touched very softly.") |
| 1624 | Monteverdi | "Tancredi e Clorinda" |
| 1634 | Landi | "Il San Alessio" (Contrast at short intervals) |
| 1634 | Henry Lawes | "Comus" ("Contrabasso de Viola tocchi pian piano.") |
| 1638 | Mazzocchi | "Partitura de Madrigali" (F.P.E.t. for Forte, Piano, Echo, and trill are common known.) |
| 1650 | Schütz | "Sacred Symphonies III" ("Fortier") |
| | Werkmann | "Kommet her. . ." (f and p) |
| 1660 | Lully | "Xerxes" ("loud", and "doux") |
| 1667 | Locke | "The Tempest" ("soft, lowder by degrees, violent, soft and slow by degrees") |
| 1674 | Lully | "Alceste" (d and f) |
| 1676 | Mace | "Musick's Monument" ("Lo" and "So") |
| c.1681? | Stradella | "La Cademia d'Amore" (Gradual dynamic change, not terraced) |
| | Buxtehude | Cantatas (Various ones have "piano" and "forte") |
| 1688 | Steffani | "Niobe" (p, pp, ppp, pppp — editor's marks?) |
| 1688/9 | Purcell | "Dido and Aeneas" (f and p) |
| 1695 | Fischer | "Le Journal du Printemps" (t. and d. — "tous" and "doux"?) |

Tempo Marks

- | | | |
|--------|-------------|---|
| 1551 | Susato | Dance ("allegro") |
| 1611/2 | Banchieri | "Organo suonarino" ("Adagio, allegro, veloce, presto, più presto, and prestissimo") |
| 1635 | Frescobaldi | "Fiori Musicali" (Gives information on tempo. Includes "rubato") |
| 1650 | Schütz | "Sacred Symphonies III" ("Praesto" and "Tarde") |
| 1667 | Locke | "The Tempest" ("violent, soft and slow by degrees") |
| 1671 | Legrenzi | "La Buscha" ("Allegro, adagio") |
| | Buxtehude | "Gott hilf mir" ("Largo") |
| 1692 | Torelli | "Sinfonia" ("allegro", etc.) |
| 1695/8 | Muffat | "Florilegium Primum and Secundum" ("allegro, grave", etc.) |

Broken Octaves and Arpeggios

- | | | |
|----------------|------------|---|
| 1622 | Marini | "Balletto e Corente a 3" (Not scored, but contains octave leaps. Marini sometimes called for "a modo di lira", after the polyphonic playing of viols) |
| 1639 | Merula | Canzona (Unscored, but contains broken octaves in all parts) |
| | Kindermann | "Gestlichte Konzert" (Broken chords in violin parts) |
| 1662 | Ahles | "Auf das Fest der Himmelfahrt" (Arpeggios) |
| 1662 | Ahles | "Auf das Fest des Erzengels Michael" (Arpeggios) |
| before
1664 | Carissimi | "Jonas" |
| 1667 | Cesti | "Il Pomo D'Oro" |
| 1687 | Steffani | "Alarico" (Broken chords) |
| | J.C.Bach | "Mein Freudin" (Alberti type part in first violin) |
| 1690 | Scarlatti | "La Rosaura" (Broken arpeggios in violin part) |

To Fanfares

1607	Monteverdi	"Euridice" (Triple Flute played by "Orfeo" ("Toccata") scene)
	Monteverdi	"Book V" (Scenes identified by different instruments)
1642	Monteverdi Schütz	"Poppea" (Unscored, but conducive to brasses) (Scored according to instruments mentioned in text)
	J.C. Bach	"Es erhob sich" (Trumpets in C)
	Monteverdi	"Sacred and Cleopatra"
	Buxtehude	"Ihr lieben Christen, freut euch nun" (3 cornetts and trombones)
	P. Caccini	In Pastoral Ritornelli of shepherd's
1693	Charpentier	"Médée" (Trumpets in D and drums)
	Farina	"Capriccio Stravagante" (4 members of violin family imitate cats, dogs, hens, pipes, lyre, tambourine, and trumpets)
	Handel	"Requiem" (Strings imitate bells)
	Joseph Haydn	Setting of Revelation 19, 12 (4 trumpets used in battle scene)
	Leclair	"Cupid and Death" (Unscored; accompaniment to waltz dancing with steps suggest quaint posturing by melodic line — Parry)
	Lucini	"Il Pomo D'oro" (Infernal scene accompanied by trombones and cornetts; martial scene by trumpets; absence of instruments in earthquake scene)
	Buxtehude	"Mein Gemüth erfreuet sich" (Violins imitate lutes, harp, violes, and claviccins; other instruments paint words of text)
	Lully	"Roland" (Instruments create furious music as Roland tears up trees, etc.)
1687	Steffani	"Alarico" (Flute used when mentioned in text)
1688/9	Purcell	"Dido and Aeneas" (Trombels used for storm)
1688	G.C. Bach	"Siehe, wie fein. . ." (3 viols used symbolically for the Trinity)
	J.C. Bach	"Es erhob sich. . ." (Trumpets for battle scene)

Tone Painting

- | | | |
|--------|-------------|---|
| 1600 | Peri | "Euridice" (Triple flute played by shepherd for pastoral scene) |
| 1607 | Monteverdi | "Orfeo" (Scenes identified by different instruments) |
| | Schütz | "Psalm 150" (Scored according to instruments mentioned in text) |
| 1624 | Monteverdi | "Tancredi e Clorinda" |
| 1625 | F. Caccini | "La Liberazione. . ." (3 recorders in pastoral ritornelli of shepherd's song) |
| 1627 | Farina | "Capriccio Stravagant" (4 members of violin family imitate cats, dogs, hens, pipes, lyre, tambourine, and trumpets) |
| 1631 | Strauss | "Requiem" (Strings imitate bells) |
| | Johann Bach | Setting of Revelation Ch. 12 (4 trumpets used in battle scene) |
| 1659 | Locke | "Cupid and Death" (Unscored; accompaniment to satyr dancing with apes suggest quaint posturing by melodic line — Parry) |
| 1667 | Cesti | "Il Pomo D'Oro" (Infernal scene accompanied by trombones and cornetts; Martial scene by trumpets; Absence of instruments in earthquake scene) |
| | Buxtehude | "Mein Gemüth erfreuet sich" (Violins imitate lutes, harps, violes, and clavecins; other instruments paint words of text) |
| 1685 | Lully | "Roland" (Instruments create furious music as Roland tears up trees, etc.) |
| 1687 | Steffani | "Alarico" (Flute used when mentioned in text) |
| 1688/9 | Purcell | "Dido and Aeneas" (Tremolo used for storm) |
| 1689 | G.C.Bach | "Siehe, wie fein. . ." (3 viols used symbolically for the Trinity) |
| | J.C.Bach | "Es erhub sich. . ." (Trumpets for battle scene) |

