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THE 17TH CENTURY ENGLISH MUSIC THEORISTS

by

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Thesis submitted to the University of Nottingham for the degree of Doctor of Philosophy, May, 1962.

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SUMMARY

Introduction. The scope of the problem: Treatises (in MS and in print) containing the rudiments of music and/or the theory of composition, from the end of the 16th century to the beginning of the 18th century. For purposes of comparison, the 17th century French theorists' works are examined; though they are fewer, and on the whole, they lagged behind their English contemporaries.

Review of background literature.

Part I. Chap. I. Title-page details of each treatise, and a brief account of the work and its writer.

Chap. II. A survey of Playford's "Introduction to the Skill of Musick", which ran to 22 separate issues from 1654 to 1730. How the book developed and what additions and alterations were made. The 1694 edition, revised by Henry Purcell, is particularly interesting.

Chap. III. An examination of the proposed musical reforms contained in Thomas Salmon's "Essay" (1672); and the arguments between Salmon and Matthew Locke.

Part II. Chap. IV. The rudiments of music. Chap. V. The theory of composition. Part II comprises a concordance of the major subjects included in the different treatises, (e.g. the Gamut, Ligatures, False Relation, Cadences, etc.). The development of each subject is traced; plagiarisms observed; and rules and examples compared, analysed and criticised.
Part III. Chap. V. Gresham College, London: source of instruction in the theory of music. An account of the 17th century music professors; the type of audience; and the lectures given.

Chap. VI. The social significance of the 17th century treatises. The theorists writing for a wide audience: budding composers, amateurs, young practitioners, music lovers, those unable to procure personal tuition, etc. The popularity of the small compendium: inexpensive, "plain and easy"; a means of self-tuition. The prestige of music in the 17th century; the interest taken in theory and composition. Political, social and religious influences on musical developments.

Appendices. Annotated copies of Ravenscroft's MS Treatise, and Dr. Blow's "Rules for Composition".
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In order to avoid tedious foot-notes, all sources of information to which direct reference is made are incorporated in the text, and a general bibliography is given at the end of the thesis.


Except in a few instances, all the examples originally in C clefs (or G and F clefs in varying positions) have been transcribed into modern G and F clefs.

As no theorist wrote two treatises in any one year, the date beside the theorist's name will indicate the work. In each section, where a theorist is mentioned for the first time, the date of his treatise is given in order to keep the chronology and perspective in mind.

In the Concordances, the non-mention of a theorist implies that he said nothing important enough to warrant inclusion, or that he omitted that subject entirely; (except where a general statement covers a whole group of theorists).

The following may be helpful for reference purposes:

(1) The full titles of the treatises in chronological order are to be found in Chapter I. (The French theorists are in a separate group after the English theorists.) See Table of Contents.

(2) All the information written about any one theorist may be located through the Index Nominum.
INTRODUCTION

In the 17th century a vigorous interest was taken in the theory of music; in this one century the rudiments and the theory of composition were completely transformed. As in the 19th century, men felt the urge to put their knowledge and their ideas into writing, and from the pens of composers and dilettanti - among them physicians, mathematicians, philosophers, clergymen, statesmen, a grammarian, and a publisher - streamed a succession of treatises; the pedants looking backwards on the complicated mathematical rules of earlier music; the reformers struggling to throw off the abstruse and meaningless terminology; the contemporary composers, endeavouring to teach the principles of composition to an ever growing audience of amateur musicians. The standard of amateur musicianship in England in the 17th century, was probably unequalled in any other country in Europe. Music was held in higher esteem at this time than at any period before or since; men of learning - authors, statesmen, scientists - generally felt obliged to cultivate it. The political and social trends in the mid-century spread the musical cult to wider circles; and by the height of the Commonwealth, people from all classes could indulge in music-making of one sort or another.

Whilst music was enjoying this high favour, another development was taking place, which curiously was to lead to a
decline in the prestige of music among the learned: the development of the "scientific method". This not only brought into existence the scientist as we know him today, but also brought about a schism between the creative arts (hitherto considered as sciences), and the "natural"sciences. By the early 18th century, music, poetry and painting had lost some of their former nobility and dignity; they came to be regarded as fanciful, light entertainments, of no serious moment. Music ceased to be one of the accomplishments of the perfect gentleman; (it was rather the essential accomplishment of the perfect lady). The musical tuition which the young people of the late 17th century had received, was directed into a new channel: listening; they became the enthusiastic audiences at the new public concerts; at Handel's "Messiah", and his other large-scale works which were given public performance.

The Scope of the Problem

It will be seen from the Table of Contents that this thesis covers both the English and the French theorists of the 17th century. It was realized that an examination of the English treatises alone would give a rather narrow outlook on the subject; and it was considered that the inclusion of the French theorists would make a useful and interesting comparison. The French theorists are fewer, and on the whole, they lagged
behind the English theorists; they have not been treated in as much detail, but wherever possible, a summary of their instructions is given in the concordances.

Only the treatises which contain the rudiments of music, and/or the theory of composition, are included in this study. Treatises on acoustics, and those containing only instructions for figured bass, singing, and playing various instruments, etc. are too numerous to be included; each branch of teaching is enough to warrant a separate study.

Part I. Chapter I gives the full titles of the works, with a brief description of each treatise, and a biographical sketch of the authors. No time has been given to searching for fresh information about the personal lives of the theorists; in most cases, additional facts may be found in the chief biographical dictionaries. The history and development of Playford's "Introduction" are surveyed in Chapter II. The controversy between Thomas Salmon and Matthew Locke over Salmon's "Essay" which proposed certain reforms in notation, is discussed in Chapter III.

Part II, which is the major section of the thesis, is a Concordance of the subjects found in the treatises, divided into two groups: the rudiments (Chapter IV) and the theory of composition (Chapter V). To have quoted the instructions that each theorist gave on any one subject would have resulted in several volumes of tedious excerpts with a lot of unnecessary
repetition. A serious attempt has been made to select for verbatim quotation, only those instructions which are most pertinent and significant in the development of the subject. Non-musical trends are related to the theories when one appears to have some bearing upon the other. Where it has been possible to establish some relationship between the musical theories of the late 17th century and contemporary music, Purcell's dramatic music has been used for purposes of comparison.

Part III examines and discusses the social significance of the musical developments in this period; and how changes in the political situation affected music. Chapter VI gives an account of the opportunities for musical tuition offered in London at Gresham College; and the professors of music at that establishment during the 17th century. The contents of the theoretical treatises often betokened a social trend, and this aspect of the matter is dealt with in Chapter VII.

The Background Literature

The only book on this subject is H. Riemann's "Geschichte der Musiktheorie im IX-XIX Jahrhundert" (1898). Actually, Riemann deals only with the landmarks of musical theory in Europe in these ten centuries; and from this standpoint, the English theorists of the 17th century are not deemed important enough to be taken into consideration; (there are one or two brief references to Morley, Locke and William Holder).
Dr Charles Burney and Sir John Hawkins include in their historical works descriptions of a number of theoretical works, and some information about the authors, which along with their personal opinions, constitute an interesting study of the 18th century attitude towards the theory of music in the 17th century. Later musical histories have provided less information on this subject than these two 18th century writers.

The musical periodicals offer a few sources of relevant information. (See Bibliography). Mr. H.C. Colles' paper is a useful and interesting one, and is the only one on the subject in general. A few of the subjects treated by the 17th century theorists have been studied: Clefs (D. Silbert); Tonality (R. Wienpahl); Chordal Formation (H. Bush); and the use of Sol-fa (W. McNaught).

Studies of individual treatises include R.A. Harman's edition of Morley's treatise, with his valuable annotations; Manfred Bukofzer's Preface in the facsimile edition of Coperario's treatise, which gives a scholarly analysis of the work; and W.B. Squire's paper, which includes a textual comparison between the 1687 edition of Playford's "Introduction", and the following one in 1694, edited by Henry Purcell.

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PART I

THE THEORETICAL LITERATURE AND THE THEORISTS
CHAPTER I

THE ENGLISH AND FRENCH THEORISTS

AND THEIR TREATISES


Since, so far as is known, this treatise was the first compendium of musical theory ever to be published in England, some acquaintance with its contents would have been interesting, but unfortunately, it is no longer extant. Thomas Morley, writing 23 years later, makes no mention of it, so its contribution to musical theory was probably not significant. The much travelled Burney and Hawkins, in spite of their researches unearthed nothing, which leads us to suppose that few copies were published. Indeed the last record of its existence is made as long ago as 1595.

All that is known about Delamotte is that he was a French musician living in London towards the end of the reign of Elizabeth. From the word "collected" in the title, we may deduce that he was an honest writer who brought together a small collation of translated excerpts from continental treatises and edited them, without claiming to be the author of them.
2. "The Pathway to Musicke, containing sundrie familiar rules for the ready and true understanding of the Scale, or Gamma-ut: Wherein is exactlie shewed by Plaine Deffinitions, the Principles of this Arte, Briefly Laide open by way of Questions and Answers, for the Better Instruction of the Learner." [Anonymous] 1596. Published by William Barley.

William Barley, who flourished as a music printer and publisher in London at the end of the 16th and the beginning of the 17th century, issued many important musical works. While Morley held the licence to print music, Barley was one of his "assignes" under the patent. After Morley's death, Barley obtained the patent and his name appears as the owner of it from 1606.

Although the author's name is not given on the title-page of "The Pathway", it is just possible that Barley was the author, for in the same year he wrote and published "A New Book of Tabliture". This was a treatise in three parts, the 1st for the lute, the 2nd for the orpharion, and the 3rd for the bandora, of which the text for the lute section was a partial translation of Part II of "Instruction de partir toute musique facilement en tablature de luth" by Adrian Le Roy (1557). From this work we may deduce that Barley was also something of an instrumentalist.

An examination of "The Pathway" discloses that the greater part of it is a plagiarised translation of two earlier German treatises: "Erotematum Musicae" by F. Beurhusius (1580) and "Erotemata Musicae Practicae" by L. Lossius (1570). Thomas Morley held a poor opinion of the author, for on p.130 of his treatise he severely criticised an excerpt about Proportions translated from Lossius (f.90v) which had been misunderstood by the author of "The Pathway".
This early attempt at a treatise for self-instruction in the rudiments of music purporting to be brief, plain and easy, was too much given over to subjects practically obsolete such as the gamut, ligatures, proportions, pricks, etc., to serve any useful purpose as a musical educator. However, its appearance did indicate the growing interest in the theory of music, and the demand for plain instructions.

3.(i) "A Plaine and Easie Introduction to Practicall Musicke, set downe in forme of a dialogue Devided into three partes, The first teacheth to sing with all things necessary for the knowledge of pricksong. The second treateth of descante and to sing two parts in one upon a plainsong or ground, with other things necessary for a descanter. The third and last part entreateth of composition of three, foure, five or more parts with many profitable rules to that effect. With new songs of 2, 3, 4 and 5 parts." By THOMAS MORLEY, Batchelor of musick, etc. one of the gent. of hir Maiesties Royall Chappell. Imprinted at London by Peter Short dwelling on Breedstreet hill at the signe of the Starre. 1597.


Thomas Morley (1557-1603) was a pupil of William Byrd (to whom he dedicated his treatise). He attained to the baccalaureate at Oxford in 1588; in the same year he obtained from the Queen the patent for the music-printing monopoly. About 1590 he was organist of St. Paul's, leaving in 1592 to become a Gentleman of the Chapel Royal. He was in ill-health when he wrote his treatise — but for this enforced confinement to his house he might never have written such a treatise — and was only 46 when he died in 1603.

Morley's treatise was the first comprehensive work on the theory of music to be published in England. It is surprising that
the third edition did not appear until 1771 because it seems that the demand for it did not slacken throughout the 17th century. In the Preface to his 1658 edition, Playford said Morley's book was "very rare and scarce to be had", yet Playford, Ravenscroft, Butler, Mace and Simpson, drew attention to the value of the work, and keenly recommended their readers to peruse it. Fortunately for modern readers there is the facsimile edition (Shakespeare Association, 1937) with an Introduction by E.H. Fellowes, and a modern reprint edited by R. Alec Harman (1952); for, as Dr. Fellowes says, this book can "still be studied with no small profit."

Much of the material which Morley included in the book was plagiarised from earlier continental treatises; but the subject matter is so skilfully put together, and his own scholarship and teaching experience so evident in his instructions, that one can only admire the manner in which he has translated and adapted the writings of other theoretical writers. It must be admitted that the instructions are not always "plain and easy"; while some points certainly are explained in the most simple way, others are discussed in such an abstruse fashion that they continue to pose problems to musicians of the present day.

4. "ANDREAS ORNITHOPARCUS his Micrologus or Introduction: Containing the Art of Singing Digested into Four Books. Not only Profitable, but also necessary for all that are studious of Musicke. Also the Dimensions and Perfect use of the Monochord, according to Guido Aretinus." By JOHN DOWLAND, Lutenist, Lute-Player, and Bachelor of Musicke in both Universities. 1609. London. Printed for Thos. Adams, dwelling in Paules Church-Yard, at the Signe of the White Lion.
John Dowland (1563-1626) was an outstanding lutenist, singer and composer, who spent much of his life travelling on the continent and holding posts in various royal courts. He may have obtained a copy of Ornithoparcus' treatise during one of his visits to Germany; or at the court of Denmark which Ornithoparcus had visited some years earlier; but it was not until he was dismissed from the court of Denmark in 1606 and settled in London that he published the work in English in 1609. One might conjecture that he found in London a growing interest in the theory of music; and holding Ornithoparcus' work in high esteem, devoted himself to making a good translation from the Latin.

Ornithoparcus (whose real name was Andreas Vogelsang; he adopted the Greek pseudonym "bird traveller" because he had travelled in so many countries - seeing 63 Dioceses and 340 Cities as he informs us at the end of his book), was a German theorist of the 15th to 16th centuries, whose treatise "Musicae activae micrologus" ran to six editions from 1517 to 1540. The work contains the substance of a series of lectures delivered by the author at the Universities of Heidelberg, Mainz and Tübingen, and is divided into four separate parts. The first three parts deal with the rudiments of music (e.g. the gamut, hexachords, moods, ligatures, proportions, pricks, etc.) and the fourth part contains the principles of counterpoint. Though much of the matter was antiquated by 1609, Dowland intended the book to instruct contemporary musicians, since he said in a little treatise at the end of his son Robert's "Varietie of Lute-Lessons" (1610):
"Wherefore I exhort all Practitioners on this Instrument to the learning of their Prick-song, also to understand the Elements and Principles of that knowledge ... for which purpose I did lately set forth the Worke of that most learned Andreas Ornithoparcus his "Micrologus", in the English tongue."

Burney displayed an unscholarly attitude towards Dowland's labours, saying that "he might have well spared himself, as Morley's "Introduction", which was so much more full and satisfactory, precluded all want of such a work as that of Ornithoparcus, in England." (Vol. II, p. 203, "History"). As a historian, Burney's failing was that he judged all earlier writings by 18th century standards, and regarded as useless all information relating to subjects which had since become obsolete. He deplored the 1771 edition of Morley's treatise on the same grounds (ibid. p. 86).

Dowland undoubtedly possessed an extensive knowledge of musical theory and it is a pity that he did not write a work of his own.

5. "Rules how to Compose" by GIOVANNI COPERARIO. Manuscript c. 1610 (now in the Huntington Library, California). A facsimile edition by Manfred F. Bukofzer was published in 1952, with a preface containing what biographical details are known, and a valuable analysis of the treatise.

Coperario (c. 1570-1627) was a viola da gambist, lutenist and composer of some repute, being foremost among the composers of instrumental Fantasies; (he composed about 90 of these in 3-6 parts). It is believed (but there is no proof) that he visited Italy some time before 1604, at the same time changed his name from John Cooper to Giovanni Coperario, and further attested his admiration for Italian music by altering his style and giving Italian titles to many of his compositions. The chief difference in his Fantasies is that they are more sectionalized than those
of his English contemporaries. That he was a teacher and theorist of outstanding merit is apparent from his treatise, which is not of the order of "introductions" written for beginners, but is intended to initiate pupil-composers into the art of writing contrapuntal instrumental music in the contemporary style. The examples in the greater part of the work might be described as "real" music, and the fluidity of the part writing is always instrumental - comparable to that found in the writer's Fantasies. William Lawes is known to have been a pupil of Coperario; his brother Henry is often claimed to have been a pupil, but there is no direct evidence for this.

The "Rules for Composition" by John Blow, are in fact an abridged version of Coperario's treatise. (See item 24 of this chapter, and Appendix III where the complete treatise attributed to Blow is given with annotations showing all the variations with Coperario's "Rules").

6. "Treatise of Musick" by THOMAS RAVENSCROFT. Manuscript c.1610, British Museum Add. 19758.


Ravenscroft (c.1590-c.1633) was a child prodigy, becoming a Bachelor of Music at Cambridge at the age of 14, and writing the his two treatises at an early age. He was a boy-chorister under Edward Pearce at St. Paul's; and from 1618-22 he was music master at Christ's Hospital. As an editor, he is best remembered...
for his Psalter ("The Whole Book of Psalms: With the Hymnes Evangelicall and Songs Spirituall", 1621), in which 51 harmonizations of the 105 tunes are by himself.

As a theorist he was pedantic, even more so than Thomas Morley and John Dowland. In view of the theoretical works published by the two last-named composers, one can hardly believe that there was a demand for a work of the nature of the "Briefe Discourse"; except that being smaller and containing only the rudiments, it was made economically attractive. (In Chap. VI about Gresham College, Ravenscroft's motives for writing his treatise are discussed.)

One error which crops up several times in the "Briefe Discourse", and repeated by Burney and later writers (including Jeffrey Pulver, Mus. Times, Feb. 1935) is that Ravenscroft quotes from a tract wrongly ascribed to John Dunstable; but which is in fact the "Quatuor Principalis" by Tunstede. In modern times, the legend of Dunstable's tract has persisted because two MSS (Brit. Mus. Add. 10336 and Lambeth Palace 499) contain a tract in which the last example of music is signed: "quod Dunstable". The signature, however, refers solely to the isorhythmic tenor - the only remaining part of a motet by Dunstable. The tract itself is one of the numerous versions of Joh. de Muris' "Libellus Cantus Mensurabilis" (Couss.C.III.46), (M.G.G.1960, Dunstable, p.950). Ravenscroft's Manuscript treatise is given in full with annotations in Appendix II. This earlier treatise contains instructions on such elements of music as the gamut, sol-fa,
intervals, note-values, rests and ligatures, followed by a long discourse on Mood, Time and Prolation. The substance of the latter part is similar to that in the printed treatise which was solely concerned with that kind of mensural notation.

8. "Utriusque cosmi majoris, scilicet et minoris metaphysica, physica atque technica historia, in duo volumnia, secundum cosmi differentiam divisa. Tomus primus de Macrocosm Historia in duos tractatus divisa." [The Physics, Metaphysics and technical history of the two worlds, the greater and the lesser, in 2 vols., treated according to the differences of each world. The first book dealing with the History of the Universe (Macrocosm) is divided into two treatises. (The 2nd vol. was never published.) ] By ROBERT FLUDD. Printed in Oppenheim. 1617.

Whilst some of the theorists named in this thesis might be considered old-fashioned in their ideas, none can compare with Robert Fludd, who, in spite of the movement towards rationality, preferred to adhere to unproved theories rather than accept the evidence of his senses.

Robert Fludd was born in Kent in 1574 and died in London in 1637. He was a noted physician, philosopher and a Rosicrucian, (i.e. a member of the occult-cabalistic-theosophic 'Rosicrucian Brotherhood', founded in 1408 by a German nobleman, Christian Rosenkreuz; a secret society, whose members were pledged to study the hidden forces of Nature). He took the degrees of B.A. (1596), M.A. (1598), M.B. and M.D. (1605), and was made a Fellow of the College of Physicians in 1609. Hawkins records (History, 1875, p.621) that "his discourse to his patients was so lofty and hyperbolical that it resembled that of a mountebank more than of a grave physician, yet it is said that he practised with success". Like many other versatile gentlemen of the 17th century, he devoted
some of his writings to music and musical instruments, only
differing widely from his contemporaries by his fantastic
metaphysical notions.

The chapter "De Templo Musica" has a large frontispiece
showing a symbolical temple of music; the colonnades bear the
gamut, the windows have the intervals, the bricks the note-values,
and such other whimsical devices. In the chapter "De Musica
Mundana", we learn that Fludd also believed in the Pythagorean
idea of the "music of the spheres": that the planets, in their
revolutions round the earth, uttered certain sounds, differing
according to the respective magnitude, celerity, and local distance.
Thus Saturn, the farthest planet, was said to give the gravest
note; while the moon, which is nearest, gave the sharpest. The
Rosicrucians, and Fludd in particular, all shared these beliefs,
and he tried to demonstrate that the whole universe was a musical
chromatic instrument. He said that earthly music is only the
"faint tradition of the angelic state; it remains in the mind of
man as a dream of, and the sorrow for, the lost paradise." This
brief abstract of Fludd's theories is given to make the description
of the theoretical literature complete, but since it is unlikely
that his writings, which were in Latin and obscure and mysterious,
were ever studied by students of music, he is left out of account
in the other sections of this thesis. Fludd's reason for having
his book printed abroad is interesting:

"I sent them beyond the seas, because our home-borne Printers
demanded of me 500 pounds to print the first volume, and to
find the cuts in copper; but, beyond the seas, it was printed
at no cost of mine, and that as I would wish; And I had 16 copies sent me over, with 40 pounds in gold, as an unexpected gratuitie for it." ("Doctor Fludds Answer unto M. Foster", 1631)

9. "A New Way of Making Fowre Parts in Counterpoint, by a most familiar, and infallible Rule. Secondly, a necessary discourse of Keyes, and their proper Closes. Thirdly, the allowed passages of all Concord perfect, or imperfect, are declared. Also by way of Preface, the nature of the Scale is expressed, with a breve Method teaching to sing." By THO: CAMPIAN. London: Printed by T.S. for John Browne, and are to be sold at his shop in Saint Dunstanes Church-yard, in Fleet Street. [Undated. Probably published c. 1619.]

Thomas Campian (1567-1620), a physician by profession, was a poet of universal fame, and a composer and theorist of a skill far removed from the generally accepted sense of amateur. He and Dowland stand out among the English composers for their prolific output of solo songs to the lute; many of Campian's being settings of his own lyrics. He also composed the words and music for a number of private masques, but unlike his contemporaries, he composed no madrigals and no church music.

In his treatise, like Coperario, he hastens over the preliminaries and gets down to the rules of four-part composition; but differs from him in that he avoids the intricacies of contrapuntal instrumental writing, and in a clear and orderly manner, teaches simple, homophonic 4-part harmony. The "new way" consists in composing from the bass upwards, and constitutes the new method of composing homophonic music, in contrast to the old contrapuntal practice of disposing the counterpoints around the tenor.

His treatise was for a long period the best handbook for beginners. In Playford's "Introduction" of 1654 (his first
tentative publication - not recognised as the first edition) only the Preface to Campian's treatise was appended, which contained an explanation of the Scale; but conscientiously omitted diagrams of the Gamut, for he deplored "the common Teacher, who can do nothing without the old Gam-ut". In the editions of Playford's "Introduction" from 1655 to 1679 (i.e. twelve different issues of the book), the Preface is omitted and the main body of the treatise is included with annotations by Christopher Simpson. In the Third Part of his treatise, Campian says that the best and most learned writer on music is Sethus Calvisius, and he admits that he has translated a part of that author's work ("Melopeiam sive Melodiae condendae ration", 1592); in fact many of his examples in the third part are taken from Calvisius. The beginning of the first part, to some extent leans on Zarlino.

10. "A Brief and Short Instruction of the Art of Musicke, To Teach How to make Discant, of all Proportions that are in use. Very necessary for all such as are desirous to attain to knowledge in the Art; And may by practice, if they can sing soone be able to compose three, fours, and five parts: And also to compose all sorts of Canons that are usuall, by these directions of two or three parts in one, upon the Plain-song." By ELWAY BEVIN. London. Printed by R. Young, at the sign of the Starre on Bread Street hill. 1631.

Elway Bevin (c.1554-c.1639) was a theorist, Cathedral organist and composer. Anthony à Wood says that he was a pupil of Tallis, and Burney, saying that it was "discoverable by his works," endorsed this; (Hist. Vol.II, p.263) though only a small number of his works have survived, and it is by his treatise that he is best known. Among his pupils at Bristol, where he
was organist at the Cathedral from c.1589 to 1637, was William Child who later became organist of the Chapel Royal at Windsor.

Later writers and theorists differed in opinion about the value of Bevin's treatise. Simpson (1667) said the examples of the various canons were excellent - "but not one word of instruction how to make such like." Purcell (1694) refrained from including instructions and examples of canons in his treatise, referring young practitioners to Bevin's book. Howbeit, it was the first work of its kind to disclose the enigmatical mysteries of canons, and constituted one more step leading away from the secrecy and obscurity which had surrounded the art of music in earlier times. It should be noted that Bevin's examples are short exercises designed to show how each type of canon is made; they are not compositions for performance; and truly, they contain little merit as music. Of course, once the secrets were revealed, no more riddle canons were composed.


Charles Butler (c.1559-1647), like so many of his contemporaries, pursued a variety of the branches of learning throughout his long life. He entered Magdalen College's Choir School as a chorister, later becoming music master at the Magdalen School; he took a degree in Arts; went to live in Hampshire where he combined the work of a curate with being master at the Free-
School in Basingstoke; and eventually became vicar of Lawrence-Wotton - "a poor Preferment God wot for such a worthy scholar", said Anthony a Wood - where he settled down to write his treatises on grammar, beekeeping, and music.

Butler's treatise contains both rudiments and the theory of composition, like Morley's work, from which he borrowed some of his material. Other theorists from whom he quoted were Calvisius, Zarlino, and Glarean; but his study of the older theorists is so nicely balanced against his knowledge of contemporary music, that he was able to produce a work of some practical value. One small hindrance to the reader is Butler's use of a phonetic orthography which he invented (see specimen page, Plate I) but this is quite easy to master and is well worth the trouble.

That the book was held in high esteem is shown by Roger North, who studied it when he was learning composition, and said that his teacher, "Mr. [John] Jenkins lent me Butler, with a comendation of it that it was the best in the kind." ("As to Musick", c.1695). We might insert here another excerpt from North's "Essay of Musicall Ayre" (Add. MS 32,536, c.1710), which places Butler on a pedestal:

"The book of Mr. Morley hath sufficiently shewed the rules of musick in his time, but it is not easy to gather them out of his dialogue way of wrighting, which according to usage is stuffed with abundance of impertinences, and also with matters, in our practise, wholly obsolete. I know many serve themselves of Mr. Sympson's books, which are doubtless very good, and worthy as could be expected from a meer musick master, as he was, but they are not compleat. Nay some make a shift with poor old Playford's 'Introduction',
Specimen page from Charles Butler's "Principles of Musick" (1636) showing his phonetic orthography.
III. Of Ornaments. § III. Of Formalism.

De Secundari Cadences are formed in the Consonant Intervals of the Tone. The first in the medieti of the Diapason, which is the highest Note of the Diapente; the second in the medieti of Diapente, which is the Third; and the Third in the middle between the Fifth and the Third, which is the Diatessaron. So that all the proper Cadences upon Primari, and Secundari, are contained in the Tone's Diapente.

As if, the Tone being SOL, the Diapason be \( \text{sol} - \text{sol} \), the Primari Cadence will be \( \text{sol} - \text{fa} - \text{sol} \), the Fifth-Cadence \( \text{fa} - \text{sol} - \text{fa} \), the Fourth-Cadence \( \text{sol} - \text{fa} - \text{sol} \), and the Third-Cadence \( \text{fa} - \text{sol} - \text{fa} \).

The Primari Cadence only is used in the Closes, dowe not in the Closes only, but in all other passages also of the Song; and that more frequently, than any of the Secundari Cadences, which are taken in the places only: in which it has (i) a peculiar power above the rest, that when true Improper, either Cadences, or Points, or great Figures, the Harmonie seems to digest into any other Air; it only can cover the Informality, and reduce the Harmonie to its proper Air again.

Of Secundari Cadences the Fifth is chief, as most pleasing and best maintaining the Air: the Third being the medieti between the Tone and his Diapente, is counted next in nature, and in affinity to the Tone. But because, in true Cadences, the Binding half-notes must ever be sharp, so in the first and third Tone \( \text{Ut} \) and \( \text{Es} \), the Third is excluded: and in the second and third Tone \( \text{Re} \) and \( \text{La} \), the Fifth is excluded: because their Binding half-notes are not to be sharpened. But (k) in all other Binding half-notes, in all Airs, either is or may be sharpened, is never excluded: never doles it is chiefly used in the Ays, whether the Third or Fifth be wanting; for when they are, they are preferred.

Improper Cadences are likewise \( \text{de Sexta, de Second, and de Sevnea} \), because they are strange and informal to the Air, are allowed (m) sparingly to be used: and when upon occasion, any are admitted, they are to be qualified by the principal Cadence nicely succeeding. Vide (i) fupra.
of which may be truly sayd that it is but just (if at all) better than none. But there is a musicall grammer ever to be recommended, compiled by a learned man, and compleat in all grammaticall iormes. It was put out by a famous master of sciences Mr. Butler, and I doe not know another in any language comparable to it. And one may be secure that whatever is done persuant to the prescriptions of this work, cannot be irregular or absurd."

12. "RENATUS DES-CARTES Excellent Compendium of Musick: with necessary and Judicious Animadversions thereupon." By a Person of Honour. London, Printed by Thomas Harper, for Humphrey Moseley, and are to bee sold at his Shop at the Sign of the Princes Armes in S. Pauls Church-Yard and by Thomas Heath in Coven Garden. 1653.

The "Person of Honour" was Lord William Brouncker (c.1620-1684), the first President of the Royal Society (from 1662-1677), and President of Gresham College from 1664-1667. He studied mathematics at Oxford in his youth; became proficient in many languages; was created a Doctor of Medicine at Oxford in 1646-7; and was M.P. for Westbury in the convention parliament of 1660. Being an ardent Royalist, he was at a loose end during the Commonwealth and so occupied himself in literary work, including the translation from Latin of Descartes' "Compendium Musicae", with 33 pages of "Animadversions" by himself comprising mathematical tables and diagrams. It is interesting to note that Descartes' treatise was not published in French until 1668.

Réné Descartes (1596-1650), French philosopher, has been called the "father of modern philosophy", for he substituted a balanced, logical and reasoned system of thought for the undisciplined conglomeration of scientific opinions and religious prejudices.

The "Compendium Musicae" was written when he was only 22
years old (1618), and is unlike the other treatises on theory, both French and English, of the 17th century, in that it propounds and discusses the nature of the elements of music, with mathematical rather than musical examples, touching lightly on the scale, consonants and dissonants, syncopes, consecutive perfect intervals, etc., without giving substantial instructions in either rudiments or the art of composition.

One might conjecture that it was Descartes' rationalistic principles rather than his treatise which had some effect on the music of the 17th century. Burney says that such was the reputation of the author that "this little tract was purchased with avidity by the lovers of the science, as a valuable acquisition." (Hist. Vol. II, p. 329). Simpson (1667, p. 137) proudly referred to his acquaintance with the work; Roger North gave evidence of having studied it. None of the other theorists mentioned it. It was perhaps too early in the century for Descartes - whose ideas follow those of Zarlino - to introduce enlightenment into the major and minor scales, equal temperament, and the formation of chords; but these elements show a relation to his rationalistic outlook. His influence is more apparent in the works of Rameau than any other music theorist, for whereas former composers had used correct harmonies without knowing their scientific foundation, Rameau formulated the logical system of chords and their inversions.

(As Chapter II surveys Playford's "Introduction" from the first edition (or issue) in 1654 to the last in 1730, all that
is necessary here is a list of the editions. The full title will be given only when it differs from the preceding edition.)

13. (i) "A Brief Introduction to the Skill of Musick for Song & Violl" by J.P. London Printed 1654. Sold by Jo: Playford at his shop in the Inner Temple. A, 2 leaves (Engraved title and "To all Lovers and Practitioners of Music"); B, 8 leaves; C, 10 leaves.


13. (v) "A Brief Introduction to the Skill of Musick." 1662. Title-page similar to 1660 ed. except "The Third Edition Enlarged" omitted; and "By John Playford, Philo-Musicae" inserted. The titled to the Third Book is dated 1661.
13.(vi) "A Brief Introduction to the Skill of Musick"...
by William Godbid for John Playford, and are to be
sold by Zach. Watkins, at their shop in the Temple
near the Church-Dore, 1664.
Portrait, aetatis 40, 1 leaf. Title, 1 leaf. Preface
and Table, 8 leaves. B-L8 in eights.

13.(via) Another issue of this edition without the words "Fourth
Edition etc." on the title page.

13.(vii) "A Brief Introduction to the Skill of Musick. In Three
Books. The First: The Grounds and Rules of Musick,
according to the Gam-ut and other Principles thereof.
The Second: Instructions for the Bass-Viol, and also for
the Treble Violin: With Lessons for Beginners." By
JOHN PLAYFORD Philo-Musicae. The Third: The Art of Descant,
or Composing Music in Parts. By DR. THOS. CAMPION, With
Annotations thereon by MR. C. SIMPSON. London, Printed
by William Godbid for John Playford, and are to be sold
at his shop in the Temple, 1666.
Portrait, 1 leaf. Title, 1 leaf. Preface and Table,
8 leaves. B-L4 in eights. The Third Book is dated 1667.

13.(viii) "A Brief Introduction to the Skill of Musick." 1667.
Identical with the 1666 edition.

13.(ix) "A Brief Introduction to the Skill of Musick." 1670.
Portrait by Van Houe, 47 Aet. suae, 1 leaf. Title, 1 leaf.
Preface and Table, 8 leaves. B-K4 in eights. K4 (p.135)
contains "List of Books sold by John Playford". The
Third Book is dated 1669.

13.(x) "An Introduction to the Skill of Musick." In Two Books...
The Second: Instructions and Lessons for the Bass Viol:
and Instructions and Lessons for the Treble-Violin...
The Sixth Edition corrected and Enlarged... 1672.
Portrait, 1 leaf. Title, 1 leaf. Preface and Table,
6 leaves. B-L8 in eights.

13.(xi) "An Introduction to the Skill of Musick"... The Seventh
Edition, Corrected and Enlarged... 1674.
Portrait, 1 leaf. Title, 1 leaf. Prefaces and Table,
6 leaves. B-M8 in eights. (This edition contains for the
first time "The Order of Performing the Divine Service in
Cathedral and Collegiate Chapels."

13.(xii) "An Introduction to the Skill of Musick". In Two Books...
The Second, Instructions and Lessons both for the Basse-
Violl and Treble-Violin. By JOHN PLAYFORD. To which is
added, The Art of Descant,... also The Order of Singing
Divine Service in Cathedrals. The Eighth Edition Carefully
corrected. London, Printed by A.G. and J.P. for John Playford, at his shop in the Temple near the Church, 1679.
Portrait, 1 leaf. Title, 1 leaf. Preface and Table, 6 leaves, B-M2 in eights.

13.(xiii) "An Introduction to the Skill of Musick." In Three Books... The Third, The Art of Descant, or Composing of Musick in Parts, in a more Plain and Easie method than any heretofore Published. The Tenth Edition, Corrected and Enlarged. by JOHN PLAYFORD ... 1683.
Portrait, by F.H. Van Houe, 57 Aet. suae, 1 leaf. Title, 1 leaf. Prefaces and Table, 6 leaves. B-M4 in eights. In this Edition a new treatise on the "Art of Descant" takes the place of that of Dr. Campion.
N.B. There was no "Ninth" edition.

Portrait by D. Loggan, 1 leaf. Title, 1 leaf. Prefaces, Verses on the death of John Playford, and Table, 8 leaves. B-M6 in eights.

13.(xv) "An Introduction to the Skill of Musick". In Three Books... The Twelfth Edition, Corrected and Amended by MR. HENRY PURCELL. In the Savoy, Printed by E.Jones, for Henry Playford at his shop near the Temple Church, 1694.

13.(xvi) "An Introduction to the Skill of Musick": In Three Books. By JOHN PLAYFORD. Containing, I. The Grounds and Principles of Musick according to the Gamut; being newly written, and made more Easie for Young Practitioners, According to the Method now in Practice, by an Eminent Master in that Science. II. Instructions and Lessons for the Treble, Tenor, and Bass-Viols; and also for the Treble-Violin. III. The Art of Descant, or Composing Musick in Parts; made very Plain and Easie by the late MR. HENRY PURCELL. The Thirteenth Edition. In the Savoy, Printed by E. Jones, for Henry Playford, and sold by him at his shop in the Temple-Change, over-against St. Dunstan's Church in Fleet Street, 1697.
Portrait, 1 leaf. Title, 1 leaf. Prefaces and Contents, 6 leaves. B-K4 in eights.


13. (xx) "An Introduction to the Skill of Musick"... The Seventeenth Edition... London: Printed by W. Pearson, for John and Benjamin Sprint, at the Bell in Little-Britain, 1718. A-M8 in eights, including portrait by J. Clark, title, etc. M8 has "Books printed for and sold by J. Sprint."


14. "Templum Musicum or the Musical Synopsis of the Learned and Famous JOHANNES HENRICUS ALSTEDDIUS being A Compendium of the Rudiments both of the Mathematical and Practical Part of Musick of which Subject not any Book is extant in our English Tongue." Faithfully Translated out of Latin by JOHN BIRCHENSHA. Philomath. Imprimeur Feb. 5. 1663. Roger L'Estrange London, Printed by Will. Godbid for Peter Dring at the Sun in the Poultry next dore to the Rose Tavern. 1664.
Alstead (1588-1638) was a Lutheran divine, professor of theology and philology at Bellersbach, and a voluminous writer. His "Methodus Admirandorum Mathematicorum" (1613) contained a section on music; and his "Elementale Mathematicum" (1611) contained a section entitled "Musica" which Birchensha translated and called "Templum Musicum".

John Birchensha (flourished 1641-1681) was a theorist, composer and teacher of the viol. (He was at one time the teacher of Samuel Pepys, and also of Thomas Salmon, who was recommended to him by Matthew Locke.) Burney thought he was "a kind of musical adventurer"; Hawkins said that he was remarkable for his "genteel behaviour and person."

The "Templum Musicum", in small type (the 'Precepts' in Gothic type), is dry and rather unattractive; the language is full of pompous and obscure terms; though this may be the fault of the translator. The rudiments are defined; but there is some truth in Burney's comment (Hist. II, p. 370) that they are "unintelligible to all but such as are in no want of them." He was one of the earliest theorists to use the syllable "si" for the seventh note of the scale.

In addition to this translation, Birchensha published Thomas Salmon's two essays (see Chap. III). In the British Museum (Add. 4388) there is a collection of his papers, mostly mathematical calculations relating to music; also his "Grand Scale", which appears to be a prospectus of the treatise he was planning to publish under the title "Syntagma Musicae"; and a copy of a printed
advertisement of this proposed work, with a full description of the contents. This advertisement appeared in the Philosophical Transactions of the Royal Society in 1671-2. It asks for subscribers to pay 20s in advance in surety of receiving a copy of the book, for over £500 is required to pay for the printing and binding. Birchensha said it was already in the press, but apparently it was never published. Birchensha made extravagant claims in this notice, promising that the book would teach how to make "airy tunes of all sorts" by rule, and how to compose in two parts "exquisitely and with all the elegancies of music" within two months.

In Add. MS 4910, among various excerpts from other theorists, there are "six rules of composition by Birchensha", including rules for similar motion in 2 parts; contrary motion in 2 parts; divisions and cadences; collected by Silas Domville als [sc. alias] Taylor - a minor composer of the 17th century.

Evelyn esteemed Birchensha as an instrumentalist: "To London; a concert of excellent musicians, especially one Mr. Berkenshaw, that rare artist, who invented a mathematical way of composure very extraordinary, true as to the exact rules of art, but without much harmony." (3rd Aug. 1664).

15.(i) "The Division Violist or an Introduction to the playing upon a Ground Divided into two parts. The first Directing the Hand with other Preparative Instructions. The Second, Laying open the Manner and Method of playing Ex-tempore, or Composing divisions to a ground. To which are Added, some Divisions made upon Grounds for the Practice of Learners", By CHRISTOPHER SIMPSON, London, 1659. W. Godbid, for J. Playford, fol. (with portrait).
15.(ii) "Chelys minuritionum artificio exonata: sive Minuritiones ad Basin, etiam Extempore Modulandi Ratio. In tres partes distributa. The Division Viol or the Art of Playing Extempore upon a Ground. Divided into Three Parts. Part I. Of the Viol it self, with Instructions to Play upon it. Part II. Use of the Concordts, or a Compendium of Descant. Part III. The Method of ordering Division to a Ground." By CHRISTOPHER SIMPSON. Second Edition. London, 1665, fol. with portrait. (A further supply of this 2nd edition was published by W. Godbid for Henry Brome at the Gunn in Ivy Lane in 1667, fol. with a portrait by Faithorne engraved from a painting by G. Carwarden. A facsimile of this was published by J. Curwen in 1955.)

15.(iii) Third edition, 1712. (William Pearson, for Richard Mears.)

16.(i) "The Principles of Practicke Musick Delivered in a Compendious, Easie, and New Method: for the Instruction of Beginners, either in Singing or Playing upon Instruments. To which are Added, Some Short and Easie Ayres Designed for Learners." By CHRISTOPHER SIMPSON. Printed by William Godbid for Henry Brome, London, 1665.


16.(iii) Third edition, 1678. (Henry Brome for M.C.)

16.(iv) Fourth edition, 1706. (W. Pearson for John Cullen)

16.(v) Fifth edition, 1714.

16.(vi) Sixth edition, 1722. (W. Pearson for John Young)

16.(vii) Seventh edition, 1727. (Printed for T. Astley)

16.(viii) Eighth edition, 1732. (W. Pearson, for Arthur Bettesworth)


Christopher Simpson (c. 1605-1669) was a theorist, composer and gambist. He appears to have spent the greater part of his life in Yorkshire and Lincolnshire. He joined the royalist army in 1643. At the end of the Civil War he became the resident music
master in the house of Sir Robert Bolles in Scampton, Lincs., an ardent music-lover. It was in his patron's house that he found time to write the Annotations to Campian's treatise for Playford's "Introduction" (which appeared from 1655 to 1679); and the treatises named above. Far from rusticating in the country, he seems to have visited London frequently; and in 1661, he accompanied his pupil John Bolles to Rome. When Sir Robert died, (incidentally, he left Simpson £5 in his will), John Bolles assumed the title and continued the patronage. Simpson profited well by his publications and was able to purchase a house and farm in Yorkshire.

"The Division Viol" was a long-awaited treatise for amateur gambists, since the fashion for playing divisions had spread from Italy at the turn of the century. (A treatise on division playing by Diego Ortiz - "Tratado de glosas sobre clausulas..." had been published in Rome as early as 1553.) In the years between the first edition and the second, Simpson revised the book carefully, even including a Latin translation (by William Marsh) alongside the English text for the benefit of foreign musicians.

"The Principles of Practicle Musick", though reckoned as the first edition of the "Compendium", is, in fact, only an enlarged version of Part II of "The Division Viol" and is quite elementary in character. This little manual forms the first 40 pages (i.e. the section entitled Part I: "Rudiments of Song") of the "Compendium". The "Compendium" is a comprehensive book on the rudiments and
composition, though less academic than the treatises of Morley and Butler.

The popularity of Simpson's two major treatises is indicated by the editions published long after his death. He received much praise from Jenkins, Dr. Colman, Playford, Sir Roger L'Estrange, Matthew Locke, Thomas Mace, Thomas Salmon and Dr. Burney. Roger North condescendingly remarks that "Mr. Sympson's books are doubtless very good, and worthy as could be expected from a meer musick master, as he was, but they are not compleat." The book has yet to be conceived that could be regarded as "complete" in everyone's estimation, but Simpson's "Compendium" is undoubtedly as near complete as may be; and worthier of the epithet "plain and easy" than anything else published in that century.

("Musick's Monument" by THOMAS MACE, 1676, (facsimile edition published by the Centre National de la Recherche Scientifique, 1958) is briefly mentioned in parenthesis. It is in three parts. I. Singing Psalms and Cathedral Musick; 2. A treatise for the Lute and Theorbo; 3. The Viol. As the rudiments of music are touched upon only fleetingly from time to time, the book has been omitted from the scope of this thesis. Mace gives his own reason for omitting the rules of composition:

(p.138) "The Rules of Composition, are Few and Easie; and Attainable in a Months Time: And They are published so very well, and Substantially by divers, that I shall count it an Unnecessary Trouble, to say any Thing of them."

17.(i) "Cantus: Songs and Fancies To Three, Four or Five partes both apt for Voices and Viols With a Briefe Introduction of Musick As is taught in the Musick
This book was commonly known as "Forbes's 'Cantus' " from the word "Cantus" (i.e. treble part) which heads the title-page.

The monopoly of music printing continued in Scotland long after it had disappeared in England, and the Scots who wanted music either had to get it from outside Scotland, or do without it; for during the 16th century only a few psalters were published (compared with over 160 publications of secular music in England); and in the 17th century the only book of music published was the Aberdeen "Cantus", which was also the first book of secular music ever to be printed in Scotland. Of the 77 pieces in the book, 50 had previously appeared in English publications. The remaining 27, probably of Scottish origin, had nearly all appeared in earlier Scottish MS collections. It is evident that the religious Reformers in Scotland had frowned upon music-making, and frustrated any latent musical ability among the natives.

Theoretical treatises by Scotsmen are similarly unknown, since the only one in existence prior to the "Cantus" is a 16th century manuscript written in the Scottish dialect entitled "The Art of Music colletcit out of all Ancient Doctouris of Music" (British Museum, Add. 4911, ff.129-). The theoretical preface to the "Cantus" is very out-moded compared with the English treatises of the same period; plagiarised from Morley and Playford
for the most part; but in view of the dilatory musical progress in Scotland it may be reckoned a brave attempt to teach rudiments. It contains such obsolete subjects as the Guidonian Hand, Ligatures, Mood, Time and Prolation, etc.

18. (i) "An Essay To The Advancement of Musick, By Casting away the Perplexities of Different Cliffs. And uniting all sorts of Musick. Lute, Viol, Violin, Organ, Harpsichord, Voice, Etc." By THOMAS SALMON, Master of Arts of Trinity College in Oxford. London. Printed by J. Macock, and are to be sold by John Car at the Middle Temple-Gate. 1672.