Character Delineations

- | | | |
|------|------------|---|
| 1600 | Peri | "Euridice" (Triple flute played by shepherd) |
| 1607 | Monteverdi | "Orfeo" (Characters identified with particular instruments) |
| 1619 | Schütz | "Psalm XXIV" (Each instrumental group identified with a person) |
| 1623 | Schütz | "Easter Oratorio" (Evangelist accompanied by 4 gambas; Jesus by 2 viols) |
| 1643 | Anonymous | "Philothea" (Personified scoring for people and ideas — ex. = "clemency") |
| 1664 | Schütz | "Christmas Oratorio" (Each man or group associated with certain group of instruments) |
| 1664 | Schütz | "Seven Last Words. . ." (Jesus accompanied by "2 violen") |
| | Weckmann | "Dialogus. . ." (Characters scored appropriately) |
| 1672 | Sebastiani | "Passion" (Violas accompany Evangelist; violins accompany Jesus) |
| 1673 | Theile | "St. Matthew Passion" (Evangelist accompanied by gambas; Jesus by viols) |
| | J.M. Bach | "Liebster Jesu. . ." (Jesus always accompanied by 2 violini) |

IMPROVISATION Imitation of Sounds

- | | | |
|------|-----------|---|
| 1627 | Farina | "Capriccio Stravagante" (Cats, birds, dogs, trumpets, pipes, imitated by 4 strings) |
| 1631 | Strauss | "Requiem" (First attempt of instruments to imitate bells) |
| | Buxtehude | "Mein Gemüth erfnæt sich" (4 violins imitate lutes, harps, viols and clavecins) |
| | Corelli | "Concerto Grosso III" (First violin part) |
| | Buxtehude | "Benedicite Dominus" (Benedicite solo) |
| | Steffani | "Aria" (Solo and tutti contrasts) |
| | Vivaldi | "Forest Mass" (First violin part) |
| | Bach | "The Notebook for Anna Bach" |
| | Corelli | "Lode des Herrn" (First violin and first horn part) |
| | Bach | "Adagio" (Solo parts for strings) |
| | Vivaldi | "Concerto Grosso" (Solo interludes for solo violin) |
| | Bach | "Requiem" (First and second violins or solo with violins) |

Importance of First Player

1600	Cavalieri	"Rappresentazione. . ." (Florid upper violin part)
1621/9	Castello	"Sonate concertate in stilo moderno" (Soloistic passages, mostly for violin)
1644/64	Neri	Ensemble Sonatas (Solo passages alternating with tutti)
1680?	Corelli	"Concerto Grosso XII" (First violin important)
	Buxtehude	"Benedicam Dominum" (Bombarde solo)
1687	Steffani	"Alarico" (Solo and tutti contrasts)
1694	Purcell	"Great Parent Hail" (First violin important)
1695	Fischer	"Le Journal du Printemps"
	Schelle	"Lobe den Herrn" (First violin and first cornett important)
1698	Fischer	"Zodiaci" (Solo parts for strings)
1698	Torelli	"Concerti Grossi" (Short interludes for solo violin)
c.1699	Biber	"Requiem" (First and second violins on solo par with voices)

Virtuoso Demands
Obligato Parts

- 1650 Monteverdi "Concertante Psalms" (Obligato string orchestra in three parts and four-fold viols or trombones with voices) (group with highly figurative part)
- 1651? Monteverdi "Messa a 4 e Salmi" (Bassoon obligato) (Violins, cornetts and double bass have rigorous passages)
- 1690 Scarlatti "La Rosaura" (2 obligato violin parts)
- 1691 Purcell "Dioclesian" (Obligato trumpet part)
- 1692 Purcell "Cecilia's Ode" (2 obligato oboe parts)
- "Concerto Grosso" (First violin parts)
- "Ain wie herrliche war" (30th Bar) (Sixty-second notes)
- "Auf, laßt uns der herrlichen loben" (sixty-fourth notes in first string parts)
- "Alarico" (thirty-second notes for trumpets; later uncorred, but probably for strings)
- "Ihr Christen, freuet euch" (difficult places for violin and viola)
- "Jerusalem-Liberata" (difficult places for first violin)
- "Siehe, wie fein. . ." (Melismatic theme occurs in all three viola parts)
- Steffani "Henrico Leone"
- Purcell "Dioclesian" (Difficult trumpet part)
- Pez "Concerto Pastorale" (No breathing places for flutes)

Virtuoso Demands

- G.Gabrieli "Canzona per sonare" (Ambitious fugue theme for all instruments)
- G.Gabrieli "Canzone a 11" (Large group pitted against small group with highly figurative part)
- 1607 Monteverdi "Orfeo" (Violins, cornetts and double harp have rigorous passages)
- 1624 Monteverdi "Tancredi e Clorinda"
- Marini (Treats violin as voice with gorgia — ornaments)
- Steffani "Bravura aria" (Obligato trumpet part)
- 1680 Corelli "Concerti Grossi" (Florid first violin part)
- J.M.Bach "Ach wie sehnlich wart' ich der Zeit" (thirty-second notes)
- J.M.Bach "Auf, lasst uns der Herren loben" (sixty-fourth notes in first string parts)
- 1687 Steffani "Alarico" (thirty-second notes for trumpets; later unscored, but probably for strings)
- 1687 Krieger "Ihr Christen, freuet euch" (Difficult places for violin and gamba)
- 1687/8 Pallavicino "Gerusalemme Liberata" (Difficult places for first violin)
- 1689 G.C.Bach "Siehe, wie fein. . ." (Melismatic theme occurs in all three gamba parts)
- 1689 Steffani "Henrico Leone" *Anthology of Music*, 1, 188.
- 1691 Purcell "Dioclesian" (Difficult trumpet part)
- Pez "Concerto Pastorale" (No breathing places for flutes)

Appendix IV

SOURCES FOR CHRONOLOGICAL CHART OF SCORING

The purpose of this chart is to give an over-all view of the variations in instrumentation throughout the late sixteenth and entire seventeenth century, by listing over two hundred works and the instruments for which they were scored. Occasionally chamber music has been included for the interest it adds to instrumentation. In some cases sources differ on the exact instrumentation of works, and in these cases I have chosen the largest number of instruments called for, and given credit to each source.

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- 4a. Grout, Short History of Opera, I, 62.
- 4b. Redlich, Claudio Monteverdi - Life and Works, p. 97.
5. Gleason, Music Literature Outlines, II, 40.
6. Bukofzer, Music in the Baroque Era, p. 20.
7. Groves, Dictionary of Music and Musicians, V, 136.
8. Bukofzer, loc. cit.
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10. Grout, loc. cit. Attributed to Caccini in Carse, op. cit., p. 22.

11. Fétis, Biographie Universelle des Musiciens, I, 234.
12. Carse, op. cit., p. 26; Apel, Harvard Dictionary, p. 519.
13. Boyd, Elizabethan Music and Musical Criticism, p. 163.
14. Franko (ed.), Monteverdi Suite for Five Brass Instruments, p. 2.
15. Redlich, op. cit., p. 48; Silbert, "Francesca Caccini called 'La Cecchina'", Musical Quarterly, (Jan. 1946), XXXII, p. 60.
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17. Dorian, History of Music in Performance, p. 65.
18. Groves, op. cit., VI, 198.
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20. Franck, Two Pavans (ed. King), p. 368.
21. Eitner, op. cit., VI, 366.
22. Monteverdi, Works, II, frontispiece; Denkmäler der Tonkunst in Bayern, VI, part 1, pp. 47-8.
23. Smith College Archives, XIII, third page of introduction.
24. Carse, op. cit., p. 36.
25. Redlich, op. cit., pp. 65-6.
26. Schrade, Monteverdi, Creator of Modern Music, p. 239.
27. Ibid., p. 245; Carse, op. cit., p. 46.
28. Brade, Two Pieces, (ed. King), p. 463.
29. Schrade, op. cit., p. 220.
30. Ibid., p. 255.
31. Redlich, op. cit., p. 127.
32. Apel, op. cit., p. 173.
33. Baines, Woodwind Instruments and Their History, p. 272.

34. Byrd, Complete Works, XIX, pp. 71 and 166.
35. Denkmäler der Tonkunst in Österreich, LXX, 3.
36. Carse, op. cit., p. 51.
37. Bukofzer, op. cit., p. 24. A late work, according to Davidson and Apel, op. cit., I, p. 234.
38. DTÖ, loc. cit.
39. Groves, op. cit., VIII, 645.
40. Bukofzer, op. cit., p. 24.
41. Bakers, op. cit., p. 940.
42. Parry, Oxford History of Music, p. 221.
43. Carse, op. cit., p. 52.
44. Ibid., pp. 51-2.
45. Schrade, op. cit., p. 287.
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47. Groves, op. cit., V, 644.
48. Bukofzer, op. cit., p. 91.
49. Groves, loc. cit.
50. Ibid.
51. Ibid., p. 649.
52. Ibid.
53. Ibid., pp. 649-50.
54. Eitner, op. cit., II, 360.60.
55. DTÖ, LXX, (observation).
56. Fétis, op. cit., IV, 82.
57. Groves, op. cit., p. 849.
58. Ibid., p. 645. XVI, (observation)
59. Prunières, "Monteverdi's Venetian Operas", Musical Quarterly, (April 1924), X, 186.
60. Handbuch der Geschichte der Musik in Beispielen, p. 249.
61. op. cit., p. 178.

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62. Groves, loc. cit.
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66. Gleason, op. cit., p. II-15.
67. Leichtentritt, Music, History and Ideas, p. 118.
68. Carse, op. cit., p. 59.
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72. Carse, op. cit., p. 52.
73. Ibid., p. 56.
74. Denkmäler Deutscher Tonkunst, XII, 64.
75. Redlich, op. cit., p. 126.
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77. Redlich, loc. cit.
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79. Redlich, op. cit., pp. 128-9.
80. DdT, XXIV-XXV, 23.
81. Groves, op. cit., p. 843.
82. Carse, op. cit., p. 56.
83. DTB, XII, 3.
84. Das Chorwerk, XXVI, (observation)
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90. Groves, op. cit., p. 647; Schütz's Works, VI says "Sacred Symphonies II" accompanied solely by basso continuo.
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95. DdT, V, 41.
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99. Ibid., p. 83.
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101. Lully, Ouvres Complètes, "Les Ballets", II, 43.
102. Ibid., p. 162.
103. Schering, op. cit., p. 271.
104. Eitner, loc. cit.
105. Carse, op. cit., p. 35.
106. I Classici della Musica Italiana, V, 4.
- 107a. Bukofzer, op. cit., p. 163.
- 107b. Carse, op. cit., p. 71.
108. Groves, op. cit., VII, 647.
109. Eitner, loc. cit.
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111. DdT, op. cit., p. 160.