18. (ii) "Observations upon a Late Book Entitled, An Essay to the Advancement of Musick, etc. Written By Thomas Salmon, M.A. of Trinity College in Oxford." By MATTHEW LOCKE, Composer in Ordinary to His M., and Organist of Her Majesties Chapel. London. Printed by W.G. and are to be Sold by John Playford at his Shop near the Temple Church. 1672. [April 11, 1672]

18. (iii) "A Vindication of an Essay To the Advancement of Musick, from Mr. Matthew Lock's Observations By enquiry into the real Nature, and most convenient Practise of that Science." By THOMAS SALMON, M.A. of Trin. College. Oxon. London. Printed by A. Maxwell, and are to be sold by John Car at the Middle Temple Gate, 1672. [June 1, 1672]

18. (iv) "The Present Practice of Musick Vindicated Against the Exceptions and New Way of Attaining Musick Lately Publish'd by Thomas Salmon, M.A. Etc." By MATTHEW LOCKE, Composer in Ordinary to His Majesty, and Organist of Her Majesties Chapel. To which is added"Duellum Musicum" by JOHN PHILLIPS, Gent. Together with A Letter from JOHN PLAYFORD to Mr. T. Salmon by way of Confutation of his Essay, Etc." London, Printed for N. Brooke at the Angel in Cornhill, and J. Playford near the Temple-Church, 1673. [July 24th, 1672]

Chapter III of this thesis discusses the controversy between Salmon and Locke. Matthew Locke (c.1630-1677), besides being a notable composer, was the author of "Melothesia, or Certain General Rules for playing upon a Continued Bass, with a Choice Collection of Lessons for the Harpsichord or Organ of all sorts." (1673) which was the first treatise on figured bass in England that has survived.
He composed some of the music for the pseudo-operas produced before the Restoration, and himself took part in them.


This tract on temperament, together with a paper entitled "The Theory of Music Reduced to Arithmetical and Geometrical Proportions", which Salmon read to the Royal Society in 1705, shows that he was developing ideas from Descartes' writings, and from his friendship with Dr. Wallis and other members of the Royal Society who were interested in the physical aspect of music. (This treatise is briefly described in Chapter III.)

20. "The False Consonances of Musick Or Instructions for the Playing a true Base upon the Guitarre, with Choice Examples and Clear directions to enable any man in a short time to play all Musical Ayres. A Great help likewise to those that would play exactly upon the Harpsichord, Lute or Base-Viol, shewing the delicacy of all Accords and how to apply them in their proper places. In Four Parts." by NICOLA MATTEIS. [c. 1682]

This treatise was published first in Italian by T. Greenhill, London, about 1680. F.T. Arnold appeared not to be aware of its existence, for it should properly have been treated in his book "The Art of Accompaniment from a Thorough-Bass". The greater part of Matteis' treatise is concerned with rules for playing from a figured bass on the guitar, together with examples in tablature
and notation. (The "false consonances" are dissonances.)

Nicola Matteis (dates unknown) came to England in 1672 and quickly became popular as a violinist and composer. Only two years later John Evelyn refers to him as "that stupendous violin."

In addition to his pre-eminence as a violinist, Matteis was an excellent guitarist. The Spanish guitar was fashionable in Italy early in the 17th century, and because of its more powerful tone, it gradually assumed the favour which the lute had for so long enjoyed.

Roger North left a number of references to Matteis in his "Memoirs". He makes the curious observation that Matteis held his violin against his "short ribs"; that he "taught the English to hold the bow by the wood onely and not to touch the hair"; and that he took offence if anyone whispered while he played, which was the kind of inattention that had been much in fashion at court.


William Holder (1616-1697) was appointed canon of St. Paul's in 1672, and later became sub-dean of the Chapel Royal. He was a Fellow of the Royal Society from 1663; and also an amateur composer of church music. His treatise was written for the gentlemen of the Chapel Royal, though it was not a practical handbook, but like Descartes' "Compendium Musicae", a discussion about the elements of music, with many mathematical explanations of the proportions of sounds, consonants and dissonants, the ratios in the scale of
one degree to another, etc. and included numerous diagrams.

Rudiments and the rules of composition are not a part of the work, and only incidentally do certain elements enter into the discourse. He supplied a general outline of Meantone tuning and a section on "How to go about tuning an organ or harpsichord" (p.180). A 2nd edition was published in 1731.

22. "Short, Easy and Plain rules to learn in a few days the principles of Musick, and chiefly what relates to the use of the Espinette, Harpsichord or Organ" by CAPTAIN PRENCOURT. MS in the hand of ROGER NORTH with annotations by him. British Museum, Add. 32,531. Date c. 1702.

The sparse biographical information that we have about Captain Prencourt is nearly all contained in this manuscript by Roger North; for both men were members of the court of James II before that monarch fled the country in 1688. Prencourt was from Saxony where he had served in the court of the Elector; he had travelled widely and knew several languages. James II sent for him to come to the English court as Maestro di Cappella of the Roman Catholic chapel. North says (f.3v):

"...those that performed in the Chapel under him, and had ability to judge, declared that he was the best and quickest composer that ever they knew, and that his Excellency lay in the Ecclesiastical style."

(f.4r)"He had 5 persons 501 [i.e. £50] pr annum apiece salary, for writing music under him, and to make it appear they worked for their money he once showed the King the books of papers of the Chapel, that were grown to almost a cart-load."

When the court broke up, he kept himself alive by sponging on wealthy music-lovers. Because of a wound in his right hand which prevented him from playing the trill with the two middle fingers, (f.5r)"...he affected to place his auditors out of view, and then
he would appear to have more hands and fingers than falls to any one man's share, so great a bustle would he make, as he saw occasion."

The treatise which teaches the rudiments is quite devoid of obsolete subjects. The final section (f.24v-28v) entitled "Instructions for distinguishing the Intervals one from another, and how they are to be played with both hands", is an interesting discourse on fingering.

Other tracts by Prencourt bound up with this one in the same MS are "An easy way to sing in a short time" (ff.29r-41) and "The treatis of the Continued or thro-base". The latter seems to have escaped the notice of F.T. Arnold, for he made no reference to it in his book (ibid.) on the subject.

23. "Observations concerning Musick Made Anno Domini 1705 or 06 By the learned and my very worthy Friend the REVEREND MR. [ARTHUR] BEDFORD, Chaplain to the Haberdasher's Hospital at Hoxton, near London." Manuscript in the hand of [Rev.] Edw[ard] De Chair [minor canon of St. Paul's]. British Museum Add. MS 4917.

Arthur Bedford (1668-1745) was a clergyman, a writer and an amateur musician. He joined in the crusade against the stage - he was obviously well acquainted with the works of the English dramatists for he wrote a series of tracts drawing attention to 7,000 immoral sentiments collected from their works. He also wrote three tracts about church music: "The Temple of Music" (Bristol, 1706); "The Great Abuses of Music" (1711), and "The Excellency of Divine Music" (1733); his aim being to promote a purer and simpler style of religious music.

This MS contains eight chapters which discuss various aspects of music, e.g. the first ("Of Musick in General") is about the
origin of the word "music"; in the second chapter "Of the Method of learning to compose", Bedford advises scholars who wish to study the science of music which treatises to read:

(p.12) "The Authors which I shall recommend are Playlors Introd. to Musick with Henry Purcell's Additions at the end thereof and also Sympson's Compendium of Musick; and tho' it must be granted that in some cases they are defective, yet I hope their defects will be supplied by the following discourses; and Dr. Campion's Treatise concerning the passages of the Concorde, printed at the End of an old Edition of Playford's Introd. to Musick, though of late it is little minded, yet I think ought not to be wholly neglected, especially in Plain Counter-point, and by a Young Composer."

The fourth chapter ("That all the half Notes in the Octave are equal") was an approach to the construction of the scale which was taken up later by La Fond (cf.)


John Blow (1648-1708) was one of the first choirboys of the restored Chapel Royal, and later became its organist, and also organist of Westminster Abbey. He was a prolific composer of church music, as well as of songs, dramatic music, and harpsichord music. He was probably the teacher of Henry Purcell. He relinquished the position of organist at Westminster Abbey to Purcell in 1679, and took it up again after Purcell's death in 1695.

The comparison of the 17th century treatises has brought to light the fact that this manuscript is, in truth, an abridged and garbled copy of Coperario's "Rules How to Compose."

The only musicologist who has written anything on the treatise spurious/is H. Watkins Shaw ("John Blow as Theorist", Mus. Times,
Sept. 1936), and as he did not question the authenticity of the work, he could not have made a searching study of it, for there are certain passages which do not make sense; and in two instances the transcriber in attempting to 'improve' upon the musical examples, has only succeeded in removing the whole point of the example. It is evident that at least one manuscript copy was made of Coperario's original MS and that Dr. Blow's MS was copied from such an intermediate version. Coperario's lucid hand-writing would hardly have given rise to the curious substitutions of words found in the later MS.

Mr. Watkins Shaw observed similarities between Playford's "Introduction" and Blow's MS. (It has been observed in other parts of this thesis that Playford must have had a copy of Coperario's treatise from which he borrowed for his 1683 edition.) Shaw says:

"The preliminaries seem to be derived almost word for word from the 11th and 12th (Purcell's) edns. of Playford's 'Introduction', and include detailed lists of 'Concords from the Bass upwards' and 'Concords from the Canto downwards.' A unison is stated to be good but 'better so the one hold and the other be going thence' - that is, presumably, when the unison occurs as a passing note. Then follows an enumeration of 'Perfect Chords' (i.e. consonant intervals) and 'Imperfect Chords' (discordant intervals) which again is to be found in Playford; but, unlike that work, this MS does not explain either compound intervals or the distinction between major and minor intervals. Again, in the time honoured prohibition of consecutive octaves and fifths ('2 8ths and 2 5ths are unlawful') our MS omits the important qualifications which Playford gives as to the case when one of the fifths is imperfect. This preamble is concluded by tables, given also in Playford, as to the distribution of notes in a chord, and the resolution of suspensions ('How to come from a discord')."

Two points in this paragraph require elucidating: First, it was in the 10th Edition (1683) of Playford's 'Introduction' that the similarities to Coperario's treatise originally occurred; secondly,
it is incorrect to say that the 'preliminaries seem to be
derived almost word for word from ... Purcell's edition...';
for instance, the 'Concords from the Bass upwards; and 'Concord
from the Canto downwards,' are embodied in the 1683 and 1687
editions of the "Introduction", but are omitted by Purcell in
the 1694 edition. Purcell also omits 'What chords parts are to
use' and 'How to come from a Discord'; in fact, Purcell allows
only the 'Rules of Rising and Falling one with another' (p.98)
and two brief sentences relating to the unison and to unlawful
consecutives(pp.90-1), to stand in his edition; and what is more,
these rules are amplified by both Playford and Purcell.

Unfortunate Dr. Blow! Musicologists have given posterity
such unfair criticisms of his musical craftsmanship. Dr. Burney
in the 18th century (Hist., Vol.II) rebuked him for his
"unwarrantable licentiousness as a contrapuntist" and published
'Examples of Dr. Blow's Crudities'; and said how "confused and
inaccurate a harmonist he was;" and "...Indeed, these crudities
are so numerous as to throw a doubt on his learning..."
Mr. Watkins Shaw says of Dr. Blow's MSS: "They reveal him as a
man of unsystematic thought and method..."; and "They disclose
too his lack of literary skill and a certain angularity of
expression." There is no factual evidence that Dr. Blow claimed
these rules to be of his own making, and consequently it is not
possible either to blame him or vindicate him for the numerous
errors perpetrated in this MS under his name.
In Appendix III there is included an annotated copy of the manuscript, showing every deviation from the original by Coperario. A study of the differences in the text and the examples may be found interesting.

There is one treatise almost certainly by Dr. Blow, and that is his "Rules for Playing of a Through Bass upon Organ and Harpsicon", British Museum Add. 34,077, ff.1-5. (This is printed in F.T. Arnold's book, ibid.) The B.M. Catalogue describes it as an 'autograph'; and the contents certainly bear a closer affinity to contemporary rules on the subject at the end of the 17th century, than do those in the misattributed manuscript.


Alexander Malcolm (1687-c.1740) was a Scottish mathematician and author. His best known works are two books on arithmetic (1713 and 1730). Nothing seems to be known about him, except that he lived in Edinburgh.

His treatise is dedicated to the Directors of the Royal Academy of Music. This was the Italian opera venture which was directed by Handel, Bononcini and Ariosti, and a number of noble amateurs; the three composer-directors' operas being the chief productions. (It flourished from 1719-28 when the high fees of the singers greatly weakened the exchequer. The first performance of the "Beggars' Opera" in 1728 was instrumental in bringing about the bankruptcy of the Royal Academy.) The treatise is a long work (608 pp.) and deals mainly with the physical and
mathematical aspects of music. The rudiments are discussed at great length, and the elements of composition are touched upon. The outlook is a modern one for that time; Malcolm advocated equal temperament; gave detailed instructions on transposition; wrote an appendix: "Concerning Thomas Salmon's Proposal for reducing all Musick to one Clef", which he supported. Two abridged editions of the book were published in 1776 and 1779.

26. "A New System of Music, both Theorical and Practical, and yet not Mathematical written in a manner intirely new; that's to say, in a Style plane and intelligible; and calculated to render the Art more charming, the Teaching not only less tedious, but more profitable, and the Learning easier by three Quarters. All which is done by tearing off the Veil that has for so many Ages hung before that noble Science." By JOHN FRANCIS DE LA FOND who teaches Singing, and the principal Instruments. London. Printed for the Autor. 1725.

La Fond was born in France at the end of the 17th century, and later settled in London where he gave lessons in Latin and French as well as music. An advertisement on the reverse of the title-page reads:

"The Autor having hitherto chiefly taught the Latin and French Tungs, as he now still does, those that shall be pleased to employ him as a Master of Music, will have the advantage of improving themselves with him in talking those two Languages."

This is not another textbook of rudiments, but like Thomas Salmon's "Essay", it is a set of proposals for reforming certain principles of music for the purpose of making the attainment of musical knowledge simpler.

The 'Preface' (27 pp.) is mainly concerned with spelling
reforms upon which La Fond held strong opinions. The book contains a number of proposals, the most important ones being:

(1) To abandon the practice of teaching music mathematically with obscure terms; (2) to replace the musical scale consisting of 8 notes with their various note-names, by a scale of 12 semitones called 1,2,3,4,5,6,7,8,9,o,u,d,t. (He points out that this would save the student the trouble of memorizing the sol-fa note-names; also that it would facilitate transposition); (3) to replace the different clefs by one G clef for all voice parts, placed on the 2nd line of the stave as in the treble clef. (It is evident that La Fond had read Salmon's Proposals, for here and in other places he used the same arguments; but Salmon proposed that there should be no clefs and that G should always be the bottom line of the stave as in the bass clef.) (5) La Fond suggested that more logical terms such as "gay key and soft key" should replace "sharp key and flat key"; and that the "Key-note" should be called "Nota"; and "Modulation" called "Notulation", etc. He declares that all these reforms would simplify the practice of accompanying from a continued bass, but he does not make the advantages clear enough, nor give any musical examples to demonstrate the new figuring combined with the use of treble-clefs for all parts. His proposals met with no more success than other attempts to change the notation of music.

27.(i) "A Short Treatise on Harmony containing The Chief Rules for Composing in 2, 3 and 4 Parts" Dedicated to all Lovers of Musick By an Admirer of this Noble and Agreeable Science. London, Printed by J. Watts. 1730.

27.(ii) "A Treatise on Harmony Containing The Chief Rules for Composing in Two, Three, and Four Parts. Dedicated To all Lovers of Musick, By an Admirer of this Agreeable Science. The Second Edition Alter'd, Enlarg'd, and Illustrated by
The author of these two treatises was Dr. J.C. Pepusch (1667-1752), composer, organist and theorist. The British Museum catalogue says: "The treatise [i.e. the 1730 edition] was written by Dr. Pepusch for the use of his pupil James, Lord Paisley (afterwards Earl of Abercorn), and published without the knowledge of the author."

Pepusch was born in Berlin, becoming a court musician at the age of 14. He came to England c. 1700, graduated Mus.Doc. Oxon., with Croft in 1713, became a Fellow of the Royal Society, a founder and director of the Academy of Ancient Music, and finally, in 1737, organist at the Charterhouse. He disliked Italian music and held 16th century music in highest esteem. He is best known in connection with the "Beggars' Opera" for which he selected and arranged the music.

It seems likely, judging by the diffuse instructions and the methodical lay-out of his treatise, that he had prepared it for publication, and not solely for the use and instruction of Lord Paisley. (Burney says that Lord Paisley assisted Pepusch in putting it into English.) The first edition without any musical examples would hardly have been of any value to a beginner. The second edition had exactly the same text, but it was improved by an appendix of 120 pages of musical examples, related to the text by the insertion of example numbers in the margins. The work contains many useful and practical instructions, but also some
reactionary views, especially in connection with the modes and hexachords.

**THE FRENCH THEORISTS**


Salomon de Caus, engineer, architect and music theorist, was born in Normandy towards the end of the 16th century. After studying mathematics, he came to England where he was attached to the Prince of Wales. Later he went to Germany and became an engineer of the Elector of Bavaria, passing the greater part of his life with this prince. After some years, he returned to France and died there c.1630.

His treatise indicates a cosmopolitan outlook for it is dedicated to Anne, Queen of Great Britain; it was written in French while de Caus was at Heidelberg, and published in Frankfurt. The first part of the book deals at great length with the Monochord, including several large diagrams, calculations of the proportions of the intervals, the Gamut, Solfa, etc. From a comparison with Zarlino's "Istitutione Harmoniche" (1558) it is obvious that de Caus copied his geometrical diagrams, and all the illustrations for the monochord from that work. The second part of the book contains additional rudiments and some rules for composition. His second publication was "Les raisons des forces mouvantes avec diverses machines et plusieurs dessins de grottes et fontaines", (Francfort, 1615, reprinted in Paris in 1624); and his third
publication treats of the construction of organs; Fétis says it was a remarkable work for the time when it was written. It was translated into German and published in 1616 and 1620.


The Ballard family held the monopoly of music printing in France for nearly two centuries, and Pierre, son of the first Ballard to hold the monopoly, printed many important musical works. (Little else appears to be known about him.) Like the English "Pathway to Musicke", this treatise is a collection of rules taken from earlier foreign theorists; and as it contains no original writing, one might venture to suggest that Pierre Ballard chose, translated and edited the rules himself. His address to the reader does not conflict with this view (if it was written by him):

"...the majority of the books which treat of this [theory and practice of music] are in the Greek, Latin or Italian language, and in consequence are understood by few. I have estimated that it would be helpful ... to put into French this summary Instruction which contains in abridged form the principal Rules and precepts mentioned from books named above, so that the young composers may more easily understand them."

Only Zarlino is named as one of the sources and there is no mention of any specific books. Compared with the treatises by Coperario and Campian which came direct from the composer's pen at about this period, the Traicté is very old-fashioned; it contains outmoded rules regarding modes and cadences and nothing approaching "real"
music, though the lengthy rules about 2-part harmony are similar to those given by nearly all 17th century theorists who followed Zarlino's ideas.


Marin Mersenne (1588-1648) was a philosopher, mathematician, theologian and music theorist. After studying in Paris he became a Franciscan Minorite in 1613; taught philosophy at Nevers for a time, and then returned to Paris, where, near his friend Descartes and other philosophers, he studied both mathematics and music. He wrote a number of works including "Questiones harmonicares" (1634), "Les Preludes de l'harmonie universelle", "De la nature des sons" (1635), "Traicté de l'orgue" (1635), "Harmonicorum Libri XII" (1635), and his most important work "Harmonie Universelle" (1636), (which was preceded by a smaller work entitled "Traité de l'harmonie universelle" (1627) ). The "Harmonie Universelle" brings together in one large volume nineteen books, each with a separate pagination, comprising Mersenne's extensive studies of the various branches.
of music. It is a valuable source of 17th century French music, preserving much music which would otherwise have been lost; and of information on the music, musicians and musical instruments of the early 17th century. Book V, "De la Composition de Musique" appears to be derived from Book VIII "De Compositione Musica" of the "Harmonicorum Libri", but the Latin discourse is more mathematical and less practical than the French one which contains a great many more musical examples, and gives fuller instructions about composition. As one might expect, there is much information about such obsolete subjects as the Guidonian Hand, Mood, Time and Prolation, the Modes, the Gamut, solfa, etc.


Antoine Parran (1587-1650) entered the Society of Jesus in 1607, and taught "belles-lettres" at the college in Nancy. The "Traité" was his only publication; it is divided into four parts: I. The principles of Musc, II The intervals and the consonances, III The Rules of Counterpoint, and IV The Twelve Modes and their characters. The authors of the "Dictionnaire historique des musiciens" (Paris, 1810-11) took a poor view of this treatise, saying that it was ill conceived and badly written; but Fétis defended it, declaring that "notation and the rules of counterpoint are better explained in this book than in other French books
published in France up to this time." Parran names the sources he has studied, which range from the ancient Greeks and Boethius to Franchinus, Glarean and Zarlino; he appears to have ignored the works written in the early 17th century, including all the earlier French writers; consequently much attention is given to ligatures, proportions; mood, time and prolation, pricks, and the twelve modes. However, he gives ample rules for composition in 2, 3 and 4 parts, and for simple counterpoint and figured counterpoint, all of which were of practical value to music students.


Marc-Antoine Charpentier (1634-1704) was a composer. His father, Nicolas Charpentier, was a "peintre du Roy", and Charpentier in his youth went to Italy to study painting; but in Rome in heard some of Carissimi's music and became a pupil of that master, studying music in Rome for some years and becoming a great admirer of the Italian style. On his return to France he co-operated with Molière, (who had broken off his partnership with Lully), writing incidental music and operas for the Théâtre-Français from 1672 to 1685. In 1684 he was appointed maître de musique to the Jesuits of the Maison-professe in Paris, composing a variety a sacred music for them; and about this time he was master of composition to the Duke of Orleans, the future regent of France, for whom he wrote the above treatise. This manuscript is bound up with a second short treatise by Charpentier entitled: "Abrégé des Règles de l'Accompagnement."
Charpentier's "Règles" relate mainly to intervals and composition in two parts; four-part harmony is not specifically discussed, though rules implying four-parts are included; most of the examples are in two parts. It is an interesting treatise, quite "modern" in most respects, but compared with the instructions written by Simpson and Purcell, it is less advanced, particularly in such subjects as keys and cadences.
CHAPTER II

A SURVEY OF JOHN PLAYFORD’S
"INTRODUCTION TO THE SKILL OF MUSICK"

John Playford was 31 years of age, and had been in business as a bookseller and publisher for six years when he published the first edition of his "Introduction to the Skill of Musick" in 1654. Earlier he had given his customers a few pages of the rudiments of music in his "Musickall Banquet" of 1651; perhaps thinking that more people would buy a song book if they had some instructions of this kind; rather like a game which is useless unless you know the rules.

If we are curious to know what prompted Playford to publish a little book on the rudiments of music, we find his own reason given in his address "To all Lovers and Practitioners of Musick":

(f. A2) Courteous Reader:

I was desired by some Masters to Print the Scale of Musick, or Gam-ut, in a halfe sheet of Paper, to put in a Schollers Book, to save the pains of writing; which I intended only to have done; but upon second thoughts I have altered my minde, and made the addition of some necessary plain Rules for the better understanding thereof, and the help of Beginners. I confess, men better able then myselfe might have spared my pains, but their slownesse and modesty (being as I conceive unwilling to appear in Print about so small a matter) hath put me upon the worke, which I count very usefull, though with the danger of not being so well done, as they might have performed it. The Rules of all Arts ought to bee delivered in plaine and briehe language, and not with flowers of Eloquence; and so this worke is more suitable to my abilities.

The work as it is I must confesse is not all my owne, some part of it was collected out of other mens writings,
which I hope will the more commend it: and if the 
brevity, plainness, and usefulness thereof may beget 
acceptance with thee, it will encourage me to do thee 
more service in other things of this nature.

Thine to the utmost 
of his endeavours,
John Playford.

Playford was susceptible to the wishes of his customers throughout his career; always trying to meet their demands and to give them what they most wanted. And a little encouragement, in the way of successful sales, usually brought forth a further bigger and better edition of the book in question.

The 1st edition of the "Introduction" was very small, only 33 pages in a small 8vo book, divided into three sections:


(2) p. 23. "A Preface, or Briefe Discourse of the Nature and use of the Scale or Gam-ut", by Dr. Thomas Campion.

(3) p. 29-33. Plaine Directions for the Basse Violl, or Violl de Gamba.

The book was laid out in three sections like this throughout its history, though the material within each section changed and expanded.

The epithet "honest" which was often added to his name was well-earned, for at a time when writers borrowed freely from other men's works and passed the material on as their own invention, Playford acknowledged that the work was not all his own, and tells us frankly that Chap. VII, "The Five Graecian Moods", is "out of Mr. Butlers learned Treatise of Musick".
Other sources which Playford clearly used for this first edition (though he did not acknowledge them) were "The Pathway to Musicke", (Anon.) published by William Barley in 1596, and Morley's "Plain and Easy Introduction" of 1597. Playford sums up some of his rules in a little rhyme at the end of the chapter, such as this one:

To attain the skill of Musick's Art,
Learne Gamut up and down by heart,
Thereby to learn your Rules and Spaces,
Note names are known knowing their places.

The section devoted to "Instructions for the Bass Viol" was included in every edition of the "Introduction", and was developed and enlarged in succeeding editions, but its subject is outside the scope of this thesis, and so it will not be referred to.

In this first edition Playford only gives us the Preface to Campion's "New Way of Making Four Parts in Counterpoint"; probably because, as he says in his opening address, the Masters were desirous of obtaining for their pupils some printed instructions about the Gamut, and the Preface is chiefly concerned with this subject.

It seems likely that Playford was cautious about the book and printed very few copies. The first edition is so rare that even Dr. Burney didn't know of its existence, and named the 1655 edition as the first. I would venture to suggest that Playford published very few copies of the first edition, and possibly not more than fifty of the later editions, as they are all very rare.
Undoubtedly, the first edition sold out quickly for the next edition appeared in 1655. It is possible that Playford was a shrewd enough businessman to realize that the scarcity of the book would create the demand for new editions, for there was a constant demand for it throughout his lifetime.

The 2nd edition was more methodical, with a preface and an index of contents. The preface (6 pp.) refers to musical legends of ancient Greece, and to the Old Testament; it speaks of the musical ability of some monarchs, including Henry VIII; these passages probably amounting to Playford's total knowledge of the history of music; and he concludes with a missionary zeal:

"Those who are Lovers hereof, must allow Musick to be the Gift of God; yet, like others his Graces and Benefits, is not given to the idle; those that desire to have it, must reach it to them with the hand of Industry, by putting in practise the Works and Inventions of Skilful Artists. Books of Instructions to Musick, our Nation is not so well stored as Forrein countreys are; what have been printed in this Nation worthy of perusal are onely two, viz. Mr. Morley's Introduction and Mr. Butler's Principles of Musick, both which are very rare and scarce to be had, the Impressions of them being long since sold off; I have therefore in a Brief and Easie method set down the whole Grounds of Musick, which are necessary for young Practitioners, both for Song and Viol...."

We know that learning the Gamut was a difficult task for music pupils at this time, but Playford oversteps any pupil's requirements in his anxiety to give comprehensive rules for this subject, devoting Chapter I (7 pp. with a diagram) to it, giving Campion's Preface (5 pp.), and in addition "the rule for the Gamut by Mr. Sympson" - another 7 pages. Perhaps he recognised this as an excess of information, since he did not use Christopher
Simpson's rule of the Gamut, nor Campion's Preface again in any of the ensuing editions.

In this 2nd edition Playford attempted to attract a wider variety of customers by including a chapter (p. 29) entitled "Of Tuning the Voyce", and six "short Ayres or Songs", a practice which must have proved popular, as most of the editions include a number of songs in two parts (soprano and bass).

The 2nd edition also gives the whole of Thomas Campion's "A New Way of Making Fowre Parts in Counterpoint". If Campion had been alive (he died in 1620) Playford would probably have asked him to write a simpler exposition of Counterpoint; instead he obtained Christopher Simpson's services, and asked him to insert annotations where necessary. Playford says (f. A13) "They were made at the instances of a private friend to salve such difficulties as occurred then to the Reader."

On p. 45 Playford furnished his reader with "Questions propounded by the Doctors in Musick, to have been discussed in the Act at Oxford, July 8th, 1622.

Mr. Nathaniel Gyles Resp.
Mr. William Heather Opp.

1. Whether Discords may be allowed in Musick? Aff.
2. Whether any artificial Instrument can so fully and truly express Musick as the Natural Voyce? Neg.
3. Whether the Practick be the more usefull part of Musick, or the Theory? Aff."

The arguments for and against each question are briefly but clearly and logically stated, and make an interesting contribution to the book. They were omitted from the succeeding editions.
There are several innovations in the 1658 edition, including brief references to "syncopation", "Tying Notes" (i.e. writing quavers and shorter notes in groups instead of separately), "Figured Bass", "Concords and Discords", "Ties" (i.e. the tie over the bar-line), and "Tyes or Holds" (i.e. slurs). This edition omits Campion's treatise and is the only one which does not give instructions in counterpoint. The chief novelty is the inclusion of 22 psalms, which Playford prefaces with this address:

Courteous Reader,

These following Tunes of the Psalms, are of much use, not onely for young Practitioners in Song, but for those Parish-Clerks which live in Countrey Towns and Villages, where their Skill is as small as their Wages; But to them of this City of London, which are most of them Skilful and Judicious men (in this matter) it will add little to their knowledge; yet I hope and wish it may to some of their Congregations, who I am very sensible have great need of instruction herein.

There are many more Tunes than I have here set down, but these I chose rather from the rest, as being all of them such as the Congregation will Joyn in, and are better acquainted with these than the other Tunes. Vale, J.P.

As Playford was the only music publisher in England at this time, he could with confidence introduce into his little book something which would appeal to "Parish-Clerks in Countrey Towns". No doubt when the tradesmen who were churchmen travelled to London to do some business, they called at Playford's shop in the Inner Temple "neer the Church-dore", and returned with some helpful instructions for the singers in the congregation who desired to learn all the newly composed psalms. Playford takes it for granted that the singer will have no musical instrument
to set the pitch, for in "Some few Directions for ordering the Voyce" (p.50), he says:

"First, observe how many Notes Compass the Tune is, next the place of your first Note, and how many above and below him, that thereby you may give the Tune of your first Note so as the rest may be sung in the Compass of the Voyce, without Squeaking above, or grumbling below..."

Although the 1658 edition was a new impression of the book, and was certainly entitled to be called the "third" edition, Playford called the 1660 edition the Third Edition. It seems, therefore, that the first edition of 1654 was tentative, and that he did not consider it as the first edition. However, we do find that Playford did not pay great attention to numbering his editions, since between the 3rd edition (1660) and the 4th edition (1664), he published a 1662 edition; and between the 4th edition (1664) and the 6th edition (1672), he published:

(1) Another issue of the 1664 edition without the words "Fourth Edition etc." on the title-page.
(2) The 1666 edition which contained a number of alterations.
(3) The 1667 edition which was the same as the 1666 edition.
(4) The 1670 edition which contained a number of alterations.

So we see that either the 1666 or the 1670 edition might be regarded as the 5th edition.

Playford is ever reminding his readers that they cannot acquire a knowledge of music by his book alone: (1660 Ed., p.36)

"I shall here conclude, and leave these Brief Instructions to thy serious perusal, not doubting but therein your knowledge in the Theorick part of
PLATE II

Portrait of John Playford at the age of 38, and the title-page of the 1660 edition of "A Brief Introduction to the Skill of Musick".
Musick will be much furthered, For the Practick, that you must Reach to you, by the hand of Industry, and the Guidance of a Skilful Master, by whose assistance, and the plain Instructions given you in this book, you may attain to be a good proficient in the Skill of Musick in a short time."

(In his "Musicall Banquet" of 1651, Playford said practically the same words and in addition gave a list of 27 teachers of the voice, viol, organ and virginals, who were available in the City of London.)

Eight new two-part songs are added to the 1660 edition, and a canon for 6 voices ("Joy in the Gates of Jerusalem", composer unspecified). No new psalms are introduced, though Playford meticulously altered notes, and sometimes the whole bass-line in many of the existing psalms; and transposed one from F to G (p. 60, "Low Dutch Tune"). Playford certainly kept his printer (from 1654 to 1674, William Godbid) busy; and it seems that William Godbid was as conscientious in his work as Playford was as a publisher, for he was always endeavouring to make the "Introduction" look different, and often pages which had no alterations would be set up in a new type with a different lay-out. It is really remarkable the amount of craftsmanship that went into this little book, which with its tooled-leather cover, never cost more than 2s. (which was the equivalent of about 10/- of the present-day money value).

Christopher Simpson's "Division Viol" had been published in the previous year (1659), and Playford generously recommends it to his readers: (1660 Ed., p. 92)

" Those who desire to know more concerning Counterpoint,
and the Rudiments of Composing Musick of 2, 3, 4 or more Parts, and the use of Discords, I refer them to the First Part of the said Mr. Christ. Simpson's Book lately published, Entituled (sic) The Division-Violist; which Book may justly be counted the Masterpiece of this Age, for the Excellent Rarities of Musick set forth therein. Vale. J.P."

The 1662 edition is entirely the same as the 1660 edition save for the title-page. Here we remark that John Playford has given himself the title "Philo-Musicae". (This was the cause of comment in the Locke versus Salmon controversy. See p. 94)

The 1664 edition was published as "The Fourth Edition much Enlarged", even though it was the 6th book to bear the same title. The enlargement consisted of a 13-page address entitled "Of Music in General, and of its Divine and Civil Uses", in which Playford aired some of his opinions and gave his readers some interesting facts; and an important new feature on page 57: "A Brief Discourse of, and Directions for Singing after the Italian manner: Wherein is set down those Excellent Graces in Singing now used by the Italians: Written some time since by an English Gentleman who lived many years in Italy, and taught the same here in England; intending to publish the same, but prevented by Death." Playford amplified this statement in his address to the reader (p. 57):

"This Manuscript fortunately came to my hand, which having diligently perused, and perceiving the Author's intent to have published it, I thought it would be useful to add some part thereof to this my Discourse of the Theorie of Musick, but being cautious of publishing anything of this kind on my own weak judgment, I communicated my intended purpose to some of the most Eminent Masters of this Kingdome, who
(after their perusal) gave a good approbation thereof; so that if thou dost reap any benefit thereby, thou art beholden to them, and not to me, any more then for Publishing the same."

Strange as it may seem, Playford had received unbeknowingly a complete translation of the 'Preface' to Caccini's "Le Nuoue Musiche" (1602). The "English Gentleman" who had translated it (probably while he was in Italy and had access to the original) had omitted to indicate the source or the real author's name; and neither Playford nor the "Eminent Masters" to whom he showed the MS realized that it was a translation, since Caccini's treatise was not available in England. When Playford said that he perceived "the Author's intent to have published it" he undoubtedly had deduced this intention from the tract itself, in which Caccini expresses his desire to teach others how the various ornaments should be taken; and makes frequent references to "this my Discourse". Therefore, The "English Gentleman" himself (i.e. the translator) must be exonerated from the accusation of intending to piratically publish the discourse.

Arnold Dolmetsch in "The Interpretation of the Music of the 17th and 18th centuries" (1916) says (p. 2) that Playford used an English translation of Caccini's Preface without acknowledging its source. It is most unlikely that Playford knew the true source. He had never visited Italy and did not know Italian, and could hardly have seen Caccini's treatise (which was not available in England).
A.K. Holland is even more suspicious. Speaking about this discourse in his book "Henry Purcell" (1932), he says:

(p.82) "It is probable however, that the professions of the English Gentleman who had long lived in Italy were slightly dishonest, in so far as he himself did not exist but was an invention of the fertile imagination of the publisher. The essay seems, indeed, not to have been based on personal experience but to have been largely borrowed from the preface to Caccini's "Nuove Musiche" (1602) the manifesto of the new recitative style."

Ian Spink has given some thought to the identity of the "English Gentleman" ("Playford's 'Directions for Singing after the Italian Manner'", Monthly Musical Record, July-Aug. 1959) and makes the following conjectural suggestion:

(p.131) "We know that he died before 1664 - presumably quite soon before, and that he was an Englishman who had lived in Italy and taught singing on his return. These conditions restrict the number of possibilities considerably, and so far as positive information goes, Walter Porter - pupil of Monteverdi, Gentleman of the Chapel Royal, and Master of the Choristers of Westminster Abbey - best fits the description. Of course, this is conjectural, but although his "Madrigales and Ayres" (1632) show the influence of Monteverdi, the figuring of his basses, and the instructions which he sets down in the preface to his madrigals concerning their realization recalls Caccini, as does his written out version of the trillo."

Sufficient has been said about the authorship. The 'Preface' itself is not given in its entirety by Playford, but "some part thereof", which is, in fact, most of it. In Caccini's original treatise the whole Preface is on three pages; but the pages are about 12" x 9" (folio) and the print is very small. The text up to the first example is all in one enormous paragraph. Playford probably found Caccini's long paragraphs
and his long-winded, ponderous style wearying, since he split the text into shorter paragraphs (which are easier on the eye) and curtailed several passages. Sixteen of Caccini's twenty-one examples were methodically arranged in pairs: the first of each pair showing how the ornament was written, and the second how it was to be sung. Playford made a random selection of fifteen of the twenty-one examples, allowing some of the written versions to stand as "Examples of the most usual Graces".

The arias contain some of the earliest examples of figured bass. This was mostly compound figuring since Caccini (and his contemporaries) used only the figures which denoted that interval from the bass which they actually expressed. As early as 1619, Praetorius ("Syntagma Musicum") recommended simple numbers, for he considered such accurate figuring difficult and unnecessary. Simple numbers had long been in use in England when Playford briefly referred to figured bass in his 1658 edition. However, with his scanty knowledge of the subject, he could not modernize Caccini's figures and they were faithfully retained.

The greater part of the discourse relates to trills and is discussed under "Trills" in the concordance, p.191.

Caccini wrote of the popular ornament: \( \text{\textcopyright} \) (Sometimes denoted thus: \( \text{\textcopyright} \)):

(p.63) "There are some that in the Tuning of the first Note, Tune it a Third under: Others Tune the said first Note in his proper Tune, always increasing it in Lowdness, saying that this is the good way of putting forth the Voyce gracefully.

"Concerning the first, since it is not a general Rule, because it agrees not in many Cords, although also in such places as it may be used, it is now
become so ordinary, that instead of being a Grace (because also some stay too long in the 3rd Note under, whereas it should be but lightly touched) I would say it is rather tedious to the Ear; and that for beginners in particular it ought seldom to be used: and instead of it, as being more strange, I would choose the 2nd for the Increasing of the Voyce."

Caccini was highly in favour of "passionate" interpretations to individual notes by increasing and diminishing the voice. His apparent advocacy of rubato and, possibly, rhythmic alteration, might well have led a novice singer into chaos:

(p. 74) "Although I call that the noble manner of singing, which is used without tying a mans self to the ordinary measure of time, making many times the value of the Notes less by half, and sometimes more, according to the conceit of the words; whence proceeds that Excellent kind of singing with a graceful neglect, whereof I have spoken before."

His instructions are more sensible (and valuable) when we discover that he was introducing the newly invented recitative style, and teaching singers how to perform his own recently composed music. He calls it "a kind of Musick by which men might as it were Talk in Harmony,..." As well as teaching the art of recitative, he desired to clear up the "confused use of those Excellent Graces and Ornaments to the good manner of singing, which we call Trills, Grappes, Exclamations of Increasing and Abating of the Voyce, of which I do intend in this my Discourse to leave some foot prints, that others may attain to this excellent manner of singing;"

All the examples that Caccini gave were set to Italian words, so Playford appended a 2-part song set in the Italian style with
English words; and he ends with these remarks:

(p.76) "I have therefore added one English Ayre which demonstrate[s] the same; Nor are these Graces any new Invention, but have been used here in England by most of the Gentlemen of His Majesties Chappel above this 40 years, and now is come to that Excellency & Perfection there, by the Skill and furtherance of that Orpheus of our time, Henry Cook Gentleman and Master of the Children of His Majesties Chappel, whose Compositions of Anthems now used in his Majesties Chappel, and by him and other Gentlemen most exquisitely performed to the Glory of God and honour of our Nation.

Those who desire to be Instructed and taught to sing after this Excellent way, needs not to seek after Italian or French Masters, for our own Nation was never better furnished with able and skilful Artists in Musick then it is at this time, though few of them have the Encouragement they deserve, nor must Musick expect it as yet, when all other Arts and Sciences are at so low an Ebb..."

thus implying that the discourse is included in the book more out of respect to the Italian supremacy in music, rather than for any new instructions it can offer. And such was the regard for anything Italian that it was repeated in nine more impressions of the book, making its last appearance in the 1694 edition.

The 1666 edition is largely the same as the 1664 edition, with a number of small alterations, additions, or omissions which though they were insignificant, show that Playford was continually "touching up" his little book. It reveals the readable nature of the book to recall that on 22nd March, 1666-7, Samuel Pepys walked from Greenwich to Woolwich (about 2½ miles) "all the way reading Playford's 'Introduction to Musique', wherein are some things very pretty." ("The Diary of Samuel Pepys", Ed. H.B. Wheatley, 1893, Vol. vi, p.221.)
By-passing the 1667 and 1670 editions which contain no noteworthy alterations, we come to the 1672 edition which has five new songs, including two by Playford himself. His study of Morley, Butler, Campion and Simpson's treatises furnished him with an elementary knowledge of composition, and at various times he composed psalm-tunes and songs for 2, 3 & 4 voices. Two of these part-songs he, himself, published in "Choice Ayres and Songs", Book I, 1673, where they shared the exalted company of works by Morley, Campion, Humphreys and Purcell. (For a full list of Playford's compositions, see the Dict. of Nat. Biog., 1917, Vol. XV, p. 1302.)

Playford, in this edition, made an alteration which was possibly unpopular, because it was not repeated: he gave the Treble line only of the psalm-tunes, and under each note he placed its 17th century sol-fa initial. It is difficult to see how the latter could have been helpful when there was not a different sol-fa name for each note of the scale. (This is referred to under "Gamut" in the concordances, p. 102) It may have been an attempt to keep the book small; it contained 161 pp. even with this abridgement, compared with the preceding edition which ran to 135 pp.

In the 1674 edition there was a fresh section entitled "The Order of Performing the Divine Service in Cathedrals and Collegiate Chappels". This was based upon the "Short Direction for the Performance of Cathedrall Service" by Edward Lowe, (some paragraphs are copied word for word), published in 1661, the
year after the Restoration. It is rather surprising that
Playford found a demand for guidance of this kind fourteen
years after the cathedrals had been reinstated; and yet this
section was retained in the book until the 1687 edition, and
after being omitted in the 1694 and 1697 editions, reappeared
in the 1700 edition and thereafter until the last edition
in 1730.

There was no special feature in the 1679 edition. The
1683 edition was the last one to be published in Playford's
lifetime, and in it he substituted "The Art of Descant, or
Composing of Musick in Parts, in a more Plain and Easie Method
than any heretofore Published, By John Playford" for Dr. Campion's
treatise. A study of the new third part of the "Introduction"
unexpectedly discloses a pot pourri of excerpts from earlier
English treatises. In his Preface Playford says:

"Also I have in a brief method set forth the Art of
Composing Two, Three, and Four Parts musically; in
such easie and plain Rules as are most necessary to
be understood by Young Practitioners, which were
never before Printed, [1] but in this 10th Edition:
The work, as it is, I must confess is not all my own,
some part thereof being collected out of other
Authors which have written on this subject, the
which I hope will make it more approv'd."

[1. This was not true as will be shown in the ensuing pages.]

One point can be cleared up before we proceed any further:
In the P.M.A. in December, 1928, Mr. H.C. Colles (after reading
a paper entitled "Some Musical Instruction Books of the 17th
Century") and Mr. Dennis Arundell, discussed the question
whether Playford had gone to Purcell for the examples in the
1683 edition. The answer is definitely no. The following table shows the contents of the instructions and indicates the sources of the text and examples wherever possible. Those examples whose source I have not traced are too antiquated or inexpert to have been contributed by Purcell.

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Bevin, Ex.14(b)
(This appeared in the 1655,1658, & 1660 Eds.)

Campion, p.5.

Simpson's Annot. 1655 Ed.
Simpson, Compendium, p.67.

Coperario, f.4v.

Butler, p.89.

Coperario, f.16v.

Coperario, f.18v.

Coperario, f.20v.

Coperario, f.27v.

Coperario, f.34v.

Coperario, f.36r.

Simpson, Compendium, p.156.
Ibid. p.160.

Mr. Colles (ibid.) said of Playford's new Third Book:

"The short course is divided into clearly defined sections..."

but the column of cross-references will show that this is not
really so; pp. 8-9 give examples of suspensions and cadences in three parts in the section relating to two-part composition; forbidden progressions crop up on pp. 6, 12, 14, 15 and 31; cadence formulas are also scattered about. Nevertheless, it is remarkable the way Playford gleaned these various rules and examples from more than nine different treatises and published them. Playford concludes the book with these words:

"My endeavour has been to set forth only what is most useful for the Practitioner, rather by necessary Examples than long Discourses and Precepts: In the whole, you will meet many Examples not to be found in other Books; [1] I must confess, (being steightened for Time) I could not so Methodically put it into that order I intended: However, if what I have here done meet with a kind reception, it will encourage me, (if God permit life for another Impression) to amend what faults are committed in this. Vale. J.P."

[1. This was true to a certain extent as Coperario's MS was not published, and most of the other treatises were out of print and very scarce.]

There were a number of faults needing correction, but unfortunately Playford died before the next edition, and the 1687 edition was virtually a reprint of the 1683 edition, and was published by his son Henry who took over the business.