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113. Grout, op. cit., pp. 97-8.
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117. Buxtehude, Missa Brevis, final page.
118. Pezel, Sonata #2, (ed. King), p. 226.
119. Schering, op. cit., p. 288.
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121. Davidson and Apel, op. cit., II, 80.
122. Ibid., p. 70.
123. Ibid., p. 78.
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128. Lully, op. cit., "Les Operas", I, preceeding p. 1.
129. DTÖ, op. cit., p. 1.
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136. Burney, op. cit., p. 578.
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144. Ibid., p. 1015.
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148. DTB, XII, part 2, p. 1.
149. Schering, op. cit., p. 308.
150. Ibid., p. 313.
151. Purcell, The Works of Henry Purcell, XXVII, 93.
152. Groves, loc. cit.
153. Ibid.
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158. Ibid.
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162. Buszin, "Dietrich Buxtehude", Musical Quarterly, (July 1937), XIII, 465.
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168. Groves, loc. cit.
169. DTB, op. cit., p. 14.
170. Ibid., VI, part 1, p. 118.
171. Carse, op. cit., pp. 74-7.
172. Parry, op. cit., p. 238.
173. Groves, loc. cit.
174. DdT, op. cit., p. 37.
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176. Groves, loc. cit.
177. DTB, II, part 2, pp. 1, 4, and 18.
178. Nathan Broder notes, Oct. 27, 1958.
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180. DTB, XII, part 2, pp. 31, 35, and 45.
181. Reichsdenkmale Deutscher Musik, II, 22.
182. Purcell, op. cit., XXVII, pp. 29 and 39.
183. Groves, op. cit., p. 1014.
184. Purcell, op. cit., I, 1.
185. DTB, VI, part 1, p. 28.
186. Ibid., XII, part 2, p. 79.
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188. Groves, loc. cit.
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192. DTB, XII, part 2, p. 91.
193. Purcell, op. cit., IX, 1+.
194. Schering, op. cit., p. 350.
195. Groves, loc. cit.
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positions for Trumpets and Strings in Bologna",
Musical Quarterly, (July 1951), XXXVII, #358.
202. Parry, op. cit., p. 251.
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206. Purcell, op. cit., XXVII, 59.
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208. DdT, X, 73-4.
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212. DTB, op. cit., p. 126.
213. Ibid., VI, part 1, 69.
214. Ibid., p. 80.
215. Ibid., XXVII-XXVIII, 77.

216. Reich, Sonata #19, (ed. King), p. 193.
217. DTB, op. cit., pp. 133 and 147.
218. Buszin, loc. cit.
219. Parry, op. cit., p. 391.
220. DdT, op. cit., frontispiece to part 2.
221. Ibid., LII-LIV, 221.
222. DTÖ, op. cit., p. 41.
223. Groves, op. cit., VIII, 514.

DATE	COMPOSER	COMPOSITION	
1543	Susato	"Premier Livre à quatre parties treble et une chanson, com- à la voix com- ments"	p. 133 and 147. p. 391. ontispiece to part 2. 21.
1544	Susato	"Premier Livre à trois parties continues tre- velles chanc- à la voix com-	41. VIII, 514.
1551	Susato	Dances	
1565	Al. Striggio	"Psyche ed Am-	
1565	Al. Striggio	"Psyche ed Am-	
1581	Beajoyeux	"Ballet Comique à l'Opera (Montpellier)"	
1583	G. Gabrieli	"Penetial Psal-	

CHRONOLOGICAL CHART OF SCORING

DATE	COMPOSER	COMPOSITION	STRINGS	WOODWINDS	BRASSES	KEYBOARD	PERCUSSION
¹ 1543	Susato	"Premier Livre de chansons à quatre parties, contenant treble et une nouvelles chansons, convenables tant à la voix comme aux instrumentz"	.....	.....	.....	.....	.....
² 1544	Susato	"Premier Livre de chansons à trois parties, auquel sont continues trente et une nouvelles chansons convenable tant à la voix comme aux instrumentz"	.....	.....	.....	.....	.....
³ 1551	Susato	Dances	.....	.....	.....	.....	.....
^{4a} 1565	Al. Striggio	"Psyche ed Amore"	4 lutes 1 lyre 1 bass lyre 1 small rebec 1 soprano viol 4 "bowed" viols 4 bass viols 1 contrabass viol	2 recorders 4 transverse flutes 2 tenor flutes 1 tenor oboe	4 trombones 1 large cornett 2 soft-toned cornetts 5 (!) serpents	4 clavicembalos	
^{4b} 1565	Al. Striggio	"Psiche ed Amore"	4 violini 1 Luito mezzano [sic] 1 Leuto Grosso [sic] 1 Sotto Basso da Viola 4 Luito 1 Viola d'Arco 1 Lirone 1 Lira 1 Rebecchino (early fiddle) 1 Soprano di Viola	2 flauti diritti (recorders) 4 flauti traverse 1 Traverso Contralto (alto flute) 1 Flauto Grande Tenore 1 Dulziano (bassoon)	1 cornetto muto (stiller zink) 4 tromboni 1 Trombone basso 5 Storte (serpents) 1 Stortina (little serpent) 2 Cornetti ordinarii 1 Cornetto grosso	2 gravicembali	2 Tamburi (drums)
⁵ 1581	Beajoyeulx	"Baliet Comique de la Reine"	Strings Lutes Lyres Harps	Oboes Flutes	Cornetts Sackbut/s	Small organ (wooden pipes)	
⁶ 1583	G. Gabrieli	"Penetial Psalms"	.....	.....	.....	.....	.....

..... Instruments and voices together and separately
up to discretion of performer

7	1585	G. Gabrieli	"Madrigali a 6 voci o instrumenti"	.....	Instruments not specified.		
8	1587	G. Gabrieli	"Concerti . . . per voci et stromenti"	.....	"For voices and instruments".		
9	1589?	Byrd	"Christ Rising Again" (Verse Anthem)	Viols			
10	1589	Anonymous?	"Intermedi of 1589"	2 harps 6 lutes 2 chitarrones 2 guitars 1 psaltery 1 cither 1 mandola 1 viola bastarda 2 lyres 1 small violin (sopranino di viola) 1 violino 3 tenor viols 2 bass viols 1 contrabass viol (Perhaps more viols)	1 traverse flute 1 (or more) tenor obes bassoons	2 cornetts 4 trombones	1 small cembalo 1 organ with wooden pipes 1 "organo di pivette" (?)
11	1593	Banchieri	"Premier Livre de chansons à quatre parties, au quel sont contenues trente tante à la Voix comme aux Instrumentz"	.....	For voices or instruments.		
12	1597	G. Gabrieli	"Sacred Symphony I" . . . "tam vocibus quam instrumentis"	2 violins (violas?) Treble Lute Padora Cittern Treble & Bass viol	bassoons Flute	2 cornetts 2 (3) trombones	
13	1599	Morley	"First Book of Consort Lessons"	.....	Five unnamed instruments.		
14	1599	Monteverdi	"Book V"	.....	Flutes (specified?)	Basso continuo	
15	1600	G. Caccini	"Euridice" (Opera)	.....	Mere handful of instruments (unspecified?).		
16	1600	Cavalieri	"Rappresentazione" ("Oratorio")	Lira Doppia Chitarrone o Teorba (Violino)	2 flutes "Due tibie all' antica" (?)	Clavicembalo Organo soave (con chitarrone)	..... Instruments merely suggested.

17	c. 1600	G. Gabrielli	"Sonata pian e forte" (Sac. Sym. IM)	..... Orchestra I	2 alto trombones 1 tenor trombone 1 cornett	
				..... Orchestra II.	2 tenor trombones 1 bass trombone	
			1 viola			
18	1600	Peri	"Euridice" (Opera)	chitarrone lira grande Theorbo	3 flutes	harpsichord
19	1602	Viadana	"Cento concerti. . .con il basso continuo"	.....	..... Instruments not specified	Basso continuo
20	1603	Frank	"Pavans"	.....	..... "Auff allerley Instrumenten"	
21	1603	Maschera	"Canzona"	.....	..... Instruments not specified	
22	1606	Quagliati	"Il Carro di Fedelta d'Amore"	violin lute theorbo	.....	cembalo
				.....	..... "e altri instrumeti"	
24	1607	Gagliano	"Daphne" (Opera)	.....	..... Various instruments.	Basso continuo
25	1607	Monteverdi	"Orfeo" (Opera)	1 "arpa doppia" (double harp) 2 chitarreni 2 bass cithers 3 bassi de gamba 2 violini alla francese 10 viole da braccio 2 contrabassi de viola	1 flautino alla Vigesima seconda (2 parts given)	4 tromboni 2 cornetti 1 clarino 3 trombe sordine
25	1607	Monteverdi	"Scherzi" of 1607	2 violins bass bass lute (or harpsichord)	Probably scored for:	Harpsichord (or bass lute)
26	1608	Monteverdi	"Arianna"	.....	..... As richly scored as "Orfeo" (?)	
27	1608	Monteverdi	"Il Ballo della Ingrate"	5 (10) viole da braccio chitarrone (2 if necessary)		harpsichord (2 if necessary)
						muffled drums

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28	1609	Brade	"Allemande" and "Galliard" "Auff allen Musicalischen Instrumenten lieblich zu gebrauchen".		
29	1609	Monteverdi	"Scherzi Musicali"	2 viole da brazzio chitarrone (or clavicembalo)		clavicembalo (or chitarrone)
30	1610	Monteverdi	"Sonata Sancta Maria" (from "Vespers")	2 violini da brazzio 1 viola da brazzio	2 cornetti 2 tromboni (or 1 trombone and 1 viola da brazzio) 1 trombone doppio	Organ
31	1610	Monteverdi	"Vespers"	Violins Violas Gambas Contrabasses	Flutes Oboes (shawms)	2 cornetts (zinken) Organ 3 trombones
32	1610	Viadana	"Sinfonie musicali a otto voci"	. . . . . Instruments not specified but implied.		
33	1610	Anonymous	"Ceremonial pavan"	Shawm band		
34	c.1611?	Byrd	"Instrumental Fantasias"	. . . . . Instruments not specified, but viols probably intended.		
35	1611	Peuerl	Instrumental dances	. . . . . "e altri instromenti".		
36	1611 [sic]	Quagliati	"Carro di Fedelta d'Amore"	Violino ò altrie soprano leuto tiorba		cembalo
37	c.1612?	G. Gabrieli	"In Ecclesiis" (Motet)	Violini (actually violas)	2 cornetti 2 tromboni	Organ
38	1613	Peuerl	Instrumental dances	. . . . . Unscored.		
39	1614	Usser	"Messa e salmi"	. . . . . Various instruments.		
40	1615	G. Gabrieli	"Suscipe Clementissime" (From Sac.Sym. II)		6 trombones	
41	1615	Leone	"Concerti à 10 for voices and 6 instruments" Instruments not specified.		
42	1617	Anonymous	"La Délivrance de Renalt"	24 violies 14 lutes		

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43 1618	Boschetti	"Strali d'Amore" Instruments not specified.			Basso Continuo
44 1619	Landi	"Le Morte d'Orfeo"	. . . . . Instruments not specified.			
45 1619	Monteverdi	"Book VII" (Madrigals)	2 violins	Three instrumental choirs: 2 flutes		Basso continuo
46 1619	Monteverdi	"Tirsi e Glori"	2 (3) chitarroni (or 1 chitarrone and 1 (3) harps)			1 small spinet
			8 viole da braccio			
			1 contrabasso			
			2 small lutes			
47 1619	Schütz	"Psalmen Davids" ("Die mit Thränen säen")				3 (6) trombones
48 1619	Schütz	"Psalmen Davids" ("Ist nicht Ephraim")				cornetti trombones
49 1619	Schütz	"Psalmen Davids" ("Nun lob mein Seel")	Strings (?)			Brass (?)
50 1619	Schütz	"Psalmen Davids" ("Zion spricht")				Cornetts Trombones
51 1619	Schütz	"Psalm XXIV"	2 violins	5 bassoons		2 cornetts 4 trombones
52 1619	Schütz	"Psalmen XXIV" ("Veni, sancti spiritus")	Violin Violone	flute 1 bassoon		2 cornetts 3 trombones
53 1619	Schütz	"Psalmen XXIV" ("Wo Gott der Herr nicht bei uns hält")	1 lute 3 viole da gamba			3 trombones
1621/0 54 1621/9	Castello	"Sonate concertate in stilo moderno"	Includes violins			
55 1621	Posch	"Musikalische Tafelfreud"	. . . . . Instruments not specified.			
56 1623	Grandi	"5 ^a Missa e Salomi a 2, 3, e 4 voci, con basso e ripieni."	(Ripieno implies instruments)			Basso continuo(?)