Henry Playford, apparently, was not such a keen amateur musician as his father, and did not pay the same close attention to detail. Undoubtedly, there was still a demand for the book; and he must have had enough business ability to realise that it was the constant revising of the contents which made it popular; and so he placed it for revision into the hands of Henry Purcell.
Mr. W. Barclay Squire ("Purcell as Theorist", 1905) has adequately shown the variants between the 1683 and the 1694 editions. One doubt arises: did Purcell amend all three sections of the book, or only the Third Book, (i.e. "A Brief Introduction to the Art of Descant")? Mr. W.B. Squire takes it for granted that he did; and the title-page gives this impression: "The Twelfth Edition. Corrected and Amended by Mr. Henry Purcell." Mr. Colles (ibid.) echoes Mr. Squire's opinion. The question also arises, if Purcell did not amend the whole book, who did? Was Henry Playford capable of doing so? Or was some anonymous person responsible for it? The arguments are these:

1. In the succeeding edition (1697) the whole of Book One is re-written by an anonymous person. Book III was never altered in any succeeding edition right up to the last in 1730.

2. In the 1700 edition, 20 of the older Psalm settings from the 1687 edition were restored. If the alterations made to them in 1694 had been the work of such an eminent composer as Purcell, it is hardly likely that there would have been this preference for the earlier versions.

3. Alterations to the psalm tunes and transpositions of some of them were carried out by John Playford in the 1660, 1672 and 1674 editions. There was nothing unique about this in the 1694 edition.

4. In the 1697 edition, only the Third Book bears the words
"With the Additions of the late Mr. Henry Purcell".

(5) The Rev. Arthur Bedford, writing in 1705 (B.M. Add. 4917) said: "The Authors which I shall recommend are Playford's Introduction to Musick with Henry Purcell's Additions at the end thereof."

Mr. Squire (ibid.) says "Purcell's twelve settings form an important addition to his Church Music, and attention to them has not been hitherto drawn by his Editors." The above remarks should make the editors cautious.

(Note: The two Canons which Mr. Squire has given on pp. 142-3 of the 1694 edition in his republication of that work, are not in the 1694 edition. They first appear in the 1700 edition.)

Purcell allows one curious error to stand in his adoption of Playford's "Examples of Cadences and Bindings in Three Parts" (p. 9, 1683, p. 97, 1694) which Playford copied from Matthew Locke's "Melothesia", (1673). Purcell has moved the middle voice up an 8ve for better spacing; but allowed the miscopied C to stand in the final chord, making a first inversion of an augmented triad. It should be B; an imperfect cadence:

Playford, 1683

Purcell, 1694
Purcell, undoubtedly, was fully occupied with his operas when he was called upon to re-write Book III of the "Introduction", and he probably gave less serious consideration to it than he might have done if he had had fewer commitments. However, it was the only theoretical treatise that he wrote, and is of great interest. Pages 85-100 (i.e. the first 15 pp. of the Third Book), are mostly a rearrangement of Playford's rules for two-part composition, retaining the examples which Playford borrowed from Simpson's Division-Viol (1659), Locke's Melothesia (1673), Coperario's Rules How to Compose (c. 1610) and Butler's Principles of Musick (1636). The following 44 pp. are completely rewritten.

Whereas Playford's rules for "Fuge" and Canon had been very brief, (and based upon Elway Bevin's "Brief and Short Instructions of the Art of Musick", 1631, and Coperario's "Rules How to Compose", c. 1610), Purcell, a genius with contrapuntal techniques, devotes 16 pp. to the art of imitative writing in 2, 3 and 4 parts, and so loses himself in the pleasure of writing all kinds of "Fuge" (double fuge, per arsin and thesin, per augmentation, per recte and retro, etc.), always using the same "point" (i.e. subject), that he quickly forgets his undertaking to be "plain and easie", and the "young practitioner" is left to struggle as best he can.

The contents of the Third Book were as follows:

p. 86 "The Perfect and Imperfect Cords and Discords with their Octaves."
p. 87 The rules for taking concords.
p. 91 "The Use of Discords on holding notes."
p. 92 "Of taking Discords."
p. 95 "Several Examples of taking Discords Elegantly."
p. 97 "Example of Cadences and Bindings in Three Parts."
p. 98 "An Example of the Usual Cadences of Closes of Two Parts."
p. 98 "Rule of Rising and Falling one with another."
p. 99 "Of the Passage of the Concorde."
p. 101 Composing in 2 parts, starting with the treble.
p. 102 Analysis of Example of 2 parts.
p. 105 The two keys in music (major and minor), and their principal notes.
p. 106 "Of Fuge or Pointing" (i.e. Imitation).
p. 108 "Imitation or Reports".
p. 109 "Per Arsin and Thesin."
p. 110 "Per Augmentation" (and diminution).
p. 112 "Recte and Retro."
p. 113 Double Descant (i.e. invertible counterpoint).
p. 114 "Canon."
p. 115 "Composition of Three Parts."
p. 116 It is good for the 2 upper parts to move in thirds.
p. 116 The 2nd treble should always be below the 1st treble in an Air, but the parts may cross in a Sonata.
p. 117 "Plain Fugeing in three parts."
p. 118 "Double Fugeing" (in 3 parts).
p. 119 "Per Arsin and Thesin" (in 3 parts).
p. 121 "Per Augmentation" (in 3 parts).
p. 122 "Recte and Retro" (in 3 parts).
p. 122 "Double Descant" (in 3 parts).
p. 124 Example of Fuge by Lelio Calista.
p. 125 Triple Fuge.
p. 125 Canon.
p. 126 Example "Gloria Patri" Canon 3 in one.
p. 129 "Composition of Four Parts."
p. 129 The upper parts should be close together.
p. 129 Sharpened notes in the bass never have an 8ve above them, but a 6th.
p. 131 The False Fifth (i.e. diminished 5th).
p. 131 "The sharp 7th and the flat 7th" (i.e. Maj. and Min. 7th).
p. 132 "The flat 6th before a close" (i.e. minor 6th: 7 7b)
p. 132 "The 3rd and the 4th together to introduce a Close" (N.B. The Example shows a 5th and a 6th together).
p. 133 Discords over a pedal bass.
p. 134 "Plain Fugeing" (in 4 parts).
p. 135 "Double Fugeing" (in 4 parts).
p. 136 "Per Arsin and Thesin" (in 4 parts).
p. 137 "Per Augmentation" (in 4 parts).
p. 138 "Recte and Retro" (in 4 parts).
p. 139 "Four Fuges, interchanging one with another."
p. 140 "A Canon; Four in Two." (Miserere mei).
p. 141 "A Canon; Four in One." (Glory be to the Father).
p. 144 "Composition of Five or more Parts."
p. 144 "Composing on a Ground."
Purcell's version of the Third Book was retained in the "Introduction" until the last edition in 1730, that is, through seven further editions.

In the 1697 edition, the whole of the First Book was rewritten by an anonymous person, and described thus on the title-page:

"I. The Grounds and Principles of MUSICK according to the Gamut; being newly written, and made more Easie for Young Practitioners, according to the Method now in Practice, by an Eminent Master in that Science."

The author did not make the rules "more easie", but pedantically substituted Playford's simple, short statements, for long, rather wearisome discourses on the rudiments, giving six pages to the gamut alone. In this edition the "Discourse for Singing after the Italian manner" was relinquished, and the author replaced it with a new chapter entitled "The Trill or Shake", (p.31), "the most principal Grace in Musick, and the most used." This version of the First Book was retained up to the last edition.

The 1700 edition was different only in that it was a new impression with new pagination, some small alterations to the text, and, as remarked earlier, the psalm tunes which were revised for the 1694 edition, nearly all reverted to the 1687 edition versions. That John Playford's memory was not yet dead is proved by the insertion of a new elegy by Nahum Tate. (This Elegy was set to music by Purcell in 1687.)

The 1703 edition was the last edition to be published by Henry Playford. He lacked the enterprise and imagination which his father had shown in keeping the book alive, and was unable
to think of anything new to put in it after an interval of three years since the preceding edition. He retired from the business altogether in 1707, and it was taken over by John and Ben Sprint who published the last four editions. These were practically devoid of new material: a new portrait of John Playford appeared in the 1718 edition, the fifth different portrait to appear in the history of the book, and the 18th edition was "done on the New-Ty'd Note" (1724). This refers to joining groups of quavers or shorter notes by a line instead of writing them separately, and was first described by John Playford in the 1658 edition, although he continued to employ the old method.

There were, in fact, seven editions (1662, 1667, 1703, 1713, 1718, 1724, and 1730) which had no alterations to the text, which contradicts the statement in Grove's Dictionary (1954 ed. p.825) "There are variations both of the text and musical examples, frequently extensive and important, in every edition of the "Introduction"."

One last correction: some writers (S. Pepys, Diary, 22.11.1662, and Dr. Burney, History, Vol. III, p.418) have mistakenly called John Playford a printer. Burney refers to him as "the most intelligent printer of music during the last century". He was never a printer; all his publications name the man who printed them for him.
CHAPTER III

THOMAS SALMON'S "ESSAY TO THE ADVANCEMENT OF MUSIC"

Early in 1672, Thomas Salmon, a young man of 24 who had recently taken the degree of M.A. at Trinity College, Oxford, wrote "An Essay to the Advancement of Musick, By Casting away the Perplexities of Different Cliffs. And uniting all sorts of Musick, as Lute, Viol, Violin, Organ, Harpsichord, Voice, Etc. in one Universal Character", which was published by his music master, the renowned John Birchensha.

There are three main reforms proposed in this tract:

(1) To replace the complicated note-names of the old Gamut by seven letters encircling themselves in several octaves.

(2) To place the seven notes and their octaves constantly upon the same lines and spaces of the stave, so that the old clef signs (\(\text{\textcopyright}\), \(\text{\textcopyright}\) and \(\text{\textcopyright}\)) are unnecessary.

(3) To replace lute tablature by staff notation.

In the 17th century many musicians shared a general opinion about the muddled state of musical theory. Salmon considered that the most confusing element that beset the music student was the scheme of clefs; and truly it must have been a big obstacle at this period as the F, C and G clefs were frequently moved up and down in any one piece to avoid the use of leger lines. He was also astute enough to see that it was not necessary to spend hours memorising the complicated names of the notes in the old Gamut.
The Title-page of "An Essay To the Advancement of Musick" by Thomas Salmon. The symbolism of this picture shows a hand from heaven presenting a young musician with Salmon's new consistent stave system, which will enable her to play her four different instruments without having to master the complexity of the several clefs which are shown on the right-hand page.
An Essay
To the Advancement of Musick
by
Thomas Salmon M.A.
The principal innovation which he proposed to the musical world was the abolition of all the old clefs, and the introduction of a constant 5-line stave on which the notes are always on the same lines or spaces, their pitch position being denoted by a letter at the beginning of the stave: Tr (Treble), M (Mean) and B (Bass). Here are the two systems side by side:

TREBLE

\[
\begin{array}{c}
\text{\textbf{F}} \\
\text{E} \\
\text{D} \\
\text{C} \\
\text{B} \\
\text{G} \\
\text{A}\text{\#} \\
\text{\textbf{C}}
\end{array}
\]

MEAN

\[
\begin{array}{c}
\text{\textbf{F}} \\
\text{E} \\
\text{D} \\
\text{C} \\
\text{B} \\
\text{G} \\
\text{A}\text{\#} \\
\text{\textbf{C}}
\end{array}
\]

BASS

\[
\begin{array}{c}
\text{\textbf{F}} \\
\text{E} \\
\text{D} \\
\text{C} \\
\text{B} \\
\text{G} \\
\text{A}\text{\#} \\
\text{\textbf{C}}
\end{array}
\]

The simplicity of the octave system is ingenious, but not without defects. The first drawback that comes to mind is that in a rapid instrument passage, a pitch-letter would have to be inserted between two short notes in a leap, thus:

And it is disconcerting to the eye when a leap that ascends in pitch is written on the stave like a descending leap and vice versa. Moreover, in a century when keeping time was
considered a difficulty (Cf p. 182 where this is discussed) musicians would undoubtedly view suspiciously the insertion of pitch-letters where they would distract the attention from the tactus. The greatest drawback of all, of course, is that if the new method of notation had been accepted, it would have rendered the vast mass of music already in print and manuscript obsolete, and this would have necessitated either reprinting the earlier music, or the additional burden of learning both systems. One might venture to suggest that if the whole idea had generated in Italy, perhaps it would have been universally adopted since Italy was the leading model for musical Europe in the 17th century; but to ask English musicians to accept a new system of notation, invented by an Englishman — why nothing could be more ridiculous!

The first composer to rush to the defence of the existing system was Matthew Locke in his "Observations upon a Late Book Entitled, An Essay to the Advancement of Musick, etc." written in April, 1672, in which he tells us:

(p. 3) "Be pleased then to know, that about three years since, our Universal Essayer made his address to me for instructions in composition; but I, never having contrived any method that way, referred him to Mr. Simpson's Compendium of Practical Musick for the first Rudiments, and to Mr. Birchensha (his now Publisher) for his further advance; assuring him I knew no man fitter for that purpose; it being in a manner his whole business. This advice was civilly and kindly taken, and after a short time put in execution."

Locke first argues the case for the old Gamut or Scale of Musick. He gives this diagram of the Gamut, and with it we have to compare Salmon's proposal to abolish these confusing note-names,
and substitute the simple letters G A B C D E F G.

(p.10) THE GAMUT OR SCALE OF MUSICK

\[\begin{array}{ccc}
\text{ee} & \text{la} \\
\text{dd} & \text{la sol} \\
\text{cc} & \text{sol fa} \\
\text{bb} & \flatfa \#mi \\
\text{aa} & \text{la mi re} \\
\text{g} & \text{sol re ut} \\
\text{f} & \text{fa ut} \\
\text{e} & \text{la mi} \\
\text{d} & \text{la sol re} \\
\text{c} & \text{sol fa ut} \\
\text{b} & \flatfa \#mi \\
\text{a} & \text{la mi re} \\
\text{G} & \text{sol re ut} \\
\text{F} & \text{fa ut} \\
\text{E} & \text{la mi} \\
\text{D} & \text{sol re} \\
\text{C} & \text{fa ut} \\
\text{B} & \#mi \\
\text{A} & \text{re} \\
\text{C} & \text{ut} \\
\end{array}\]

[1] Duraleis, Naturalis, Modarlis

[1. These three words relate to the B in the hexachord: sharp, natural and flat. For a full explanation see page 100]

It might be easier to perceive these note-names as they were set forth by Salmon, thus:
The Gamut as set out by Locke demonstrates how the note-names are formed by adding to each letter-name all the possible sol-fa names in the G, C and F hexachords. It was the task of all music students to learn the Gamut and be able to say the note-names both up and down, and to say whether they were in line or in space. This practice was about three hundred years old and was quite out of date. Composers for years had been using lower notes than Gamma-ut, the theoretical lowest pitch recognised by the old system; and likewise the higher compass for both voices and instruments had long extended above ee-la. The system might have been granted some advantage if it had consistently given a different pitch-name to each note, as it was claimed to do, but one sees at a glance that F fa ut is the same name in each octave; and verbally there is no difference
in name between B♭fa ♭mi and bb ♭fa ♭mi, and a la mi re and aa la mi re, in the two upper octaves.

In spite of Locke's support, the old Gamut did pass out of existence at the end of the 17th century, and this may have been due partly to Salmon's Essay. It was the only innovation of his that was accepted, though as it was included in the rudiments of music for a further thirty years or more after the publication of his Essay, one cannot credit him with its dismissal, though it might have been his influence which slowly seeped into the minds of English musicians.

The proposal to replace lute tablature by staff notation was another attempt by Salmon to simplify and narrow down the rudiments of musical notation, "and establish all Music in one constant and universal order." Once again he has the learner's interest at heart, for there is no record of a complaint made by a skilled lutenist against lute tablature; though much of the music in the vast repertory of lute music in manuscript certainly looks undecipherable.

The great characteristic of lute music is its contrapuntal character, yet Salmon uses for his illustration an unmasterly piece by John Rogers called "Aarons Gigue": (Between pp. 66 & 67)
1. Salmon advocates a four-line stave whenever possible. The bottom line is always G.

2. The letters under the stave are the note-names of the bass line, but their octaves are not indicated. In the tablature version the bass notes are an octave lower.

3. Salmon has devised the small letter to indicate a thumb-stroke.

4. Each line of the tablature represents a lute string. The tuning was not regulated, though the most frequent tuning was:
5. Letters below the tablature relate to the open bass strings sometimes found fitted on the lute.

6. The small letters in the spaces of the tablature represent the notes: a = open string, b c d e etc. represent the semitones marked on the neck of the lute by gut frets. The dots under the letters indicate the fingering.

7. These signs indicate the duration of the note and are corrupted forms of ordinary notes. The plain vertical stroke would commonly signify a semibreve.

8. When a note-length sign occurs only at the beginning of the measure, the notes are of that length until it is contradicted.

9. A cross signifies an ornament. Salmon did not give their equivalents in the notation.

A comparison of the two notations leads one to believe that Salmon's version is a great improvement, but this is due to the simplicity of the piece, and is misleading. The one advantage which staff notation would have over lute tablature, not mentioned by Salmon, or evident from the example, is that it would indicate different time-values or different rhythms which occur simultaneously, thus making the interpretation of an intricate polyphonic passage more apparent; giving a more musical understanding of the piece; and making transcription for key-board possible, and more certain than it is from tablature.

Matthew Locke's comments on this proposal are interesting
because he was in favour of the noisier instruments that were becoming popular:

("Observations", p.36)
"His dear Empress the Lute, which his romantic brethren (if he speak truth) do so infinitely admire, brings up the rear of his examples; but with the like success (poor dumb thing) as the rest: For at first dash (as a true friend to Confusion) he sets her at defiance with her sister Instruments, by buzzing her in the head, that she is supreme; which is as absolute a Tale of a Tub (how eloquently soever told) as ever wanted bottom or truth; the Harpsichord and Organ far exceeding her in Compass and parts, the Viol and Violin in loudening and softening, and continuing a note or sound, Sagbuts and Cornets the same; every Instrument having one or other excellency proper to itself: The conveniency of its being portable and useful at the same time is common to most other Instruments: That true excellency which is peculiarly hers, is the making of a complete consort with the stop of one hand only; which he (notwithstanding all his gay commendation) has absolutely robbed her of in his confounded Example of Arrons Jig, his way of writing being incapable of containing the Parts of a well-composed Lute-lesson, without all the absurdities before mentioned."

Unfortunately, Locke's arguments are not profound; his language is abusive, and in spite of the fact that he dedicated his "Observations" to the Gentlemen of His Majesty's Public and Private Musick, he includes some very ribald comments. In Thomas Salmon's answering essay entitled "A Vindication of an Essay to the Advancement of Musick from Mr. Matthew Lock's Observations By enquiring into the real nature, and most convenient Practise of that Science", dated June, 1672, he enlarges upon the proposals in his first "Essay" and replies to Locke's arguments intelligently, but cannot restrain himself from retaliating to Locke with some equally abusive remarks. Take, for example, this legitimate criticism by Locke regarding Salmon's octave system beginning on G and not A; followed by Salmon's reply:
MATTHEW LOCKE: ("Observations", p. 28)

"His swallowing the old way of alphabetical Numeration, without giving any account why he commences with G and not A, (as the honest Horn-books and Kalenders do,) was no small oversight; for had he done it, it might in some measure have answered the hungry Gapers after his pretended Invention and Reformation: but being omitted, they still remain Seekers: And I with them, had there not been a (p. 29) happy accident of meeting with an Acquaintance and worthy Neighbour of his; who assured me, the sole reason of his proceeding that way, was, because G was the Dominical Letter that Year he writ; which, how admirably it demonstrates the Excellency of his Invention, the very Rabble, his dear Cronies as it seems (pag. 78) will confess, and give him thanks for. But in earnest, had I occasion to quarrel with that account, I should have thought it rational to have reformed it, by taking the Alphabet endwise; which, in all probability, would have freed us from those perplexities he says we are involved in."

THOMAS SALMON: ("Vindication", p. 50)

"Now to allay my hopes of the least success, he here insinuates a Question, so very profound and unaccountable, 'That there be many hungry Gapers, who remain seekers, and I (saith he) with them.' The thing is this, that by beginning my 8ve with G, I contradict that Classical Horn-Book he learned, which began (when he was a School-boy) with great A. No Sir, though this was haled in, only for an opportunity to show his education; yet rather than my 'worthy neighbour' shall suffer for his suggestion of the Dominical Letter, I will insert as much as I know of the matter.

The reason why I began my 8ve with G, was, because the general practice of Musicians is so to do: which I professed never to contradict, but when there were 'very good advantage to be gained thereby' (Ess. p. 41) especially mine being a circular way, it was no matter where I began, so long as the letters went round in their own order.

But the Original I suppose was this, that Guido in the year 1024, recovering Music out of its dark ruins, (which those unhappy times had caused) compiled that Scale which we are now discoursing about: So that the assignment of the Alphabetical letters being altogether in his power, he began the Gamut with the first great letter of his own name, that he might perpetuate his memory to posterity.

Which (if we consider the nature of the thing) will appear very reasonable; (p. 52) for though G have the first sound assigned to it, Yet A is the first Musical
Interval; there being nothing of Music, without composing two sounds together; that G is in truth only the term from which the sound A arises, as F to G, etc. which may be easily perceived, by the circle in the Diagram..."

Locke had the last word in this controversy in a publication entitled "The Present Practice of Musick Vindicated Against the Exceptions and New Way of Attaining Musick Lately Publish'd by Thomas Salmon, M.A. etc.", dated 1673, which is nothing but an onslaught of captious arguments. Also in this tract is "Duellum Musicum" by John Phillips, (the nephew of John Milton), a supporter of Matthew Locke who pours pages of scurrilous abuse on Thomas Salmon and his Essay, and not one sensible word of logical criticism; and a Letter from John Playford. Playford was provoked to enter into the dispute by this passage from Salmon's "Vindication": (p.32)

"It deserves a smile to see how arrogantly he assaults my Publisher [John Birchensha] (a person who for his knowledge and industry in Music deserved rather his encouragement than envy) for complaining that the ancient and modern Authors were 'obscure' in their Musical writings; so that we ought to believe they were (p.33) very easy and plain when our Observer read them; and we may safely believe they were: for there is a cross thing, the restraint of Languages, that makes me believe they may have lain abed and slept all their days, for anything the Observer knows; who is capable of reading few more than Mr. Morley, Mr. Simpson, Mr. Greetings instructions for the flageolet; and above all, his good friend and hirer, Mr. John Playford (who so learnedly styles himself) Philo-musicae."

Playford first indulged in this title in his "Introduction to the Skill of Music", 1662. Few people begrudged him this whim, for he was held in great esteem, as may be gathered from this paragraph in John Phillips "Duellum Musicum" which was included in Matthew Locke's next essay, "The Present Practice of Musick
Vindicated etc.", 1673.

(p. 28) "But I shall leave that Idol of Bell and the Dragon, to be altogether demolished by a Person, whom the Vindicator (i.e. Thomas Salmon) seems very much to slight, even Mr. J. Playford himself, whom I think an Antagonist deep enough in all Conscience for such a Master of Arts as he is: And that notwithstanding the Vindicator twits him with writing himself Phil-Musicae (a Fault no Scholar would have taken notice of from such a Person) yet I cannot find, but that by his own sedulity he hath attained to more knowledge in Music than ever the Vindicator is like to do; and that he has done more for the Advancement of Musick than ever that Bauble the Essay is like to produce."

Playford must be commended for contesting Salmon's proposals in his own simple and direct manner. It should be noted that he was the publisher of Locke's "Observations" as well as "The Present Practice of Musick Vindicated". By 1673, he had published eleven editions of his "Introduction to the Skill of Music", and it is not surprising to find him belittling Salmon's proposed innovations which would have threatened his thriving trade. However, he was broadminded enough to include an advertisement of Salmon's "Essay" in one of his later books, though this was undoubtedly because of his friendship with John Carr who printed it.

Doris Silbert ("The C Clef in the 17th Century", 'Monthly Musical Record', Oct. 1937) pointed out that although Salmon's "Essay" was licensed in August, 1671, it did not appear in print until 1672. In the interval the printer, John Carr, showed it to Locke and asked him "to write somewhat in commendation of it" (Locke's "Observations", p. 4). Carr and Locke
were both friends of Playford, and it seems likely that the latter read it also. The outcome of this was that Playford, who had formerly published catches, rounds, songs, etc. with C clefs for the upper voices, commenced in 1672 to use G clefs for the upper voices. Playford said in his letter to Salmon:

(p.86) "...If you cast your Eye upon those several Collections of Ayres and Songs, which I have lately published (1672) you will find I have not made use of the C sol fa ut Cliff in all the second Part of the Musical Companion, which consists of Songs of Two, Three and Four Parts; but printed them all in the G or Treble Cliff, as proper to be sung by Men or Boys."

In the first edition of the 'Musical Companion' (1667) Playford had used C clefs. It therefore seems likely that Salmon's plea for the simplification of the clef system struck home, for after 1672 this use of the G clef is peculiar to choral music published in England; the continental publishers continuing to use the movable C clef well on to the 19th century.

Anthony a Wood (Athenae Oxonienses, 2nd Ed., Vol. II, 1721, Col. 1075) records the facts of the Salmon versus Locke case erroneously:

"...these "Observations" [by Matthew Locke] lying dead on the Booksellers hands, was another Title put to it running thus, The present practice of Music Vindicated against the Exceptions and new way of attaining music lately published by Tho. Salmon M.A. etc."

They were not the same publication with a new title substituted, but were two separate tracts, as discussed above.

Such is the unhomogeneous nature of man that if half the people support an idea, the other half can be relied upon to oppose it. Among Thomas Salmon's supporters were John
Birchensha, Anthony à Wood, Dr. John Wallis, Alexander Malcolm, the Scottish music theorist, and Dr. Charles Burney; the "Essay" was also recommended to public practice by the Royal Society in their Transactions No. 80, published in Feb. 1671-2. Sir John Hawkins ("History", 1776, Vol. II, p. 716) was on the side of the opposition. He wrote of Salmon:

"If Salmon had understood more of music than it appears he did, he never would have thought the knowledge of the Cliffs so difficult to attain, nor would he have attempted, by the establishment of a new and universal character, to have rendered unintelligible to succeeding generations the many inestimable compositions extant in his time: notwithstanding this, there is in his manner of writing such an air of pertness and self-sufficiency, as was enough to provoke a man of Lock's temper;..."

Shortly after this dispute, Thomas Salmon became Rector of Mepsal in Bedfordshire, but he did not rusticate for the remainder of his days. In 1688 another tract by him was published entitled "A Proposal to perform Music in perfect and mathematical Proportions". This was in three chapters: (1) The State of Music in General, (2) The Principles of present Practice, according to that Art, and (3) The Tables of Proportions calculated for the Viol and capable of being accommodated to all sorts of Music.

The first chapter contains a loose account of the history of music. This, like other attempts by 17th century writers on music to air their knowledge of musical history, only suffices to prove how ignorant they were on this subject. He concludes the chapter in true Renaissance spirit by expressing his joy at the publication of works by the ancient Greek writers on music.
The second chapter tells us that in the preceding twenty years the octave has had a twofold constitution: that built on major intervals, and that built on minor intervals, having their prototypes in the flat key of A (i.e. A minor) and the sharp key of C (i.e. C major).

The third chapter contains tables of the proportions of intervals. For the viol he has contrived changeable finger-boards, differently fretted according to the key. This would appear to be the central purpose of the whole tract, though it could only have been directed to learners as professional instrumentalists were already capable of playing accurately.

The problem of playing strictly in tune in any key must have continued to prey on his mind, for in 1705 he read a paper to the Royal Society upon the subject and engaged two well-known violists, Messrs. Frederick and Christian Stefkins, to demonstrate his theories. ("The Theory of Music Reduced to Arithmetical and Geometrical Proportions", Phil. Trans. Vol. XXIV.) He also demonstrated this musical experiment at Gresham College at about the same time.
PART II

CONCORDANCES

CHAPTER IV THE RUDIMENTS OF MUSIC
1. THE GAMUT

The word "gamut" was derived from the two names "gamma ut" indicating G, the lowest note of the scale; in the 17th century the word meant the complete musical scale. Most of the comprehensive treatises on musical theory (and some of those on Rudiments), published in the European countries in the 16th and 17th centuries contain one or more diagrams of the Gamut, varying in design from a simple ladder to a complicated geometrical graph. The information usually contained in the various diagrams is condensed into the one following:

(1) (2) The 7 overlapping hexachords. (3) The full note-names

Ordinary letter-names

<table>
<thead>
<tr>
<th>Hexachord</th>
<th>Ordinary</th>
<th>Letter-names</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>la</td>
<td>E la</td>
</tr>
<tr>
<td>D</td>
<td>sol D</td>
<td>la sol D</td>
</tr>
<tr>
<td>C</td>
<td>fa C</td>
<td>sol fa C</td>
</tr>
<tr>
<td>B</td>
<td>mi B</td>
<td>fa mi B</td>
</tr>
<tr>
<td>A</td>
<td>re A</td>
<td>mi re A</td>
</tr>
<tr>
<td>G</td>
<td>ut G</td>
<td>sol re ut G</td>
</tr>
<tr>
<td>F</td>
<td>Dur. F</td>
<td>fa ut Dur. F</td>
</tr>
</tbody>
</table>

The terms Durum and Molle (hard and soft) do not relate to the quality of the hexachord itself, which is the same arrangement of tones and semitones in each of the three hexachords, but to the two
shapes of the letter b: in the hexachord on F the b is round, making a flat, and in the hexachord on G the B is square, making a natural. (N.B. Ravenscroft (MS 1610), Butler (1636) and Playford (1654) misunderstood the meaning of these terms, unless all three of them took their information from an incorrect source, for in their diagrams of the gamut they name the hexachord on C "B Duralis", the hexachord on F "B Naturalis" and the third one, which they place on B flat, "B Mollaris".)

The full note-names in column 3 of the diagram are composed of the letters and the syllables of the one, two or three hexachords to which they could belong. To a limited extent these compound names served to indicate the pitch and differentiate octaves.

It was an essential part of the music student's training to learn and memorise a table of this kind. Morley says:

(p.10) "Then must you get it [i.e. the Gamut] perfectly without book, to say it forwards and backwards. Secondly, you must learn to know wherein every key standeth, that is, whether in line or in space. And thirdly, how many clefs and how many notes every key containeth."

Perhaps the most archaic aspect of the hexachord system was the necessity of mutations when the range of a melody exceeded the six notes of the hexachord. Mutation, or melodic modulation, was a shifting from one hexachord to another, joining the new hexachord on its "Re" when the melody was ascending, and on its "La" when it was descending, e.g.
Molle Hexachord
Ut RE MI FA SOL LA

Durum Hexachord
LA SOL FA MI re ut

Natural Hexachord
Ut RE MI FA sol la

Natural Hexachord
LA SOL FAMIRE UT

Morley's rules regarding mutations were drawn from the "Quatuor principalia" (believed to be by Simon Tunstede, d.1369). He was the last theorist to discuss them, for at the end of the 16th century a new idea was spreading, said to have emanated from Geneva, (W.G. McNaught, "The History & Uses of the Sol-fa Syllables", P.M.A., Jan. 1893), whereby Ut and Re would be dispensed with, and the scale be composed of only four syllables. Forthwith, the 17th century student had to learn the gamut, with Ut and Re in each hexachord, and then proceed to learn the new "fasola" system.

In his treatise of 1597, Morley was already displaying the tendency to omit Ut and Re (cf. exercises on p.18 of his book). Ravenscroft (MS 1610, f.5r) was the first English theorist to use only four syllables in his examples of the scale, and to state that this was customary in England; but it was Thomas Campian, in the Preface to "A New Way of Making Fowre Parts in Counterpoint" (1619) who explained the new system fully. His instructions were later embodied in Playford's "Introduction" (1654), and in succeeding editions they were revised and reworded. Christopher Simpson included similar instructions in his "Compendium" (1667) and thus the system became widespread in this country, though apparently it
was not adopted elsewhere. According to Rousseau ("Dictionary of Music", 1767) this system was peculiar to England; (and as it was continued longer in Lancashire than elsewhere it came to be called 'Lancashire Sol-fa'). The solmization of the octave became:

\[
\begin{array}{cccccc}
\text{fa} & \text{sol} & \text{la} & \text{fa} & \text{sol} & \text{la mi} \\
\end{array}
\]

The constant position of the two semitones, la-fa and mi-fa was an advantage; and at a time when the importance of the leading-note of the scale was implicit in the music of every composer, it was timely to introduce a systematic symbol for the 7th degree of the major scale; none of the theorists mention the application of this system to the minor mode, but in practice it was treated as a mode of the major and the leading note was "se", i.e. sol sharpened.

The arrangement of the syllables was the same for all major keys, similar to the "movable Do" of the Tonic solfa. The main disadvantage from the modern point of view, was that the syllables alone could not be used in teaching singers vocal exercises, in the same way as Tonic sol-fa; they could only be applied to the normal staff notation, since fa, sol and la all occur more than once in the octave. For instance, two consecutive notes fa fa, could mean (1) a repeat of the same note, (2) the leap up or down of a 4th, (3) the leap up or down of a 5th, and (4) the leap up or down of an octave. Despite this ambiguity of the syllables when used disjunctly, the 17th century singers seemed to regard these sol-fa names under psalm tunes of valuable assistance in learning new
melodies. In the 1672 edition of his "Introduction", Playford provided the sol-fa initials under his "Tunes of Psalms used in Parish Churches", and remarked:

(p.73) "...those who are principally concerned are Parish-Clerks, as being the Leaders of those Tunes in their Congregations, for whose use and benefit, I have set down these following Directions, as also the Names of Notes under each Tune."

Sir John Stainer, in his paper entitled "On the Musical Introductions found in certain Metrical Psalters", (P.M.A., Nov.1900), names several English and French Psalters published in the 17th century with both the solmization of each Psalm, and instructions for learning how to sing by Solfa.

Whilst the English were content with the "fasola" system, the continental theorists were trying to improve upon the hexachord by adding a seventh syllable. The Dutchman, Erich van der Putten of Dordrecht broached the subject of introducing a 7th syllable in 1599 ("Pallas modulata", p.54-5); in 1611 Calvisius was strongly advocating the use of "Si" as the 7th syllable ("Exercitatio musicae tertia"); in the same year J.H. Alstead used "Si" as the 7th syllable in his treatise "Elementale Mathematicum". Si was probably derived from the last words - S-ant I-ohannes - of the hymn "Ut queant laxis", which provided the other six syllables.

In 1645, Otto Gibelius ("Seminarium modulatoriae vocalis") proposed the replacement of the unvocal syllable "ut" by "do"; but due to the practice of omitting Ut in the scale, which had been generally adopted in England, "do" was not used here until Tonic Solfa was introduced in the 19th century.

The Guidonian Hand may have continued to be regarded as
a valuable visible aid by some 17th century teachers, but none of the English treatises contained a diagram of it; probably because music frequently extended both below and above the range of the twenty notes of the old Gamut; and also because printed tables of the scale were readily available. In the Aberdeen "Cantus" (1662), the Guidonian Hand is illustrated, but as no instructions are given to the reader regarding the use of it, perhaps the order of the note-names was common knowledge, though, as may be seen in the following drawing of the left hand, the order of the notes was not straightforward:
Apparently there were other arrangements of the note-names on the hand, for Reese says ("Music in the Middle Ages", 1940) "The assignment is not made the same way in all the old MSS. The usual one is as given here [i.e. as given above]." Burney illustrated a Guidonian Hand which was more logical in that the notes follow down each finger in succession, ("History", 1776, Vol.II,p.473), and Grove (Dict. 1954,"Guido D'Arezzo") gives the same one; neither of them mention their source. However, the order of note-names given in the above illustration is the one contained in most earlier treatises, including the five in E. de Coussemaker's collection ("Scriptorum De Musica Medii Aevi", Paris, 1864). The diagram in Plate IV from Mersenne's "Harmonie Universelle" (1636) shows how complicated some of these illustrations could appear. This one contains not only the Gamut but other rudiments of music: on the left side is an obscure diagram showing the intervals within the Tetrachord C to F ascending; at the top is another showing the intervals within the fourth from A to E descending; on the right side are the notes and their equivalent rests; and at the bottom are various characters used in music.

The diagrams of the scale were often far from "plain and easy", and the accompanying explanations were sometimes vague or confusing. The opening pages of these treatises, expounding the gamut at length, must have dismayed many an enthusiastic beginner who had hoped to become a self-taught musician. Yet, strangely enough, once this hurdle had been
Diagram with the Guidonian Hand which appeared in Marin Mersenne's "Harmonicorum Libri" (1635, Book VII) and "Harmonie Universelle" (1636, Book V).
Ordres des sons.

Joint qu'elle montre le Tetrachorde divise en 12 sons, ou 12 chordes à costé gauche, & en haut la même Quadrte diuise en 9 chordes, & que les jointures, & les extrémités des doigts sont marquez des lettres & des syllabes que nous avons expliqué dans cette première partie; comme fait aussi la main de la première prop. du 3 livre des Genres, dont la lecture peut grandement feruir à ce Traité. Mais si l'on desire flouer les raisons de toutes les diuisions de ces Tetrachordes il faut lire les 2, & 3 prop. du 2. livre des Dissonances, ou les 4, 9, & 10 du 3 livre des Genres.
overcome there was a tendency to esteem the Gamut as a valuable asset to music, which took years of reasoning and arguing to break down. Matthew Locke, a musician who generally showed modern tendencies, angrily flew to the defence of the Gamut ("Observations...", 1672) when Thomas Salmon ("Essay..." 1672) dared to belittle it thus:

"That which first of all terrifies a beginner, is a long discourse of Gibberish, a Fardle of hard names and fictitious words called the Gamut..."

Captain Prencourt (c.1702) said it was "the only stumbling block that has hindered abundance of people to learn this charming science." Roger North regarded the Gamut as totally unnecessary and thought students should be spared "the drudgery of conning such pedantique gibberish as the old gamut note-names." Quite early in the 18th century the compound note-names were dispensed with and the letter-names were used instead.

(Note: The theorists who include diagrams of the Gamut in their treatises are listed below:

Ornithoparcus (orig. 1517)
The Pathway to Musicke (1596)
Morley (1597)
J.H. Alstead (orig. 1611)
Salomon de Caus (1615)
Charles Butler (1636)
Marin Mersenne (1636)
Playford (All editions, 1654-1730)
Aberdeen Cantus (1662-1682 edns.)
Christopher Simpson (1667)
2. CLEFS

The use of the clefs in the 17th century differed from present day usage in the following ways:

(1) There was a greater use of C clefs.

(2) It was considered better to move the clefs than to use ledger lines.

(3) B flat (♭) was regarded as a clef, (called the Mi-clef).

Ornithoparcus writing in 1517 (translated by Dowland, 1609) named five principal clefs, viz. $\text{ut}$, $\text{Flaut}$, $\text{Csolfaut}$, $\text{Gsolreut}$ and $\text{Ddlasol}$:

```
\[ \begin{array}{c}
  \text{dd} \\
  \text{♭} \\
  \text{♭} \text{♭} \\
  \text{♭} \text{♭} \\
  \text{♭} \\
\end{array} \]
```

Ornithoparcus calls these the "marked keys"; in the 17th century $\text{♭}$ and dd were sometimes included in diagrams of the Gamut, but were rarely used on the musical stave. (Cf. Butler's remarks.)

Of the B clefs, he says:

"Those Keys which are less principal are two, b round, and ♯ square. The first shows that the voice is to be sung fa, the second that it is to be sung me in the place wherein it is found. And unless one do heedily discern b from ♯, he doth confound the Song (as Berno sayth) even as wine and water being mingled together, one can discern neither."
Barley's "Pathway" (1596) names four usual clefs: G, C, F and B; his explanation of the B clefs is similar to that of Ornithoparcus.

Morley (1597) explained the four clefs in some detail, but the information is basically unchanged. However, it is necessary to explain the 16th century Chiavette system for choral music which Morley used, and which he explained rather ambiguously (p. 274). In order rigidly to avoid ledger-lines, if a voice part went higher or lower than usual the clef was moved up or down, and since the higher or lower range of any one voice part entailed an equivalent change in the range of the other voices of a polyphonic piece; and for this purpose three sets of clefs were devised to keep the voice parts within the range of the staff:

- **High chiavette**
- **Normal clefs**
- **Low chiavette**

Morley says (p. 274) "All songs made by the musicians who make songs by discretion are either in the high key or in the low key"; Morley has translated chiavette to "key" instead of clef. He gives examples of the 1st, 2nd and 4th of the above sets of
clefs, placing a note at the top and bottom of the stave beside each clef to show the range of that voice. He mistakenly calls the normal clefs (chiave naturale) the "low key". He said that the 4th set were used for "compositions for men only to sing."

Morley puts the system into practice on p. 248 when his pupil writes an exercise in the "normal clefs" with a very poor Mean part, since he is afraid "to go out of the compass of his lines". Morley re-writes the exercise in the "high chiavette" so that all the parts may be interesting and better spaced. Morley was the only English theorist to describe this system.

In his MS treatise (c. 1610) Ravenscroft mixed his rules relating to clefs with hexachords. It seems that because the three clefs stand in the position of the three hexachords, he believed they were related (and so did Butler, Cf.), but in fact the clefs were never used to indicate the hexachord; they were placed purely for the convenience of the voice or part.

(f. 4r) "F fa ut \( \frac{4}{5} \) \( \frac{5}{4} \) C sol fa ut \( \frac{3}{4} \) \( \frac{4}{3} \) signifieth \{ b molle Properchant
G sol re ut \( \frac{6}{5} \) \( \frac{5}{4} \) quare
"b Molle signifieth ut in F fa ut with a b flat in B fa b mi and a flat in E la mi

Example

"Properchant is that which carrieth ut in[G] sol fa ut; mi in E la mi; with a b flat in b fa b mi:

"# Quare [Sc. Square. Latin: Quadrate. Usually called b duralis] is called our natural or chantsong and is known by Ut in G sol re ut, mi in b fa b mi and la in E la mi."
(N.B. It should be pointed out that Ravenscroft's definitions of the first two hexachords are inaccurate: b molle had only one flat, and Properchant, or b naturalis, had no flats.)

Charles Butler (1636) said that the three signed clefs "are sufficient for song, though, at the first, were marked Gam ut [♯] also, and Dd la sol [♭♭] as now they are in Virginal and Organ-lessons of exorbitant compass." (p.14). Butler's rules about the "Mi-clefs" show the same confusion as Ravenscroft's:

(p.22) "The Dural, or sharp, has no flat marked and his Ut is in G.
The Natural has one flat and his Ut in C.
The Mollar or Flat has two flats and Ut in F."

As already explained, the Natural hexachord on C has no flat, and the Molle hexachord on F has one flat. This seems very obvious to us; but it may be more than a coincidence that Ravenscroft, Butler and Playford (1654) all gave the same inaccurate rules.

Alstead's (1664) rules and Simpson's ("Compendium", 1667) simply explain the clefs and their functions.

Playford's rules from the first to the last edition contain the basic explanations of the clefs, but from 1697 the reference to "Mi-clefs" is omitted. Also in this edition there is another new comment:

(p.30) "I would have you make use of the Treble Cliff being always placed on the 2nd line from the bottom of your five; the Bass Cliff is not so common as that, altho it's as certain as the other; but the Tenor Cliff is very uncertain, for you may find it placed on every
Line of the five except the uppermost, observing that whatever Line it stands on you ought to call it C solfaut..."

This points to the interesting fact that by 1697 the G and F clefs were in one certain place on the stave. To some extent, Thomas Salmon's "Essay" (1672) had helped to stabilize the positions of the clefs in England. (See Chapter III where this is discussed more fully.)

Alexander Malcolm (1721) wrote ten pages explaining clefs in great detail; he also wrote six pages in support of Salmon's proposal to reduce all music to one clef.

The French theorists, Salomon de Caus (1615) and Antoine Parran (1646) briefly defined the three clefs; they did not include B flat as a clef as did the English theorists in the first half of the century.
3. BAR-LINES, DOUBLE BARS & REPEAT SIGNS

These three auxiliary characters have been grouped together because of their similarity in appearance, though, of course, they differ in age, importance and function.

The Double Bar

The double bar is probably as old as musical notation; certainly in medieval music it was common, though not very consistent; sometimes only a single bar was used; often 3, 4, or more lines were used with decorative flourishes. A feasible clue to the origin of the double bar lies in Ornithoparcus' treatise (1517), where, in his rules for rests he says:

(p. 51) "2. The rest which toucheth all the spaces, is general, where all the voices cease together, and is only to be placed in the end."

The accompanying example is the same as a double bar: 

By the 16th century a double bar of two thin lines was used to divide the sections, parts, stanzas, strains, etc. and the final double bar was elaborately decorated. (In some MS collections of anonymous pieces, these flourishes are the only means of seeing where one piece ends and another begins.) In printing, this flourish was replaced by a thin line coupled with a thick line. None of the theorists who described double bars mentioned this feature of the final double bar; in fact, they all stated that the double bar served to separate the strains, parts, periods, etc. of a song or lesson. (The psalm-tunes and hymns were also divided into short strains by double bars.) It will
be seen in the concordance "Rests and Pauses" that at this period the pause was the acknowledged character for indicating the end of a piece.

In Playford's 1654 and 1655 editions, it is misleadingly stated: "A Double Bar \( \text{\textit{\(\|\)}} \) which divides the strains of a song or lesson" (p.21). The Repeat sign which he gave next was printed thus \( \text{\textit{\(\|\)}} \). In the 1658 edition (p.39) he amended this by saying that the sign \( \text{\textit{\(\|\)}} \) was to be used "for a Repeat of the Ditty or Words of a Song ... which is common in Anthems or Madrigals of 3 or 4 Parts." His definition of the double bar in the 1658 edition (p.39) was: "The double bar divides the strains or Parts that the Lesson or Song is divided into."

This rule remained practically unchanged through all the subsequent editions until the last in 1730. Simpson ("Compendium", 1667) was the only other 17th century theorist to mention it; his definition was similar to Playford's. Malcolm (1721) still maintained that it "separates the greater periods or strains or any particular or simple piece." (p.411) (Robert Bremner echoes this rule in his "Rudiments of Music" (1756).) The other writers probably decided that it was self-explanatory and did not mention it.

The Sign of Repetition

Repetition of sections of a piece is one of the oldest formal elements of music (e.g. Kyrie eleison and Agnus Dei in earliest plainsong). The earliest repeat signs appear in 14th century manuscripts as a bar-line; this could hardly have been
Note: In certain 16th century virginal pieces the double bar with repeat signs was used when a repeat was not intended, e.g. F. V. B. 'Felix Namque', which has repeat signs at the end of each section, though it is very long without repeats.
clear at a time when the same sign sometimes indicated a rest equal to four breves. The use of lines with dots appeared in the 14th century merely to denote section endings and it is likely that it came to be adopted for the purpose of a repeat sign. Morley leads us to believe that English composers copied the sign from the Italians:

(p.99) "When you see this sign :||: of repetition you must begin again, making the note next before the sign (be it minim, crotchet, or whatsoever) a semibreve in the first singing; at the second time you must sing it as it standeth, going forward without any respect to the close. When you come to the end and find the sign of repetition before the final close, you must sing the note before the sign as it standeth, and then begin again at the place where the stroke [i.e. the bar-line indicating the beginning of the section which is repeated] parteth all the lines and so sing to the final close. But if you find any song of this kind without the stroke so parting all the lines, you must begin at the first sign of repetition and so sing to the end, ior in this manner (for saving of labour in pricking them at length) so they [i.e. the Italians] prick all their Ayres and Vilanelles."

Ornithoparcus (1517, Dowland translation 1609) gave these two signs of repetition (p.46)

Ravenscroft, in his MS treatise (c.1610, f.18v) offered a variety of signs of repetition: X X, saying that they are commonly to be seen in "pavins, almaines or galiards." In his "Briefe Discourse" (1614, p.22) he omitted the 3rd of these, but added to different ones: i$ j

Charles Butler (1636) gave one sign for the repetition of a strain, and three signs for repetitions of the words:

(p.37) "A repeat is either of the same notes and ditty together, having this mark $; or of ditty with other notes having this mark #: , or this i$: before which the first word
of the repeated ditty is commonly placed under his note or notes: or of a whole strain; having at the end thereof two pricked bars, through all the rules: thus:

We observed above that Playford's first two editions confused the repeat sign with the double bar. The 1658 edition (i.e. the 3rd different edition of the book, though Playford called the 1660 edition the "Third Edition") gave the sign :$S$: for a repeat of the music, and the sign $\|$: for a repeat of the words. In the 1660 edition he made another change:

(p. 35) "A Repeat is thus marked $S$ and is used to signify that such a part of a song or Lesson must be played or sung over again from that Note over which it is placed."

In the 1672 edition, he added this repeat sign: $\|\|$, and thereafter it was retained until the last edition in 1730.

Christopher Simpson ("Compendium", 1667) was the only other 17th century theorist to mention the subject:

(p. 24) "Two strokes through the Lines signify the end of a strain. If they have pricks on each side thus the strain is to be repeated.

"This mark $\|\|$ signifies a Repetition from that place only where it is set, and is called Repeat."

Alexander Malcolm (1721) gave a more modern definition:

(p. 411) "A repeat is a mark which signifies the repetition of a part of the piece; which is either of a whole strain, and then the double bar, at the end of that strain, which is repeated, is marked with points on
each side of it; and some make this rule, that if there are points on both sides, they direct to a repetition of both of the preceding and following strain, i.e. that each of them are to be played or sung twice on End; but if only one of these strains ought to be repeated, then there must be points only on that side, i.e. on the left, if it is the preceding, or on the right if the following strain: When only a part of a strain is to be repeated, there is a mark set over the place where that repetition begins, which continues to the end of the strain."

(Exs. from Plate 2, Fig. 3)

Bar-lines

Whilst lines drawn through the stave at irregular intervals were not uncommon in earlier times, the bar-line as we know it, was novel in the 17th century, and was undoubtedly one of the important inventions in the history of notation. The cross-rhythms and ligatures which were characteristics of the music of the 13th to 16th centuries did not lend themselves to bar-lines; and to a great extent, it was the development of homophonic music and the use of shorter note-values which made barring possible. In lute tablature and keyboard music, bar-lines were often used in the 16th century; for the rhythm was usually consistent; but in the vocal forms - the madrigal and motet - the separate parts often proceeded in dissimilar rhythms, and barring would only interfere with the freedom of the rhythms.

It was always the custom to bar scores, but the score was only the composer's draft, and as it was considered a professional secret, it was rarely published before the 19th century; (with notable exceptions such as Ballard's scores of
Lully's music, and Walsh's scores of Handel's music). The individual parts were printed without bars until well into the 17th century. Such were all Morley's examples. (In one of his examples, a madrigal by Alexandro Striggio (p.61), there are bar-lines but they are quite arbitrary.)

Coperario's examples were all in score and fairly consistently barred; except for some final notes which were not given a separate bar; and some short examples in an odd number of semibreves (e.g. five semibreves).

Ornithoparcus (1517) did not use bar-lines in his examples which were in individual parts, but he acknowledged that barring was helpful:

(p.83) "It is necessary for yong beginners to make a Scale [i.e. stave] of ten lines, then to distinguish it by bounds, [i.e. bars] so that they may write each time within each bound, by keyes truly marked, least the confused mingling together of the Notes hinder them; yet is it better to compose without a Scale, but because it is hard, let yong men begin with a Scale."

(N.B. In Simpson's annotations of Campian's treatise which was the Third Book of Playford's "Introduction" from 1655-1679, he recommends the use of an eleven-line stave in a similar manner to that of Ornithoparcus.)

Ravenscroft does not use bar-lines in his two treatises, and the songs appended to the "Brieie Discourse" (1614), written in parts, are also unbarred. Campian (c.1619) used bar-lines to the same extent as Coperario (Cf.). Elway Bevin's (1631) examples in score were all consistently barred.
Charles Butler's (1636) remarks on barring are interesting for he makes a distinction between barring when "setting of Discant" (by which he means setting "points" against a cantus firmus in longer notes), and "setting counterpoint" (i.e. when "the notes of all the parts are of equal time and number and go jointly together.").

(p.89) "Setting in Counterpoint is after this manner. Having ready the Melodious Part, of your own or of another's invention, first draw so many lines, (or rows or Rules) as you mean to make parts: (4 in this kind is best) then, if this certain part shall be a Mean, prick it down in the fourth line: if a Tenor, in the 2nd: and divide every strain with a double Cross-bar drawn straight through all the 4 lines; and **subdivide them in the middle with a single bar:** ...The Bars will direct you to a present synopsis of all the Notes answering one another; that you may the sooner and surer espy the faults, if any be."

(p.91) "In setting of Discant, (whether it be upon a plainsong or otherwise) first, **at every 2 or 3 semibreves, draw the Bars through all the lines, or parts of your song,** that you may the more easily see, in true music, to contrive your points together, and afterwards espy and correct your errors, if any be in the points, or concords..."

In both cases, Butler's barring is arbitrary, and he obviously regards it as an aid to correctness rather than the means of denoting the rhythmic accentuation. Butler appended an example (similar to a German chorale) to the instructions for "setting in Counterpoint" and barred it after the fashion of his instructions. When Playford borrowed this example for the 1683 edition of his "Introduction" (p.34) he compressed the score into two staves, and gave it alla breve barring. This is given below with Butler's original barring indicated above the stave:
It will be seen that Butler's double bars divide the strains logically; but the single bars are only visual aids, as he has said. Playford's barring is based on his statement: (1660 ed., p. 35) "The single bars serve to divide the Time according to the Measure of the Semibreve."

Simpson ("Compendium", 1667) said (p. 20) that Bars are for distinguishing the Time or Measure, and hints in the accompanying "Lessons for Singing in Exact Time" that their main purpose is as an aid to keeping correct time. Malcolm (1721) said that single bars serve to divide the measures. Roger North regarded the bar-line purely as a means of keeping correct time, and looked back with horror upon the time when there were no bar-lines:
"It is a wonder how the musick of our forefathers was conducted, that had no bars at all, and yet their consorts were solemn, of many parts, and full of restings, but not given to catching divisions. I guess their movements were crotchety, which served to measure the longer notes. But now without Bars nothing is to be done."
4. NOTES, RESTS AND PAUSES

Notes and Rests

The following table showing the range of notes and rests given by the various theorists, discloses the gradual disposal of the Large (or Maxima) and Long as the longest note-values; and the adoption of the demisemiquaver as the shortest note. This appears erratic, but where the late 17th century theorists include the Large or Long rest, a rest of 4 or 8 semibreves is implied.

<table>
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<th>Range</th>
<th>From</th>
<th>To</th>
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</thead>
<tbody>
<tr>
<td>Large</td>
<td>Large</td>
<td>Crotchet</td>
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<tr>
<td>Large</td>
<td>Large</td>
<td>Semiquaver</td>
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<tr>
<td>Large</td>
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<td>Large</td>
<td>Large</td>
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<td>Large (Note)</td>
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<td>Quaver (Rest)</td>
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<td>Large (Note)</td>
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<td>Demisemiquaver (Rest)</td>
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<td>Semibreve (Note)</td>
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<td>Demisemiquaver (Rest)</td>
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<td>Quaver</td>
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<td>Long</td>
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<td>Demisemiquaver</td>
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</tr>
<tr>
<td>Large</td>
<td>Large</td>
<td>Demisemiquaver</td>
</tr>
</tbody>
</table>

With the exception of Ornithoparcus, Ravenscroft (MS), and Antoine Parran, each diagram given by the above theorists has a binary subdivision of all note-values. The three theorists...
named include Long rests equal to three breves, as in the
"Perfect Mood", thus: \[\text{[diagram]}\]. Ornithoparcus says:

(p. 52) "The rest which takes up three spaces, is called of the Mood, which it betokens, and is to be placed only in the perfect Mood."

Ravenscroft (MS) says:

(f. 10v) "The character of a Long in the Mood Perfect carrieth his distance the length of four lines. In the Mood Imperfect the longest character reacheth but the distance of three lines:"

\[
\begin{array}{c|c}
\text{Mood Perfect} & \text{Mood Imperfect} \\
\hline
\text{[diagram]} & \text{[diagram]} \\
\end{array}
\]

Ravenscroft's rule was, of course, quite reactionary at this time, since Morley, writing in 1597, spoke of this in the past tense:

(Annot. p. 118) "But it is to be noted that the Long rest was not always of one form, for when the Long contained three breves then did the Long rest reach over three spaces, but when the Long was perfect then the Long rest reached but over two spaces, as they now use them."

It will be appreciated that notes of shorter values were in use long before their equivalent rests. Ornithoparcus was a little pedantic in this respect, for he says:

(p. 52) "The rests of the two last figures, [i.e. crotchet and minim rests] because of their too much swiftness, are not in use among Musicians."

Minim rests were frequently used in the 15th century, and crotchet rests were not so very rare either. The table shows that from 1658-1687 Playford gave the semiquaver as the shortest note, but the quaver as the shortest rest.
Salomon de Caus (1615) said (p.8) "As to the semiquaver [rest] one never uses it, because the interval is so small that it is not possible to consider it." The Aberdeen Cantus (1666-82) gave a quaver as the shortest rest because it borrowed the diagram from Playford's "Introduction". Simpson also stopped at quaver rests though he referred to semiquaver rests in instrumental music (see below).

A few of the 17th century theorists were ambiguous about the new short notes: Ravenscroft (MS, f.1lr) said that the quaver rest has "on his head bending somewhat to the right side two tittles both in mood perfect and imperfect." He gave this confusing example for quaver notes and rests:

\[
\begin{array}{cccc}
\underline{\text{\textbullet \textbullet \textbullet \textbullet}} \\
\underline{\text{\textbullet \textbullet \textbullet \textbullet}} \\
\end{array}
\]

The semiquaver examples are equally muddled:

"Last of all is the semiquaver whose rest is as before mentioned but trebled in the tittles."

\[
\begin{array}{cccc}
\underline{\text{\textbullet \textbullet \textbullet \textbullet}} \\
\underline{\text{\textbullet \textbullet \textbullet \textbullet}} \\
\end{array}
\]

Christopher Simpson ("Compendium", 1667) giving advice for measuring rests said:

(p.28) "The chief difficulty is in the other two; to wit, the quaver and the semiquaver rests which, indeed, are most concerned in instrument music.

"Your best way to deal with these at first, is to play them, as you would do Notes of the same quantity; placing those supposed or feigned Notes, in such places as you think most convenient."

On the next page, speaking of short notes, he said "When they have three or four strokes, they are demisemiquavers."
Playford's printers seemed reluctant to make a demisemi-
quaver note type. The 1694 edition (p. 21) which shows how many minims are contained in a breve and so on, gives "Etc." after semiquavers. In the 1697 edition (p. 7) this is amended to "16 Semiquavers contain 32 Demisemiquavers or Demiquavers, Etc." without an example in notation; the writer (anonymous) said: "the Printer having none of that Character by him, I was obliged to omit it in the Scale." There were six more editions of the "Introduction" after this one, but the printer never did have that "character".

With the exception of Morley, the theorists approach the subject of rests from the point of view of (1) definition; briefly, a measure of silence; (2) description; minutely describing the shape of each rest-value; and (3) as a problem; how to measure them. On the other hand, Morley points out the musical functions of rests:

(Annot. p. 118) "Rests are of two kinds, that is either to be told [i.e. counted] or not to be told. Those which are not to be told be always set before the song, for what purpose we shall know hereafter. [This relates to Moods where rests were used in conjunction with the time signature.] Those which are to be told for two causes chiefly were invented; first, to give some leisure to the singer to take breath; the second that the points might follow in imitation one upon another at the ease, and to show the singer how far he might let the other go before him before he began to follow. Some rests also (as the minim and crotchet rests) were devised to avoid harshness of some discord or the following c. f. two perfect concordes together." [N.B. Morley says (p. 156) "A minim rest put betwixt two perfect chords of one kind hindreth not their faulty consequence."]

Morley's next remark about rests draws attention to the fact that
in early contrapuntal music, odd rests (i.e. rests equal to 1, 3, 5, etc. notes) were essential to the style: a detail usually overlooked by modern writers:

(p.161) "But withal you must take this caveat, that you take no notes above one minim rest (or three upon the greatest extremity of your point) in two parts, for that in long resting the harmony seemeth bare, and the odd rest giveth an unspeakable grace to the point (as for an even number of rests, iew or none use them in this kind of descanting)"

In madrigal composition, Morley was a stickler for setting the words sensibly; he advised his pupil not to place rests in the parts "till they have expressed that part of the dittying which they have begun" (p.282). As for "separating any part of a word from another by a rest, as some dunces have not slacked to do," Morley considered this "one of the greatest absurdities which he had seen committed in the dittying of music." He singled out and criticised John Dunstable for this, though, of course, rests in words had been common since the 12th century (when the hocket device made it an inevitable characteristic of the style); and have reappeared in music since Morley's time. Purcell used rests in words with excellent effect as, for example in "Hark the ech'ing air" (The Fairy Queen); with onomatopoeic effect in "Ye twice ten hundred" (The Indian Queen, Act III) at the words "pants for breath"; for drunken stuttering in the Poet's song (The Fairy Queen); and like all the composers of arias with long melismata, he sometimes introduced a rest in a word to enable the singer to take a quick breath.

In contrast to the function of rests in contrapuntal music,
it is interesting to observe that in much of Purcell's homophonic (and pseudo-homophonic) instrumental music (e.g. hornpipes, minuets, rondeaux, airs, jigs, preludes, etc.) he deliberately avoids rests of any sort from beginning to end.

**Pauses**

The pause had two purposes in the 17th century (1) to lengthen a note or rest, and (2) to mark the end of a composition; though only Playford and Simpson in the 17th century acknowledged both functions; Malcolm did so later.

The equivocal nature of the pause at this time was probably due to the transience of 17th century terminology, since the word pause itself meant a *rest* (as in French, German and Italian), but the sign (\(\text{\textbullet}\)) had meant "to lengthen the time" since the 14th century.

*Ornithoparcus* (1517) does not specify its purpose; merely saying that the pause sign is one of the less principal signs, called 'Concordance Cardinalis'. Morley did not mention the pause, nor did he use it in his examples, except in a few cases to mark the ending of a piece. Ravenscroft (MS, c.1610, f.18v) said:

"\(\text{\textbullet}\) This wheresoever in any kind of songs you see him demonstrated that there must be made a pause." In his "Briefe Discourse" (1614, p.22) he was less explicit: "...as necessary to all harmonies, pertain certain signs for divers uses, as ... Concordances, or Cardinale [Sc. Lat. concordance cardinalis] thus \(\text{\textbullet}\) as Pauses \(\text{\textbullet}\)"

Butler (1636, p.38) gives the pause one function: "A perfect close is the end of a song, noted thus \(\text{\textbullet}\) or thus \(\text{\textbullet}\); or with two bars through all the lines; or both ways."
Christopher Simpson ("Compendium", 1667, p.24) named the two functions:

"The sign for a close. It is also set, sometimes, over certain particular notes in the middle of songs, when (for humor) we are to insist or stay a little upon the said notes; and thereupon it is called a Stay, or Hold."

In the 1654 and 1655 editions of the "Introduction", Playford said:

(p.21) "A Hold or a Close, put at the end of a Song or Lesson."

(1658, p.40) "A Close is marked thus , which is many times put over a Note in the midst of a song or Fantasie, when the Parts come to a close altogether, and also at the end of a song or Lesson."

(1660, p.36) "Hold is thus made, and is placed over the Note which the Author intends should be held to a longer Measure than the Note contains. And over the last Note of a Lesson."

The last and most accurate definition was retained until the last edition in 1730.

By the time Alexander Malcolm wrote (1721) the pause sign was used to mark the end of a da capo aria:

(p.413) "You'll find over some single notes a mark like an arch, with a point in the middle of it which has been used to signify that that note is to be made longer than ordinary, and hence called a Hold; but more commonly now it signifies that the song ends there, which is only used when the song ends with a repetition of the 1st strain or a part of it; and this repetition is also directed by the words, Da Capa, i.e. from the beginning."

On the continent, the use of a pause at the end of each line of a chorale tune had its origin in the practical difficulty of getting the congregation to finish each line together; the organist filling in the space with a little interlude. To this humble beginning, we owe the sublimity of Bach's chorale preludes.
Note: This idea is open to doubt. Dr. B. Rose suggests that it is more likely that the chorale prelude developed from the practice of improvising on the hymn tune during the Communion, or before, or after the service.
These two signs so similar in appearance but so different in function became regular adjuncts of music in the 17th century. (An early instance of the tie occurs in a printed keyboard piece by Marcantonio de Bologna of 1523, where it is used instead of dots.) Though the terms were still in a state of flux, the signs themselves had become stable:

Tie: curved line joining two notes of the same pitch so that they form a single note. It can be used (1) to join two notes across a bar-line; (2) instead of a dot where a tie is more helpful to the accent; and (3) to make note-values which cannot be indicated by single notes, e.g. ♪.

Slur: curved line over or under notes of a different pitch. In vocal music it indicates (1) that the notes are to be sung to one syllable; (2) that the notes are to be sung in one breath as a musical phrase; (3) that the notes are to be sung legato. In instrumental music it indicates (4) that the notes are to be played with one stroke of the bow; (5) the extent of the musical phrase; (6) that the phrase should be played legato. By the end of the 17th century two more functions were added: (7) in vocal music to indicate a portamento, i.e. a slide from one note to another; (8) in instrumental music to indicate that the second of two notes should be shortened and weakened.
Note: Tomkins sometimes need a square bracket for a tie, thus: [D]
Neither of these signs was mentioned by Morley since they were not used in his music, which was written before bar-lines were adopted, and before it was thought necessary to give the performer more than the notes. In those days the rendering of any piece of music must have varied considerably from one skilled performer to another; when composers added to the score the numerous exacting indications of interpretation which gave music some uniformity in performance, much of this variety was relinquished.

In the early days of music-scoring, long notes and syncopated notes were written through the bar-line (as in Coperario's treatise, c. 1610). The first English theorist to mention the tie and the slur was Ravenscroft ("Briefe Discourse", 1614) and he called them both "connections":

(p. 22) "Connections, when two notes are joined together both for the better ordering of Discords, and the applying of the note to the ditty thus ☞ ☞ ☞ ☞ ."

Charles Butler (1636) describes only the slur, which he calls "a Ligature devised for the Ditties sake" of which he says:

(p. 37) "The ligature of the shorter notes is a semicircle, whose two ends point to the two notes conjoined: as ☞ ☞ ☞ . Sometime, (specially when the notes be many to one syllable) this ligature is signified in the ditty only, by setting that syllable, with a hyphen under the first note, and the following syllable after the last."

Although he does not define the tie, he uses it and makes references to "binding-notes" in the text.

John Playford, in the 1658 edition of his "Introduction" used the term "tie" for a new purpose: to indicate the tying
of quavers and shorter notes into groups. He thought it necessary to draw attention to this practice, since though for a century the music scribes had been writing short notes in this way, in printed music (except for engraving by copper plate, as in "Parthenia"), the use of movable type necessitated the separate printing of each individual note and disjointed short notes were used in English printed music from about 1530 to 1681. The invention of these "tied notes" was not English; it had appeared on the continent some forty years earlier.

(p.31) "Of the Tying of Notes"

(This example shews that many times in songs or Lessons, 2, or 4, or more quavers and semiquavers are tyed together by a long stroke on the top of their tails: And though they be so, they are the same with the other, not differing in the measure or proportion of time, neither by the placing of the tail of a note up or down doe make any alteration."

(Note: It is curious that Playford should distinguish his "tied notes" from "ligatures" - "which do vary in time value by being joined together, and by having their tails upwards or downwards" - when his reader would be most unlikely to know anything about ligatures, and he himself does not mention them.)

In the same edition (1658) he introduces "Tyes or Holds", using these terms for both ties and slurs:
"This Tye or Hold when he is put over the head of two notes, both upon the one line, or one space, it is, that they must be sung or played in one sound.

"If the Tyes or Holds be put over passing notes, as thus

they show that so many Notes are sung to one syllable of a word.

"If such Ties be in Lessons for the Viol, or Violin, they show that so many as are so tyed are to be stroke with once drawing the Bow."

In 1660 (p.35) he called them "Tyes or Binds", altered the words of his rules and gave two different examples, without departing from the principles stated in 1658. These rules were retained in all the editions until 1697 when they were again slightly altered.

The 1703 edition carries this announcement on the title-page: "The Fifteenth Edition / Corrected, and done on the New Ty'd Note". It could hardly be described as "new" since Thomas Moore had been using it from 1681, and the French publisher, Pierre Ballard, had been using it from 1640.

Christopher Simpson ("Division Viol", 1659) calls the slur "an Arch or Stroke" and says that it indicates notes to be "played with one motion of the bow" (p.11). He includes the slur among the Graces, saying that the notes "would not have that Grace or Ornament if they were play'd severally." (p.10). And in his "Compendium" (1667) that the "Arch or
Stroke signifies that many notes are to be sung to one syllable, as Ligatures did in former times." (p.24). Simpson did not define the tie, but he used it frequently in his examples for suspensions and syncopation. Like other 17th century musicians, he did not take advantage of the tie for dotted notes through the bar-line, but wrote the note before the bar-line and the dot after it.

Captain Prencourt (c.1702) defined the "Tye", and North in his assiduous annotations hastened to add that

(f.24r) "The same mark signifies a sort of slur, as when an instrument of the bow is touched so as two or more notes are done with one bow; and by onhanging of the notes one upon another, the same is performed with the voice, or any clavical instrument."

Alexander Malcolm (1721) called both signs the "Slur or Tie"

\[ \text{Tye} \quad \text{Tye} \]

but his explanations of their functions is quite clear:

(p.412) "You'll find a Mark, like the arch or a circle drawn from one note to another, comprehending two or more notes in the same or different degrees; if the notes are in different degrees, it signifies that they are all to be sung to one syllable, for wind-instruments that they are to be made in one continued breath, and for stringed instruments that are struck with a bow, as violin, that they are made with one stroke. If the notes are in the same degree, it signifies that 'tis all one note, to be made as long as the whole notes so connected; and this happens most frequently betwixt the last note of one bar and the first of the next, which is particularly called Syncopation."

Robert Bremner (1762) called the tie a "Dash or Slur", but despite the interchangeable terms, the signs were clearly understood.
6. DOTS

In the 17th century dots and dotted rhythms were passing through an arbitrary phase and might be interpreted in a number of ways:

(1) Normally, a dot beside a note makes that note one half longer.

(2) In compositions in the style of the French overture, dotted notes were given a more pronounced rhythm:

\[
\begin{align*}
\text{J.} & \quad \text{\ is interpreted } \quad \frac{3}{4} \\
\text{or J.} & \quad \text{\ is interpreted } \quad \frac{3}{4}
\end{align*}
\]

(N.B. The double dot was not invented until 1756 when it appeared in Leopold Mozart's "Versuch einer gründlichen Violinschule".)

(3) When dotted notes were used against triplets in another part, the rhythm was modified into a triplet rhythm thus:

\[
\begin{align*}
\text{\ was played } & \quad \text{\ was played}
\end{align*}
\]

(4) Undotted quavers might be played as dotted ones (called inégales): (North, Prencourt's treatise, f. 22v)

Written

\[
\begin{align*}
\text{\ }
\end{align*}
\]

Played

\[
\begin{align*}
\text{\ }
\end{align*}
\]

All the theorists who explained dotted notes gave a definition approximating to (1) above; none mentioned (2) and (3); only Roger North mentioned (4).

As we might expect, the early 17th century theorists
reverted to dots used in earlier notation, such as the dot of perfection which approximated to (1) above; Ornithoparcus (1517), Ravenscroft (MS c. 1610), and Morley (1597) mention the dot of division and the dot of alteration (used in mensural notation). The last two were used for practically the same purpose: to denote rhythmic grouping. These dots were normally placed higher than the melodic line. The group of notes following the dot is always three, e.g.

\[ \text{Equals } 3 \quad 1 \quad 2 \quad 3 \text{ semibreves} \]

\[ \text{Equals } 2 \quad 1 \quad 1 \quad 2 \quad 3 \text{ semibreves} \]

Very often the dot was omitted altogether and it was left to the performer to work out the intentions of the composer. Sometimes a tick was used instead of a dot.

Dots described as (a) the dot of augmentation, (b) the dot of addition, and (c) the dot of perfection, though they derive from mensural notation, mean the same as the modern dot: that the note-value is to be increased by one half; and the terms were retained until the end of the 17th century.

In the "Aberdeen Cantus" (1666) John Forbes, in copying the relevant rule about dotted notes from Playford's 1658 edition, carelessly applied the wrong sentence to the example:

(p. 7) "A further Example of the Prick-Notes, wherein you see your Measure of the Time barred, according to the Semibrief, both by prick Semibriefs, Minims and Crotchets. Example:"
In Playford's 1658 edition, the above sentence accompanied an example of the dot carried over the bar-line, thus:

\[ \text{(p. 23)} \]

The practice of substituting $\frac{1}{2}$ for $\frac{1}{4}$ was a "breaking" or "division" in the French sense. Roger North said of it:

\[ \text{(annotations to Pencourt's treatise, f. 22v)} \]

"it gives a life and spirit to the stroke, and a good hand will often for that end use it, tho not expressed. First it serves to imitate a sort of saltation, different from the walk of the music... and next it gives a spirit to swift playing which they call division... where the air is smarter than if the notes were played plain."

Purcell was very fond of this rhythm and usually contrived to introduce a few measures of it into his vocal and instrumental compositions. By 1700 it was a fashionable folly to play all running quaver or semiquaver figures in a dotted note rhythm.

Another prominent feature of Purcell's (and John Blow's) music was inverted dotting, or the Scotch snap: $\frac{1}{4}$, $\frac{1}{4}$, though Purcell was not influenced by Scottish folk tunes, but by the use of it in early 17th century Italian music. He used it frequently in his vocal music for short first syllables (e.g. cruel, pity, pretty, never - Purcell was inordinately fond of repeating the word "never" in this way - echo, nothing, cannot, shiver, etc.); and for pairs of words when the first one is
short (e.g. let us, trip it, does not, tell us, will not, do not, shall we, etc.); and for a purely dramatic effect for single words such as die, wounds, sing, love, weep, sad, etc. To a lesser extent it occurs in the instrumental music also, and it is often used in accompaniments to imitate the vocal treatment.
7. THE DIRECT

All the theorists who state the purpose of the Direct:

(also called Directory, Guide and Custos), including Morley, Ravenscroft, Butler, Simpson, Playford, Alstead, Malcolm and Prencourt, say practically the same thing: that it is set at the end of the stave to show where the note at the beginning of the next line stands.

Most musicians were still using this sign in the 17th century from force of habit, for by that time the development of a simpler notation, and visual aids such as bar-lines, and accidentals, rendered it unnecessary. In the annotations to Prencourt's treatise (c.1702) Roger North says of it:

(f.23v) "...altho' it be of constant use to write it at the end of the lines, I must confess, I never found any necessity or indeed much use of it; for the least cast of an eye, to the other line, (and it is a sorry performer hath not so much liberty) informs clearer what is to come. Perhaps at the turning over a leaf it may signify somewhat, or as people may have been accustomed to observe it, and then chiefly for the voice, which needs a little more preparation for the tone, than the hand on an Instrument."

It probably served as a useful aid before the 16th century, when so many notes (and complicated ligatures and dots) were crowded onto a long stave without bar-lines; taking into account the varied cross-rhythms, and the sketchy underlaying of the words, one may appreciate that earlier musicians had to give their attention to each note, and could hardly have risked giving "the cast of an eye to the other line."
8. LIGATURES

The number of theorists who included rules for Ligatures in their treatises is small: confined to those who wrote rudiments; and with the exception of the "Aberdeen Cantus" (three editions, 1662, 1666 and 1682), they were all published before the mid-17th century:

- Ornithoparcus (Original 1517, Dowland's translation 1609)
- "Pathway to musicke" Anon. (1596)
- Thomas Morley (1597)
- Thomas Ravenscroft (MS "Treatise of Musick", c.1610)
- Dr. Charles Butler (1636)
- The Aberdeen Cantus (1662, 1666, 1682)

By 1500 all the complicated ligatures were obsolete, and even simple ligatures were rare. It is surprising that they survived in the music curriculum as late as the 17th century, since by that time one may be fairly certain that music of the 15th century and earlier was not performed; very few musicians had access to such music; and only the music theorists would have taken the trouble to examine closely music having an obsolete notation. There seems to be one main reason why these 17th century theorists included ligatures in their treatises and that was because they were emulating the eminent 16th century theorists, (e.g. Franchinus Gaforus, Tinctoris, Glarean, etc.)

Ornithoparcus' rules are the clearest of the group to be examined, though they do not include every type of ligature, and he does not provide coherent examples. His rules are quoted in extenso below, and will be used as a criterion for the rules given by later writers; but as he did not give systematic examples,
more appropriate ones are given below.

(p.40) [I] General Rules for the Ligatures

1. There are four ligable Notes, that is a Large, a Long, a Breve, and a Semibreve.
2. Every Ligable Note, except a Large, may be figured with a two-fold body, a square body, and a crooked. [i.e. oblique]
3. Every ligable Note is to be judged according to the ascension and descension, either of itself, or of the Note following.
4. Every ligable Note is either beginning, middle or final.
5. The Accidents of simple Notes, say for example, alteration, imperfection, and the like (as Franchinus witnesseth) are also the Accidents of the bounden Note.

[II] Rules for the beginning Notes

1. Every beginning (whether straight or crooked) wanting a tail, when the 2nd note descends is Long. [Ex. A]
2. Every beginning Note without a tail, if the 2nd Note ascend, is a Breve. [Ex. B]
3. Every beginning Note having a tail downward on the left side of it, is a Breve. [Ex. C]
4. Every initial, howsoever fashioned, having a tail on the left side upward, is a semibreve, together with the note next following; so that you need not care whether it ascend, or descend. [Ex. D]

A B C D
LL L8 b8 bb BL bb bb bb ss ss ss ss

[M = Maxima, L = Long, B = Breve, S = Semibreve.]

[III] Rules for the middle ligatures

1. Every Note betwixt the 1st and the last is called middle.
2. Every middle note howsoever shaped, or placed is a Breve. [But see [II] 4 above.]
3. A Long may begin and end a Ligature, but can never be in the middle of it. [According to Morley (Cf.) any middle note with a tail on the right side is a Long.] [Exs. A C and E]
4. A Breve may be in the beginning, middle and end of a Ligature very fitly. [Exs. B C E and F]
5. A Semibreve may be in the beginning, middle and end of a Ligature: so that it have a tail in the left part upward. [Exs. D F and G]
IV  Rules for the final ligatures

1. Every last Note that is straight, [i.e. square] and descends, is a Long. [Exs. A C and H]
2. Every final Note that is straight, and ascending, is a Breve. [Exs. B C F and I]
3. Every crooked final whether it ascend or descend, is a Breve. [Exs. A B C and J]
4. A Large wheresoever it is set, is always a Large. [Ex. K]

As we said earlier, Ornithoparcus' rules are the clearest of the six sets published in English in the early 17th century, but it will be apparent, (especially to the reader who is unfamiliar with ligatures), that one could not learn to use or interpret ligatures from these rules. This method which was commonly followed of classifying them into three groups - beginning, middle and final - though it was a system of sorts, would take a long time to memorize, since it shuffles up the other factors, e.g.

1. Whether the ligature ascends or descends.
2. Whether the ligature is in square notes or oblique.
3. Whether the tails go upwards or downwards.
4. Whether the tails are on the right or the left.
The earliest English publication to include information about ligatures was the anonymous treatise published by William Barley in 1596. (As so much of this book comprises translated excerpts from Beurnusius and Lossius' treatises, it seems likely that the whole treatise is a compilation of such borrowings.) The definition of a ligature is given, and three kinds of ligature named: "That which begins, that in the midst, and the last." That, along with 24 examples, is the sum of the instructions for ligatures. The examples have a number under each note to indicate the value by number of semibreves (e.g. 1 = semibreve, 2 = breve, 4 = long, 8 = maxima); and they are in a rough order of from simple to complicated. (The examples contain many inaccuracies in the numbers unless the ligatures are misprinted. Examples with wrong numbers: 6, 7, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.)

Morley's rules (which follow Gafurius) give the most complete instructions; again presented in the order of "first, middle and last notes". (Note: Only those omitted by Ornithoparco will be discussed here.)

The interpretation of the oblique ligature (which is usually misunderstood by most beginners), is one of the first things which Morley explains:

(p.20) "PHI. "...how many notes doth that character contain which you have set down last?"

\[
\text{i.e. } \begin{array}{c}
  \text{[image of ligature]} \\
\end{array}
\]

"MA. Two. PHI. Where do they stand? For I thought it should
have been set thus

\[ \begin{align*}
\text{because it stretcheth from Alamire to Elami.} \\
\text{MA. The notes stand at the beginning and the end; as in this example aforesaid the first standeth in Alamire, the last in Elami.} \quad [\text{N.B. Ascending oblique = two breves.}] \\
\end{align*} \]

A common "final" note in a ligature (overlooked by Ornithoparcus) is one with a tail on the right, which Morley explains thus:

(p.20) "PHI. "...how if it [the ligature] have a tail on the right side? \\
MA. Then out of doubt it is as though it were not in ligature, and is a Long, thus:

\[ \begin{align*}
\text{and this is true in the last notes as in the first.} \\
\end{align*} \]

Morley was the only theorist in this group who mentioned ligatures in combination with dots:

(p.21) "Where be also ligatures with dots, whereof the first is three minims and the last likewise three minims, thus:

\[ \begin{align*}
\text{And also others, whereof the first is three semibreves and the last two thus:} \\
\end{align*} \]

Lastly, he mentions some rare ligatures, none of which was included in Ornithoparcus' rules. (They were included in
the examples in "The Pathway to Musicke".)

(p. 22) "There be likewise other ligatures which I have seen but never used by any approved author, whereof I will cease to speak further, setting them only down with figures signifying their value of semibreves, whereof if you find one directly to be set over another, the lowest is always first sung."

The 3rd and 4th examples may be more clearly shown:

It should be noted that the ascending oblique ligature \[ \text{[\text{\hfill}]\text{\hfill]} \] was interpreted by Tinctoris (1477) as Long, Breve.

W. Apel's book, "The Notation of Polyphonic Music, 900-1600" follows Tinctoris. Gaiurius (1492) interpreted this ligature as Breve, Breve, and all the theorists under review followed him, including Antoine Parran, the French theorist. However, in the actual music (French and Italian) of the 14th century the first note is always a Long.

In his 'Annotations', Morley explains the purpose of ligatures:

(p. 118) "Ligatures were devised for the ditty's sake, so that how many notes served for one syllable, so many notes were tied together. Afterwards they were used in songs having no ditty, but only for brevity of writing. But nowadays, our songs consisting of so small notes, few ligatures be therein used, for minims and figures in time shorter than minims cannot be tied or enter in ligature; but that defect might be supplied by dashing
the sign of the degree either with one stroke or two, [e.g. $\xi$ or $\xi$] and so cause the ligable figures serve to any small quantity of time we list."

Morley follows this with a brief reference to black or half-black ligatures (called 'coloration') and gives a number of examples (p.119) from Zacconi's treatise ("Practice of Music", Chap.45, 1592). None of the other theorists under discussion mentions coloration.

Thomas Ravenscroft's MS "Treatise of Musick" (C.1610) gives this definition of a ligature: (f.11v) "A Compound note (or otherwise called a ligature) is like a noun adjective which cannot stand by himself but must needs require another to be joined with him both for to shew his nature and property."

He then says there are three kinds of ligature: "those which begin, those in the midst, those at the end." The brevity of his statements followed by 18 examples, with numbers under the notes, is very similar in lay-out to "The Pathway to Musick", and though the arrangement (a random one) of the examples is different to "The Pathway", and the examples themselves are nearly all different, there is a similar proportion of inaccuracy. Even allowing for the negligent handwriting, which makes it difficult to tell which notes have tails and which have not, and which notes are Longs and which Maximas, seven of the examples are wrongly numbered. Ravenscroft was very young when he wrote this treatise - about 20. Perhaps it was because he tried to learn the rudiments from foreign treatises that he gained such a confused knowledge of ligatures. The study of Morley
and Dowland's translation of Ornithoparcus would have given him a clearer understanding of them.

Charles Butler's (1636) definition of a Ligature is based on Morley: (p. 36) "A Ligature, devised for the Ditties sake, is when two or more notes are sung to one syllable. And it is either old, of the Longer Notes, (🎵, 🎪) or new, of the shorter, (🎵🎵🎵🎵🎵)." This relegation of all the complicated ligatures to the sole function of a slur is an over-simplification, and can be accepted only as the 17th century meaning. The original purpose of ligatures is not yet completely known; but among the possible factors to be reckoned with are (1) the advantage of this type of musical shorthand at a time when writing materials were scarce and expensive; and (2) the tendency which prevailed until the 17th century of deliberately making the science of music obscure and mysterious in order to protect the profession from a redundancy of masters; and (3) the skilled "discanters" appeared to welcome these intellectual problems which added more interest to their art.

In his rules for ligatures, Butler departs from his peculiar orthography and branches forth into Latin, largely borrowing from Franchinus Gaiarius. His ability in translating Latin is evident elsewhere in his book, and this exception seems to indicate some uncertainty about ligatures. This is no unfair criticism, for though he was undoubtedly a man of considerable
scholarship, he was not a professional musician nor even an amateur composer; and he would hardly have found the subject of obsolete ligatures inspiring or worthwhile. He gives (p. 36) "three sorts of rules: 1. Concerning Initial Notes; 2. Of middle notes; and 3. Of final notes." Like Ornithoparcus, he omits to mention ligatures with tails on the right side, and ligatures with notes placed one directly above another. From two of his examples we may gather that he failed to comprehend the universal rule that a tail upwards on the left of a note made that note and the one following semibreves. The first example shows that he was misled by the rule that all middle notes are breves. (p. 36) "2. Sursum caudate pro Semibrevi reputatur." (A note with a tail upwards is to be reckoned as a semibreve.)

\[
\begin{array}{c}
\text{\textbf{12224}} \\
\text{[This should be numbered 11224]}
\end{array}
\]

(p. 37) "3. Est obliqua Brevis semper finalis habenda." (The oblique must always have a Breve for its final.)

\[
\begin{array}{c}
\text{\textbf{1 2}} \\
\text{[1 1]}
\end{array}
\]

The correct example for this rule would be: 4 2

John Forbes in the "Aberdeen Cantus" (1662, 1666, 1682) reaches the nadir of unhelpfulness in his rules for ligatures; (one hopes that the Scots were not keen students of medieval music at this time). He gives a definition and three rules:
(1) "...if your first note lack a tail, the second
descending, it is a long."
(2) "If the first Note have a tail on the left side
hanging downward: the 2nd ascending or descending,
it is a Brief."
(3) "Every final Note of a Ligature descending, being a
square Note is a Long."

He gives no indication of the note-values (by number or letter)
so that it would be impossible for a beginner to determine the
interpretation of any of his examples.

The only French theorist who included rules for ligatures
in his treatise was Antoine Parran (1646). He based them on
Gafurius and Glarean. With one exception, his sixteen rules
are consistent with those of Ornithoparcus; each rule has its
appropriate example, and the individual ligatures have numbers
to indicate note-values. The rule which conflicts is:

"Rule 16. When the two first notes are semibreves, those
which follow are breves ascending and descending."

The operative words are "When the two first notes are semibreves",
for he has said in Rule 14 that "All last notes descending in
ligature
ligature direct are longs: in oblique/they are breves." He
consistently places a "2" beneath last square notes descending,
when the first two notes are semibreves, e.g.

\[
\begin{array}{cccc}
11222 & 11222 & 1122 & 1122 \\
\end{array}
\]

The last figure in each ligature should be "4". It is impossible
to say what is the basis for his rule, since in the French and
Italian music of the 14th century the last note in ligatures
similar to those in the four examples above, always equals a long.
There is one exception to the rules just discussed, and that is when in Mensural Notation the Time is Perfect, i.e. when the breve equals three semibreves. This is found particularly in the music of the Netherlands School (14th and 15th centuries); it does not affect the rules given by the aforementioned theorists. The following examples from Adrian Petit Coclico's "Compendium Musices" (1552), compare the note-values in both perfect and imperfect time, in ligatures with the tail upwards on the left, and a descending breve for the last note:

Perfect Time: 1236 12336 1236 126

Imperfect Time: 1124 11224 1124 11\textsuperscript{4}
9. MENSSURAL NOTATION, PROPORTIONS, AND TIME SIGNATURES

Until towards the end of the 17th century, many of the theorists were more pedantic about "Moods" or "Degrees" (i.e. Mood, Time and Prolation) than any other subject, even though the introduction of bar-lines, shorter note-values, dotted notes, and ties, had rendered the old notation obsolete as far as practical music was concerned.

Before proceeding to discuss the subject further, the terms must be defined:

<table>
<thead>
<tr>
<th>Mood</th>
<th>(Great) [ ] (Less) [ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>relates to the subdivision of the</td>
</tr>
<tr>
<td>Prolation</td>
<td></td>
</tr>
</tbody>
</table>

- **Perfect** = ternary subdivision
- **Imperfect** = binary subdivision

In the **Perfect Mood** the Long equals 3 breves.
In the **Imperfect Mood** the Long equals 2 breves.
In **Perfect Time** the breve equals 3 semibreves.
In **Imperfect Time** the breve equals 2 semibreves.
In **Perfect Prolation** the semibreve equals 3 minims.
In **Imperfect Prolation** the semibreve equals 2 minims.

Morley (1597) went into the ramifications of Mood, Time and Prolation thoroughly (pp.23-33, pp.121-6), demonstrating all the possible combinations of binary and ternary subdivisions of notes from the Large to the semibreve. However, most of the other theorists who included this subject, (i.e. Ornithoparcus, "The Pathway to Musicke", Ravenscroft (MS and "Briefe Discourse"),
Antoine Parran (1646), Playford (1654-1687), Simpson (1667), and the Aberdeen Cantus (1662-1682), gave instructions for only four kinds of "Moods", which, in fact, are the equivalents of four basic meters of modern notation:

1. The Perfect of the More
2. The Perfect of the Less
3. The Imperfect of the More
4. The Imperfect of the Less

<table>
<thead>
<tr>
<th>Sign</th>
<th>Modern Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø</td>
<td>9/8</td>
</tr>
<tr>
<td>ø</td>
<td>3/4</td>
</tr>
<tr>
<td>c</td>
<td>6/8</td>
</tr>
<tr>
<td>c</td>
<td>2/4</td>
</tr>
</tbody>
</table>

(The theorists who related the four "Moods" to practical meters, (i.e. Ravenscroft, Butler, Playford and Simpson), did not interpret them in the modern meters given above, as will be shown after the four "Moods" have been further explained.) The subdivision of note-values in these four "Moods" is given in Playford's "Introduction" (1654-1687) in the following manner: (See foot note)

1. The Perfect of the More (i.e. Perfect Mood, Perfect Time, and Perfect Prolation)

2. The Perfect of the Less (i.e. Imperfect Mood, Perfect Time, and Imperfect Prolation)

3. The Imperfect of the More (i.e. Imperfect Mood, Imperfect Time, and Perfect Prolation)

(Playford obviously took these examples from Morley, p.30-31)
4. The Imperfect of the Less (i.e. Imperfect Mood, Time & Prolation)

(See also Appendix II, Ravenscroft's four tables, ff.14v-15r)

That "The Perfect of the Less" was not regarded as triple time is evident from the following excerpts:

Ravenscroft (1614) p. 9 "These two Perfect Moods in these days are of little or no use,..."

Butler (1636) p. 25 "Triple Proportion is when 3 Minims ... go to the semibreve-stroke:... the proper sign where is this C " [i.e. The Imperfect of the More.]

Playford (1654) p. 15 "...all these 4 [Moods] have been of much use in former times, but what our late Masters of Musick have composed either for Voice or Instrument, make use onely of the 2 latter; that is to say, the Imperfect of the More, the Imperfect of the Lesse, one being called the Triple Time, the other the duple, or Common Time."

Simpson (1667) p. 15 "The measure of these 3 Moods [i.e. the first three] was Tripla... The 4th Mood they named Imperfect of the Less, which we now call the Common Mood, the other 3 being laid aside as useless."

In connection with the signs, the following rules were generally observed:

1. The Circle indicated Perfect Time.
2. The semicircle indicated Imperfect Time.
3. The figure 3 indicated Perfect Time.
4. The figure 2 indicated Imperfect Time.
5. The dot in a circle or semicircle indicated Perfect Prolation.
6. The absence of a dot indicated Imperfect Prolation.
7. A stroke through a sign indicated that the time was to be
halved if it was duple time, and divided by three if it was triple time. It was also the symbol for dupla proportion (cf. below). It was used arbitrarily in the 17th century to indicate a quick time.