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57 1623	Monteverdi	"Gloria a 7"	2 violins 4 viols (or 4 trombones)	(4 trombones)	Basso continuo
58 1623	Schütz	"Easter Oratorio" ("Historia der Auferstehung Jesu Christi")	4 viol da gamba		Organ
59 1624	Monteverdi	"Combattimento de Tancredi e Glorinda" (Opera)(Oratorio)	Quartet of viols da braccio Contrabass da gamba		Harpsichord
60 1625	F. Caccini	"La Liberazione. . ." (Opera)	3 violins basses 5 viols lutes	3 flutes 4 trombones	Portable organ Keyboard instruments
61 1625	Peuerl	Instrumental dances	. . . . . Instruments not specified.		
62 1625	Schütz	"Cantiones Sacrae"	. . . . . Instruments not specified.		
63 1625	Schütz	"Symphoniae Sacrae" (or "Deutsche Concerte")	3-part strings		Organ
64 1626/7/9	Castello	"Capo di compagnia di musichi strumenti da fiato"	. . . . . "Wind instruments"		
65 1626	Mazzocchi	"La Catena d'Adone"	. . . . . Instruments not specified. Basso continuo		
66 1627	Farina	"Capriccio stravagante"	4 strings		
67 1628	Benevoli	"Mass in 53 Parts"	Choir I: 2 violins 4 violas	2 oboes 4 flutes	2 trumpets
			Choir II:		8 trumpets
			Other: cellos double basses bass lute lutes harps	bassoons	2 cornetts 3 trombones
					Organ Clavicembali

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68 c.1628	Bollius	"John the Baptist"	2 violins viola bastardo bass	1 bassoon 3 flutes	2 cornetti	organ
69 1629	Schutz	"Fili mi, Absalon" ("Sacred Symphonies I")			4 trombones	
70 1630	Pierson	"Mottects, or grave Chamber Musique. . ."	. . . . .	"Fit for voyces and vials".		organ (or virginals, baselute, [s.c.] bandora, or Irish harpe.
71 1631 (pub.)	Strauss	"Requiem"	Strings			Organ
72 1634	Landi	"Il San Alessio"	3 violins Harps Lutes Theorbos Bass viols Lyra Violini (large violins) Celli	Oboes		Gravicembali
73 1637	M.A. Rossi	"Erminia sul Giordano"	4 treble violins Violone			Basso continuo ("per tutti gli stromenti")
74 1638	Albert	"Arien"	2 violins 2 violas Violone	Bassoons	3 trombones	Continuo
75 1638	Monteverdi	"Altri canti d'amor"	2 violini 2 violas Gamba Contrabasso			Basso continuo
76 1639(?)	Merula	Canzona	3 strings			Organ
77 1641	Monteverdi	"Gloria a 7" (From "Selva")	2 violins 4 viole da braccio (or 4 trombones)		(4 trombones)	Basso continuo

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78 1641	Monteverdi	"Il ritorno di Ulisse in patria"	1 (or 2) theorbos bass viols other viols (?)		cornetts trumpets trombones	harpsichord	
79 1641	Monteverdi	"Magnificat" (From "Selva")	2 violins 4 violas (or trombones) 2 viols	2 "fiffari" (i.e. shawms) 2 flutes	3 cornetts (4 trombones)	Organ	
80 1642	Hammerschmidt	"Musikalische Andachten"	2 violins Violon			Organ	
81 1642	Monteverdi	"Poppea"	Strings (?)			Basso continuo	
82 1642	L. Rossi	"Il Palazzo Incantato"	2 violins 5-part viols				
83 1643	Kindermann	"Gestlichte Concert"	Strings	Fagott (flauto)	Trombones Cornette Trombone: grosso	Basso continuo	
84 1643	Selle	"Johannes Passion; für Solo- stimme, Chor und Instrumente" Instruments not specified.				
85 1643	Anonymous	"Philothea" (Oratorio)	4 violins 3 viols theorbo	3 oboes	3 trombones	organ	
86 1644	Cavalli	"Ormindo" (Opera)	2 viols 2 violas			Cembalo Basso continuo	
87 1644	Neri	"Sonata et canzone" Instruments not specified.				
88 1644	Staden	"Seelewig"	3 violins Theorbo (bass)	3 recorders 3 shawms	"Thick horn"		
89 1645	Hammerschmidt	"Dialogi oder Gespräche einer Glaubigen Seele mit Gott"	2 violins Bassus		Trombone	Basso continuo	
90 1647	Schütz	"Sacred Symphonies" II	2 violins Bass			Basso continuo	
91 1649	Cavalli	"Giasone"	Strings (?)			Cembalo	

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92 1651	Neri	"2 ^o Sonate a 3-12 stromenti"	Violins Violas Bass Va da braccio Violetti Theorbo	Fagotto	Cornetti Tromboni
93 1651	Neri	"Sonate da sonarsi con varj strom. a 3 sino a 12" (Op.2)	Violas Violins Bass Va da braccio Violetta Theorbo	Flauti Fagotto	Cornetti Tromboni
94 1655/6	Hammerschmidt	"Musicalische Gespräche uber die Sonntags - und Fest - Evangelia"	. . . . . 4 - 7 voices and instruments.		
95 1657	Ahles	"Jubilus S. Bernardi: Jesu dulcis memoria"	3 violins Violone		Basso continuo
96 1657	Ahles	"Magnificat"	(violino) (2 violas) (violone)		Cornetto (or violino) Basso continuo 2 trombones (or 2 violas) Trombone (or violone)
97 1657	Lully	"Le Ballet de L'Amour Malade"	Violons	Flûtes Hautbois Bassoons	
98 1658	Ahles	"Fürchtet euch nicht"	(Viola)	Bassoon (or trombone) 3 bassoons	Trombone (or viola) Basso continuo (trombone)
99 1658	Ahles	"Ich hab's gewagt"	2 violins Viola Violon 3 violini violone 5-part strings	4 flutes	Basso continuo
100 1658 101 1658	Hajnlein Lully	"Hodie Christus Natus Est" "Ballet D'Alcidiane"			Basso continuo
102 1660	Lully	"Xercès" (Ballet)	Violons (Trompette marine?)	Fagotins	(Trompette marine?) 3 Timpani