The signs for the four "Moods" varied a little, as may be seen from the table below:

<table>
<thead>
<tr>
<th></th>
<th>Perfect the More</th>
<th>Perfect the Less</th>
<th>Imperf. the More</th>
<th>Imperf. the Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ornithoparcus (1517)</td>
<td>∅</td>
<td>03 ☢ ☢ ∅</td>
<td>☢</td>
<td>☢</td>
</tr>
<tr>
<td>&quot;The Pathway&quot; (1596)</td>
<td>∅</td>
<td>☢</td>
<td>☢</td>
<td>☢</td>
</tr>
<tr>
<td>Morley (1597)</td>
<td>03</td>
<td>☢</td>
<td>☢</td>
<td>☢</td>
</tr>
<tr>
<td>Ravenscroft (1610)</td>
<td>∅</td>
<td>☢</td>
<td>☢</td>
<td>☢</td>
</tr>
<tr>
<td>Ravenscroft (1614)</td>
<td>∅</td>
<td>☢</td>
<td>☢</td>
<td>☢</td>
</tr>
<tr>
<td>Antoine Parran (1646)</td>
<td>∅, ☢</td>
<td>☢</td>
<td>☢, ☢ [2]</td>
<td>☢</td>
</tr>
<tr>
<td>Playford (1654)</td>
<td>03 [1]</td>
<td>☢, ☢</td>
<td>☢, ☢ [2]</td>
<td>☢</td>
</tr>
<tr>
<td>Playford (1655-87)</td>
<td>03</td>
<td>☢, ☢</td>
<td>☢, ☢ [2]</td>
<td>☢</td>
</tr>
<tr>
<td>Simpson (1667)</td>
<td>∅</td>
<td>03</td>
<td>☢, ☢ [3]</td>
<td>☢</td>
</tr>
<tr>
<td>Aberdeen Cantus (1662-82)</td>
<td>∅</td>
<td>☢</td>
<td>☢</td>
<td>☢</td>
</tr>
</tbody>
</table>

(1) Playford's 0 3 for Perfect of the More is incorrect, for without the dot in the circle, the Prolation would be Imperfect.

(2) Playford's 3 1 for Imperfect of the More, is a further sign that he regarded it as triple time. 3 1 was common in time signatures in the 17th century for any kind of triple time.

(3) Simpson's ⚫ 3 for Imperfect of the More is incorrect, for the figure 3 would make the Time Perfect.
Ravenscroft's sign 2 3 0 for Perfect of the Less requires explanation. In his earlier MS treatise, he subdivided the notes for this Mood in the same way as the other theorists; but in the "Briefe Discourse" he interpreted it Perfect Lesser Mood, Perfect Time, and Imperfect Prolation:

Consequently, in the sign (which he invented himself) the 2 represents the Imperfect Greater Mood, the 3 the Perfect Lesser Mood, and the circle the Perfect Time; (the absence of a dot shows that the Prolation is Imperfect). Ravenscroft cites Morley's treatise as one of his sources of information; but in Morley's "Exposition of the four usual Moods" (p.30), he says: "The Mood Perfect of the Less Prolation is when all go by two except the semibreve..."

Proportions

Proportions were used in conjunction with mensural notation; they were a characteristic feature of Flemish music of the 14th to 16th centuries. Proportional signs were used to alter the note values by arithmetical ratios, indicated by a fraction-like sign, or by a symbol. Morley was the only English theorist to include comprehensive instructions for Proportions (pp. 46-99, and Annotations "What is Proportion", pp. 127-37). The "Table containing all the usual proportions" (p.57), taken from Gafurius' "De Proportionibus Musicis", contains all the theoretical proportions; though most of them were more speculative than practicable. He also provides many musical examples, which (with Mr. Harman's transcriptions)
help towards the understanding of the subject.

The proportions were divided into five species:

(1) genus multiplex \(\frac{2}{3} \frac{4}{1} \frac{3}{1} \frac{1}{1}\)

(2) genus superparticulare \(\frac{3}{2} \frac{4}{3} \frac{5}{4} \frac{6}{5}\)

(3) genus superpartiens \(\frac{5}{3} \frac{7}{4} \frac{9}{5}\)

(4) genus multiplex superparticulare \(\frac{10}{3} \frac{21}{5}\)

(5) genus multiplex superpartiens \(\frac{11}{4}\)

Of these only the first two were commonly used:

<table>
<thead>
<tr>
<th>Dupla</th>
<th>2 4 6 8 12 1 2 3 4 6</th>
<th>genus multiplex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tripla</td>
<td>3 6 9 12 1 2 3 4</td>
<td>&quot;</td>
</tr>
<tr>
<td>Quadrupla</td>
<td>4 8 12 16 1 2 3 4</td>
<td>&quot;</td>
</tr>
<tr>
<td>Sesquialterta</td>
<td>3 6 9 12 2 4 6 8</td>
<td>genus superparticulare</td>
</tr>
<tr>
<td>Sesquiatertia</td>
<td>4 8 12 16 3 6 9 12</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

When a fraction has the larger figure on top, diminution is implied; by using the prefix "sub" and inverting the fractions, the time is augmented: e.g.

Subdupla \(\frac{1}{2}\)

Subtriplina \(\frac{1}{3}\)

Subquadrupla \(\frac{1}{4}\)

Two other branches of this subject were Augmentation and Diminution, which were less mathematical, and used symbols instead of fractions. The rules for Augmentation, based upon the various treatises, are as follows:
1. By the sign of the Greater Prolation in one part of the song i.e. If this sign is in all the parts, it is not a sign of Augmentation but of Greater Prolation.

2. In Augmentation the minim is measured by a whole tact.

3. The rests are augmented as well as the notes.

4. Augmentation is usually in the tenor.

5. A Large is not augmented, because there is no note greater than itself.

Diminution was used more often than augmentation; the symbols used can be related to the proportional signs \(\frac{2}{3}, \frac{3}{4}, \frac{1}{2}\) and show that the new semibreve is equal to a half, third or quarter of the original one. A stroke through a sign thus \(\frac{2}{3}\) halves the time; a stroke through the sign of perfect time \(\frac{1}{2}\) equals a triple diminution; crossed strokes through a sign indicate double diminution: \(\frac{1}{2}\). If the semicircle is reverted, the time is halved; if reverted plus a stroke, it is quartered: \(\frac{1}{4}\). A "retorted" sign may only be used in Imperfect Time (Morley, p. 46). Coloration diminishes the breve (or longer note) by a third part of its value, e.g. The figure two placed beside the sign \(\frac{1}{2}\) is another way of indicating du\(l\)a proportion.

Elway Bevin (1631) purports to demonstrate Proportions by writing over the plainsong in semibreves, 2, 3, 4, 6, 9 notes of equivalent values, followed by sesquialtera, sesquiatertia, Tripla Inductio to Nonupla, and Sesquialtera Inductio to 9 2. Bevin's "Proportions" differ from the earlier ones in that the
the latter were to be considered in relation to the meter of the sections immediately preceding them; each of Bevin's examples is self-contained. The example which he calls "Quadrupla by three" is given below (as it is more interesting than the others);

\[ \text{\includegraphics[width=\textwidth]{music_example.png}} \]

Bevin says at the end of this section "Divers other proportions there are, as Quintupla, Septupla, and such like, which are out of use." Proportions of the kind demonstrated by Bevin, come in Morley's treatise under the heading of "Figuration", with some similar examples, (pp.169-172). In the section "Of Proportion" in Charles Butler's treatise (1636), the same simplified idea of proportions is given, with examples showing so many notes to the tactus (2 1, 6 1, 3 1 and 9 1)

Time Signatures

In the mid-17th century the Italians invented the modern time-signature with the lower figure showing the note-value, and the upper figure how many notes to the measure. Simpson, ("Compendium", 1667) had broken away from the old signs to the extent that he used \( C \) or \( \text{\textcopyright} \) for the "Common Mood", and a figure 3 for "Tripla Time". Matteis (1682) brought to England the contemporary Italian time-signatures:

(p.7) "There are two sorts of Times or Measures in Music, i.e. Common and Triple.

"The Mark of the Common Time"\[ \text{\includegraphics[width=\textwidth]{music_signature.png}} \]
"the mark of the Triple
\[\frac{3}{2}\]

"The first C signifies Slow Time, the 2nd \(\frac{1}{2}\) with a stroke cross signifies Quick Time. The first 3 moves a little quick: the 2nd \(\frac{1}{2}\) with a bar moves very quick.

"There are several sorts of common time and so there are of Triple. Other marks of Common Time:

\[
\begin{array}{c}
2 \quad \frac{1}{2} \quad \frac{3}{4} \\
\end{array}
\]

and of Triple:

\[
\begin{array}{c}
\frac{3}{2} \quad \frac{3}{4} \quad \frac{3}{8} \quad \frac{3}{16}
\end{array}
\]

"The first figure of 2 directs the beating of a Quick Measure after the French Fashion; the 2nd \(\frac{1}{2}\) with a bar signifies Very Quick; the \(\frac{1}{2}\) with a Reverse signifies much the same.

"In Triple the first mark \(\frac{3}{2}\) signifies Slow Time, that is 3 Minims to a Measure, and this [is] used in passionate and melancholique Airs [Airs or Arias?]; The second mark \(\frac{3}{4}\) a little quicker, i.e. 3 crotchets to a measure. The 3rd divides the time equally 3 crotchets down and 3 up. The 4th mark has 12 quavers to a measure, 6 down and 6 up. The 5th is out of use, and so are a great many others that would be superfluous in this place."

The dash through a sign still means diminution; the semicircle signs became traditional for simple duple meters.

In the 1694 edition of Playford's "Introduction" the "Four Moods" were omitted for the first time. Significantly, the chapter before it was omitted also, i.e. "Of the Keeping of Time by the Measure of the semibreve or Master-Note"; since the conception of the semibreve as the tactus had become obsolete, it was no longer an aid to keeping time. The new chapter has an old-fashioned title: "Of the Moods or Proportions of the Time or Measure of the Notes"; but the matter throws light on contemporary English practice:

(p.25) "That there is but two Moods or Characters by which Time is distinguished, viz. Common-Time, and Triple-Time, all
other Variations and Distinctions of Time (like so many Rivulets) take their original from these two; the Marks of which are always placed at the beginning of your Song or Lesson."

It will be observed in the following instructions (1) that the signs for "Common Time" indicate the speed of the four crotchets in the measure; and (2) that the lower figure in a fraction-like sign does not consistently represent the note-value unit.

"First, I shall speak of Common-Time, which may be reckon'd three several sorts; the first and slowest of all is marked thus $C$: 'tis measured by a semibreve, which you must divide into four equal parts, telling one, two, three, four, distinctly...

"The Second sort of Common-Time is a little faster, which is known by the Mood having a stroak drawn through it, thus $\dot{C}$.

"The Third sort of Common-Time is quickest of all, and then the Mood is retorted thus $\ddot{C}$; you may tell one, two, three, four in a Bar, almost as fast as the regular motions of a Watch. The French Mark for this retorted time, is a large figure 2.

"There are two other sorts of Time which may be reckoned amongst Common-Time for the equal division of the Bar with the Hand or foot up and down: The first of which is called "Six to Four", each Bar containing six crotchets, or six quavers, three to be sung with the hand down, and three up, and is marked thus 6/4, but very brisk, and is always used in Jigs.

"The other sort is called Twelve to eight, each Bar containing twelve Quavers, six with the hand down, and six up, and marked thus 12/8.

"These are all the Moods of Common-Time now in use...

"Tripla Time, that you may understand it right, I will distinguish in the two sorts: The first and slowest of which is measured by three Minims in each Bar, or such a quantity of lesser notes as amount to the value of three Minims or one Pointed Semibreve, telling one, two, with your hand down, and up with it at the Third; so that you are as long again with your hand or foot down as up. This sort of Time is
thus 3/2.

"The Second sort is faster, and the Minims become Crotchets, so that a Bar contains three Crotchets, or one Pointed Minim; 'tis marked 3, or thus 3 l. Sometimes you will meet with three Quavers in a Bar, which is marked as the Crotchets, only Sung as fast again. There is another sort of time which is used in instrumental music, called Nine to six, marked thus 9/6, each Bar containing Nine quavers or Crotchets, six to be Play'd with the foot down, and three up: This I also reckon amongst Tripla-Time, because there is as many more down as up.

"These, I think, are all the Moods now in use, both Common and Tripla Time: But 'tis necessary for the Young Practitioner to observe, that in the middle of some Songs or Tunes he will meet with Quavers joyn'd together three by three, with a figure of 3 marked over every three quavers, or (it may be) only over the first three: These must be performed, each three Quavers to the value of one Crotchet, which in Common-Time is the same with Twelve to Eight, and in Tripla-Time the same with nine to six."

These instructions coincide faithfully with contemporary practice, as may be judged by the following comparisons with Purcell's dramatic music:

(1) C : This is generally used for simple quadruple time - as in modern music - but in Purcell's music, it would also indicate slow time. (There are 4 instances where it is used for duple time.)

(2) : This sign is used frequently and impartially for simple duple and quadruple time. In Purcell's music it does not denote the accent.

(3) : This sign is not used.

(4) 2 : This sign is used for both simple duple (35 instances) and quadruple (18 instances) time; its function is to indicate a fast tempo.
Apparently it was not considered necessary to make a distinction between duple time and quadruple time.

(5) 6/4 : This was generally used for both 6/4 and 6/8 time.

(6) 12/8 : This sign is only used once.

(7) 3/2 : This sign is used as in modern music. On three occasions it is used for 3/4 time, when, no doubt, it denoted a slow tempo.

(8) 3 and 3 1 are commonly used for 3/4 and 3/8 time. Purcell used the sign 3/4 in several places.

(9) 9/6 : The sign 6/9 is used once (meaning 9/8). It is difficult to determine what the 6 in the sign meant, unless it was regarded as a compound of 3/2.

It seems that in the late 17th century compound triple and quadruple times really were "out of use" (as Simpson said); they found favour again with the 18th century composers in the Pastorale and Siciliano; and in Bach, the Gigue and Prelude, though he used these meters for a large variety of forms.

Captain Prencourt (c.1702) gave full explanations of time signatures (all amplified by Roger North, ff.18v-20r), differing slightly from the 1694 edition of the "Introduction":

(f.18r) "C and then the time is beaten very slow. \( \frac{3}{4} \) or \( \frac{4}{4} \) with a stroke thro them the time is beaten more lively like the Gavott time. 2 : then the time is beaten quick like the Boree [sc. Bourée] time.

(f.18v) "Tripla Time ... is known by a figure 3 and some other figure set under it. The 3 signifies always the triple time, on that you have 3 Notes for your chief Notes, the lower figure shews you what sort of notes you are to have for your Ground Notes."
"The chief of these triplas are known by these figures 3/1, 3/2, 3/4 etc.

After explaining these three times, Prencourt says:

(f. 20r) "There is another 3 quarter [i.e. 3 crotchet] tripla which is marked with a single 3. The difference is this, that when you see a 3 and 4 viz 3/4 upon the lines, the time is beaten slow like a saraband time, but when it is 3 alone, then the time must be beaten quick like a minuet time.

"Observe that when you see a 6 for the uppermost figure, then the time is beaten equally and you must have 6 Notes for your Ground Notes 3 down and 3 up."

Examples of one measure each are given for 6/4, 6/8, 6/16 and 6/32.

(f. 20v) "When there is 12 for the upper figures, then the time is beaten also equally, but with this difference, that in this tripla time you make 4 movements, 2 in down stroke, and 2 in up, so that you have 12 Notes in a Measure. (Example of 12/8 time.)

The idea of the time-signature denoting the speed of a composition was soon replaced by the custom of using Italian terms along with the sign. Roger North says (Musicall Grammarian):

"The old marks of Common Time, quickening, were $C, \cdot, \cdot, \cdot, \cdot$. Now it is done by description, as Adagio, Grave, Allegro, Presto, Prestissimo; and for humour Andante, Ricercata, Affectuoso, Maninconico, [i.e. in melancholy fashion] Cantabile, and others dayly new."
It has already been observed that the 17th century theorists were fond of borrowing material from their predecessors and including it in their own treatises, regardless of whether or not it was of real practical use to the music students of their own time. Sometimes a subject had been transcribed so many times over the years that it became rather distorted. Such a subject was the "Modes". A comparison of the information given about the Greek Modes shows many variances. The first theorists to write at length about the Greek Modes (and about Greek music in general), were the 6th century Romans, Boethius and Cassiodorus, whose writings were avidly studied by music scholars in the Renaissance. The confusing aspect of this subject with regard to most 17th century writers is that they believed that the ancient Greek modes and the ecclesiastical modes (which still bore the Greek names) were one and the same; whereas they were quite different. Dr. Charles Butler (1636, pp.1-5) perpetrated this error; he gave a full historical account of each mode, including ancient Greek legends and biblical incidents, and described the appropriateness of individual modes for such contemporary forms as fancies, sonnets, anthems, etc.

Playford, who included an abridged version of Butler's chapter on the modes in his "Introduction" from 1654 to 1687, made this artless statement in the 1672 edition:

(p.57) "Of these Moods, though of little use among us, there
is scarce any Author that has wrote of Musick but do give some account of them; ...therefore not intending to be singular, I shall give you this short narrative.

The other two treatises published in England in the 17th century which contained chapters on the Greek Modes were by Ornithoparcus (orig. 1517, Dowland translation 1609), and J.H. Alstead (orig. 1611, Birchensha translation 1664). The French theorists who wrote a chapter on this subject were Salomon de Caus (1615) and Antoine Parran (1646). It would be long and tedious to particularize on what they said about every one of the modes; but in order to see how the descriptions of the individual modes differed, their comments on the Lydian Mode may be compared:

Ornithoparcus (1517, p.36)

"The Lydian mode doth sharpen the wit of the dull, and doth make them that are burdened with earthly desires, to desire heavenly things, an excellent worker of good things. Yet doth Plato lib.3 de Rep. much reprehend the Lydian, both because it is mournful, and also because it is womanish."

Alstead (1611, p.40) "...the querulous Lydian..."

(p.78) "Casus in politicus lib. 8 chap.5 saith thus, Musick is various and manifold. One kind is humble and remiss, as the Lydian..."

(p.79) "The Lydian Mood doth take his course between F and f is divided in c and endeth in f. In a flat song it runneth between b and bb and divided in f and endeth in bb. It is harsh, threatening, and merry. As Plato 3 dial. de rep. who condemneth the Lydian and Ionic Harmony as sottish. This Mood is sharp, and according to Apuleius, threatening: and to Lucian Bacchicus raging."

Salomon de Caus (1615, p.4) "...the Lydian was the invention of Ansion, proper for lamentations and funeral chants."

Butler (1636, p.2)

"The Lydian Mood is a grave, full, solemn Musick in
Discant, for the most part, of slow time, set to a Hymn, Anthem, or other spiritual song in prose, and sometimes in verse, the notes exceeding often the number of the syllables: which through his heavenly harmony, ravisheth the mind with a kind of ecstacy, lifting it up from the regard of earthly things, unto the desire of celestial joys: which it doth lively resemble.

"Of the Lydian Mode are those solemn Hymns and other sacred Choir-Songs, called Motets, a motu; because they move the hearts of the hearers, striking into them a devout and reverent regard of him for whose praise they were made."

"Of this Mode seem those religious vows [vows?] of the Romans in their Sacrifices; and their grave Canzons at the solemn feasts of their Magistrates: ... And likewise those funeral Elegies of Noble men, commanded in the old Roman laws."

"Of this Mode is that passionate Lamentation of the good Musical King for the death of his [son] Absalom: Composed in 5 parts by Mr. Th. Tomkinds..."

"These Naenia or funeral Elegies, seem to have been the first use of this Mode: as Coelias Rhodoginus observes in the place of Cassidorous..."

Playford (1654-1687, p.18)

"The Lydian Mood was used to grave, full, solemn Musick, the Descant or Composition being of slow time fitted to sacred Hymns, as Anthems, or Spiritual songs in prose..." [Cf. Butler, p.2 above.]

Antoine Parran (1646, p.117)

"The Lydian, appropriate for funeral songs and laments. Pline said that it is high and weeping. It begins in F fa ut."

(p.118) "Some have esteemed it as joyous, and appropriate for dances, that I can in no wise approve, seeing that it would be a contradiction: that cannot be, if only by reason that it has been changed improperly to the Ionian transposed. ...Sapho Lesbyenne was the first inventor of this Mode, disapproved by Plato, because it is too sharp and not so grave."

(p.124) "The Lydian Music was very powerful, witness Aristotle,
who seeing that it conformed with the sciences and learning, permitted it to the young in the same way as the other Modes, one each of those being endowed with a secret virtue, and consequently employed by Theophraste, Thales and Xenocrates, to cure the troubles of the spirit, and bodily ills: so that the Music is most excellent to console a grief, appease anger, restrain rashness, moderate excessive desires, cure sufferings, relieve boredom of the miseries, comfort weariness, and alay all kinds of pains: my witness of it will be the flute of Ismenias, who brought about these effects: to which I will add that which King David did with his harp, delivering Saul from the evil spirit."

Parran suspected that the ancient Greek Modes were not the same as the modes used in the 17th century, for after writing on each mode at length, he says:

(p.125) "Why is it then that the Modes and Music of the present day, if they are the same as of old, (as it is seemly true) have not the same force and virtue of those days?"

Christopher Simpson "Compendium", 1667) was also rather sceptical about the modes:

(p.113) "Many volumes have been wrote about these Moods or Tones, concerning their use, their number, nature and affinity one with another; and yet the business left imperfect or obscure, as to any certain Rule for regulating the Key and Air of the Musick, though one of the Greatest concernments of Musical composition."

(p.116) "But, whereas we read such strange and marvellous things of the various affections, and different effects of the Grecian Moods; we may very probably conjecture that it proceeded chiefly from their having Moods of different measure joined with them; which, we find by experience, doth make that vast difference betwixt Light and Grave Music; though both set in the same Key, and consequently the same Mood or Tone."

Morley (p.249) appeared to be acknowledging the existence of "key-colour" when he said "the air of every key be different one from the other"; and nearly a century later Charpentier (c.1690) ascribed a character to each of the keys in use at that
time, thus transferring the old ideas to the major and minor
keys - a conception not taken up in England. His list is
given in full:

(f.13r) "C Major Gay and warlike
C Minor Obscure and sad
D Minor Grave and pious
D Major Joyous and very warlike

(f.13v) E Minor Effeminate, amorous and plaintive
E Major Quarrelsome and clamorous
Eb Major Cruel and hard
Eb Minor Horrible, frightful
F Major Furious and quick-tempered
F Minor Obscure and Plaintive
G Major Sweetly joyous
G Minor Serious and magnificent
A Minor Tender and plaintive
A Major Joyous and pastoral
Bb Major Magnificent and joyous
Bb Minor Obscure and terrible
B Minor Solitary and melancholy
B Major Harsh and plaintive."

By the end of the 17th century there was a tendency to
regard all the major keys as having one character, and all the
minor keys as having another. William Holder (1694) says:

(p.198) "The sharp [i.e. major keys] which take the greater
intervals within Diapason, as 3rds, 6ths, and 7ths
major; are more brisk and airy; and being assisted
with choice of measures last spoken of, do dilate the
spirits, and rouse them up to gallantry and magnanimity.
The flat, consisting of all the less intervals, contract
and damp the spirits, and produce sadness and melancholy."

Robert Bremner (1762) said:

"The Tunes in sharp [i.e. major] harmony being more gay
and airy, are most proper for Thanksgivings, etc. and
those in the flat [i.e. minor] harmony, being of a grave
or melancholy nature, for mournful occasions, such as
funerals, fasts and the like."

This was, of course, the traditional attitude to the major and
minor keys, and gay dance tunes in a minor key, or dirges in a
major key were rare. The folk musicians had long favoured the Ionian mode (and its transpositions), which was equivalent to the major key; and it was the secularity of folk music in the Ionian mode which gave the major keys their secular association.

Descartes (orig. 1618, Brouncker translation 1653, p.6) takes a more rational view of the matter, attributing the power of music to excite in us anger, joy, courage, sadness, etc., not to the modes, but to tempo and rhythm.
In the 17th century treatises one may detect a reluctance to break away from the idea that remote keys (i.e. keys with a signature of four or more flats or sharps) were to be avoided. The early attitude is understandable as the transition from modes to major and minor keys was taking place, and the use of key signatures was not yet completely comprehended. The unwillingness to go further than three flats in a signature may have been a prejudice resulting from the modal practice of not transposing more than three times from the original mode. In the case of keyboard instruments, with mean tone tuning major keys with more than three sharps or flats would not have been possible, and minor keys would have been even more restricted. In addition, there was the reason which Morley mentions: that it would be difficult to sol-fa the remote keys. However, he was referring to a less remote key (Polymath's exercise in C minor) when he said: (p.261) "...you have set it in such a key as no man would have done..."; and referring to music in such keys, he said: "...you shall not find a musician (how perfect soever he be) able to sol fa it right..." Morley was also concerned lest beginners be disheartened by the sight of a large number of flats in the signature: (p.262) "And as for them who have not practised that kind of songs, the very sight of those flat clefs (which stand at the beginning of the stave or line like a pair of stairs, with great offence to the eye but more to the amazing of the young singer) make them misterm their notes and so go out of tune, whereas by the contrary if your song were pricked in another key any young scholar might easily and perfectly sing it; and what can they
possibly do with such a number of flat: \( bb \) which I could not as well bring to pass by pricking the song a note higher?"

Morley upheld this view in practice and rarely used a key with even two flats in the signature. In the only example in his treatise (p.18) which has two flats in the key signature (G minor), Morley inserted flats beside the E's, and the B an octave above the one in the signature; he probably did this from habit since he goes on to criticise repeated flats:

(p.263) "...when they make their songs with those flats, they not only pester the beginning of every stave with them but also, when a note cometh in any place where they should be used, they will set another flat before it, so that of necessity it must in one of the places be superfluous."

His next argument, logical though it is, certainly did not help towards stabilizing the key signatures:

(p.263) "Likewise I have seen divers songs with those three flats at the beginning of every stave and, notwithstanding, not one note in some of the places where the flat is set from the beginning of the song to the end."

As for sharps, Morley only used them as accidentals. By some oversight, he omitted to define the function of a sharp. The key of G was still too close to the Mixolydian mode for a uniformly sharpened F; the sharpened leading-note was normally reserved for cadences. The key of D still retained its Dorian mode character. The appearance of one or two sharps in a signature in some rare earlier works of the 14th to 16th centuries was intended to neutralize false relation by transposition. For instance, the intractable Locrian Mode on B, became the transposed Phrygian with an F sharp in the signature. Sharps were not used in a
key signature per se until the late 17th century.

In spite of the fact that transposition had been realized by practising musicians for many years, for the greater part of the 17th century they did not appear to be aware that a major or minor key was a certain arrangement of tones and semitones which could be built upon any one semitone; and with mean tone temperament prevailing, it is hardly likely that they gave much consideration to the "remote" keys. Simpson's "Division Viol" (1659) gave the definition common at that time:

(p.16) "This Key or Tone is called Flat or Sharp, according as the Key-note hath the lesser or greater Third next above it. If it be the Lesser Third, 'tis called a Flat Key; if the Greater Third, 'tis a Sharp Key..."

Simpson then gives examples of eight major and eight minor "triads" plus the upper octave-note, saying whether they are sharp or flat, and affixing key-signatures in a most uncertain manner. He makes this statement which would lead us to believe that he has grasped the matter:

(p.16) "How strange or difficult soever some songs may appear by reason of the Flats or Sharps set at the beginning of them, yet all is but in relation to the Lesser or Greater Third taking place next above the Key or Tone-Note, being the very same, in all respects, with the first Instances of the Lesser and Greater Third above G."

and yet the only consistent thing about his examples is the third of the triad being major or minor. The key signatures were curiously inconsistent:

- G minor  (with B flat only)
- G major  (no F sharp)
- A minor
- A major  (with F and C sharp. No G sharp)
Bb minor (with B and D flat. No E, A, or G flat)
Bb major (only Bb in signature)
C minor (with Eb only. No B and A flat)
C major
D minor (No Bb)
D major
E minor (No F sharp)
E major (with G sharp. No F, C and D sharp)
Eb minor (with B, E, A and G flat. No D and C flat)
Eb major
F minor (B, E and A flat. No D flat)
F major

(Note: The keys with no comment were correct.)

To a certain extent it was sol-fa which was obstructing progress, for the student was taught to look for "Mi" in only three places (i.e. B, E and A). From circa 1610 Ut and Re were dropped out of the sol-fa system, and the new arrangement of syllables made Mi the leading-note, thus:

Fa sol la fa sol la mi fa

C D E F G A B C

We may here make an interesting comparison between Butler (1636) and Simpson ("Compendium", 1667); but it should be pointed out that Butler was referring to the old Gamut with the sol fa syllables Ut re mi fa sol la (with Pha as the 7th syllable), and Simpson was using the new system without Ut and re as shown above:

BUTLER, p.21
"To know which of these 3 clefs [i.e. B, E or A] hath the Mi in the present song, first, by the signed clef, [i.e. G, F or C clef] look out the next B: where, if you find not a flat, is his place; if the flat put him out thence; look him in E: where you shall have him; unless the flat likewise (which happeneth seldom) do remove him: and then his place is certainly in A."

SIMPSON, p.6
"The most natural place for Mi is in B, unless B is flat; then it will be E, or if E is flat, A."
"I have seen songs with a B flat standing in A, B and E, all at once; by which means Mi has been extruded from all its three places: but such songs are irregular."

Though both theorists used the same terms and said practically the same thing, Butler was referring to the Mediant and Simpson to the Leading-note. By confining "Mi" to three places, neither of them promoted a better understanding of key relationships.

Playford in the 1654 and 1655 editions of his "Introduction" also demonstrates how "Mi" the leading-note may be located in B, E, A or D, according to the key signature. In his examples of keys, he does not commence each octave on its key-note, but places them all in the octave of G, with the various arrangements of the sol fa syllables under the notes. Later (p.22) he shows his reader the appearance of these scales in the different G, C and F clefs; placing them on G in the G, F and Alto C clefs; but on C in the Soprano clef, B or Bb in the Mezzo-soprano clef, and E or Eb in the Tenor clef, so that in all the C clefs the first note is in the first line or space, e.g:

[F Major in the Soprano clef]
Playford did not include any keys with sharps in the signatures, nor did he acknowledge their existence. He never placed an F sharp in the signature of the songs or psalms in G major which appeared in the "Introduction" during his lifetime. In the 1658 edition, he said:

(p.16) "I have seen some songs with four flats; that is to say, in B mi, E la mi, A la mi re, and D la sol re; but this last is very seldom used, and such songs may be termed irregular as to the naming the notes (being rather intended for instruments than Voices) and therefore not fit to be proposed to Young Beginners to sing."

Thomas Salmon ("A Proposal to Perform Musick, in Perfect & Mathematical Proportions", 1688) made a similar remark:

(p.21) "...some things indeed have been set with four flats, but they are very difficult to the Practiser, and I never saw any of them published."

In the same tract, he made this more progressive statement:

(p.8) "There needs then only this twofold constitution of the 8ve to be considered by us, the 2 Keys A and C: all the rest serve only to render the same series of Notes in different pitches; which is demonstrable by transposing Tunes from one Key to another: The Tune remains the same, only the compass of the Voices or the Instrument is better accommodated."

Purcell's statement in the 1694 edition of the "Introduction":

(p.105) "There are but two Keys in Musick, viz., a Flat, and a sharp, etc." was no more nor less than Simpson's and Salmon's statements in 1659 and 1688, though Purcell's strikes one as more direct.
The anonymous writer of Part I of the 1697 edition of the "Introduction" gave a list of the "principal keys made use of" which he demonstrated by examples of a short tune, transposed to the various major keys. Using a different tune he illustrated the minor keys in the same way. All the examples bear the correct number of sharps or flats in the signature. This list of "principal" keys compared with that given by Simpson in 1659, shows the same major keys (cf.); the minor keys include B minor (and not Bb minor), E minor (and not Eb minor), and F sharp minor, which Simpson omitted. The unknown author said: (p.25) "There may be more [keys] thought on to puzzle young beginners, but not of any use, here being variety enough to please the ear."

The principle of equal temperament was clearly expounded by Marin Mersenne in 1635; and other writers abroad were theorizing on the subject; but in England, the idea that remote keys "were not of any use" persisted until the early 18th century when Alexander Malcolm (1721) said that the "constitution of the octave" in the major key or the minor key is always the same and it is only the pitch which is different. In the same treatise he propagated equal temperament. Whether Malcolm knew of the work of Andreas Werkmeister who was supposed to have invented equal temperament in 1700; or of Fischer's "Ariadne musica" of 1715, — a collection of preludes and fugues in nearly all the keys, which Bach imitated and borrowed from for his "48" which (48 Second "24" published in 1744) was published in 1722 — is doubtful. In all probability the
concept of equal temperament had completed its period of
gestation and was now being publicized throughout Europe,
though it was not generally adopted until the 19th century.

Dr. Pepusch (1630), who was reactionary in many of his
ideas, said there were only six keys: C D E F G and A:

(p. 8) "As it would take up a much larger treatise than this is
to mention what ought to be done with all the six keys;
we will only speak of that of C and of that of A. The
first as an example of a sharp key, and the other as an
example of a flat key; these two being the most commonly
used."

Paradoxically, he provides a chapter on transposition which
embraces the whole cycle of major keys, but which does not link
up with the modal practices which he refers to in other chapters.

The French theorists, Salomon de Caus (1615), the anonymous
"Traicté de Musique" (1616) and Antoine Parran (1646) made no
mention whatever of keys, and related their instructions to the
Church Modes. They used the terms "major" and "minor" only in
connection with intervals. Charpentier (c. 1690), as well as
acknowledging that "there are as many Modes as there are notes"
(f. 12r), and that all these Modes bear a relationship to the
Mode of Ut with a major 3rd, or the mode of Re with a minor 3rd,
considered that the various keys expressed different emotions.
(This is discussed in the concordance "The Character of the Modes".)
It may be only a coincidence that he attributes the unpleasant
moods or characters to his most remote keys, e.g. "Eb minor -
Horrible, frightful; Bb minor - Obscure and terrible; E major -
Quarrelsome and clamorous."
Although there is evidence that the practical musicians of the 17th century were capable of transposing music from one key to another, the subject is not explained in any of the treatises before 1700. It is not likely that the theorists lacked the ability to explain transposition, since Zarlino and Aron gave instructions about it, and Morley, Campian and Butler (and in France, Salomon de Caus, Ballard, Parran and Mersenne) all acknowledge that they have studied the works of one or both of these theorists. The knowledge of transposition seems to have been important only to organists at this time.

Morley (p.261) incidentally mentions that organists have to know how to transpose:

"The music is indeed true, but you have set it in such a key as no man would have done, except it had been to have played it on the organs with a choir of singing men, for indeed such shifts the organists are many times compelled to make for ease of the singers."

In the 17th century nearly every organ had a different pitch, and the compass of voices singing with an organ accompaniment must have necessitated the art of transposition as one of the organist's first accomplishments.

"The Pathway to Musicke" (1596) leads one to expect an explanation of transposition, for it says on the title-page:

"Whereunto is annexed a Treatise of Descant, and Certaine Tables, Which doth teach how to remove any song higher, or lower from one key to another, never heretofore published."

In this context, the word "song" meant hexachord, and the word "key" meant note; the tables only serve to show the student how
how to ascend and descend the scale or gamut.

Whilst the Church Modes were in use, composers had long been accustomed to transposing them up a fourth or down a 5th by placing a B flat in the signature. In the 16th century when performers were more accustomed to seeing clefs on different lines of the stave, transposition was sometimes effected by moving the clef up or down a 3rd and inserting the new key-signature.

Morley expressed sensibility about the original "colour" of a composition and observed that much was lost in transposition:

(p.275) "...those songs which are made for the high key be made for more life, the other in the low key with more gravity and staidness, so that if you sing them in contrary keys they will lose their grace and will be wrested, as it were, out of their nature..."

This statement does not conflict with that quoted above respecting organs, since the organist's purpose in transposing was to bring the key to the pitch which the composer intended.

Perhaps it was the practice of transposition which revealed to musicians that the major and minor keys were homogeneous and only differed in pitch.

The difficulty of transposing in the 16th century, gave rise to the manufacture of transposing keyboards for harpsichords and organs which enabled the performer to play in any key as if it were the key of C. By the 17th century organists had dispensed with such mechanical aids, but the amateur performers
on the harpsichord went on making use of transposing keyboards, and they were manufactured right up to the 19th century when they were adapted for the pianoforte.

By the 18th century, the theorists had clarified the theory of transposition, and Dr. Pepusch (1730), Alexander Malcolm (1721) and John Trydell (1766) devoted many pages of lengthy explanations to the subject.
13. THE PROBLEM OF KEEPING TIME

It is rather a paradox that in a period when music had attained simpler forms, and far less complicated rhythms, the problem of performing music in correct time should have been regarded as an obstacle. This concern was not expressed by theorists before the Commonwealth. The large, elaborate musical forms sustained an enforced rest during the interregnum, and the psalms and simple vocal pieces enjoyed great popularity during that period. (This is discussed in greater detail in Chapter VII.) Naturally twenty years of backsliding in musical practice was a serious hindrance; and with the restoration of the large, elaborate musical forms, not many native musicians were available who could cope with the new demands in performance. Charles II, to satisfy his lately acquired taste for an orchestra with violins instead of viols, imported 24 violinists from France; and many other foreign singers and instrumentalists, taking advantage of the situation, followed in their wake.

In spite of the conditions peculiar to England at this time, it appears to have been necessary in most parts of Europe to conduct with an audible beat. There is evidence for this in the unfortunate injury, (eventually resulting in his death), which befell Lully while beating time by striking the floor with a long and heavy staff. Anthony à Wood (MS Notes on Musicians in the Bodleian Library) says about John Hilton's funeral in 1657:

"...the singing at burials being silenced, as popish, the Fraternity of Musicians who intended to sing him to his grave, sang the Anthem in the House over the corps before it went to the church, and kept time on his coffin."
To be capable of beating time audibly and correctly was almost reckoned an accomplishment at this time, for when Pepys attended a service at the Chapel Royal in Whitehall, he recorded in his diary (22.11.1663):

"And here I first perceived that the King is a little musickall, and kept good time with his hand all along the anthem."

The terms used for what we now call the beat were: tact, tacture, tactus, touch, time, striking, stroke and measure.

The definition of "Tactus or Striking" is given in "The Pathway to Musick" (1596) in this manner:

"It is a successive moving of the hand, directing the quantity of all the notes and rests in the song, with equal measure according to the variety of the signs and proportions."

Thomas Morley, in spite of his derogatory remarks about "The Pathway" (p.130), appears to have copied his definition from that book:

(p.19) "PHI. What is stroke?  
MA. It is a successive motion of the hand directing the quantity of every note and rest in the song with equal measure, according to the proportions of the signs of the degrees..."

Thomas Ravenscroft (1614) said exactly the same as Morley, save that he commenced: "Tact, Touch or Time, is, a certain motion of the hand..." (p.20) These are not dissimilar to Ornithoparcus' definition in 1517 (Dowland's translation 1609):

(p.46) "Of Tact.  
"...Tact is a successive motion in singing, directing the equality of the measure: Or it is a certain motion, made by the hand of the chief singer, according to the nature of the marks, which directs a song according to Measure."
Ornithoparcus explains also how the tact changes when different "proportions" (Cf.) are introduced in the music. In addition he gives a "Table of Tact" which shows the number of semibreves in each larger note according to the different signs of the "Moods" (Cf.).

Charles Butler (1636) wrote:

(p.24) "The principal Time-note is the semibreve: by whose time, the time of all notes is known: and it is measured by Tactus or the stroke of the hand, in a certain space or distance: of which, imitation and use will make you perfect in. The parts of Tactus are two: (Thesis and Arsis) of depression or fall, and the elevation or rise of the hand."

An examination of Playford's "Introduction" from the first edition in 1654, shows that little attention was paid to the subject of keeping time until the 1672 edition when it was augmented to the following:

(p.29) "Observe that by the Measure of the Semibrief all Notes are proportionated, his own Measure is expressed (by a natural Sound of the Voice, or Artificial on an Instrument) to the Moving of the hand up and down when his measure is whole, as in Notes of Augmentation, the Sound is continued, but in Notes of Diminution, the Sound is variously broken into Minums, Crotchets, and Quavers, or the like. So that in keeping Time your Hand goes down at one half, which is a Minim, and up at the next. For the more ease at first, if you have 2 Minims, or 4 crotchets, as in the Example following, in one Bar, which is the proportion of a semibreve, you may in Minims pronounce one, two, the hand being down at the first sounding one, you lift up your hand leisurely, and when it is up a small distance you pronounce two, and when down you begin the third minim, and so up again at the 4th, and down at the 5th. Also when you have 4 crotchets, pronounce one, two, three, four, that is, the hand is down at one and up at three, and down when you begin the next bar of four crotchets, as in this Example. This Rule observe according to the Measure of those Notes your Semibrief is divided into, be it either Triple, Duple, or Common Time."
This laboured discourse sufficed until 1683 when the following additional examples were included:

(p. 27) "Example of Quicker Notes Divided into Common Time:

(p. 28) "Example of Tripla by Three Semibreves:

(p. 28) "Example of Tripla by Three Minims:

In the 1694 edition, published by Playford's son Henry, all the
above examples were omitted, and replaced by three pages of instructions on how to beat time in relation to the time signatures then in use:

(p.25) "First, I shall speak of Common-Time, which may be reckoned three several sorts; the first and slowest of all is marked thus C: 'tis measured by a Semibreve, which you must divide into four equal parts, telling one, two, three, four, distinctly, putting your Hand or Foot down when you tell "one", and taking it up when you tell three, so that you are as long down as up. Stand by a large Chamber-Clock, and beat your hand or foot (as I have before observed) to the slow motions of the Pendulum, telling "one", two, with your hand down as you hear it strike, and three, four, with your hand up; which Measure I would have you observe in this slow sort of Common-Time: Also you must observe to have your hand or foot down at the beginning of every Bar.

"The Second sort of Common-Time is a little faster, which is known by the Mood, having a stroak drawn through it thus 0.

"The Third sort of Common-Time is quickest of all, and then the Mood is retorted thus 6; you may tell one, two, three, four in a Bar, almost as fast as the regular motions of a Watch. The French Mark for this retorted time, is a large figure 2.

"There are two other sorts of Time which may be reckoned amongst Common-Time for the equal division of the Bar with the hand or foot up and down: The first of which is called "Six to Four", each Bar containing six crotchets, or six quavers, three to be sung with the Hand down, and three up, and is marked thus 6/4, but very brisk, and is always used in Jigs.

"The other sort is called Twelve to eight, each Bar containing twelve Quavers, six with the hand down, and six up, and marked thus 12/8.

"These are all the Moods or Common-Time now in use. The length of your Notes you must perfectly get before you can keep time right...

"Tripla Time, that you may understand it right, I will distinguish in the two sorts: The first and slowest of which is measured by three Minims in each Bar, or such a quantity of lesser notes as amount to the value of
three Minims or one Pointed Semibreve, telling one, two, with your hand down, and up with it at the Third; so that you are as long again with your hand or foot down as up. This sort of Time is marked thus 3/2.

"The Second sort is faster, and the Minims become Crotchets, so that a Bar contains three Crotchets, or one Pointed Minim, 'tis marked thus 3, or thus 3 1. Sometimes you will meet with three Quavers in a Bar, which is marked as the Crotchets, only Sung as fast again. There is another sort of time which is used in instrumental music, called Nine to six, marked thus 9/6, each Bar containing Nine quavers or Crotchets, six to be Play'd with the foot down, and three up: This I also reckon amongst Triple-time, because there is as many more down as up.

"These, I think are all the Moods now in use, both Common and Triple Time: But 'tis necessary for the Young Practitioner to observe, that in the middle of some songs or Tunes he will meet with Quavers joyn'd together three by three, with a figure 3 marked over every three Quavers, or (it may be) only over the first three: These must be performed, each three quavers to the value of one Crotchet, which in Common-Time is the same with Twelve to Eight, and in Triple-Time the same with nine to six.

"A Perfection in these several moods cannot be obtained without a diligent Practice, which may be done at any time when you do not Sing or Play, only telling one, two, three, four, or one, two, three, and Beating to it; (as I have before observed). Also the Young Practitioner must take care to sing or play with one that is perfect in it, and shun those which are not better than himself."

These instructions were retained in the "Introduction" until the last edition in 1730. The recommendation to stand near a large chamber clock was by no means a new idea, for Christopher Simpson in his "Compendium" (1667) mentioned that it was a common practice. The idea of using a pendulum as a time-keeper was far older; and of course, the human pulse as a method of measuring time was the oldest of all. By the end of the 16th century, Galileo had demonstrated scientifically the workings of the pendulum, and had realized its possibilities as a time-
keeper. The earliest music theorist to discuss the pendulum as a time-keeper was Marin Mersenne ("Harmonie Universelle", 1636); but his dimensions for it were so big that it was unfit for ordinary use. The idea of the pendulum was developed and improved upon throughout the 18th century, and was in the 19th century at last superseded by the metronome which is still manufactured and used at the present day.

Christopher Simpson ("Compendium", 1667) was not in favour of using visual or aural clocks for keeping time, and said that the hand, foot, or the imagination was sufficient. For those who had nobody to demonstrate the length of a semibreve to them, he gave these instructions:

(p. 18) "I would have you pronounce these words (One, Two, Three, Four) in an equal length as you would (leisurely) read them. Then fancy those 4 words to be 4 crotchets, which make up the quantity or length of a semibreve and consequently of a Time or Measure: In which let these 2 words (One, Two) be pronounced with the hand down; and (Three, Four) with it up. In the continuation of this motion you will be able to measure, and compute all your other notes."

Despite all the advice then in circulation about beating time, it must still have been regarded as a great difficulty, for in the preface to Purcell's "Choice Collection of Lessons for the Harpsichord or Spinnet" (1696) he says:

"There being nothing more difficult in Musick than playing of true time, 'tis therefore necessary to be observed by all practitioners, of which there are two sorts, Common time, and Triple Time, and is distinguished by this C this ¯ or this 0 mark, the first is a very slow movement the next a little faster, and the last to brisk and airy time, and each of them has always to the length of one semibreve in a bar, which is to be held in playing as long as you can moderately tell four, by saying one, two, three, four,
two Minims as long as one Semibreve, 4 crotchets as long as 2 minims, 8 quavers as long as 4 crotchets, 16 semiquavers, as long as 8 quavers."

Captain Prencourt (MS c.1702) had much to say about keeping time, and along with Roger North's annotations, there are twelve pages dealing with this subject. Between them they give lengthy instructions about common and triple time. They relate common time to the motions of the swinging of the arm, walking, running, and the trotting of a horse; and triple time to skipping and the gallop of a horse. North, as a proficient gambist, had more to add about keeping time in consort, and said (f.1v) it was impossible to keep together without someone, commonly the composer, to beat the time. However, he later contradicts himself:

(f.2v) "It is to be noted in general that the beating the time, is a defect, for the music were better, (if it could be) without it..."

The various time signatures then used are fully explained. The problem of keeping time is raised again in article 5 "Of the Rests or Pauses", where North says (f.21v) "There is no worse drudgery in Consort Music, than the keeping a long parcel of rests..." And again, that if one of the players loses the count, or so much as doubts it "there is no help but [to] begin again, to the trouble of the performers as well as the audience."

(We gather from this that amateur instrumentalists did not play together purely for their own entertainment, but often had a gathering of friends and relations as an audience.)

Alexander Malcolm (1721) deals at great length with
keeping time, first expanding the instructions given by Christopher Simpson, and then giving a full explanation of Loulie's Chronometer. This was the earliest metronome and was described by Loulie in his "Éléments ou principes de musique dans un nouvel ordre ... avec l'estampe et l'usage du chronomètre" (1696). The instrument was six feet in height and too cumbersome for general use; but the notion of relating the movements of a pendulum to the composer's symbols was not without merit. The pendulum would be measured and marked with figures, and the composer would indicate, at the beginning of his composition, the number of vibrations and note value (crotchet or minim) which he calculated should correspond with the vibrations of the pendulum. Maelzel, a century later, was to put this idea to practical use.

While the 17th century French theorists must have been experiencing the same difficulties in keeping time, and were still using, as we have observed, the audible beat, only Salomon de Caus (1615) provided instructions on the subject. (As stated above, Mersenne described the workings of the pendulum.) Salomon de Caus briefly explains how to beat duple and triple time with the hand, and relates these measures with time signatures and the popular dance forms in which they are used.
14. ORNAMENTATION

Vocal and instrumental ornaments are, undoubtedly, as old as music itself; but we are concerned here with the beginning of a period in which ornaments took on a new and special significance. In music prior to the 16th century nothing but the notes was written, for the singers were highly trained, competent musicians, and would have been insulted if even the accidentals were inserted. At certain periods the notes themselves were of a highly ornamental order: as in the 14th century when the music of Guillaume de Machaut contained various written ornaments which were often elaborate. We do not know to what extent in earlier times ornaments were added, nor the nature of them; we only know that they were introduced. There is an anecdote relating to Josquin's stay in Cambrai, where one of the singers embroidered a passage in one of Josquin's motets; Josquin flew into a rage and said to him: "Why do you add ornaments here? When they are necessary I know very well how to write them." We could infer from this statement that the ornaments commonly improvised at this time (i.e. the 15th century) were the same as those used in actual compositions; and if we take those used by Josquin we find nothing ostentatious or obtrusive:

1. The ornamental resolution of a dissonant suspension by (a) a "turn", (b) an anticipated note.
2. The insertion of passing notes between two notes.
3. The insertion of an auxiliary note between two notes.
5. A rare appoggiatura.
6. A rare "springer".
7. A simple melodic sequence.
It seems then, that the really elaborate ornaments were
developed in Italy in the late 16th century, in synthesis
with the "new music" - recitative; and this is borne out by
Caccini's "Le Nuove Musiche" (1602) (see quotation from his
'Preface' on page 67), which discusses numerous florid ornaments
in a far from tentative manner; not as something new but as a
well established art which needed systematizing. Whilst in
former times ornaments had been practised by singers and
instrumentalists, in the late 16th century they were forming
an integral part of the music. Shorthand signs were invented
to avoid the trouble of writing so many clusters of short notes,
and these signs were variously interpreted since the same name
was used for a number of ornaments, and the same ornament
appeared under several names. This resulted in a confusion
which later generations have taken great pains to clarify, and
a mass of literature has since been written on the interpretation
of 17th and 18th century ornaments. Often, and especially in
instrumental music, ornaments were left to the discretion of
the performer. Simpson gave details and examples of many
ornaments in his "Division Viol", but none are marked in the
music. Nicola Matteis, in his treatise for the guitar, said:
(p.79) "To set your tune off the better, you must make several
sorts of graces of your one [sc. own] genius it being
very troublesome for the Composer to mark them."

In England the elaborate graces were quickly taken up by
the composers for the lute and virginals (Vide "Parthenia", 1611),
but (perhaps because of the lack of vocal technique) the new
trend was not so readily adapted to vocal music. The insularity which frequently caused England to lag behind the continent in all the arts, had made our forebears slow to assimilate the madrigal forms. While the English composers were still composing lute songs and madrigals of great beauty, their Italian contemporaries were already writing florid vocal arias and recitatives. (However, it should not be overlooked that monody was an accomplished fact in England in the very first years of the 17th century, with the Ayres of Jones, Rosseter and Campian.) Roger North wrote the following account of the first attempt at recitative in this country. ("Notes of Comparison between the Elder and Later Musick and Somewhat Historical of both", c.1726, Add. MS 32,533.):

"King Charles I had a very ingenious vertuoso, one Nicholas Laniere, whom he imployed into Itally to buy capitall pictures; Mr. Laniere was no less a vertuoso at musick, than picture, for which the King greatly esteemed him. Being so qualified he must needs be a nice observer of the Itallian musick, as he really was, and more especially of that which was most valuable amongst them, I mean the vocall. And after his returne he composed a recitativo, which was a poem being the tragedy of Hero and Leander, which for many years went about from hand to hand, even after the Restauration, and at last crept out (wretchedly drest) among Playford's collection in print. The King was exceedingly pleased with this pathetic song, and caused Lanneare often to sing it, to a consort attendance, while he stood next, with his hand upon his shoulder. This was the first of the recitativo kind that ever graced the English language, and hath bin litle followed, till the latter attempts in our theaters."

Before the transition from masque to opera could take place the Civil War intervened. However, as soon as the arts could again flourish, and they came back to life at the height of the Commonwealth, composers immediately began writing quasi-operas;
though their achievements were unlike those of the Italians, for English people never could "relish that perpetual singing", and a Singspiel type of opera has always met with more favour.

At the Restoration a sweeping change took place in both secular and sacred music; and the full impact of Italian and French influences was quickly felt. Foreign singers and instrumentalists were imported to supply the virtuoso performance which our native musicians, through lack of training and ignorance of continental developments, were unable to provide. Ornaments, graces, dynamic effects, dramatic effects, etc. all tended towards this new desire for "illusionism".

Though it is not our intention to discuss exhaustively the ornaments which the theorists in this study included in other publications, (for instance, in Playford's numerous treatises for stringed and wind instruments, Simpson's "Division Viol", and Purcell's Lessons for the Spinet, 1696), it is interesting to note that four ornaments by Elway Bevin are included in an MS collection of virginal music (Brit. Mus. Add. MS 31,403). The virginal pieces are dated c. 1600; the handwriting is of a later date but is 17th century work.
In this MS the name "Edward Bevin" occurs twelve times, and "Elway Bevin" twice, so there is some doubt whether the names refer to one or two composers. My arguments for the belief that "Elway Bevin" is intended in each instance are these:

1. Item "Double Canon" bears the name "Edw/Bevin" in the 'Table of Contents,' and "Elway Bevin" at the end of the piece.

2. On p. 2 there are biographical notes about the composers of the pieces. Edward Bevin is not mentioned, but Elway Bevin is, with a reference to his treatise. If Edward Bevin had composed six pieces & Elway only one, surely Edward (if he was a separate person) would have been included in the biographical list.

3. The style of all seven pieces is similar to Elway Bevin's (3 Canons, 2 Duos, 2 Preludes).
"The graces, before, is here exprest in notes."

(1) None of these ornaments appears to have been interpreted in this way by any other English composer.

(2) The first ornament was given various names (e.g. slide, slur, elevation, whole-fall, etc.) and was indicated by this and other signs than the one given, but was not interpreted as a dotted slide as shown above.

(3) Only the first ornament was used in the collections of virginal music in which these examples were included.

(4) Note that the little finger is used for the shake. Later, the heavier touch of the piano made this impossible.

In the 1664 edition of the "Introduction" Playford (speaking of Caccini's 'Preface', a translation of which he had included in this edition, believing it to be by an English gentleman lately dead) said of Caccini's ornaments:

(p.76) "Nor are these Graces any new Invention, but have been used here in England by most of the Gentlemen of His Majesties Chappel above this 40 years, and now is come to that Excellency and Perfection there, by the skill and furtherance of that Orpheus of our time, Henry Cook Gentleman and Master of the Children of His Majesties Chappel..."

This may be an exaggeration as Caccini's examples are very elaborate and we have no evidence that such ornaments were in
use in England in the 1620's. The recitatives in "Cupid and Death" (Locke and Gibbons, 1653) though containing a fair amount of Italianate ornamentation, have none of the floridity with which Caccini's arias are imbued. (The instrumental music in this work, on the other hand, is very ornate.)

A textbook on the rudiments of music and/or the theory of composition is not the place where one normally finds ornaments explained and exemplified, for they come within the province of the teachers of singing or instruments. However, Playford (whose "Introduction" was far from conventional) tried hard to include information on subjects which were in popular demand, and when he received the manuscript containing "Directions for singing after the Italian manner", (which later proved to be a translation of Caccini's 'Preface' to "Le Nuoue Musiche", 1602) we can imagine with what delight he anticipated an increase in customers for his book.

The term "Trillo" originally meant a quick repetition of one single note; (it was probably this ornament that Purcell intended in the Frost Scene in "King Arthur"); the term "Grup" (or groppo, gruppo, grapp, etc.) was the ornament which we now call a trill:

(p.68) "The Trillo"  "The Grupp or Double Relish"

Caccini merely explains that both ornaments are vocalised by
beating "every Note with the throat upon the vowel a", [i.e. "ah"] . Playford thought this inadequate and inserted these further directions:

(p. 70) "...some observe that it is rather the shaking of the Uvula or Pallate on the Throat in one Sound or Note; For the attaining of this, the most surest and ready way is by imitation of those who are perfect in the same; yet I have heard of some have attained it by this manner, That in singing a plain Song of six Notes up and six down, they have in the middest of every note beat or shaked with their finger upon their throat, who by often practice they came to do the same Notes exactly without."

He goes on to relate how he had heard a gentleman sing this grace exactly, and on asking him how he had learned it, was told:

"I used (said he, at my first learning the Trill) to imitate that breaking of the sound in the Throat, which men use when they luer their Hawkes, as he-he-he-he-he; which use by a slow motion at first, and by an often practice, he became perfect in."

The complete table of Caccini's Graces may be seen in "Musical Ornamentation", by E. Dannreuther, 1893, pp. 35-36. Sixteen of the examples are in eight pairs, the first of the pair showing how the ornament is written, and the second how it is sung. Playford missed the point of this and omitted examples 2(a), 3(a), 4(b), 5(a) and 8(a). He apparently considered examples 1(a), 4(a), 6(a) and 7(a) to be ornamental enough in the written version.

The "Directions for Singing after the Italian Manner" were retained in nine succeeding editions of the "Introduction". In the 1697 edition the whole of the first book was rewritten by an "eminent master" (who remains anonymous). He appears to have
considered the "Trill or Shake" the only ornament deserving attention within the scope of the book. As the whole chapter is very short, it is given below. (Chap. VIII, "Of the Trill or Shake", p. 31)

"The Trill is the most principal Grace in Musick, and the most used; the Directions for Learning it is only this, To move your Voice easily upon one Syllable the distance of a Note, thus:

\[
\begin{array}{c}
\text{Mi la, mi la,} \\
\text{Sol sol}
\end{array}
\]

"First move slow, then faster by degrees, and you'll find it come to you with little Practice; but beware of huddling your Voice too fast, for B fabemi and Alamire [i.e. B and A] ought both of them to be sounded distinctly, your shake being compounded either of a whole or half Tone. This is the Method, which observed with a diligent Practice, will certainly gain your ends.

"I shall add a few Instructions to let you know where the Trill ought to be used: (Viz.) On all Descending Prick'd Crotchets, also when the Note before is in the same line or space with it, and generally before a Close, either in the middle, or at the end of a Song. I will now set you a small Example of it, and place a Cross over the Notes you ought to shake.

\[
\begin{array}{c}
\text{Mi la, mi la,} \\
\text{Sol sol}
\end{array}
\]

"There are other Notes which ought to be shaked besides Pricked Notes, and a little Practice upon these Directions will be much more Advantageous than what I can say here."

Note: (1) The term "trill" no longer means the repetition of a single note; (2) The trill is no longer confined to (a) a cadence, or (b) the resolution of a dissonance.
That the trill had become the principal grace is confirmed by Roger North in his essays. John Wilson ("Roger North on Music", p.165) has summed up North's views on this ornament:

"Most prominent among tremulous graces, however, was the Trill itself, about which North had views that were maintained in all his essays. Having as a young man heard the slow measured Trilling of the elder Matteis, he ever afterwards preferred such a manner to that of other masters who used a mechanically rapid shake. One reason was that the rapidity 'stopped the sound'; that is, it prevented the main note from making its proper contribution to the harmony. Harmony, he believed, should always take precedence over decoration; but if there was to be a Trill, a guiding principle was that its two notes should sound tolerable if gently sustained together, since the Trill itself the ear has virtually to accept both sounds at once."

(N.B. Matteis was, of course, a virtuoso violinist, and the above passage relates to instrumental trills.)

In Captain Prencourt's treatise (c.1702) there are instructions for playing various ornaments used in harpsichord music which were enlarged upon by Roger North (ff.23v-24v)

We may ask at this point what effect the satiety of ornamentation had upon music as a whole. It seems that just as music was tending towards greater sonority and all the potential beauty in the harmonic forms, it also took on this excess of decoration which often detracted from the depth of feeling which serious musical forms should contain and convey.

T.S. Eliot has observed ("Homage to Dryden", p.30) that between 1640 and 1680 a profound change in the mode of sensibility took place in literature and poetry; Dryden and
the Augustan poets were rational and brilliant, but superficial. Knowing that the arts generally move in a parallel fashion, we look for an identical change in music, and we do find these three elements: (1) rationality: the influence of Descartes; the transition to the major and minor keys; the development of equal temperament; the new approach to chord formation; and, in the theoretical treatises, the gradual breaking away from the slavish adherence to antiquity; (2) brilliance: the restoration of elaborate musical forms gave the composers of the late 17th century the opportunity to display their genius; the introduction of louder instruments, such as the violin, guitar and harpsichord, gave more "brilliance" to the sound of music, and (3) superficiality: the shallowness of excessive fioritura; the desire for illusion; and the influence of the decadent court on the development of music.

Purcell, Bach, Handel, and other outstanding Baroque composers, with their genius could contrive to use a vast amount of ornamentation without at the same time losing the sensibility of the composition as a whole. But in much of the music of the 17th and 18th centuries (as in the architecture of that period), ornamentation frequently deteriorated to tasteless decoration.
CONCORDANCES ii

CHAPTER V

THE THEORY OF COMPOSITION
THE FORMATION OF A CHORD

Over the centuries, changes have taken place in the composer's "point of departure" when he commences to write a piece of music; and these changes have been due to the invention of new forms.

The cantus firmus forms, whilst being weighed down with other difficulties, all had the comparatively simple incipient principle of the cantus firmus itself, upon which the composition was built. When the imitative forms evolved, the "point" was the vehicle of departure. In the age of thorough-bass, the bass line was the framework of the composition. It was recognised that the uppermost part was the most important one in Ayres, Ballets, Songs, and any form where the melody is the chief characteristic.

For centuries musicians were satisfied with the technique of using a cantus firmus, which indeed offered unlimited scope to the composer's imagination, since it could be laid out to suit his requirements, e.g. it could be divided into long or short phrases interspersed with long or short rests; it could have its note-values augmented, diminished or altered rhythmically; it could be altered by such devices as inversion, (i.e. inverting the intervals of the c.f. melody so that the leap of say a 5th upwards becomes a leap of a 5th downwards, and so on), canzicrans (i.e. turning the c.f. backwards so that the last note becomes the first, and the first the last); it could be moved up or down in pitch (as in Josquin's 'Missa L'homme armé Super Voces
Musicales' à 4).

The method of procedure for composing in four parts with a cantus firmus was, first, to arrange the disposition of the cantus firmus, second, (assuming the c.f. is in the tenor) to write the treble part against it, third, to write the bass part, reckoning the intervals from the tenor according to those already formed by the treble, fourth, to write the Mean part according to the intervals formed by the bass against the tenor; at the same time adhering to the principles of consonance and dissonance treatment. These combinations of notes were not thought of as harmonic progressions but as vertical combinations of intervals. Throughout the period, however, the functional character of the chords in the cadences becomes increasingly apparent.

In the early 16th century an important innovation was developed by Isaac and Josquin: that of composing the voice parts simultaneously, instead of composing one complete part and adding other parts to it one by one. This development coincided with that of the purely imitative forms which dispensed with the cantus firmus. Pietro Aron in his "Il Toscanello in Musica" (1523) said that the music of the "moderns" is better than that of the older composers "because they consider all parts together and do not compose their voices one after the other." (Incidentally, this parallels Leonardo's statement on simultaneity in pictorial composition.)

For centuries composers constructed intervals above or
below the tenor. Ornithoparcus laid down a formula for constructing chords, beginning with the interval from the tenor to the discantus, but - and this was probably the earliest instance of such a rule - Rule 8 (p.67) reads: "Contrarily (if you make your Bass first) you shall make it with the Discantus."

Morley, exactly 80 years later, gave practically the same rules, but that a change in importance from the tenor to the bass has taken place is evident.

The greater part of Morley's instructions for composition are based upon techniques of "descanting" on a cantus firmus, or "plainsong". The plainsongs which Morley used were not flexible like those described above, but were 6 to 8 measures of plain semibreves, against which the student contrived a treble, bass or mean "descant". No interest was attached to the cantus firmus itself, and it might only be altered in exceptional circumstances. Morley treated "descanting" exhaustively, and did not pass on to the subject of "setting" until near the end of his treatise (p.222).

Morley does not say that his pupil should compose from the bass in setting a homophonic passage, but significantly, he gives Zarlino's (1556) "table of usual chords for the composition of four or more parts" (p.226), which measures each interval of the 4-part chord from the tenor; and he follows this (p.227) with examples of how the three upper parts may stand in relation to the bass, giving a variety of chord spacing for each degree
from F to g.

The advent of thorough-bass led the theorists to recognise that the bass was the foundation of the harmony, and for almost a century the rules for composition were founded on the progressions of the bass. Instead of building up the harmony in the order of tenor, treble, bass, mean, as Morley and the earlier theorists had done, it became the custom to proceed from the bass to the treble, alto and tenor - now last instead of first. In general, the chords were still thought of in terms of superimposed intervals, for the theory of chords in root position and their inversions had not yet been rationalized. However, that composers recognised the principle of inversion is indicated by Campian (c.1619) when he said that the bass of a $\frac{6}{3}$ chord is "not a true bass".

Coperario (c.1610) founded his rules for composition on a melodic bass; Thomas Campian and Christopher Simpson ("Division Viol", 1659 and "Compendium", 1667) founded their rules on a harmonic bass:

Campian: "First, it is in this case requisite that a formall Base, or, at least part thereof be framed, the Notes, rising and falling according to the nature of that part, not so much by degrees as by leaps of a third, fourth, or fift, or eight, a sixt being seldome, a seventh never used, and neither of both without the discretion of a skilfull Composer."

In Simpson's treatise which is concerned with improvisations for the viola da gamba over a keyboard accompaniment, a harmonic bass is of course necessary in order to allow more freedom for the violist's "divisions":
Simpson (p.17) "let your Bass move for the most part by Leaps of a Third, Fourth, or Fifth; using degrees no more than to keep it within the proper bounds and Ayre of the Key."

In France, Charpentier's rules were based on the progression of the bass as late as 1690.

It was not until the end of the century that the importance of the melody was clearly recognised, when Purcell made the famous and oft-quoted statement: (p.101) "Formerly they used to compose from the Bass, but Modern Authors compose to the Treble when they make Counterpoint or Basses to Tunes or Songs."

However, we can judge by the tunefulness of the Ayres, Ballets, etc. composed in the early part of the century that composers had conceived their melodies before the basses long before Purcell's time. The French theorist, Salomon de Caus (1615) made the distinction clear early in the century: (p.41) (speaking of composition in three parts) "The subject on which the other parts are composed is usually in the Tenor for Motets, Chansons or Madrigals. But if it is a French Air the subject will be in the highest part."

One more Italianism which became prevalent at the end of the 17th century was the preference for consecutive thirds in the two upper parts in homophonic music. This was a further loss of independence in the part-writing, and another simplification in chord construction. Purcell was the only theorist who mentioned this, and the instructions he wrote are given below: (p.115) "Composition of Three Parts.

"The first thing to Treat of is Counterpoint, and in
this I must differ from Mr. Simpson (whose Compendium I admire as the most Ingenious Book I e're met with upon this Subject;) but his Rule in three parts for Counterpoint is too strict and destructive to good Air, which aught to be preferred before such nice Rules.

(p.116) "This Example is this

<table>
<thead>
<tr>
<th>Treble</th>
<th>Alt.</th>
<th>Bass</th>
</tr>
</thead>
<tbody>
<tr>
<td>LN. B. Purcell has transposed the example a tone higher. &quot;Compendium&quot;, 1667, p.54.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

"Now in my opinion the Alt or Second Part should move gradually Thirds with the Treble; though the other be fuller, this is the smoothest, and carries most Air and Form in it, and I am sure 'tis the constant Practise of the Italians in all their music, either Vocal or Instrumental, which I presume ought to be a guide to us; the way I would have, is thus:

Example

"When you make a Second Treble to a Tune, keep it always below the upper part, because it may not spoil the Air; But if you compose Sonata's, there one Treble has as much Predominancy as the other; and you are not tied to such a strict Rule, but one may interfere with the other..."
16. FORBIDDEN MELODIC INTERVALS

On the whole, the 17th century English theorists did not specify very clearly the disjunct progressions which they considered bad. A number hinted that a good composer might use any interval with judgment; but there was little guidance for the beginner. We will examine the rules laid down by the 17th century writers, bearing in mind the intervals which were regarded as good in 16th century contrapuntal tradition, i.e.

- 2nd Major and Minor
- 3rd Major and Minor
- 4th Perfect
- 5th Perfect
- 6th Minor
- Octave

At the end of "The Pathway to Musicke" (1596), which omits any reference to irregular melodic leaps, there is this rule:

"To have the ready sight of Descant, you must never seek your sight under the plainsong lower than the 5th, and if you be purposed to sing lower, fetch your sight above in the 8th, as thus. Example."

The last two bars of the "descant" (lower part) are obviously misprinted since (1) the leap of a 10th would not be recommended to a novice; (2) the Locrian mode was avoided like the plague, even though no faults arise in this example; (3) the leap makes crossed perfect 5ths; (4) the rule reads "fetch your sight above in the 8th". The last four notes in the lower part should
therefore be a third lower.

Morley (1597) condemned only one disjunct progression and that was the tritone, (pp. 164, 191 and 256). Among his musical examples one may come across a major 6th (pp. 17, 78, 81, 166 and 269), a leap up of a minor 10th (p. 82), and a leap up of an 11th (pp. 79 and 258), but in the text he makes no reference to unvocal leaps.

Morley objected to the leap from F sharp to B ascending (p. 176), though he allows one to stand in his Canzonet (p. 98). (Note: The editor of the 1952 edition draws attention to a diminished 4th downwards (p. 96) and points out that Morley condemned it; but Morley condemned only the leap upwards. As a leap downwards, the F was probably sharpened to avoid the tritone even though the accidental created a diminished 4th.)

Ornithoparcus (original 1517, Dowland translation, 1609) mentioned only the Mean and Bass voices in relation to leaps: (p. 82) "17. Let the Meane seldom leap by a fift upwards, but by a sixt and an eight it may oft: to which also an eight downward is forbidden, though all the other intervals be granted.

18. A Base may not leap a six,..."

Ornithoparcus does not provide reasons for these rules, and one wonders why the alto was not allowed a leap upwards of a 5th. No restriction of this kind is to be found in compositions of the 15th and 16th centuries.

Thomas Campian (c. 1619) who advocated that the bass part should be composed first, recommended leaps of a 3rd, 4th, 5th or 8th (but seldom a 6th) in that part, for he recognised it
as the harmonic basis of the music; but he does not mention irregular melodic progressions in the upper parts. His method of teaching composition is so carefully thought out in terms of any one chord moving as conjunctly as possible to the next, that unvocal leaps were practically impossible.

Butler (1636) is more explicit, although he does not mention the harmonic necessity of leaps in the bass:

(p.45) "Modulations in melody are more smooth, facile, and fluent, by degrees, than by skips: (and therefore even in many parts, the chief, as much as may be, should observe Degrees) and skips are better to consonant than to dissonant intervals: as to a 3rd, a 4th, a 5th, an 8th, and sometimes a 6th: but seldom to a 7th, or 9th; (and that not without some special cause) and to a Tritonus or Semidiapente never."

Playford's "Introduction" provided the rules (given above) by Campian from the 1655 edition to the 1679 edition. In the 1683 edition, which is a collation of excerpts from many treatises, Playford omitted to include a rule against leaping discordant and unvocal intervals.

In the 1694 edition, Purcell specifies only the tritone as an inharmonical leap, and that merely incidentally (p.104), when analysing a 2-part phrase. In the section on "Composition of Four Parts" (p.129) he gives his reader this unspecific advice:

(p.129) "...be sure to keep a smoothness and decorum, that none of the Inner Parts may make an Irregular Skip either upwards or downwards..."

One might expect Purcell to mention that he liked the leap of a tritone descending, since it was one of the characteristic features of his own melodic lines. Nor was he averse to the major 6th ascending. The following table shows the instances
of irregular vocal intervals which occur in his dramatic music.

Taken from such a large collection of vocal music, it will be realised that they are all rare except the tritone:

<table>
<thead>
<tr>
<th>Interval Type</th>
<th>Down</th>
<th>Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperfect 5th (tritone)</td>
<td>126</td>
<td>4</td>
</tr>
<tr>
<td>Imperfect 4th (tritone)</td>
<td>37</td>
<td>13</td>
</tr>
<tr>
<td>Major 6th</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td>Diminished 4th</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Minor 7th</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Major 7th</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Diminished 7th</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Diminished 8ve</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Minor 9th</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Major 9th</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Minor 10th</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Major 10th</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Augmented 5th</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Purcell used the more difficult vocal intervals in ascending leaps, probably because a singer would find it easier to pitch the note accurately if aimed at from below.

J.H. Alstead (original 1611, Birchensha's translation 1664) gave clearer directions than did his English contemporaries of the early 17th century, though by the time his treatise appeared in England, those rules had already been outlined by Campian and Butler.

(p.66) "7. Let Melodies associate by gradual, not by skipping motion. For if every Melody do proceed rather by degrees, than fly violently by greater Intervals and Leaps, it will be more grateful to the Ears; yet the Bass is allowed to move by Leaps."

(p.93) "To these Moods or Intervals there are four prohibited Intervals opposed by vulgar Musicians. (1) A Tritone which containeth 3 Tones, and is made from ia to mi. (2) A Semidiapente which passeth from mi to fa containing 2 Tones and as many Semitones. [i.e. also a tritone as B to F] (3) A Semidiapason, which is an 8ve containing 3 Semitones and 4 tones, reaching from mi to fa. [i.e. a diminished 8ve] (4) A Diapason, which is an Interval by a 15th; within which there is a Limit appointed to
the Voice: beyond which it may not wander; and if it wander it is but feigned; For if more Distances than a Diapason occur, they will equisonate with the former Distances in the Octave."

The treatise by Alexander Malcolm contains these rules:

(p.421) "1. The Treble ought to proceed by as little intervals as is possibly consistent with that variety of Air, which is its distinguishing character.

3. The ascending by the distance of a false 5th is forbid, as being harsh and disagreeable; but descending by such a distance is often practised especially in the Bass.

4. To proceed by the distance of a spurious 2nd, that is, from any note that is sharp, to the note immediately above or below it that is flat; or from any note flat to the note immediately above or below it sharp, is very offensive. [Note: An augmented 2nd is meant. To go from a sharp note to one above that is flat would be an enharmonic change of the same note, e.g. C sharp to D flat.] As we are in greatest danger of transgressing this rule in a flat [i.e. minor] key, because of the lesser 6th, and the greater 7th which are two of the natural notes of the harmony, we are therefore to take care that descending from the key we may proceed by the 7th lesser to the lesser 6th and ascending to it we may proceed by the greater 6th to the greater 7th. [Note: This is the earliest reference to the melodic minor scale.]

5. The proceeding by the distance of a lesser 7th in any of the parts is very harsh."

Dr. Pepusch's (1730) rules are similar to those of a century earlier. (Cf. Butler)

(p.7) "Those melodies are the most agreeable that go by degrees; and next to these, those that go by the smallest leaps; and excepting the leap of an 8ve, none greater than that of a 6th Minor is allowed. But the leaps of the False Relations, viz. of a Tritonus, and of a semidiapente are absolutely forbidden."

Of the French theorists, only Charpentier (c.1690) makes reference to forbidden intervals. (N.B. In the treatise they are given as musical examples in the treble clef.)
Enumeration of the forbidden intervals which one should avoid. These are:

<table>
<thead>
<tr>
<th>Leaps upwards</th>
<th>Leaps downwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>G# to Ab</td>
<td>G# to Eb</td>
</tr>
<tr>
<td></td>
<td>G# to C</td>
</tr>
<tr>
<td></td>
<td>G to C#</td>
</tr>
<tr>
<td></td>
<td>G# to Db</td>
</tr>
<tr>
<td></td>
<td>G to D#</td>
</tr>
<tr>
<td></td>
<td>G to E</td>
</tr>
<tr>
<td></td>
<td>G to F</td>
</tr>
<tr>
<td></td>
<td>G to F#</td>
</tr>
<tr>
<td></td>
<td>G# to C</td>
</tr>
<tr>
<td></td>
<td>G# to G#</td>
</tr>
<tr>
<td></td>
<td>G, j to G</td>
</tr>
</tbody>
</table>

- This is an enharmonic change of the same note.
- Diminished 3rd
- Imperfect 4th
- Imperfect 4th
- Diminished 5th
- Imperfect 5th
- Major 6th
- Minor 7th
- Major 7th
- Augmented 3rd
- Imperfect 5th
- Major 6th
- Minor 7th
- Diminished 8ve
- Augmented 8ve

"Nevertheless the expression of the subject sometimes obliges us to use these false intervals, when they are the master-strokes."

(1) Charpentier forbids G sharp to A flat, the enharmonic change of the same note, in the same way that Alexander Malcolm does (Cf.). Of course, in mean-tone temperament they would be slightly different. (2) Charpentier omitted the augmented 2nd; also, he would hardly have allowed the leap downwards of a major 7th; nor the leaps upwards of a diminished or augmented 8ve; nor the leap downwards of a diminished 5th.

None of the English theorists mentioned compound intervals; and the only French writer to refer to them was Antoine Parran (1646):

(p.63) (Speaking of the 4th) "...one sees frequently in Du Caurroy... the redoubling of the 4th, and the progression of the 7th and 9th; all that is good, but one must avoid these last when the 7th, and the 9th are so near, that there are only one or two notes between the two, only to be able to take easily, and well a propos the 8ve of the said 7th as it would be in a cadence."
"Example of the progression of the 9th and 7th"

These progressions of the 9th and 7th are good, because of the multitude of notes which are between them.

Bad progression Good in a Cadence.
17. FORBIDDEN CONSECUTIVES

One of the most important precepts of classical harmony and counterpoint is the avoidance of consecutive 5ths and 8ves. Since the 14th century, or even earlier, this has been regarded as one of the essential principles of western music. It is founded upon the following reasons:

(1) That consecutive perfect intervals are obtrusive and unsubtle.
(2) That they detract from the independence of the part-writing.
(3) That the sound of consecutive 5ths impoverishes the harmony, making it sound bare.

In the 15th and 16th centuries the independence of the parts was capable of excusing the actual sound of consecutives, as in the cadential formula where the voices cross and avoid direct consecutive 5ths:

\[
\begin{align*}
\text{Josquin Des Prez} \\
\text{"Salve Sancte facies" (a 4), bars 124-5, Bologna MS Q.20}
\end{align*}
\]

In this period also it was considered that if one of the perfect 5ths was a short passing-note or an ornamental note, the bad effect of the progression was removed, as in these two examples by Josquin:

\[
\begin{align*}
\text{"Qui Regis Israel (a 5)"} & \quad \text{G.A.63, Bar 11, s. & t.} \\
\text{"Misericordias Domini" (a 4)} & \quad \text{G.A. 43, Bars 122-3, a. & t.}
\end{align*}
\]
No treatise containing the rules of composition omits to mention forbidden consecutives. Nearly every treatise within the scope of this study contains either a brief reference to this subject, or gives lengthy instructions about the avoidance of consecutive perfect intervals, plus all the niceties of hidden 5ths and 8ves.

"The Pathway to Musick" (anon. 1596), after giving the rule forbidding direct consecutives, states: "You may take two perfects together of divers kinds", e.g. unison to 5th, or 5th to unison; and the examples include the overlapping progression from unison to 5th, which has been regarded as faulty by other theorists at all times since the 15th century, thus:

\[
\text{\textbf{\tiny Figure 1: Overlapping Progression}}
\]

Thomas Morley's (1597) emphatic statement that consecutive unisons, 5ths and 8ves are forbidden, evokes this observation from his imaginary pupil, Philomathes:

(p.143) "PHI. "This is easy to be discerned as it is set down now but it will not be so easy to be perceived when they be mingled with other notes..."

MA. "There is no way to discern them but by diligent marking wherein every note standeth, which you cannot do but by continual practice, and so by marking where the notes stand and how far every one is from the next before you shall easily know both what chords they be and also what chord cometh next."

His next rule (p.148) is rather unusual: he strictly forbids consecutive 5ths when one 5th is imperfect. Imperfect 5ths are normally considered to ameliorate the effect of consecutive 5ths,
and most theorists permit them. Next, he draws attention (p.151-2) to the bad effect of progressing from a 5th to an 8ve in two parts, e.g.
(p.151)

Morley's rules for consecutive octaves are as follows: (p.157)
(1) Octaves moving by step with one part anticipating, forbidden:
   (N.B. Morley has one of these in his own example, p.315)

(2) Octaves with a short rest in one part, forbidden:
   (N.B. Morley has these in his own examples on pp. 220, 233, 236 and 239.)

(3) Octaves leaping a third, with the intervening note filled in in one voice, forbidden: (N.B. Morley has one of these in his example on p.287)
(N.B. Morley gives examples similar to the three above for the unison and 5th.)

(4) Octaves leaping a 5th with the intervening notes filled in in one voice, forbidden:

As the book proceeds, other rules crop up relating to hidden consecutives:

(1) (p.151-2) Skipping from the 10th to the 8ve, both parts ascending, condemned:

(2) (p.163) Falling from a 6th to an 8ve, the upper part moving down by step, forbidden:

(3) (p.253) Leaping from the 6th to the 8ve, 6th to the unison, and 10th to the 8ve, ascending and descending to be avoided.

(4) (p.253) Skipping up to a unison from a 6th, 3rd or 5th, forbidden.

(5) (p.264-5) Moving from a 5th to an 8ve, the upper part moving down by step, forbidden:
Morley's treatise was, of course, a more comprehensive one than any of those which followed during the 17th century; and on the whole, he takes the instructions for composition to greater length, and embodies many more precise details than his successors.

Ornithoparcus (orig. 1517, Dowland trans. 1609) gives the simple rule that "two perfect concords of the same kind are not suffered to follow themselves." He also says that "A minim, or his pause [i.e. rest] is not sufficient to come betwixt perfect concords of the same kind, because of the little, and as it were insensible sound it hath, although by most the contrary be observed." (p. 80).

Coperario (c. 1610), after stating the general rule, gives some directions about hidden consecutives:

(f. 3v) "It is not good to rise with the Bass from a 12th unto an 8th, or from an 8th unto a 5th. Neither is it good to fall with the bass from an 8th unto a 12th, or from a 5th unto an 8th, as for example:"

"You ought to shunn for to rise with the Bass from a 6th, unto an 8th, likewise you may do well in shunning to fall with the bass from an 8th unto a 6th, as for example:"

Bukofzer says in his Preface to the facsimile edition (1952)
(p.6) "...his advice to avoid skipping from the octave to the 6th is very uncommon and more restrictive than usual."

However, exactly the same rule and examples may be seen in Campian's treatise (c.1619); and Campian tells us that he has taken his rules from Sethus Calvisius ("Melopeiam sive Melodiae condendae ratio", 1592). Campian confines the rule to the bass which is "sharp in F". In the section entitled "Of the Taking of all Concord perfect and imperfect" he says:

"Note here that it is not good to fall with the Base, being sharp in F from an eighth unto a 6th."

This rule is followed by two examples which are the same as Coperario's last two examples above. At the end of his treatise, in the section "Of the lesser sixth" he gives the rule:

"The lesser sixth ... goes into an eighth ... when the parts ascend or descend together, and one of them proceeds by the half note, the other by leap." [See example below]

"However the ways of rising and falling from the lesser sixth into the eighth in the former example may pass, I am sure that if the base be sharp in F, it is not tolerable to rise from a sixth to an eighth."

(1) The permissible progression (2) The forbidden progression from Lesser 6th to 8ve. with F sharp in the bass.

(Note: Butler says these progressions are "seldom used". Cf.)

The chief objection to both of these examples is that they move to the 8ve in similar motion ascending; but it is interesting that Campian makes a distinction between these two progressions
which are in fact the same: both from the minor 6th on the leading note.

Campian rules that the 5th may pass to the 8ve, or the 8ve to the 5th, "yet most conveniently when one of them moves by degrees, and the other by leaps, for when both skip together the passage is less pleasant." Like Morley (p.151) he objects to this progression unless it is for many voices:

Campian also treats hidden consecutives from the 3rd and he forbids the following:

1. Minor 3rd to unison when both parts leap or fall together:
   (N.B. The 2nd example is a Major 3rd.)

2. Minor 3rd to 5th when both parts leap upwards, and Minor 3rd to 5th, the upper part remaining in the same place.

Butler commended this last example (Cf.) but Campian says of it:

"In the last disallowance, ...many have been deceived, their ears not finding the absurdity of it: but as this way is immusical, so is the fall of the greater third in the former manner, into a 5th, passing harmonious; in so much that it is elegantly and with much grace taken in one part of a short air
four times, whereas had the 5th been half so often taken with the lesser third falling, it would have yielded a most unpleasing harmony."

This is followed by a 2-part Air in which the Major 3rd followed by the 5th is introduced four times.

(3) The minor 3rd to 8ve is good when the lower part descends by degrees, and the upper part by leaps; but not so good when the upper part riseth by degrees, and the lower part falls by a leap: (N.B. Butler also approves of this progression, cf.)

At the end of his rules for taking concords, Campian says that some dispensation may be allowed in "fuge" and in many parts "because the multitude of parts will drown any small inconvenience."

Elway Bevin, whose small number of rules are all brief, only says regarding the Unison, 5th, 8ve, 12th and 15th: "Of these you may not take two of one sort together, neither rising nor falling, as two 5ths or two 8ves."

Butler (1636) first gives a general rule:

(p.56) "...the simple consecution of these 3 primary concords [i.e. unison, 5th and 8ve] both in gradation and skippings, is irksome to the ear, and therefore prohibited."

He follows this rule with examples, then goes on to say:

"These prohibited consecutives are of that force, that they are not taken away by the interpolation either of
discords, i.e. discordant passing notes or of the smaller rests."

These are the same rules as Morley laid down (p. 157), and so is the next one which forbids 5ths with an imperfect 5th between them: (Morley, p. 148)

Butler quotes the rule of Calvisius about consecutive 4ths, (Chap. 10, "Melopeiam", 1592) who "showeth it to be the practice of most musicians, to continue 4ths in 6ths: so they begin with a primary concord, and end with an 8ve:"

This type of fauxbourdon passage, though quite common in the 15th century, was certainly obsolete long before Butler's time; (but so were many other subjects which the English theorists quoted from older treatises.)

Butler repeats Campian's rule forbidding the progression from major or minor 3rd to the unison when both parts ascend or descend together and overlap:
Among his examples of good progressions from the minor 3rd to the 5th, Butler includes the example which Campian describes as "immusical", (see above). Butler says it is good for the 3rd to be followed by the 5th "when one of them stayeth in his place" (p.59).

Butler condemns the 3rd moving to the 8ve when both parts ascend by leap (p.60); but among the progressions of the 3rd to the 8ve which Butler approves, (and indeed it is a harmless progression), is the one which Campian condemns (cf.):

(p.60)

Lastly, Butler says that the progression from the 6th to the 8ve is used "seldom when they ascend or descend together, the one by Degree, the other by skip." (N.B. The first of these examples is the same as the one which Campian commended, cf.)

(p.61)

Playford's "Introduction" contained the rules laid down by Campian in the editions from 1655 to 1679. In the 1683 edition, Playford compiled the Third Part of his book from the treatises of a number of other theorists. The first rules he introduces about consecutives (pp. 6 and 12) are the same as those given by Coperario. The next (p.14), which are general rules prohibiting consecutive 5ths and 8ves, are taken from Simpson's "Division Viol" (1659); following these (p.15) are rules for 'Hidden 8ves and 5ths', taken
from Simpson's "Compendium" (1667); lastly, (p.31) he again provides the general rule, taken this time from Campian's treatise. In the 1694 edition, which was revised by Purcell, the rules on pp. 6, 12 and 14 of the 1683 edition were retained and were no doubt considered sufficient. They remained unchanged throughout the remainder of the editions, i.e. until the last edition in 1730.

Descartes (orig. 1618) briefly states the general rule (p.49), adding that the reason why consecutive perfect intervals are prohibited is because "they are the most perfect, and therefore when one of them is heard, then is the hearing therewith fully satisfied." More than one perfect interval makes a "frigid symphony of the tune", which is not the case with the imperfect consonances.

In the "Division Viol" (1659), Simpson, after giving the usual rules against consecutives, says that they "may be allowed in contrary motion in Songs of many parts." (p.15). And "you may pass from a 5th to an 8ve, or from an 8ve to a 5th" providing that the parts do not leap together. In Part III of his book, in dealing with consecutives in his instructions about Divisions, Simpson repudiates the rule against interpolated imperfect 5ths laid down by Morley (p.158) and Butler (p.56):

(p.42) "As for Fifths... If they happen in Descant, there is no apology for them, except one of them be a false fifth, which, though not allowed by some precise Musicians of former times, yet our more modern Authors, as well Writers as Composers, do both use it and approve it. For my own part, I do not only allow the Consecution of two 5ths, when one of them is Defective, but (being rightly taken)
esteem it amongst the Elegancies of Figurate Musick."

In his "Compendium" (1667) Simpson includes similar rules to those above, but modifies his remarks on the consecution of 5ths when one of them is imperfect:

(p.125) "This I speak supposing them to be in short notes. But if the Notes be long, as semibreves, and sometimes also Minims; I should then rather choose to have the perfect 5th to hold on, till the other part remove to a 6th before it change to an Imperfect 5th:"

Not thus but thus or thus

(This manner of "breaking" a 5th is also discussed under "Trailing Fifths" cf.)

J. Alstead (orig. 1611) and William Holder (1694) gave only the basic rules and made no departures from the usual instructions.

Dr. Pepusch (1730), in addition to the general rules, says (p.9) that "a false 5th may immediately follow a perfect 5th, provided it be also immediately followed by a sharp 3rd, gradually and by the contrary motion."

The 17th century French theorists give rules and examples of consecutive perfect intervals, and a large variety of hidden consecutives, treating the subject even more thoroughly than their English contemporaries. The only one who made some curious departures from the general rules was Charpentier in his MS treatise (c.1690). After forbidding consecutive 5ths,
he says:

(f. 2v) "Several consecutive octaves between the parts and even against the bass make no fault at all because they do not determine the accords."

(f. 3r) "The Plainchant of the Church sung by the low and high voices at the 8ve, sounding one against the other, never makes a hard sound on the ear."

This contradicts his opening rule: that one should pass from a perfect chord to another perfect chord only by contrary motion.

Of the following example of consecutive octaves:

(f. 5r)

Charpentier says: "Good because the first note of the Bass is accompanied by the sixth, and the second by the 5th which diversifies the accords." The next unusual licence pertains to consecutive 4ths and 5ths:

(f. 5r) "Several consecutive 4ths or 5ths in similar motion are again allowed between the upper parts provided that they are of different species and that they move conjunctly. Ex."

"C. These are good because they move by degree conjunctly and because the first and the last which are more piercing than the others are of a different species. D. Good for the same reason."
18. FALSE RELATION

False relation is of three kinds:

(1) The false relation of the tritone.

(2) Chromatic false relation, e.g. F sharp in one voice followed by F natural in another.

(3) Simultaneous false relation, e.g. E flat and E natural sounding together.

The false relation of the tritone is a fault which nearly all theorists have forbidden since the middle ages. In early times it was called the "Diabolus in Musica" and music students learnt the proverb:

Mi contra fa
Diabolus in musica.

In the hexachord system, mi to fa was a semitone if the two syllables were taken from the same hexachord, and a tritone if taken from successive hexachords. In the absence of a 7th syllable, if a melody exceeded six notes of a hexachord, it mutated to the next hexachord, which provided "fa" as the 7th note. It was between this leading-note fa and the mi below that the tritone commonly made its faulty appearance.