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¹⁰³ 1660	Weckmann	"Wenn der Herr die Gefangenen zu Zion" (Cantata)	2 violen				Organ	
¹⁰⁴ 1662	Hammerschmidt	"Kirchen and Tafel-Musik Clarinnen 1, 2, 3 Vocal und 4, 5, 6 Instrumentalstimmen enthalten"				Brass (?) (Cornetti (?))		
¹⁰⁵ 1663	Cesti	"La Dori" Scored once for 3-part orchestra. Scored again for 5-part orchestra. Adds: Trumpets					
¹⁰⁶ before 1664	Carissimi	"Jonas"	2 violins	(fagotto)			Basso continuo	
¹⁰⁷ 1664	Lully	"Miserere"	Basso o fagotto					
1664	Lully	"Princesse D'Elide"	(Strings)	. . . . . Full Orchestra	Trumpets	"Trompes de Chasse" (hunting horns?)	Kettle drums
¹⁰⁸ 1664	Schütz	"Seven Last Words" Instruments not specified.					
¹⁰⁹ 1664	Neri	"3 Sonaten; 1 canz.; 2 Corrente" Instruments not specified.					
¹¹⁰ 1664	Schütz	"Christmas Oratorio"	Violins 2 violas	Flutes Bassoon	Trumpets Trombones		Basso continuo	
¹¹¹ 1665	Ahles	"Zwingt die Saiten in Cithara"	2 violini		4 trombones		Basso continuo	
¹¹² 1666/7	Buxtehude	"Ecce nunc benedicta Domino"	2 violini				Organ	
¹¹³ 1667	Cesti	"Il Pomo D'Oro"	6 violins 4 alto viols 4 tenor viols 4 bass viols Double bass viol Lutes Archlutes Theorbos	2 flutes Bassoon	2 trumpets 2 cornetts 3 trombones		Gravicembalo (or gravi- organo) "Regate" "Spinettina" "Spinettone"	
¹¹⁴ 1669	Bernhard	"Ich Sahe an Alles Thun"	2 violini 2 violas Violone				Organ	

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¹¹⁵ 1669	Cesti	"L'Argia" (Opera)	2 viols Bass			Gembalo
¹¹⁶ 1669	Schmelzer	"Ballettmusik"	2 violini Viola			Basso continuo
¹¹⁷ 1670	Buxtehude	"Missa Brevis"	. . . . . Instruments not specified.			
¹¹⁸ 1670	Pezel	"Hora Decima"			2 cornetts 3 trombones	
¹¹⁹ 1670	Pezel	"Turmsongate"			2 cornetts 3 trombones	
¹²⁰ 1670	Rosenmüller	Suite for Stringed Instruments	2 violas 2 violins Bass viola			
¹²¹ 1671	Cambert	"Pomone" (Opera)	Dessus de Violon Haut-Contre de Violon Taille de Violon Basse de Violon			
¹²² 1671	Legrenzi	"La Buscha" (Sonata)	2 violino (Violon) Viola da braccio	Fagotto (ò violon)	2 cornetti (or viol)	Continuo
¹²³ 1671	Provenzale	"Il schiano di sua moglie"	3-part strings?			
¹²⁴ 1672	Buxtehude	"Wedding Cantata"		Bassoon	Brass (muted)	Continuo
¹²⁵ 1672	Sartorio	"L'Adelaide"	2 violins 2 violas		trombe	Gembalo
¹²⁶ 1672	Schmelzer	"Sonata con arie. . ."	2 violini 2 violas Violone		3 trombe	Organo Timpano
¹²⁷ 1672	Sebastiani	"Passion"	2 violins 3 violes da gamba (ò da braccio) Viola basso			Basso continuo
¹²⁸ 1673	Lully	"Cadmus"	Violons	Flûtes	Trumpets	Timbales (kettle- drums)

¹²⁹ 1673	Theile	"Passion Domine nostri Jesu Christi sec. Matthaeum"	2 violas da gamba 2 violas da braccio			Basso continuo	
¹³⁰ 1674(?)	Buxtehude	"Ihr Lieben Christen" (Cantata)	3 violins 2 violas Contrabass	Bassoon	3 cornets 3 trombones 2 trumpets	Organ	
¹³¹ 1674	Draghi	"La Laterna di Diogene"	2 violins 2 violas			Cembalo	
¹³² 1674	Lully	"Alceste"	strings	Flutes Oboes	Trumpets	2 kettle- drums	
¹³³ 1675	Locke	"Psyche"	Violins Wind instruments.			Kettledrums
¹³⁴ 1675	Lully	"Thésée"	5-part strings	Hautbois Flutes d'Allemagne	Trumpets	Basso continuo	
¹³⁵ 1675	Pallavicino	"Il Diocletiano" (Opera)	2 viols		Tromba (trumpet)	Basso continuo	
¹³⁶ 1676	Stradella	"Oratorio di S. Giov. Battista"	2 violins Violoncello	} "del concertino"			
			2 violins Tenor Bass [sic]	} "del concerto grosso"			
¹³⁷ 1677(?)	Buxtehude	"Frohlocket mit Händen"	Violins Violone		2 clarini	Basso continuo	
¹³⁸ 1677	Legrenzi	"Totila"	2 violins 2 violas			Basso continuo	
¹³⁹ 1677	Lully	"Isis" (March)	Violins	Musettes Oboes			
¹⁴⁰ 1678	Purcell	"Timon of Athens"	2 violins Viola Bass	2 flutes 2 oboes	trumpet	Basso continuo	

141 1679	Kaiser Leopold I	"Die Erlösung des menschlichen Geschlechts"	2 violas				
142 1680	Corelli	"Concerti grossi"	2 violins 1 cello (Plus string orchestra)			Organ	
143 1680	Freschi	"Berenice"		6 flutes		40 cornets 6 trumpets 6 sackbutts	6 drums
144 1680	Purcell	"Welcome, viceregent of the mighty King"	Strings (?)	.....Turkish and other instruments.....			
145 1681	H. Bach	"Ich Danke dir, Gott" (Cantata)	2 violins alto viola tenor viola			Organ	
146 1681	Lully	"Le Triomphe de l'amour"		Flute quartet: Tailles ou Flûtes d'Allemagne Quinte de Flûtes Petits basse de Flûtes Grande basse de Flûtes		Basso continuo	
147 1681	Purcell	"Swifter Isis, swifter flow"	Strings	Flutes Oboes		Basso continuo	
148 1681	Steffani	"Marco Aurelio" (Opera)	.....Instruments not specified.....				
149 1681	Stradella	"Susanna" (Oratorio)	2 violas			Basso continuo	
150 1682	Lully	"Persée"	Violine Disk.-viola (descant?) Alt viola Tenor viola Basse			Basso continuo	
151 1682	Purcell	"Hark Damon, Hark" (Secular cantata)	2 violins 1 Cello	2 flutes		Harpsichord Basso continuo	

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¹⁵² 1682	Purcell	"The Summer's absence unconcerned we bear"	Strings			Basso continuo
¹⁵³ 1682	Purcell	"What, what shall be done in Behalf of the Man?"	Strings	Flutes		Basso continuo
¹⁵⁴ 1683	Buxtehude	"Benedicam Dominum"	2 violons Bass viol.	(Oboe) Bombarde	4 trompettes 2 clarini (oboe or cornetti) Cornetti 5 trombones	Basso continuo
¹⁵⁵ 1683	Purcell	"Fly, bold rebellion"	Strings			Basso continuo
¹⁵⁶ 1683	Purcell	"From Hardy Climes" (Ode)	2 violins Viola Violoncello			Harpsichord
¹⁵⁷ 1683	Purcell	"Laudate Ceciliam" (Ode)	Violins			Basso continuo
¹⁵⁸ 1683	Purcell	"Welcome to all the Pleasures" (Ode)	Strings			Basso continuo
¹⁵⁹ 1684	Kerll	"Missa pro defunctis"	3 violas Basso viola o fagotto	(Fagotto)		Harpsichord
¹⁶⁰ 1684	Lully	"Amadis" (Chaconne)	5-part string orchestra	..... Wind instruments implied. Hautbois Flutes	Trumpets	Basso continuo Tympani
¹⁶¹ 1684	Purcell	"From those serene and rap- turous joys"	Strings			Basso continuo
¹⁶² 1685(?)	Buxtehude	"Jesu Meine Freude"	2 violins Contrabass	Bassoon		Harpsichord
¹⁶³ c.1685	Blow	"Venus and Adonis"	2 violins Viola Violoncello	2 flutes		Harpsichord
¹⁶⁴ 1685	Krieger	"Magnificat"	2 violini 3 violas	Fagotto	2 clarini	Continuo Tympana

¹⁶⁵ 1685	Lully	"Roland"	2 violes 2 violas Basse	Oboes	Basso continuo	
¹⁶⁶ 1685	Pezel	"Intrada, Sarabande, Bal"			2 cornetts 3 trombones	
¹⁶⁷ 1685	Purcell	"My Heart is Inditing" (Anthem)	2 violins Viola			
¹⁶⁸ 1685	Purcell	"Why, Why are all the Muses Mute"	Strings		Basso continuo	
¹⁶⁹ 1685	Steffani	"Servio Tullio" (Opera)	. . . . . Instruments not specified.			
¹⁷⁰ 1686	Krieger	"Die Gerechten werden wegger- afft"	Violini Violetta 2 violdigambas Violoncello	Fagotto	Organ Gembalo	
¹⁷¹ 1686	Lully	"Acis et Galatée"	5-part strings	Flutes		
¹⁷² 1686	Lully	"Armide"	Strings			
¹⁷³ 1686	Purcell	"Ye Tuneful Muses"	Strings	Flutes	Basso continuo	
¹⁷⁴ 1687	Krieger	"Liebster Jesu, willst du Scheiden"	2 violini 2 violas Violone		Organ	
¹⁷⁵ 1687	Pallavicino	"Gerusalemme Liberata"	2 violini 2 violetti Viola da collo Basso		Continuo	
¹⁷⁶ 1687	Purcell	"Sound the Trumpet"	Strings		Organ	
¹⁷⁷ 1687	Steffani	"Alaria"	2 violini (or 1 and 1 piff.) Viola	("Piff.") Fagotto Oboe Flauti	3 tromba Klavierauszug Gembalo	2 timpani

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¹⁷⁸ 1688	Lully	"Proserpine" (trio)	Strings	2 Oboes Bassoon		
¹⁷⁹ 1688/9	Purcell	"Dido and Aeneas" (Opera)	2 violins Viola Bass			Basso continuo
¹⁸⁰ 1688	Steffani	"Niobe" (Opera)	Violini Violas Theorbo	Piffari Flutes Fagotto	4 tromba	2 timpani
¹⁸¹ 1689	G.C.Bach	"Siehe, wie fein. . ." (Cantata)	Violino 3 viola da Gamba Violone			Organ
¹⁸² 1689	Purcell	"Celestial Music" (Ode)	2 violins Viola Violoncello			Harpsichord
¹⁸³ 1689	Purcell	"Now does the glorious day appear"	Strings			Basso continuo
¹⁸⁴ 1689	Purcell	"Yorkshire Feast Song"	2 violins Viola Bass	2 flutes 2 oboes	2 trumpets	Basso continuo
¹⁸⁵ 1689	Schwemmer	"Victoria, plaudite coelites" (Cantata)		Fagotto	2 clarini 2 cornetti 2 tromboni	Organ
¹⁸⁶ 1689	Steffani	"Alcide"	. . . . . Instruments not specified.			
¹⁸⁷ 1689	Steffani	"Henrico Leone" (Opera)	Strings?	Hautbois Bassoon		
¹⁸⁸ 1690	Purcell	"Arise, my Muse"	Strings	Flutes Oboes	Trumpets	Basso continuo
¹⁸⁹ 1690	Purcell	"High on a throne of Glittering Ore"				Basso continuo
¹⁹⁰ 1690	Purcell	"Of Old when Heroes"	Strings	Flutes Oboes	Trumpets	Basso continuo
¹⁹¹ 1690	A.Scarlatti	"La Rosaura"	2 violins Viola Basses	Hautbois Flutes	Trumpets?	

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219 1697	Ascarlatti	"Prigionier fortunato"	Violins Viola *Cello Double bass	Flutes	Trumpets		
220 1698	Fischer	"Zodiaci"	Violino Violetta Viola Violone			Cembalo	
221 1698	Krieger	"Preise, Jerusalem, den Herren"	2 violini 2 violas	Fagotto	2 "trombettas" 2 cornettinos 3 trombones	Basso continuo	Timpani
222 1699?	Biber	"Requiem"	Violins 3 violas Violone	Fagotto	3 trombones	Organ	
223 1709 (pub.)	Torelli	"Concerti grossi"	2 violins String orchestra				

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CORRECTION



***PRECEDING IMAGE HAS BEEN
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CORRECT A POSSIBLE ERROR***

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