Thomas Morley (1597) makes a brief reference (p.189) to the false relation of the tritone in his rules for double counterpoint. (This is discussed and the examples given in the concordance "Double Counterpoint". See page 358) He disapproved more strongly of the other two types of false relation. Referring to the F natural and F sharp sounding together in this measure:
"...I have set down a kind of closing (because of yourself you could not have discerned it) from which I would have you altogether abstain, for it is an unpleasant harsh music; and though it hath much pleased divers of our descanters in times past and been received as current amongst others of later time, yet hath it ever been condemned of the most skilful here in England and scoffed at amongst strangers, for, as they say, there can be nothing falser, and their opinion seemeth to me to be grounded upon good reason however it contenteth others."

He is equally averse to successive false relation:

...but that and many other such closings have been in too much estimation heretofore amongst the very chiefest of our musicians, whereof amongst many evil this is one of the worst."

(Another example by Morley may be seen in the concordance "Cadences" on page 303) Morley's master, William Byrd, (to whom he dedicated his treatise), used both these types of false relation, especially in the form of the "English cadence"; and in spite of Morley's criticism of this native practice, he himself introduces simultaneous false relation in three of his
examples in the book without condemning them. (Vide examples on pp. 54, 185 and 318.)

Thomas Campian (c. 1619) makes no reference to simultaneous false relation, but his rules for the other two kinds are strict:

"Relation or reference, or respect not harmonical is Mi against Fa in a cross form, and it is in four Notes, when the one being considered cross with the other doth produce in the Musick a strange discord."

\[
\begin{array}{cccccc}
1 & 2 & 3 & 4 & 5 & 6 \\
\end{array}
\]

"The first note of the upper part is in Elami sharp, which being considered, or referred to the second Note of the lower part, which is Elami, made flat by the chromatic flat sign, begets a false second, which is a harsh discord, and though these Notes sound not both together, yet in few parts they leave an offence in the ear. The second example is the same descending, the third is from Elami sharp in the first note of the lower part, to the second note in the upper part, it being flat by reason of the flat sign, and so between them they mix in the Musick a false fifth, the same doth the fourth example, but the fifth example yields a false 4th, and the sixth a false 5th."

Campian's reference to "Mi-Fa" relates to the newly devised four-syllable sol-fa which was explained for the first time in his 'Preface'. (See the concordance "The Gamut" where this is discussed more fully.) This example of the octave from C shows the tritone from Fa to Mi:

\[
\begin{array}{cccccc}
\end{array}
\]

Fa Sol La Fa Sol La Mi Fa
Campion says that consecutive major thirds and minor sixths should not be used as they create false relations and make the harmony less pleasing, e.g.

Charles Butler (1636) was concerned only with the tritone false relation:

(p.59) "The consecution in the first and last of these five ways is excepted against, propter relationem non Harmonicam. But this happeneth seldom: for of all the 7 relations of the 7 notes, in both these ways, there is but one Non Harmonica; and that, when it happeneth, by flatterng the sharp or sharpe the flat, may be corrected."

The two examples he refers to are these, with the corrected version:

Butler goes on to say:

(p.61) "Yea the most harsh discords Tritonus and Semidiapente, which, for their extreme jarring above others, are branded with Relatio non Harmonica, being ordered aright become Harmonical."

He allows the tritone as a discordant passing note, where "the notes, because they are Discords, be of short time (Minims, Crotchets, Quavers) for so even Relatio non Harmonica will not offend." (p.61-2)
"Here the two parts set below are two Tritones to the Mi's above: and the same, set above, are two Semidispentas: yet, being thus taken, they make good harmony: yea though the minim Pha be also a 7th to the bass."

(N.B. Butler invented the syllable "Pha" for the 7th note of the scale so that it would be distinguished from the fourth syllable "Fa").

Réné Descartes (orig. 1618) includes the rule (p. 48): "That we admit not a Tritone, or 5th false, no not so much as in relation." Like Butler, he says that this dissonance is good in a passing-note position. (p. 53).

Simpson, in his "Division Viol" (1659), briefly rules that "you have liberty to pass from any one, to any other different Concord, provided you avoid Relation inharmonical; that is, a harsh and unpleasing reflection of flat against sharp." In his "Compendium" (1667), he enlarged upon this rule and demonstrated it with examples. He also added two new observations:

(p. 93) "It is both usual and proper for the upper part to change from flat to sharp when the Bass doth fall a lesser 3rd as in this Example:"

![Music notation image](image)

(p. 95) "The reason why F sharp to B flat is good and usual is because in theory it is the same as a Major 3rd:"

(N.B. This was the only observation about enharmonic intervals to be made during the 17th century.)
Playford's editions of the "Introduction" from 1655 to 1679 contained Campian's rules for false relation, exactly as given earlier. In the 1683 edition, which is a collation of rules and examples from a number of treatises, Playford quotes the rule from Simpson's "Compendium", p. 95, as given above, and since Purcell did not alter it in the 1694 edition, it remained in the book until the last edition in 1730.

William Holder (1694) gives examples of lawful and unlawful thirds in succession, and as earlier theorists had pointed out, consecutive major thirds create false relation:

"Lawful movement of thirds, mixed."  
"Unlawful movement of thirds major."

The French 17th century theorists gave rules against the tritone false relation, and chromatic false relation. The anonymous "Traicté" (1616) and Antoine Parran (1646) include a rule against moving from the Major 6th to the major 3rd or the minor 6th to the minor 3rd, which makes a tritone false relation.

Charpentier in his MS treatise (c. 1690) makes a fresh contribution to the niceties of false relation:
"Permissible False Relation"

False relation caused by the leading note or the supertonic of a mode or a cadence, is not only permissible, but it is forbidden to avoid it. For example, the Mode or the Cadence that I shall treat is in Re, Mi is the supertonic of Re, Ut is the leading note of Re. Example:

(1) The false relation caused by the leading note of Re is so agreeable that it is forbidden to avoid it.

(2) The false relation caused by the supertonic of Re is so agreeable that one should not avoid it.

(3) The Italians by putting a flat to the supertonic avoid the false relation but that is in order to express the sorrows or the weakness of the last words of a dying man."

Later Charpentier treats the tritone false relation at greater length, and reiterates the permissibility of it at cadences, with these examples:

"Excellent because "Bad because the it is caused by the leading note of Supertonic of Ut leading note of Ut." Ut is impaired." is impaired."

It will have been noticed that Morley's disapproval of the chromatic false relation at cadences was not echoed by any of the later theorists; moreover the composers of the second half of the
17th century, especially Purcell and Blow, made this type of false relation a characteristic of their style. Undoubtedly, it was still "scoffed at amongst strangers", because it harks back to the modes with its leading note descending flat and ascending sharp in succession, or simultaneously:

Purcell

1st & 2nd violins 1st & 2nd violins 1st & 2nd violins.

The poignancy of the false relation in the "English cadence" is one of the pleasing characteristics which we listen for in 17th century English music. No doubt the Italian music which was being imported into England in growing quantities by the end of the 17th century, had the effect of inhibiting our native composers against the use of these archaic features, since they speedily disappeared in the early 18th century.
19. TRAILING FIFTHS

The term "trailing fifths" will be used here to mean a sequence of suspended 6ths resolving on 5ths. Consonant suspensions of this kind were quite common in music prior to the 17th century, and were still esteemed by some of the 17th century theorists. The attributes of this sequence may be summarized as follows:

(1) It was considered inept to write three or more consecutive 6ths except in this manner.
(2) It avoided the fault of consecutive 5ths.
(3) It was a fault to follow the major 6th by a 5th except in this type of sequence.
(4) It gave independent rhythm to two voices which at this time was more desirable than the harmonic significance of a dissonant suspension.

The 17th century theorists were not unanimous in their rulings on the use of this sequence, as will be shown. Strangely enough, Morley (1597, p.166) proved to be more modern in outlook than most of his successors in the next century, for he perceived that the consonant suspension was weaker harmonically than the dissonant suspension. (p.165. Last three bars of example):
Criticizing these three bars, Morley says:

(p.166) "That kind of binding with concords is not so good as those bindings which are mixed with discords..."

Later in the book, however, when he is speaking specifically about syncopation, he gives an example in two parts which is entirely syncopated, and between bars 10 and 15 he introduces both an ascending and a descending sequence of 6-5 suspensions:

(p.257)

Coperario (c.1610) who based his instructions on the progression of the bass, advised his pupils to use the 6-5 sequence formula whenever the bass moved up or down by degrees:

(f.22r) "If the Bass rise many seconds, lett the part which uses the 5th divide, and then use a 6th, and so hold as it appeareth in the Tenor in the following example."

(f.28r) "Or if the Bass fall manie seconds you maie beginn to devide with the 6, and then use the 5, holding the same you must use the 6th again. The holding is uppon the 6."

(The two examples accompanying the above rules may be seen in Appendix III: John Blow's copy of Coperario's Rules; the first example on f.164v, last example; the second on f.167r, last example.)

Thomas Campian (1619) said that the major sixth should proceed to the octave, but may proceed to the 5th in a suspension:
"The greater sixth in proceeding affects the eight; but it will hardly pass into the fifth, unless it be in binding wise..."

The anonymous French theorist who wrote the "Traicté de Musique" (1616) gave a similar rule:

(f.14r) "It has been said above that the major 6th should not be followed by the 5th, however, by the means of a syncope it is possible to do this both ascending and descending."

Butler (1636) makes a fleeting reference to this type of suspension in his rules for syncopes, merely stating that "the 6th is bound with the 5th" and illustrating it with a short two-part example.

Christopher Simpson in both his "Division Viol" (1659, p.21) and his "Compendium" (1667, p.83) refrains from giving an example of the sequence in two parts, but includes the same example in both treatises in three parts, where the middle part, moving a 3rd below the upper part, makes a 6/4 chord on the weak beat twice in the 2nd bar; the second 4th is abandoned like an échappée note:

![Musical notation](image)

Playford, in the 1683 edition of his "Introduction" gives this rule:

(p.5) "Take no more than two or three 6ths; Or they move by a 5th or a 6th: As,"
Most of the material in the 1683 edition was drawn from various earlier sources (vide Chapter II). The origin of the above example has not been traced, and judging by the clumsy nature of the two-part writing, it is quite likely that Playford wrote it himself. It is a little surprising to find that Purcell allows this example to stand in the 1694 edition, for he rarely, if ever, used trailing fifths in his compositions. No doubt, like the other theorists of his time, he approved of the rule in principle, and could not spare the time to substitute a better example. The two other examples of 6-5 sequences which Playford quotes in the 1683 edition are copied from Christopher Simpson (the example given above), and Coperario (f.36r). Playford included the latter under "Examples of holding upon Discords in 4 Parts", though it is concordant: (p.39)

It is interesting to note that Matthew Locke ("Melothesia", 1673) and John Blow ("Rules for playing of a Thorough Bass", Add. 34072, ff.1-5, undated) both include the 6-5 sequence as a
rule for a bass which moves by degrees. Locke's rule reads:

"(6) If many Notes of the same length immediately ascend one after another, the common Descant is a Fifth and Sixth upon every one, or more of them: And if many descend in the like manner, the Descant is to be a Sixth and Fifth, or a Seventh and Sixth, on each of them. But which of these two last are to be used, cannot be set down by any Rule, but must be left to your own Ear..."

"Examples of the 6th Rule"

By the mid-18th century it was considered a fault to use this sequence descending. Marpurg ("Handbuch bey dem Generalbasse und der Composition", Part I, 2nd ed. 1762, Abschnitt II, p.95) writes:

"When the progression of the two parts takes place by step, with the Sixth coming first, it can only take place with rising notes, but not comfortably with falling notes where it is regarded simply as a faulty progression of Fifths."
DIVISION OR BREAKING

A few of the English 17th century theorists included in their treatises a section on 'Division'. 'Division' and 'breaking' were terms used at this time relating to the art of subdividing long notes into a number of shorter ones, either in passing notes, or in such ornamental figures as changing notes, turns, and broken chord figures. In the 17th century the technique was mainly an instrumental one; singers may have continued to break long notes, but not in such an elaborate way as the instrumentalists.

Until the end of the 16th century the art of Division was practised by singers. Morley wrote his instructions for Divisions in terms of the voice. At the turn of the century, the fashion changed and graces and ornaments were introduced into vocal melodies instead. Caccini ("Le Nuove Musiche", 1602) in his 'Preface', a partial translation of which was first included in Playford's "Introduction" in 1664, said:

(p.58) "But seeing many of them [i.e. his own vocal compositions] go about maimed and spoyle, and that those long winding Points were ill performed, I therefore devised to avoyd that old manner of Division which has been hitherto used, being indeed more proper for Wind and Stringed Instruments than for the Voyce."

In place of Divisions Caccini wrote elaborate trills and graces which his 'Preface' described and demonstrated in fully notated examples.

Thomas Morley (1597) refers briefly to the "way of breaking a plainsong" (p.177). He speaks about the early 16th century
composers (Parsley, Redford, Tallis, Preston, Hodges, Thorne and Selbye), adding that many examples of a variety of breaking of plainsongs may be found in their works. In fact the plainsongs they used were so thoroughly "broken" that "one not very well skilled in music should scant discern any plainsong at all."

Morley gives only one rule (p.178): "ever to keep the substance of the note of the plainsong", which he amplifies with this explanation: "When, in breaking it, you sing either your first or last note in the same key wherein it standeth, or in his octave." e.g.

(p.178) "Here be three plainsong notes, \( \text{\textbullet\textbullet\textbullet} \), which you may break thus: \( \text{\textbullet\textbullet\textbullet} \);

thus: \( \text{\textbullet\textbullet\textbullet} \);

or thus: \( \text{\textbullet\textbullet\textbullet} \); and infinite more ways which you may devise to fit your canon, for these I have only set down to show you what the keeping the substance of your note is."

Morley then gives Osbert Parsley's (1511-85) canon three parts in one, which is made from the plainsong hymn "Salvator mundi", broken in division. He also gives the plainsong so that the student may see how Parsley has broken every note of it.

Coperario (c.1610) (whose examples are always in an instrumental style) devotes a long section to "Division" (ii.11v-18r). The instructions fall into two sections, (1) the division of the highest part (unaccompanied); (2) the division of the bass with
the three upper parts. He limits himself to dividing the intervals ascending and descending of a 3rd, 4th and 5th; and his divisions are always of the simplest kind: passing notes varied rhythmically, with an occasional auxiliary note.

Campian (c.1619) says: "...that in composing of the Bass you may break it at your pleasure, without altering any of the other parts." His example shows minims broken into crotchet passing notes.

Butler (1636) says that discordant passing notes are best "in swift division".

Christopher Simpson's "Division Viol" (1659) is one of the most important instrumental treatises of the century. It teaches the gambist "The Art of Playing ex tempore to a Ground"; in Part III (pp.27-61) are comprehensive instructions and examples for breaking all the intervals up to an 8ve, ascending and descending, with shorter notes, ranging from simple passing notes to intricate ornamental semiquavers. It will have been seen that there is some affinity between the practice of making divisions, and (1) the art of melodic variation, and (2) the art of composing over a ground bass. This is more apparent in Simpson's examples, where he gives a short simple ground, and writes a number of divisions on it. They frequently look like virtuoso instrumental exercises, as in the following example:
(p.43) (The ground and the 4th division on it.)
In his "Compendium" of 1667, Simpson includes a section entitled "Of Transition or Breaking a Note" (p.65); but the breakings he demonstrates are of the simplest kind and lack any ornamentation.

As already noted, the art of composition on a ground bass was closely allied to the art of composing or improvising divisions upon a ground. Purcell's early life amid so much practice of this art must have accustomed him to consider it an easy matter, for at the end of his edition of the "Introduction" (1694) he adds as an afterthought:

(p.144) "One Thing that was forgot to be spoke of in its proper Place, I think necessary to say a little of now, which is, Composing upon a Ground, a very easie Thing to do, and requires but little Judgement; as 'tis generally used in Chaconnes, where they regard only good Air in the Treble, and often the Ground is four Notes gradually descending, but to maintain Fuges upon it would be difficult, being confined like a Canon to a Plain Song. There are also pretty Dividing Grounds (of whom the Italians were the first Inventors) to Single Songs, or Songs of Two Parts, which to do neatly, requires considerable Pains, and the best way to be acquainted with 'em is to Score much, and chuse the best Authors."

Other terms that were used for division were "supposition" and "diminution". Alexander Malcolm (1721) and Dr. Pepusch (1730) use the term supposition; but whereas Malcolm uses it to mean division, and gives rules for breaking notes with passing notes, changing notes, and other ornamental figures, Pepusch uses
supposition to mean appoggiatura. He regarded the appoggiatura as a kind of division and wrote diffuse explanations on how to use it (pp. 29-35). In the 1731 edition of his treatise (which was improved by the inclusion of examples), he gave the following example of "Division by Supposition"; the top stave shows "The Plain Notes", and the one beneath it "Division by Supposition" (p. 175):

![Musical notation]

By the early 18th century the art of division had fallen into a decadent state. Roger North makes fun of the performers ("Roger North on Music", J. Wilson, 1959):

(p. 129) "...For in division they outrun thought, and then Lord! how at the wagging of an elbow the whole theatre claps, though no single note is heard."

Division was a common form of entertainment at this time, when so many virtuoso string players - both natives and foreigners - were in this country, and the public concert was flourishing in its infant development. Though North ridicules the division performers as a whole, he obviously admired their art:

( Ibid. p. 235) "But division properly so, is when the strokes upon the instrument are swift as hand can move, or a nice attention distinguish. This kind of agility is pleasing to many, but to none so much as to the performers, who all the while are wrapt in the joy of their own
excellence; and in order to partake of those joys, few persons that practise fails to strain their facultys in the exercise of acceleration... And the fatal defect of such usage is the confusion that at a moderate distance will happen; because the sound spreading in the air, the swift notes run into one another, and are not distinguished, but die in a mere hum-drum... But after all I must allow that a judicious hand - not outrunning the emphatic, (and) for an interspersed variety in camera - out of division maketh a pleasing entertainment."

The only French theorist to demonstrate Divisions was Marin Mersenne ("Harmonie Universelle", 1636), where, in the section on singing (pp.410-414) he gives examples of songs, first in the simple version, and then in increasingly "Diminute" versions which are very elaborate.
21. THE TREATMENT OF THE 4TH

Thomas Morley (1597) ruled that the 4th could only be used as a passing note on a weak beat, and as a suspension on an accented beat. He condemned the 4-5 retardation (p.146) because he considered that the discord was best resolved on an imperfect concord. He gave the caveat (p.154) "that you take not a discord for the first part of your note except it be in binding manner, but for the last part you may." and illustrated his point with two examples which showed the 4th/taken as a passing note, followed by two examples with the 4th wrongly used on the accented first note:

Chains of 4-3 suspensions and the "Consonant" 4th were not referred to in the text but were contained in "examples of discords well taken" (p.160); Morley must have expected his students to be observant enough to see and imitate such progressions.

It seems to have been always difficult to convey to a beginner that the 4th is dissonant, (possibly because it is called "perfect", and also because it inverts into a perfect 5th); Morley's imaginary pupil, true to tradition, wrote fourths carelessly immediately after his master's explanations of their correct treatment. There is much practical merit in Morley's method of repeating rules which in personal tuition would undoubtedly call for reiteration.
Coperario (c.1610), in eight pages of instructions and examples, thoroughly covered all the approaches of the bass and the upper parts to the plain 4-3 suspension. On f.23r he gave an example of a suspended diminished 4th, followed by one of an imperfect 4th. These would have been unusual at this time, but he makes no comment upon them, only pointing out the less obtrusive imperfect 5th in the tenor part:

"If the Bass rise a sharpe 3rd, the part which uses the 12th must divide, and then use the 13th, holding the same she must next use the 10th. The part which uses the 8th must hold and then descend with the false fift unto the 3rd."

It seems that Coperario preferred a really pungent dissonance to a feeble one, for whilst he condemned the imperfect 4th in the two upper voices in the next example:

(f.10r)

he made no comment upon it in several other examples where it added to the scrunch of another dissonance, as in this example:
When Coperario demonstrated how a chain of 4-3 suspensions could be written above a bass which fell by degrees, he stated "This waie is used butt seldom." Chains of 4-3 suspensions were common in the 16th and 17th centuries, and it will be recalled that Morley included examples of them among his "discords well taken"; however, there is a world of difference between Morley's inoffensive 2-part example and Coperario's dissonant harmonic progressions in 4 parts:

Morley (p.160)

Coperario (f.28v)
Morley said in his "Rules to be observed in dittying" (p.290) "...when you would express any word signifying hardness, cruelty, bitterness, and other such like make the harmony like unto it, that is somewhat harsh and hard, but yet that it offend not."

The suspensions above, marked with an asterisk (on the sharpened leading note, with the notes of resolution sounding against it in another part), might well have been coupled with the bitterest expression of any passionate madrigal. However, Coperario's instructions appear to be intended for instruments rather than voices.

Among the examples in Elway Bevin's treatise (1631) there are, as well as plain 4-3 suspensions, "consonant" 4ths, and chains of suspensions, other treatments of the 4th as follows:

(1) The 4th moving up a degree before resolving to the 3rd.
(2) 4-5 retardation
(3) Nota cambiata treated as a 4-3 suspension.
(4) 4-3 suspension with parasitic 4th in another part.
(5) 4-3 suspension with note of resolution sounding in another part.

(1) Ex.13c  (2) Ex.17b  (3) Ex.24b
(4) Ex.14b  (5) Ex.35a
(6) Unprepared 4th on 1st beat.

(7) Echappée crotchet 4th.

(8) 4th (quaver on weak beat) left by leap of 5th upwards.

Charles Butler (1636) described the syncope but did not say that the dissonant suspended note should occur on the strong beat of the measure; consequently some of his examples are rather unusual, as in the following one where "the 3rd is bound with a 5th, or a 4th":

Butler also quoted Morley's example of the chain of 4-3 suspensions in two parts given above. From the following rule and example it would seem that Butler regarded the imperfect 5th as a species of 4th:

"The Tritone is bound with a 5th: and the Semidiapente with a 6th; and sometimes with a 3rd: but so, the Bound and Binding Notes will want the entire Band, which is necessary to a perfect Alligation":

(p. 65)  

(p. 66)
(N.B. The imperfect 5ths which Butler marked "4½" are tritones as is the imperfect 4th in the first measure.)

Christopher Simpson ("Division Viol", 1659) introduced some treatments of the 4th which though not new in practice, had not been mentioned before in an English treatise. These were:

1. the 4th as a bass suspension,
2. the double suspension 5\_3\_4,
3. the imperfect 4th unprepared:

(1) (p.21) (2) (p.21)

\[ \begin{array}{c}
\text{In his "Compendium" (1667), Simpson says of the unprepared 4th:}
\end{array} \]

(p.86) "A 3rd way of making discords, wherein skilful composers do often use them: which is, by setting note for note of the same quantity one against another. And though it be against the Common Rules of Composition, yet, being done with judgment and design, it may be ranked amongst the elegancies of figurate music. The prime or chief of which, for their use and excellency in music, are a Tritone and a Semidiapente, i.e. the greater 4th and the defective 5th. Their use in Figurate Descant is very frequent, both in syncopation and note against note, as in Counterpoint."

When Simpson shows the same progression in three parts, we see that the imperfect 4th is, in fact, the last inversion of the dominant 7th resolving in the usual way on the first inversion of the tonic:

(p.87)
In Simpson's examples of "syncopation in 3 parts" ("Division Viol"), there is one of "trailing 5ths" (cf.) where the 4th occurs on the weak beat, as in Charles Butler's example above; the second 4th is left by leap:

(p. 21)

\[ \begin{array}{c}
5 & 6 & 5 & 6 \\
3 & 4 & 3 & 4
\end{array} \]

Playford's "Introduction" contained no rules about the 4th until the 1683 edition, compiled by himself from several other treatises. In this edition he gave the rule and examples for the "consonant" 4th (p. 7), many examples of 4-3 suspensions in cadences, and in various examples showing the manner of taking discords. Among the "Several examples of taking Discords Elegantly", he includes the following which is headed "Of taking the Lesser 4th", though only one of the 4ths is imperfect:

(p. 17)

This is followed by "Of taking the Greater 4th", which is a sequence of imperfect 4ths treated as bass suspensions, and could hardly be described as "elegant" in two parts:
In his selection of examples from Elway Bevin's treatise (pp.26-7) there are unprepared 4ths; and in the examples from Simpson's "Division Viol" (p.22) there are $\frac{6-5}{4-3}$ suspensions, and 4ths on the weak beat, as already exemplified above.

Much of the material relating to 4ths was allowed to remain in the 1694 edition, edited by Purcell. In his rule for "Composition in Four Parts", he demonstrates how 4ths (and other discords) may occur in minims and semibreves on the weaker part of the measure, either below a pedal note or above one:

(p.132) "There is another sort of Discord used by the Italians not yet mention'd neither, which is, the Third and Fourth together to introduce a Close."

"As for Example.

(N.B. Working on the presumption that the figures are correct, two corrections have been made: (1) The figures under the two notes have been altered: (1) Ait: 4th note changed from C to E; 11th chord have been changed from $\frac{5}{4}$ to $\frac{2}{3}$. (2) Bass: 5th note changed from F to A.)

Purcell also included an example of dissonant minims moving over a dominant pedal (p.133).
In Purcell's compositions a variety of treatments of the 4th may be observed. Appoggiaturas on the 4th are more common than on any other dissonance. The following figures (based on the dramatic music) show that disjunct appoggiaturas are quite frequent:

4-3 appoggiaturas moving downwards:

Conjunct in auxiliary-note position 81
" in passing-note position 125
Disjunct 171

4-5 appoggiaturas moving upwards:

Conjunct in auxiliary-note position 24
" in passing-note position 15
Disjunct 20

At cadences Purcell commonly used the 4-3 suspension combined with an anticipated note, but he rarely struck the two dissonances simultaneously: a characteristic so frequently found in Corelli's sonatas (usually in the two violins) that it was known as the "Corelli-clash". Compare:

Purcell Sonata V

Corelli, Chamber Sonata, Op.2, No.2. (1685)
(1) Allemande (2) Corrente
Final cadence Half close

The "slide" ornament on the 4th is not uncommon in Purcell's music: e.g.

A large variety of decorated resolutions to suspensions may be seen in Purcell's works; (some of these are shown in the concordance "The Treatment of other dissonances" No.24).
Alexander Malcolm (1721) referred to the "Use of Discords in Figurate Counterpoint" (p.433), and among his examples the 4th occurs unprepared and/or unresolved in various sequence patterns and ornamental changing notes, (where such freedoms are normally permitted).

Pepusch (1730) gave some rules for the treatment of the suspended 4th in cadences, and also for the double suspension of the 9th and 4th together. He added that the 4th might be used as an anticipated note (p.36), and as a "discord by postposition", i.e. an appoggiatura (p.38).

Of the French theorists, Salomon de Caus (1615) and Antoine Parran (1646) maintained that the 4th was consonant; albeit they acknowledge that it sounds more harmonious when there is a 5th below it. They both call attention to the fact that Josquin Des Prez used a bare 4th in his Missa L'Homme Armé (à 4). Dr. Burney (Hist. Vol.II, 1957, p.237) said that the Spanish theorist, Francisco de Salinas ("...de Music libri Septem", 1577), in his 'Definitions of Sound', "...takes up the gauntlet in defence of the 4th being a concord, which practical musicians had then but lately began to rank among discords." In a footnote, Burney gives this relevant excerpt:

"Salinas says, that ... the prince of all contrapuntists, Josquin des Pres, in the beginning of the verse "resurrexit", of 2 parts only, in Mass sur l'Homme Armé, in the 6th tone, had used it naked and unaccompanied by any other interval, which he would not have done if he had regarded it as a discord."

As it is tantalizing to read these references to a musical example without seeing it in its context, the excerpt is given below:
Such conjunct appoggiatura 4ths were extremely rare in Josquin's music; (three occur in all the hundred or so motets). The above argument has no real foundation, since Josquin did, of course, regard 4ths as discords.

The anonymous "Traicté" (1616) and Antoine Parran, vaguely introduce the 6/4 chord:

"Traicté" (f. 19r) "The 4th may also be supported in another way, that is by a 3rd above it: but this ought to be used with the good judgement and discretion of the composer:"

Parran (p. 64) "The 4th may be placed in the lower part as well as the higher part. It is best in the higher part, and being joined with the Imperfect Consonances, it is necessary that they be major, in order that they be more sweet, as we see hereunder. If it is in the lower part, the major 3rd will be more agreeable above it than the minor:"
This leads the reader to believe that the 4th was used freely in the 6/4 chord, but, of course, this was not the case.

Charpentier's (c.1690) first reference to the 4th relates to the tritone:

(f.9v) "The augmented 4th (Quarte superflue) or tritone may be prepared or unprepared on any beat and resolves itself by ascending one degree higher. Exs."

```
\begin{array}{cccc}
\text{A} & \text{B} & \text{C} & \text{D} \\
\text{G} & \text{C} & \text{F} & \text{B} \\
\text{E} & \text{A} & \text{D} & \text{G} \\
\end{array}
```

"A. Suspended and resolved a semitone higher to the 8ve, 6th or 3rd.
B. Unprepared, resolved a tone higher.
C. When it is followed by a 4th.
D. Good Italian treatment. It implies a major 3rd."

If we regard "A" as a bass passing-note to E it is good; but if the C and A in the bass are the optional progressions ("8ve or 3rd") then the suspension of the tritone on the weak beat is poor.

"C" is harsh in two parts with the perfect 4th on the strong beat.

These treatments are freer than those allowed by the English theorists. Like some of his predecessors, Charpentier says that the 4th may be considered as a consonance, but it must "always move conjunctly".

(f.10r) "Two consecutive 4ths of the same species or of different species are permitted against the Bass, but no more. Exs."
On f. 10r Charpentier says that the diminished 4th may be "prepared or unprepared on any beat of the bar and is resolved by descending a semitone lower:"

Charpentier points out that the first example is an amplification of the second, from which we may infer that the diminished 4th is an appoggiatura.
22. THE TREATMENT OF THE 7TH

In Morley's treatise the 7th is permissible only as a passing note on a weak part of the measure, or as a prepared suspension. The following 7-8 retardation in two parts was condemned because "the perfect concords do not so well bear out the discords as the imperfect do..."

(p.146) "Discord not well taken"

Morley declares that the following example is one "which for badness will give place to none other:"

(p.160)

(1) Unprepared 4th followed by unprepared 7th.
(2) Unprepared 7th.
(3) Unprepared 4th.
(4) The "Landini cadence" was still widely used in the 16th century, though not at final cadences. This was the only instance of it in the treatise, and as it is included among the bad progressions, perhaps Morley disapproved of it.

Two consecutive discords as they occur in these two "changing note" ornaments were condemned:
Morley's remark upon the following progression was: "Binding no excuse for two discords together":

One unprepared 7th which Morley used frequently and regarded as a "discord well taken" was one similar in treatment to the "consonant" 4th:

He made no specific reference to this type of dissonance treatment; like so many characteristics of the English school of the 16th century, they were so common that they were either overlooked, or not deemed important enough for an explanation.

Coperario (c.1610), in his rules "How to Come from a Discord", said: "If you use a 7th, your next note must be the 6th." (f.3r). In the ensuing pages he gave many examples of the way a 7-6 suspension may be written in an upper part when the bass moves in a certain way. (Vide f.19v-20r, 20v, 21r, 23v, 24r, 25r, 29r, 30v, 31r, 33v-34r.) His rule "How to use a 7th" (f.33v-34r) differs from the other examples only that it is a dominant 7th preceding the final cadence. (This is discussed under "Cadences".)
An unusual rule which Coperario gave (f. 26v) was how to use the diminished 7th as a suspension. This occurs in the minor key above the leading note, or the leading note of the dominant as in the first example below. It was quite common in the English madrigal.

(f. 26v) (Ex. b)  (Ex. c)

He also gave directions for a chain of 7-6 suspensions when the bass falls by degrees:

(f. 27v) "If the Bass fall many seconds in Semibreves or minims, the part which uses the 5th must divide, and then use the 6th agayne, until you com unto the last note of the Bass and then the part that uses the 6th must use the 8th." (Ex. b)

Ornithoparcus (orig. 1517) does not mention the 7-6 suspension, even though he includes it in his examples of cadences. As for some hundreds of years the 7-6 suspension had been a common feature in music, one expects its function to be described in any treatise on composition in the 16th and 17th centuries. Thomas Campian also does not refer to it, nor even include it in an example.
Elway Bevin's treatise (1631) which contains little in the way of instruction, gives no rules for the 7th; but a perusal of the various canonic exercises shows that the author took advantage of the licence granted to composers of canons. As well as legitimate chains of 7-6 suspensions, "consonant" 7ths, internal 7-6 suspensions, there are the following.

(1) 7-6 suspension resolved on a quaver. (Several examples).

(Ex. 5c)

(2) 7-6 suspension with an ornamental resolution. (Frequent).

(Ex. 11b) (Ex. 9c) (Ex. 34b)

Bevin also introduced 7ths on a weak crotchet beat, sometimes approaching or quitting them by a leap.

Butler (1636) gave rules for 7-6 suspensions, including sequences of them, and "consonant" 7ths. He said (p. 65) "The 7th is sometimes bound with the 8th", indicating that 7-8 retardations were good. (Cf. Morley who condemned them.)

Simpson ("Compendium", 1667) gave a rule which had probably originated in the practice of Divisions:
(p.79) (Speaking of a Discord by Diminution) "In this way of passage, a Discord may be allowed in any one of the diminute Notes, except the first or leading note, which ought always to be a concord."

Later, he referred again to the freedom allowed to short notes:

(p.90) "Discords are best brought off, when they pass into Imperfect Concords in long notes and syncopation: But in short notes and diminution, we are not so strictly obliged to observance of that Rule."

In Playford's "Introduction" the treatment of the 7th is not mentioned until the 1683 edition. However, in the 1658 and 1660 editions Playford includes among the "Several Adjuncts and Characters used in Musick", a fragment of figured bass:

(1658 ed.)

```
\[ A_03 6 5 7 6 5 A_3 \]
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(1660 ed.)

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[III IV V]
```

It will be seen that neither of these 7ths can be prepared; the one in the first example would be a descending appoggiatura, and the one in the second example would be an ascending appoggiatura: irregular progressions at this period, for in the 17th century, the theorists of Thorough Bass denounced such unprepared dissonances. ("The Art of Accompanying from a Thorough Bass", Arnold, 1931).

No text-book on the subject had appeared in English up to this
time, and it seems likely that Playford, with scant knowledge of the subject, wrote these muddled figurings without paying much attention to the harmony implied. The 7th on the mediant is unconventional in the first example, and in the second example, the 7th resolving onto the 8th (with F natural implied through the measure when the key is G major) is feeble.

In the 1683 edition, Playford compiled the Third Book from other treatises. His first examples of the 7-6 suspension are borrowed from Morley (p.225), and in his attempt to simplify them, he produced an unprepared 7th on the first chord in the first example; and a mixture of 2 and 3 parts in the second. Compare:

Playford, p.8

Morley, p.225

Other references to the 7th were (1) p.10 An example of a chain of 7-6 suspensions, borrowed from Butler,p.65; (2) p.10 7-8 retardation, borrowed from Butler,p.65; (3) p.10 "The Rule of Syncopation or Binding Notes in 2 parts", which includes 7-6 suspensions, borrowed from Simpson's "Division Viol", p.21; (4) p.13 "The use of Discords on holding notes", showing dissonant crotchet passing notes, borrowed from Simpson's "Div. Viol", p.20. (5) p.18 Consecutive 7ths. This is discussed under "Consecutive 7ths".
(6) p.36-8 "Several Examples of holding upon a Discord in 4 Parts", showing 7-6 suspensions, taken from Coperario's treatise, f.20r, 19v, 20v, and 27v.

Purcell, in the 1694 edition of the "Introduction", omitted most of the examples listed in the last paragraph, and introduced some new material:

(p.131) "There are two Discords not yet treated of in this short Introduction, which I think proper now to mention, because in an Example of Four Parts you may see what other Cords belong to them, and that is, a Sharp Seventh, and a Flat Seventh, two Notes mightily in use among the Italian Masters; the Sharp Seventh, which generally resolves itself into the Eighth, you will find frequently in Recitative Songs, which is a kind of Speaking in Singing; a Flat Seventh resolves itself into a Fifth, and is used commonly at a Close or Cadence. This Example will demonstrate the Thing Plainer."

1. Chord of the dominant (without root) over a tonic pedal.
2. Diminished 7th on the leading note of the dominant.

(p.132) "Another Elegant Passage used by the same Authors"
(1) Neapolitan 6th (♯II6).

(2) Last inversion of the dominant chord.

(3) Diminished 7th on the leading note of the dominant.

(p.132) "The Flat Sixth before a close (as you may observe in the second Treble) is a Favourite Note with the Italians, for they generally make use of it."

Among the treatments of the 7th in Purcell's compositions, the appoggiatura 7th is quite common, as may be seen in the following table (based on the dramatic music):

7-6 appoggiaturas moving downwards:
Conjunct in auxiliary note position (diminuendo) 91
" in accented passing note position 99
Disjunct 127

7-6 appoggiaturas moving upwards:
Conjunct in auxiliary note position 2
" in accented passing note position 27
Disjunct 15

7-8 appoggiaturas moving downwards:
Conjunct in auxiliary note position 1
" in accented passing note position 4
Disjunct 3

7-8 appoggiaturas moving upwards:
Conjunct in auxiliary note position 23
" in accented passing note position 32
Disjunct 29

Purcell used a variety of ornamental resolutions to the 7-6 suspensions, including the following:

(1) (2) (3) (4) (5)

(See other examples below.)

In his instructions for "Supposition" (another term for "Division" cf.), Alexander Malcolm (1721) demonstrated how "discords
N.B. "Auxiliary note position" means between two notes of the same pitch, thus:

\[\text{Music notation}\]
may be divided into notes of small value, for the sake of air."

He gave the following two examples of this treatment applied to the 7th (in sequence), pointing out that there are an infinite variety of ways of doing this: (Ex.37)

His rule for writing this type of supposition was:

(p.439) "...in all such breakings the first part of the discording note must distinctly appear, and after the remaining part of it has been broke into a division of notes of less value, according to the fancy of the composer, such division ought to lead naturally into the resolving concord that it may be also distinctly heard."

Pepusch (1730) named several ways of taking 7ths, which, though they were not new in practice, had not been included in any of the earlier treatises. He described the double suspension of the 9th and 7th (p.25); he gave the unusual rule that "In 3, and in 4 Parts, the 7th may be prepared in a 4th." (p.26); he said that 7ths may be taken by anticipation either rising or falling: "by taking a 7th upon the unaccented part of the Bar, which will become a 6th on the next accented Part, by the keeping that Note on whilst the Bass rises one degree" (p.36). Next, Pepusch speaks of "Postposition or Retardation" (terms which mean appoggiatura), which is "the putting a discord upon the accented part of the Bar, followed by a concord on the unaccented part, but not prepared and resolved, according to the regular Rules for
Discords." (p.37) (Pepusch's example for this is given in the concordance "Divisions" cf.)

In France: in the first half of the 17th century, only the anonymous "Traicté de Musique" (1616), and Mersenne's "Harmonie Universelle" (1636) gave instructions for using the 7th, and they were solely concerned with suspensions. The "Traicté" ruled that it was best to resolve the 7th on an imperfect chord, though "Some have allowed the 5th to follow the 7th, as in the following examples, but this is not approved of by everyone."

(f.12v)

\[
\begin{array}{c}
\text{[7 5]} \\
\text{[7 5]}
\end{array}
\]

In this treatise it is also stressed that the suspension should be followed by an imperfect chord by conjunct degrees; "not as some have wished, by the interval of a 4th or a 5th, as here:"

(f.15r)

In England, the tendency to make these irregular resolutions was very strong; it was almost a characteristic in the latter half of the century. Purcell used them frequently, e.g.:
Charpentier (c. 1690) gave the following instructions for the suspension of the 7th:

(f. 8v) "The 7th is tied on the weak beat, is heard on the strong beat and resolves one degree lower on the next weak beat."

He briefly mentioned the possibility of suspending diminished dissonances (f. 11r) and later (f. 15r) gave an example of a diminished 7th suspension.
Before the mid-17th century the music theorists made no reference to consecutive sevenths, for until that time it was taken for granted that such a dissonance was to be avoided. It could and did occur as a result of the clash of crotchet or quaver passing notes in independent linear part-writing, but would have been condemned in a disjunct progression or on accented notes. Morley (1597) condemned two consecutive crotchet discords (p.211): a 9th echappée note followed by a 7th. Charles Butler (1636) has a section entitled "Consecution of Discords" (p.61) but this relates only to short notes (i.e. minims, crotchets, and quavers) ascending or descending conjunctly; in his examples there is no "consecution" of discords, as all the discordant passing notes are single.

Christopher Simpson ("Compendium", 1667) was the first English theorist to speak about consecutive 7ths. He says that it would be unwise to encourage a beginner to write unusual discords, since there is "a great difference betwixt that which is done with judgment and design, and that which is committed by oversight or ignorance," and skilful composers use discords for which no general rule can be given. The example of two consecutive 7ths which Simpson gave was most commonly used at cadences:

(p.90) "A 7th may move to a 5th in contrary motion. Here you may see two 7ths descending not by oversight, but set with design:"
This particular progression became known as the "Creyghton" 7th, though the above example from Simpson's book (and others) undoubtedly appeared earlier than those in Creyghton's church compositions. Robert Creyghton (1639-1734), an amateur musician and composer, was one of the versatile men of the Restoration period; appointed Greek professor at Cambridge in 1662, and canon and precentor of Wells Cathedral in 1674. The following example is from his anthem "I will arise":

In the 1683 edition of Playford's "Introduction", which is a collation of excerpts from several treatises, Playford included two examples of the "Creyghton" 7th among "Examples of some short passages and Cadences of 3 Parts, wherein Discords are taken Elegantly". One might consider that in introducing such progressions to "young practitioners" he lacked Simpson's sagacity.

(p.24) (Ex. 3) (Ex. 5)
In both of these examples it will be seen that the 9th (E in the superius) is left in mid-air. In an even more injudicious example in two parts, Playford gives a whole sequence of "Creyghton" 7ths, in a group entitled "Several Examples of taking Discords Elegantly." (p.17)

Playford also demonstrates a chain of dominant 7ths:

(p.18) "In this Example you may observe the exact method of taking two 7ths together in whatsoever key you shall Compose in, with this allowance that two Major 7ths together is not good; but two Minor 7ths together is allowable; Also if you take two 7ths, so the one be Minor, and the other Major it is allowed but be sure the Minor be set before the Major, as you see in the Example."

"I have often observed in several late Italian Authors, where Figures are placed over the Thorough Bass, that six or seven 7ths have followed each other, which has been much wondered at by some young Composers, and so for their satisfaction, I have inserted this Example, which shews both the method and manner how it is performed."

Although Purcell allows the last two examples to stand in the 1694 edition, in the part of the treatise which he completely revised, (i.e. all the pages after pp.1-18 of the 1683 edition),
there is a very careful handling of dissonances, and there are no consecutive 7ths at all. As has been said already, Purcell, in 1694, was a very busy man, and if he could have devoted more time to his task, doubtless he would have omitted much of the material which had been retained from the earlier editions.

This is not to say that Purcell objected to consecutive 7ths; W.G. Whittaker ("Some Observations on Purcell's Harmony", 'Collected Essays', 1940) says: "While Purcell is not prone to seconds, he indulges in sevenths freely"; the following example was "chosen out of many":

(p.108, Ex.41) (Sonata III, Bar 8)

Purcell also used chains of (non-modulating) dominant 7ths as in the next example:

(Sonata I, Bars 25-6)

The "Creyghton" 7th (V7-IV7), with the 7ths most often in the outside parts, was a common feature in 18th century music and may be found in the works of Handel and Corelli. Dr. Pepusch (1731), for all his adherence to outmoded theories, gave examples of it in two and three parts:
One of "Dr. Blow's Crudities" condemned by Dr. Burney (Hist. Dover Ed., 1957, p. 353) might here be vindicated. The example is from Blow's Solo Anthem "Turn thee unto me O Lord" (Second Collection of Divine Harmony, 1731):

Burney said that he liked the "feeling and courage" of the sharp 4th at (3), but of (4) he said "here we are lost". This is only a typical "Creyghton" 7th cadential formula similar to those given above. Owing to the similar motion of the two sevenths, it is a difficult progression to handle in four parts without creating consecutive 5ths with the inner parts; (but see Creyghton's example). The theorists named avoided the issue by giving their examples in only two or three parts.

None of the French theorists prior to Rameau mention consecutive 7ths. However, by the mid-18th century the chain of 7ths formula had become common; Rameau explains it at length in his treatise (orig. 1722, Eng. trans. 1752) where he gives as many as twelve consecutive 7ths in one example (p. 62).
24. THE TREATMENT OF THE 2ND, 9TH AND OTHER DISSONANCES

Morley (1597), speaking about discordant passing notes in general said: "...it is impossible to ascend or descend in continual deduction without a discord, but the less offence you give in the discord the better it is, and the shorter while you stay upon the discord the less offence you give." (p.158). He suggested that the passing notes in the two measures below would have been better if they had been written in shorter notes thus:

![Musical notation](p.158)

Morley's strictures were necessary for two-part writing; but in works of four parts, he and the other composers of the English school used such crotchet and minim passing notes frequently.

Like the "consonant" 4th and 7th, the "consonant" 2nd figures quite frequently as a bass suspension in Morley's examples. Concerning the ordinary cadential 2-3 bass suspension, Morley appears to have been the only English theorist specifically to permit the resolution on the sharpened leading note with an imperfect 5th above it, thus:

![Musical notation](p.174)

Campian and Coperario, in ruling that the sharp leading note in the bass should never have a 5th above it, dismissed this agreeable
exception to the general rule.

Coperario (c.1610) gave short rules (f.3r) for the resolution of the 9th, 2nd and imperfect 5th:

"How to come from a Discord:

If you use a 9th your next note must be the 8th.
If you use a 2nd, your next note must be the 3rd.
If you use a false 5th, your next note must be the 3rd."

He gave the following rule for using the imperfect 5th as a suspension:

(f.32r) "How to use a false 5th: If the Bass fall a sharp 3rd, and then rise a 2nd, the part which uses the 3rd, or 10th must hold, and then come unto the 10th or 3rd again. If the Bass rise a sharp 2nd, and then rise another 2nd, the part which uses the 6th or 13th must hold, and then use the 3rd or 10th."

\[
\text{(a) (b) (c) (d)}
\]

It will be seen that the dissonance in these suspensions is not so much in the imperfect 5th as between the 5th and 6th in (a), (b) and (c), and with the 7th in (d); and (a) and (b) also have false relations.

In the section entitled "Of Ligatures" (i.e. suspensions), Coperario gave his rule for the 9-8 suspension first place, even though it was one of the less favoured ones. Here again he misses no opportunity to add pungency to his examples, for in the first two examples the 9th is minor and it has the imperfect 5th set against it: (f.18v)
(N.B. Coperario gave other examples of 9-8 suspensions on f.20v over a different bass progression.)

In Elway Bevin's (1631) treatise suspensions of the 9th and 2nd are frequent; also the "consonant" 2nd. The two examples below show (1) a dissonant 2nd on the 3rd beat followed by a rest; (2) a 9-10 retardation with ornamental resolution:

Ex. 8b, Bar 4. Ex. 28b, Bar 3.

Charles Butler (1636) included in his list of discords, "the perfect and imperfect 2nd, the perfect and imperfect 7th: and the Tritonus or Semidiapente." (p.51) Other theorists confine the terms perfect and imperfect to the 4th, 5th and 8ve; Butler meant major and minor.) His rule "...the second is frequently bound with a Third, and sometimes with an unison", permitted the 2-1 suspension; the example of it is weak in two parts, with the unison followed by an underlapping third:

(p.65)
By the 16th century the 2-1 suspension was considered archaic, and was certainly a rarity in Butler's time.

Simpson ("Division Viol", 1659) recognised the contemporary treatment of the imperfect 5th and renounced the necessity of preparing it like a discord:

(p.22) "Although the Excessive Fourth and Defective Fifth be Discords, yet are they of most excellent use in all Figurate Musick, and are sometimes set without Syncope or Binding, which (according to the Rules of Composition) is not allowed to other Discords. Either of them consists of six Semitones, which seems the same, as to proportion of Sound; But here we must consider them as they are represented to the Eye, like a Fourth and a Fifth, which (if you place one above the other) compleat the Compass of an Octave, thus:"

\[
\begin{align*}
\begin{array}{c}
\text{Semidiapente} \\
\text{Tritone}
\end{array}
\end{align*}
\]

"A Tritone naturally passeth into a Sixth, a Semidiapente into a Third:

\[
\begin{align*}
\begin{array}{c}
\text{Tritonus} \\
\text{Semidiapente}
\end{array}
\end{align*}
\]

"A defective Fifth doth naturally require a 6th to be joined with it, as you see it set in the Example; which perhaps may seem a contradiction to what I said (pag.19) that a 5th and 6th must not sound together; that is, as Concorde set note against note without binding; But this 5th stands as a discord, and is backed with a 6th to mollify its harshness."

The Tritone represents the last inversion of the dominant 7th, and the Semidiapente, the 1st inversion of the dominant 7th. Musicians were becoming aware of the appropriateness of this type of unprepared dissonance preceding the tonic chord.

In both the "Division Viol" and the "Compendium" (1667), Simpson gave various examples of the 2-3 suspension; but made no mention of the 9-8 suspension.
John Playford's "Introduction" did not refer to the treatment of 2nds and 9ths until the 1683 edition, which was a collation of rules and examples from other treatises. In this edition he demonstrated three times the 2-3 bass suspension:

(p.7; p.10, an example from Butler's treatise, and p.11, an example from Simpson's "Division Viol"). He also used Butler's example of the 2-1 suspension (given above), but he unheedingly placed the bass part an 8ve lower so that the suspension he described as a 2-1 was, in fact, a 9-8 (p.10). Under the heading: "Several Examples of taking Discords Elegantly" (p.17), he provided an example of suspended 9ths which was so unmasterly that one feels that he probably wrote it himself:

(1) The tie was omitted here.
(2) A 9-10 bass suspension, followed by a 9-10 treble suspension, rather crude.
(3) Sequence of 9-10 bass suspensions
(4) The minor 9th is harsh, and the augmented 2nd is jarring.

Playford unwittingly contradicted himself a few pages later when he quoted Coperario's rules "How to come from a Discord", i.e. "If you use a 9th your next note must be the 8th", and "If you use a 2nd your next note must be a 3rd."
Playford's "Examples of some short passages and Cadences of 3 Parts, wherein Discords are taken Elegantly", include these two unusual treatments of the 9th:

(p.24) Ex.1. Ex.4.

1. The double suspensions $\frac{9}{8}$ and $\frac{9}{8}$ were common in the music of the 17th century, but none of the theorists made any reference to them before Dr. Pepusch (1730).

2. This bass suspension resolving onto the 1st inversion of the dominant 7th was unusual.

3. These discords are mitigated by the contrary motion of the parts.

On p.36 Playford quoted the examples of 9-8 suspensions from Coperario's treatise (f.18v) which have already been given above.

Purcell (1694 edition) amplified the rule relating to the false fifth which had been given by Simpson (see above). The beginning of the rule is similar to Campian's: that a sharp note in the bass must never have an octave placed over it but always a 6th. He adds that "in Four Parts, a Sixth and false Fifth go together upon all Sharp Notes:" (p.130)
(1) Chords with roots a third apart were a characteristic of Purcell's style.

(2) Note Purcell's preference for consecutive 3rds in the treble and alto.

Purcell's next statement is also a paraphrase of Simpson's rule (see above); he was very fond of the imperfect fifth:

(p. 131) "The False or Defective Fifth is the only Note like a Descord that needs no Preparation; and tho' it must not be us'd to begin a Piece of Musick with, yet there is no Cords whatsoever that has a more grateful Charm in it to please the Ear."

In Playford's 1683 edition (pp. 7-8) rules are given for writing (1) the 2-3 bass suspension (2) the "consonant" 4th suspension, and (3) the 7-6 suspension; Purcell retained these and added a fourth: the 9-8 suspension:

(p. 94) "The fifth way of taking a Discord by way of Binding, is when the Ninth is taken between the Third and Eighth:"

(Purcell omitted the examples of Coperario's 9-8 suspensions which Playford gave on p. 36.)

In Purcell's compositions appoggiaturas on the 2nd and 9th occur, but they are not so common as those on the 7th and 4th (cf.); the following figures are based on the dramatic works:

9-8 appoggiatura moving downwards:

<table>
<thead>
<tr>
<th>Conjunct in auxiliary note position</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>in passing note position</td>
<td>20</td>
</tr>
<tr>
<td>Disjunct</td>
<td>6</td>
</tr>
</tbody>
</table>
9-8 appoggiatura moving upwards:

Conjunct in auxiliary note position 2
in passing note position 3
Disjunct 1

2-3 appoggiatura moving downwards:

Conjunct in auxiliary note position 2
in passing note position 1
Disjunct 2

2-3 appoggiatura moving upwards:

Conjunct in auxiliary note position 10
in passing note position 5
Disjunct 30

Among the more frequent ornamental resolutions to suspensions of the 9th are the following:

\[ \text{(1) } \text{ (2) } \text{ (3) } \text{ (4) } \]

Alexander Malcolm (1721) gave a cursory description of the 6/5 chord, the 9th, and the 4/2 chord, but he did not supply any rules for their use, nor demonstrate them by example.

Dr. Pepusch (1730) gave the following instructions for the use of the 9th:

(p. 24) "The 9th is the replicate or octave of the 2nd, which 2nd also is distinguished in practice by this name, when it is prepared and resolved in the treble, or in one of the upper parts. It is prepared in a 3rd, in a 5th, and sometimes in a 6th, but never in an 8th, and should not be used in fewer than 3 parts."

He also said (p. 25) that "...other discords may be mixed with the 9th", and described the double suspensions $9-8\quad 4-3$ and $9-8\quad 7-6$. He also gave rules for 2-3 suspensions in the bass.

The French theorists in the first half of the 17th century said little or nothing about the treatment of the 9th. The anonymous
"Traicté de Musique" demonstrated 2-3 suspensions in two parts. It also permitted the imperfect 5th "in lieu of a consonance, provided that it be preceded by the minor 6th, and followed by the major 3rd, as follows" (f.11v)

(To some degree, this rule corresponds with Morley's (cf.) which permits the imperfect 5th on the leading-note.)

Charpentier (c.1690) introduced the treatment of diminished and augmented intervals - a subject hardly touched upon by the English theorists. His list of thirteen dissonances contains all the possible aural discordant intervals (i.e. some of these discordes may be written as a different interval on paper, but they are enharmonically the same, e.g. the augmented 6th = the minor 7th).

(f.8r) "There are thirteen dissonances:

1. The major 9th
2. The minor 9th
3. The augmented 8ve
4. The diminished 8ve
5. The major 7th
6. The minor 7th (and very small, that is to say diminished)
7. The augmented 5th
8. The diminished 5th
9. The tritone
10. The Perfect 4th
11. The diminished 4th
12. The major 2nd
13. The minor 2nd"

N.B. The side-note about the diminished 7th appears to be in
another hand; there is another one beside Nos. 12 and 13 which says: "Note that he does not mention the augmented 2nd."
The augmented 2nd is enharmonically the same as the minor 3rd, and that may be why it is omitted.

Charpentier continues with "The Practice of the Dissonances":

(f. 8v) "The 9th is tied on a weak beat, is heard on the strong beat and resolves itself one degree lower on the nearest consonance of the next weak beat."

As Pepusch said, the 9th is a harsh dissonance in only two parts, and three of these are minor 9ths. The examples of the augmented octave are not unlike the instances of simultaneous false relation which were common in England at this time (arising from the coincidence of the flat and sharp leading note):

Purcell: (1) Vol. XXI(3), p. 117 (2) Vol. XXIV, p. 33 (Novello Ed.)

(f. 9r) "The augmented dissonance like the augmented 8ve, the augmented 5th, and the augmented 4th, may be treated without a tie or a note of preparation if they occur above a note equal to the length of the measure and resolve by ascending a degree."

This accord is very plaintive
Note: The unprepared 4th in the first bar of "C", and the unprepared 7th in the second bar of "C" conflict with Charpentier's rules for these dissonances. The fourth chord of "C" has an augmented 6th like an "Italian 6th", except for the E natural in the top part. The rule for "D" is given on f. lOv (see below).

(f. 9r) "The augmented 5th may be tied or not tied. It may occur on any beat and resolves itself by ascending one degree or by remaining in the same place."

(The last three bars sound very odd with so many imperfect 5ths and the false relation.)

(f. 10v) "The diminished dissonances like the 8ve, 5th and false 4th are prepared or unprepared on any beat of the bar, and resolve themselves by descending a semitone lower."

"A. False 8ve on the weak beat unprepared.  
B. False 8ve on the strong beat unprepared.  
C. Prepared by the Bass."

"Diminished or False 5th"
"D. False 5th unprepared on the strong beat and properly resolved.
E. Made on the weak beat and resolved well.
F. Prepared and resolved well."

Lastly, Charpentier gives the rule for the second. In a side-note he says that the second differs from the 9th in that the 9th is suspended in an upper part, and the second in the lowest part.

In fact, his examples show the suspensions at the distance of a 9th:

(f.11r) "The second is always suspended in the Bass, it is tied on a weak beat, heard on a strong beat and while the upper part stands still, it resolves itself by the Bass descending one degree onto a weak beat."
25. MODULATION

The technical explanation of the process of passing from one key to another, was one which the 17th century theorists could not give clearly or easily, and so few theorists make any reference to modulation. Like transposition (cf.) it was an art which the competent musicians of the day had mastered, but which the theorists were unable to express comprehensibly.

Morley (1597) made very few comments on modulation; only cautioning against it; no doubt because of the untempered instruments used for accompanying at that time. After Philomathes had written a 4-part exercise commencing in G major and ending in F major, Morley condemned it as a great fault to leave the key in which he began and to end in another; and his ensuing remarks are the nearest approach which he makes to the subject of modulation:

(p.249) "...Glareanus hath written a learned book which he took in hand only for the explanation of those modes; and though the air of every key be different one from the other yet some love (by a wonder of nature) to be joined to others, so that if you begin your song in Gam ut you may conclude it either in C fa ut [i.e. the subdominant] or D sol re [i.e. the dominant] and from thence come again to Gam ut; likewise if you begin your song in D sol re you may end in A re [i.e. the dominant] and come again to D sol re, etc."

Morley's own compositions were far removed from the eight church modes; he and his contemporaries were, in fact, well advanced in the development of the major and minor keys, with modulations to closely related keys. The examples in his treatise use modulatory cadences; and his madrigals and ballets were well developed in the modulatory sense.
Thomas Campian (c. 1619) gives some progressive instructions on this subject in the section of his treatise entitled "Of the Tones of Musicke:"

"Of all things that belong to the making up of a Musition, the most necessary and usefull for him is the true knowledge of the Key or Mood, or Tone, for all signify the same thing, with the closes belonging unto it, for there is no tune that can have any grace or sweetness, unless it be bounded within a proper key, without running into strange keys which have no affinity with the air of the song."

Of course, the idea of modulating by means of a pivot note had not evolved in the 17th century; Campian's directions bear more affinity to the modal practice of making cadences in other modes, than to the contrivance of moving smoothly to another key:

"The main and fundamental close is in the key itself, the second is in the upper note of the 5th, the third is in the upper note of the lowest third, if it be the lesser third, as for example, if the key be in G with B flat, i.e. G minor, you may close in these three places."

"The first close is that which maintains the air of the key, and may be used often, the second is next to be preferred, and the last, last."

For the key of G major Campian points out that one would not use the close a major 3rd above the key, but the 2nd above, which is A, or sometimes the 4th above, which is C, (i.e. the relative minor of the subdominant, or the subdominant itself). He goes on to say:

"...but these changes of keys must be done with judgement; yet have I aptly closed in the upper Note of the lowest third of the key, the key being in F and the upper Note of the third standing in A as you may perceive in this Air:"
Without a B flat in the signature, this "Air" is really in the Lydian mode, with the cadence at (1) in the Ionian mode, and at (2) in the Aeolian mode. It cannot be regarded as F major modulating to the dominant and the relative minor of the dominant. Campian repeats his directions, using the keys of A minor and G major for his illustrations. For the major key, he offers two additional closes:

"True it is that the key next above [i.e. the relative minor of the subdominant] hath a great affinity with the right key, and may therefore as I said before be used, as also the fourth key [i.e. the subdominant] above the final key."

The basic conception of the tonic triad containing the three closes of the key, i.e.

(1) The minor key  
(2) Dominant  
(3) Relative major  

(1) The major key  
(2) Dominant  
(3) Relative minor of the dominant

signified in the early 17th century the break away from modal practice, where nothing in theory prevented the composer from
cadencing on any note of the mode, (though each mode had certain cadences peculiar to its character). Campian was the only English theorist to expound this new trend; (his treatise was included as Book III of Playford's "Introduction" from 1655-1679; Simpson maintained the rule of the three cadences for the minor key in his treatises). In France, however, more importance appeared to be attached to the matter; the anonymous "Traicté de Musique" (1616), Descartes (1618) and Antoine Parran (1646) discuss it at great length; Parran including examples of the three cadences in 4-parts for each mode. Mersenne (1636) looks both backward and forward for he says that the "attendant keys" are on the 5th, 3rd and 6th; and later, that "there is no note on which one cannot make cadences as one will own after having experimented..." Charpentier, like Simpson, maintained the three cadences in the minor key, but was so conservative about the major key that he reduced the closes to two: the key and the dominant.

Charles Butler (1636) does not speak of modulating as such, but of making "secondary cadences" at closes; he declares that the purpose of these perfect cadences in related keys is not to move away from the key of the piece, but to keep the composition within its own key. Butler demonstrates the cadences thus:

(p.83) "...if the Tone be Sol, the Diapason be \[\text{Diagram}\]

"the Primary cadence will be: \[\text{Diagram}\]"
"the 5th-cadence:

"the 4th-cadence: [N.B. No sharpened leading-note.]

"and the 3rd-cadence:

Butler was still thinking in terms of modes, and not of major and minor keys, and his ideas about related keys show a stage of development, for as in modal practice one could make a cadence on any note of the mode, so Butler goes on to discuss making cadences on the remaining notes of the key of G minor:

(p.83) "Improper cadences are likewise three, (the 6th, the 2nd, and the 7th) the which, because they are strange and informal to the Air, are therefore sparingly to be used: and when upon occasion, any such are admitted, they are to be qualified by the principal Cadence fitly succeeding."

Though Butler was undoubtedly aware that some modes have a major 3rd and some a minor 3rd above the key-note, he confined his rules to the minor mode; he may have intended the above rules to apply to the major mode, though the cadence on the leading-note of the major mode would indeed be "strange to the Air".

Christopher Simpson gives instructions similar to Campian's both in his "Division Viol" (1659) and in his "Compendium" (1667): his closes for the minor key are the key, 5th and 3rd; and for the major key, the key, 5th, 4th and 2nd. In addition, he gives some practical advice about composing a Pavan, or any other piece "that consists of strains":

(p.143) "All Music concludes in the Key of his Composition
which is known by the Bass as hath been shown. This Key hath always other keys proper to it for middle closes. If your Pavan (or what else) be of 3 strains, the lst strain may end in the key of the composition, as the last doth: but the middle strain must always end in the key of the middle close [i.e. the dominant]

"Sometimes the lst strain does end in a middle close; and then the middle strain must end in some other middle close; for two strains following immediately one another ought not to end in the same key. Therefore when there are but two strains let the first end in a middle close that both strains may not end alike."

Playford's "Introduction" contained Campian's instructions from 1655 to 1679. (The 1683 and 1687 editions contain only various examples of the "usual cadences".) In the 1694 edition, Purcell, after declaring that there are only two keys (i.e. major and minor), continues: "...you must proceed to know what other Closes are proper to each Key.

(p.105) "To a flat key, [i.e. minor] the Principal is the Key itself, the next in dignity the Fifth above, and after that the Third and Seventh above."

We may surmise from the B natural in the example, that the seventh key is G major; a rather remote key, not generally acknowledged as a related key; the fact that Purcell sometimes modulated to the key of the flat leading note in his own compositions is one of the reasons why his music has a strong modal flavour. The "closes" of the major key are all legitimate in the modern sense:
"To a sharp key, the key itself first, the Fifth above, and in stead of a Third and Seventh (which are not so proper in a sharp key) the Sixth and Second above."

Purcell says that the closes may be used "promiscuously as you please, only with this Caution, That you have regard to good Ayre."

(See also the concordance "Cadences" where Purcell's rules and examples are compared with Simpson's.) Purcell's treatise remained in Playford's "Introduction" until the last edition in 1730.

Alexander Malcolm (1721) clearly defined all the keys related to the major key as they finally came to be recognised; but like Purcell, he included the 7th as a key related to the minor key; and also the 6th, which Purcell thought improper in the minor key.

(p. 446) "In a sharp principal key, the 1st cadence is upon the principal key itself often; then follow in order cadences on the 5th, 3rd, 6th, 2nd, 4th, concluding at last with a cadence on the principal key. In a flat principal key the intermediate cadences are on the 3rd, 5th, 7th, 4th, 6th. Now, whatever liberty may be taken in varying from this order, yet the beginning and ending with the principal key is a principle never to be departed from; and as far as I have observed, it ought to be a Rule also, that in a sharp principal key, the 5th, and in a flat one the 3rd, ought to have the next place to the principal key."

From his next paragraph it is apparent that the problem of effecting a modulation was still unsolved:

"It now remains to show, how to modulate from one key to another, so that the Transitions may be easy and natural; but how to teach this kind of modulation by Rules is the difficulty; for altho' it is chiefly performed by the help of the 7th g. [i.e. major 7th: leading note] of the
key into which we are resolved to change the harmony, whether it be sharp or flat; yet the manner of doing it is so various and extensive as no Rules can circumscribe."

In lieu of a solution to the problem by some short rule, Malcolm gave pages of examples to illustrate the different ways of modulating from one key to another.

Dr. Pepusch (1730) wrote ten pages of rules and instructions about modulation; but it is interesting to find that he does not acknowledge the uniformity of the major and minor keys. In referring to different keys, he implies that he was thinking in terms of modes by not specifying whether he means major or minor, nor mentioning that accidentals are needed for a change of key.

His first general rule is practicable:

(p.51) "The way of going out of one key into another, except into the Key of E, is by Introducing the note or sound that is a sharp 7th to the key we would go into"

He amplifies this instruction in terms of the key of C, but when he comes to the third cadence of the key, which he says is E, he lapses into modal terms:

(p.52) "E Key not having a full tone, but a semitone major for its 2nd, cannot have a cadence from its 5th above, or from its 4th below, as all the other keys have;"

(p.54) "E Key differs from all the other Keys; for they are introduced or brought in by the semitone major below them, but this key is by the semitone major above it, i.e. from F downwards to E."

This is, of course, tantamount to treating E as the Phrygian mode and giving it the traditional Phrygian cadence. Nor was this his only retrograde tendency, for when he comes to the 5th cadence, which is F, he makes this curious comment:
"We ought to observe on this key of F, that in the diatonic scale it has a Tritonus for its 4th, which ought to be preserved as much as possible; because if we use B♭ as much in this key, as we use F for the 4th in C key, such modulation in F key, will only be the modulation of C key transposed a 4th higher or a 5th lower."

This was an outmoded statement for the early 18th century; composers had been placing B♭ in the Lydian mode since the 15th century, thus making it identical with the Ionian mode transposed; moreover, no instances may be found of Pepusch putting this into practice in his own compositions.

Pepusch gives five usual cadences: the Key, its 5th, 3rd, 6th and 4th. Lastly, he reluctantly admits the 2nd:

"There may be a 6th cadence of C key which is not marked in Plate 2 because it is very remote from C key; but in a long piece of music we may use it but sparingly.

"This 6th cadence is in D which is the 2nd of C Key; and this key is introduced by C sharp which is the accidental semitone major below it."

One might be more reluctant to admit the supertonic key in the minor mode than the major; but Pepusch says that the above cadences "may also be done in all the other keys".

As has already been observed, the French theorists were far more conservative about modulation than their English contemporaries. J.P. Rameau (1722) was the first to give a full exposition of modulation; briefly, he demonstrated removing from the key to its 3rd, 4th, 5th and 6th, with the 7th sometimes allowed in the minor key, and the 2nd in the major.
No theorist could undertake to give instructions in the simplest two-part composition without explaining and demonstrating the purpose of the cadence; therefore all the 17th century theorists who professed to teach composition have included instructions for cadences.

"The Pathway to Musicke" (1596) is of no importance in this respect; for though it provides "The Rule of Descant" and briefly refers to consecutive perfect intervals, and perfect, imperfect, and dissonant chords, the examples are not very enlightening, and from them no student could grasp the elements of composition.

Morley (1597) made many references to closes and cadences, but these two words were not synonymous at that time. Grove (Dict., 1954, "Cadence") says: "He [Morley] applied the term "close" to the descent of the canto fermo upon the final of the mode; and "cadence" to the dissonance with which this progression was accompanied in the counterpoint"; this, however, is not strictly accurate. Although Morley does not define the term "close", an examination of the cadences which he regards as final ones, indicates that the harmony (in modern terms) may be V-I, VIIb-I and sometimes IV-I. In many of the V-I cadences no voice falls by step to the Tonic; and in the Plagal cadences this progression is not possible. As for the term "cadence", Morley did define it:

(p.145) "MA. "...there is no coming to a close, specially with a cadence, without a discord, and that most commonly a 7th bound with a 6th when your plainsong descendeth as it doth in that example I showed you before.

PHI. What do you term a Cadence?
A Cadence we call that when coming to a close, two notes are bound together and the following descendeth thus:

\[ \text{\begin{align*} \text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \end{align*}} \]

or in any other key after the same manner."

The above excerpt leads us to believe that Grove's statement is correct, but in the following passage Morley contradicts himself, saying that it is not necessary to have a discord in a "Cadence", and so we conclude that by the term "Cadence" he means the tonic / leading-note / tonic figure in one voice:

(p.223) "MA. "...And because of all other Closes the Cadence is the most usual (for without a Cadence in some one of the parts, either with a discord or without it, it is impossible formally to Close)..."

That "it is impossible formally to Close" without this "cadence" is also contradicted later when several plagal cadences are included among the final cadences.

Morley gave the following definition of a passing cadence:

(p.223) "MA. "...And as for those ways which here you see marked with a star thus *, they be 'passing closes' which we commonly call 'false closes', being devised to shun a final end and go on with some other purpose; and these passing closes be of two kinds in the bass part, that is either ascending or descending; if the passing close descend in the bass it cometh to the sixth, if it ascend it cometh to the tenth or third as in some of these examples you may see."

Two of the examples marked with an asterisk are given below and it will be seen that the bass which "cometh to the sixth", (i.e. the 6th against the "cadence") is a passing cadence (V-Ib or IVb-V), though in the context of this example it can hardly be called a cadence at all; and the bass which "cometh to the tenth
or third is an interrupted cadence (V-VI): (p.224)

Considering that the plagal cadence had been in use for two centuries it is surprising that Morley did not attempt to elucidate its character. And in the examples of cadences in 4, 5 and 6 parts, he gives six plagal cadences an asterisk denoting that they are middle closes, and six no asterisk, denoting that they are final closes. (Middle closes: p.229, Ex.9; p.231, Exs. 2 & 3; p.236, Exs. 1, 2 & 5. Final closes: p.231, Ex.5; p.233, Exs. 3, 4 & 5; p.236, Ex. 6; p.238, Ex.5.) R.A. Harman points out (p.240, f.n.11) that those with an asterisk approach the chord with more movement which destroys the sense of finality, but this distinction is not always present, as the reader may judge from the following examples: (p.229) Plagal cadence marked as a passing close: (Ex.9)
(N.B. On p. 244 R.A. Harman (f.n. 2(c)) says the last example is an imperfect cadence (I-V) and yet on the same page (f.n. 1) he says that D is never the key-note when there is no Bb in the signature.)

(p. 233) Plagal cadence as a final close: (Ex. 3)

At the end of his treatise, Morley names a host of theorists "whose authorities be either cited or used in this book", yet he omits Tigrini from whose "Compendia della Musica" (1588) he took 53 of the examples of cadences which he included in his own book. (See p. 241-2 of 1952 edition where R.A. Harman has given a Table of the cadences which are identical, or nearly so, in both books.) (N.B. Grove (Dict., 1954, "Morley") says that the identical cadences are coincidental, but the mind boggles at such a far-fetched coincidence.)

One may note in this 1952 edition that R.A. Harman has placed asterisks frequently among these cadences, accompanied with a footnote: "Morley does not mark this passing close."
As stated at the outset, Morley regarded the progression VIIb-I as a final close, since it contains the two requirements of such a close: the cadence figure and the descent to the tonic note beneath the cadence:

(p.224, Ex.3)

Naturally, Morley refrained from placing an asterisk over such cadences since he regarded them as final and not as passing closes; yet, because in modern times this cadence has been regarded as a passing close, in the 1952 edition the editor has placed asterisks over all thirteen examples given by Morley; so that the modern reader, who may not have the time to examine the matter closely, is lead to believe that Morley regarded these examples as passing closes and by some oversight omitted to place asterisks above them. In three of the thirteen examples, the editor has decided that the cadences are passing ones because there is a B flat in the signature or 'accidentally' in the parts, and the final note is A, since A is not usually a keynote when there is a Bb in the signature; but if we are to credit Morley with enough musicianship to know what he considers final or passing cadences, then such a cadence as the following he may well have considered a final cadence of the Phrygian type:
After giving the examples of cadences, Morley continues his discourse, explaining how the 5th and 6th may be used together:

(p. 243) "But when you put in a sixth then of force must the fifth be let out, except at a cadence or close where a discord is taken thus:

\[
\begin{align*}
\text{\textcopyright} & \text{ the best manner of closing and the only way of taking the fifth and sixth together.}
\end{align*}
\]

It seems as if Morley recalled this form of cadence after he had provided all the other examples, for though he could have put the II6/5 chord before many of the perfect cadences, he never did. And though he esteemed it so highly he gave it only a cursory mention, and did not use it again in any of his later examples.

In his later and longer examples, the passing cadence most frequently used is the modulatory one to the dominant, but he made no reference to this in the text; and was altogether silent on the subject of modulation, which, like the major and minor keys,
was in the early stages of development.

Morley was vehemently opposed to the characteristic false relation of the so-called "English" cadence, and he delivered the following tirade against this particular one:

(p. 259)

"...the Close in the Counter part is both naught and stale, like unto a garment of a strange fashion which being new put on for a day or two will please because of the novelty, but being worn threadbare will grow in contempt; and so this point, when the lesson was made, being a new fashion was admitted for the rarity, although the descant was naught as being only devised to be foisted in at a close amongst many parts for lack of other shift; for though the song were of 10 or more parts yet would that point serve for one, not troubling any of the rest, but nowadays it is grown in such common use as divers will make no scruple to use it in few parts whereas it might well enough be left out, though it be very usual with our organists."

And of a similar cadence in 5 parts (p. 271) he said: (p. 272)

"...your last two bars you have robbed out of the capcase of some old organist;..." adding that it was not sufferable in composition for voices "seeing there be such harsh discords taken as are flat against the rules of music." He goes on to condemn a cadence having in it a simultaneous false relation:

(p. 272) "...but that and many other such closings have been in too much estimation heretofore amongst the very
chiepest of our musicians, whereof amongst many evil this is one of the worst."

Both of these types of cadence were used by Byrd, (to whom Morley dedicated his treatise), and by most composers of the English school. The former type was used by Morley himself in his madrigals; but by the time he wrote his treatise he had apparently heard it to satiety and was only aware of its faults.

By the 17th century, Ornithoparcus' rules for cadences (Dowland translation 1609) were rather antiquated, and since the terms are not clearly defined, a novice would be muddled by such directions as the following:

(p. 81) "13. If the Base take the Close of the Tenor, the Tenor shall take the Close of the Meane; Or if the Base take the Close of the Meane, the Tenor shall take his Close,..."

Whereas Morley used the terms "cadence" and "close", Dowland used the terms "Meane close" and "Tenor close": e.g.

\[ \text{Meane Close} \]
\[ \text{Tenor Close} \]

This example makes the above excerpt clear, and shows that these "closes" could be placed in any voice. The explanation of the term "close" is far from clear:
"Being that every song is graced with formal Closes, we will tell what a Close is. Wherefore a Close is (as Tinctor writes) a little part of a Song, in whose end is found either rest or perfection, or it is the conjunction of voices (going diversely) in perfect Concords."

Ornithoparcus follows this with eight short rules for closes which describe the position of the parts in a close in 3-parts.

Coperario made a complete break away from the old practice of making a "cadence" and a "close" with a 7-6 suspension; the only final close he acknowledged was the one we now call the "perfect cadence!", when the bass falls a fifth or rises a 4th:

"The Bass means to make a close when he rises a 5th, 2nd, or 3rd, and then falls a 5th, or rises a 4th. Likewise if the Bass fall a 4th, or 2nd, and then fall a 5th, he means to use a close, then that part must hold, which in holding can use the 11th or 4th with the Bass in the next note rising, or falling, and then you must use either the 3rd or 10th."

Coperario established the 4-3 suspension at the cadence. He illustrated all the named possibilities in 2 parts, (I-V-I, IV-V-I, VI-V-I and Ib-V-I) first with Superius and Bass clefs and then with Tenor and Bass clefs.

Within the section devoted to suspensions (f.31v), Coperario directed that "If the Bass fall a 4th, or rise a 5th meaning to make a staie the 8th, or 15th must hold, and next use the 3rd, or 10th." Bukofzer (in his Preface to the facsimile edition, p.12) elucidated this by pointing out that the term "staie" referred to the prolongation of the bass note by means of a dot. The "stay" (which should not be confused with the syncope) enters on the strong beat and is held to form
a half-cadence. The examples show imperfect cadences (I-V, VI-V, IV-V and Ib-V) with 4-3 suspensions, e.g.:

(f.31v, Ex.1)

On f.32v Coperario gives the rule "How to use a 5 and 6 together"; he does not say at a close, though his earlier ruling: that the Bass means to make a close when it falls a fifth, would here be taken into account. (He had already made a brief mention of the six-five chord (f.21v), where the examples show it in its most usual cadential position: II6/5-V-I.) The arresting feature about these 6/5 chords is that they are actually on the dominant note making a III6/5 chord, (except for the 4th example): (f.32v)

Coperario pointed out that the 4th and 5th examples are "cleane contraries to the other three"; the 4th example is the common progression II6/5-V-I, and the 5th shows a III6/5 chord before an imperfect cadence. We speak of these as chords, but the fact that the dissonance was always prepared as an internal suspension, and the fourth note of the chord sounded after the
other three, makes them different to the unprepared 6/5
chord which later became the stereotyped form at the cadence.

Coperario's rule: "How to use the 6 instead of a 5 in
a close" (f. 33r) shows the seed of the I6/4-V-I cadence:

"The 6 instead of the 5 is most commonlie used if the
Bass rise to his close with seconds, or fall a 2 as it
appeareth in the third score."

(f. 33r 2nd and 3rd Examples)

In the rule "How to use a 7th" in a close (f. 33v), we
expect to find the "dominant 7th" explained; but though it is
a 7th on the dominant which Coperario meant, it only leads up
to the cadence, and after being prepared and resolved, it is
followed by the 4-3 suspension on the same dominant. Nowhere
in the treatise has the dominant 7th the cadential function
which later became so common; and one never finds a 7th on
the dominant unprepared.
Thomas Campian's (c.1619) first reference to cadences is obviously a paraphrase of Coperario's rule (Cf.):

"...the Bass intends a close as often as it riseth a fifth, third or second and then immediately either falls a fifth, or riseth a fourth. In like manner if the Bass falls a fourth or second: and after falls a 5th, the Bass insinuates a close, and in all these cases the part must hold, that in holding can use the fourth or eleventh, and so pass either into the third or tenth."

Even with certain words altered, the style of writing is so similar to that used in the whole of Coperario's treatise that although the dates of both treatises are uncertain, one may be sure that Campian depended on Coperario for this rule and for the examples which accompanied it.

An examination of Campian's treatise discloses that every cadence he used was a perfect one (V-I) either in the tonic or a related key. He completely overlooked the imperfect cadences and the interrupted cadence. (Needless to say, he used them frequently in his own compositions.) However, apart from this oversight, he made an advancement on his predecessors; Morley
used modulatory cadences without mentioning the fact; and Coperario, once he had shown the essence of the modulatory cadence, (i.e. that the Bass makes a cadence when it falls a 5th or rises a 4th to the Tonic, relative major, subdominant and dominant) made no use of it within the short examples in his treatise.

Campian rules that if the key is a minor one, the closes to be used are on the tonic, dominant and the mediant; but if they key is major, the close on the mediant is improper and for variety one may use instead the key of the supertonic or the subdominant. Then he immediately contradicts his rule by giving a 2-part example in F major with the second cadence onto the mediant: the relative minor of the dominant in modern terms. (N.B. The key of the example would qualify as "major" in Campian's estimation since the A is natural; but there are no B flats in the signature, nor are they added as accidentals, and it is more properly in the Lydian mode.)

Charles Butler (1636) introduced the terms "perfect cadence" and "imperfect cadence" with their modern meaning. He recommended various ornamental resolutions of the 4–3 suspension in the cadence, as he considered that repetitions of the plain suspension would be tedious: (p.66)

"Also this cadence is sometimes resolved by raising the Bound Note into the next key as:"

\[ \text{Diagram of musical notation} \]
If the last example is joined to the bass counterpart which Butler gave for all the foregoing examples, it will be seen that there is nothing to "resolve", thus:

\[ \text{Diagram of example} \]

It is more likely that he intended the sort of decorated resolution which was so characteristic of the 17th century, and especially of Purcell, thus:

\[ \text{Diagram of example} \]

Novello, ("Works of Purcell"/ Vol.XX(2), p.2)

(Sop.)

(Bass)

(This ornamental resolution may also be seen in Morley's treatise in the example on p. 29, penultimate bar.)

Butler says of the Imperfect Cadence:

(p.67) "The Imperfect Cadence doth signify very little rest, either of harmony or of Ditty: but that they are both to proceed further: and it differs from the Perfect in the 3rd or last note: which either it silences as

\[ \text{Diagram of example} \]

, or moves from the proper key of an 5th or unison, to some other, as:"

\[ \text{Diagram of example} \]

It is curious that he gave only the upper part of these half-closes; one cannot be sure how he would have harmonized the final note in each cadence. He continues:

"Sometimes this change is made in the Bass, the Cadence remaining whole: which nevertheless is Imperfect;
because the last note, by this means, is neither unison nor 6th as:

Describing the II6/5 at the cadence in the minor key as a way of introducing a dissonance, Butler was concerned with the imperfect 5th resulting in the upper parts: a point which Morley chose to ignore (Cf.):

(p. 66) "So proper is a discord to a Cadence, that if there be none in the Cadence to the bass; yet is a discord well admitted in some other part to the Cadence. Where note that if the Note in a 4th part, answering the bound-note and its discord be a 3rd to the Bass; it is better imperfect than perfect: although the perfect be a 5th to one part, and the imperfect be neither 5th nor 4th, but a discord of a half-note between them both. And therefore if that 3rd be naturally flat, they will not sharp it: (so that the other parts standing thus:

the 4th part will be: M.

All the foregoing instructions are embraced within the section devoted to "Alligations" (i.e. suspensions) and the real
substance of the cadence is dealt with in a section entitled "Of Formality" (p.81). It is unfortunate that these two subdivisions are separated as they both relate to the same subject. Moreover, in the first section he wrote about perfect and imperfect cadences; and in the second section about primary and secondary cadences, though primary cadences and perfect cadences are one and the same. The secondary cadences are those in related keys: the Dominant, Sub-dominant and Mediant, but using only the minor key as the tonic in the given examples.

Butler next discusses the three "Improper Cadences", the 6th, the 2nd, and the 7th, which, presuming he related them to the minor key, would be the sub-mediant minor, the relative major of the subdominant, and the major key on the flat leading note (which was not at all uncommon in the 17th century):

(p.83) "...which, because they are strange and informal to the Air, are therefore sparingly to be used: and when upon occasion, any such are admitted; they are to be qualified by the principal Cadence fitly succeeding."

Christopher Simpson's rules for cadences in the "Division Viol, (1659) do not throw any new light on the matter. The first rule (p.17) is based upon that of Thomas Campian (Cf.) i.e. it pertains only to perfect cadences: for the minor key the tonic, dominant and mediant, and in the major key substituting the subdominant or the supertonic for the mediant.

In Part III of Simpson's book ("Playing Extempore on a Ground"), cadences are referred to again, but in a more vague and misleading manner:

(p.37) "6. CADENCES OF TWO Sorts. Though Cadences may seem
to be many in Number, yet in effect they are but Two; to wit, a 7th brought off with a 6th, after which the Bass falls a Tone or Semitone; or else, a 4th brought off with a 3rd, after which the Bass commonly falls a 5th, or rises a 4th, which is the same thing. Example:

\[
\begin{array}{cccc}
76 & 76 & 43 & 43 \\
5 & 3 & 3 & 3
\end{array}
\]

The second example was misprinted; from the ensuing examples of divisions upon this cadence, one can see that the key signature should have had two sharps, F and C, and the sharp before the D should be omitted. The first two examples are imperfect cadences in the minor and major keys; the next three are perfect cadences. We gather from this rule that Simpson meant by a "cadence" the dissonant suspension in a "close".

The "Compendium" (1667) still adheres to Campian's treatise in that it relates only to perfect cadences and does not add any new material to the rules for cadences. It enlarges on the "Division Viol" instructions to the extent of giving practical advice to amateur composers with regard to 'Middle Closes'; the chief caveat which Simpson makes is that "two strains following immediately one another ought not to end in the same key."

(p.144) "I do confess I have been guilty myself of this particular fault (by the example of others) in some things which I composed long since; but I willingly acknowledge my error, that others may avoid it."

(See comparison of Simpson's and Purcell's cadences on p.317)
Playford's "Introduction" carried Campian's instructions from 1655 to 1679. In the 1683 edition, which was an accumulation of excerpts which Playford took from various treatises, he included a host of rules and examples regarding cadences. Of the 2-3 suspension in the bass, he said:

(p.7) "This Binding is seldom taken in a Close in more parts than two; but in the Middle of a Lesson it is to be taken as often as you shall see occasion. This Binding is seldom or never taken in other Notes than in this Example"

(N.B. Morley (p.224) gave examples of this cadence in three parts, but he did not rule that it should be limited to three parts; though there are no examples of it in more than three parts. By 1683 it was probably thought too weak for a final close.)

Of the perfect cadence with a 4-3 suspension, Playford said:

(p.8) "This Close may be used in any part of a Lesson of 2 or more parts, either beginning, Middle, or Ending; but seldom it is to be omitted in the Ending of a Lesson: This Close is seldom or never taken in longer or shorter Notes than in the Example."

The next reference to cadences (p.9) was copied from Locke's "Melothesia" (p.12), given below (with misprints corrected):
(1) Playford and Locke give D for this upper part, but it is a misprint; the figuring indicates F.

(2) Playford has a C in the alto part. (See further discussion about this on p. 77)

(3) N.B. Locke set all the upper parts an 8ve lower.

(4) In Exs. 2 and 3 the figures are not quite accurate:

Ex. 2 should read $7\ 6\ 5\ \frac{3}{4} - 3$; Ex. 3 should read $6\ -5\ \frac{3}{4} - 3$

(5) The 4th cadence is Phrygian and might be regarded as a final close; or it may be an imperfect cadence in A minor. The fifth cadence is a final close in C major.

On p. 10, Playford gave this example from Simpson's "Division Viol" (p. 21):

and said: "This Close is used in the Middle Strain of three or more parts, and for the Final Close many times of two parts."

On p. 13 Playford gave examples of "Usual Cadences or Closes of two Parts" which he borrowed from Campian's treatise.
These are modulatory cadences on the mediant and the sub-dominant (with two cadences on the tonic). Unfortunately, Playford did not take into account Campian's subsequent instructions for "usual" cadences, and consequently he omitted the most usual cadence of all: the cadence of the dominant.

Playford's last contribution to the subject was made under the heading: "Examples of some short passages and Cadences of three Parts, wherein Discords are taken Elegantly." (p. 24). Of these seven examples, five have perfect cadences with 4-3 suspensions; the other two, which are given below, have imperfect cadences, approached in a very irregular manner: (cf. pp. 272-281)

In the 1694 edition, revised by Henry Purcell, the matter on pp. 7, 8, 9 and 13 of the 1683 edition (discussed above) was retained. Purcell, like Campian, Coperario and Playford, made no specific reference to passing closes in the tonic key. His own instructions and examples for making closes show some dependence on Simpson's "Compendium" (1667); and in order that the two may be compared and Purcell's variances noted, both are given below:
SIMPSON (p.45) "...the chief and principal is the key itself; in which the Bass must always conclude; and this may be used also for a middle Close near the beginning of a Song, if one think fit. The next in dignity is the 5th above; and the next after that, the 3rd. In these 3 places middle closes may properly be made, when the key is flat."

SIMPSON:  

![Simpson's notation](image1)

(From 5th to 3rd to Key)

PURCELL (p.105) "To a flat key, the Principal is the Key itself, the next in dignity the Fifth above, and after that the Third and Seventh above."

PURCELL:  

![Purcell's notation](image2)

(From 5th to 6th to 2nd to Key)

(It will be remembered that Butler (Cf.) called the cadence onto the [flat] 7th of the [minor] key an "Improper Cadence". This cadence was quite common throughout the 17th century, and was undoubtedly a survival of the modal practice of cadencing upon any note of the mode.)

SIMPSON: "But if the Bass be set in a Sharp Key, then it is not so proper, nor easy to make a middle Close to end upon the sharp 3rd, and therefore we commonly make use of the 4th or 2nd above the Key for middle Closes."

SIMPSON:  

![Simpson's notation](image3)

(From 5th to 4th to 2nd to Key)

PURCELL: "To a sharp key, the key itself first, the Fifth above, and instead of a Third and Seventh (which are not so proper in a sharp key) the Sixth and Second above."

PURCELL:  

![Purcell's notation](image4)

(From 5th to 6th to 2nd to Key)
Purcell's omission of the subdominant as a modulatory cadence in both major and minor keys, leads us to believe that he did not attach much importance to it. All the subsequent editions of the "Introduction" contained the same rules as those in the 1694 edition.

As to the cadential features in Purcell's compositions, a few characteristics may be briefly noted. The perfect cadence with a 4-3 suspension combined with an "anticipation" was very common; (see an example below; this is also discussed in the concordance "The Treatment of the 4th" cf.). The "added 6th" is frequently used at cadences, preceding either the dominant 7th or the 6/4 chord as in these two examples:

(1) Vol.XII, p.18, Orch. Prelude  (2) "Dido & Aeneas", p.55 Orch. Novello Ed.

\[
\begin{align*}
\text{Vol.XII, p.18, Orch. Prelude} & & \text{Vol.XII, p.55 Orch. Novello Ed.} \\
\text{In triple-time, the perfect cadence is often preceded by} & & \text{the subdominant 7th, as in this example:}
\end{align*}
\]

\[
\text{Vol.XIX, p.159, Bar 10. Orch.}
\]
Note: The dissonant combination of the anticipation (C) and the 4-3 resolution (B) in the penultimate chord was known as the "Corelli-clash"; Purcell rarely struck the two notes simultaneously; he usually made one a crotchet and the other a quaver.

Alexander Malcolm's treatise (1721) teaches the elements of composition to a certain extent; yet, though the book does not purport to be a handbook for Thorough Bass players, when we look for rules regarding cadences we come upon this statement:

(p.450) "Having thus explained the nature of modulation from one key to another, it may seem natural to treat now of Cadences; but of these I cannot suppose a performer of the Thorough Bass ignorant, they being so frequent in music, all I shall therefore say of them is, that they must always be finished with an accented part of the measure."

Dr. Pepusch (1730) wrote six pages about cadences; he was compelled to write at length to make his instructions intelligible without examples; (examples were appended in the 1731 edition). His notions of keys were rather archaic, and instead of instancing a major and a minor key for his rules, he used C major and the Phrygian Mode on E (with F natural). His first four pages of rules are condensed into the following notated examples of final cadences in 2 parts which may only end in the unison or 8ve:

![Notated examples of final cadences in 2 parts](image)

The student is referred to Plate I of Pepusch's treatise for a diagram of final cadences in 3 parts, and this is given below
to illustrate Pepusch's mode of demonstrating his rules:

(p. 85)

Cadence in C

\[
\begin{align*}
C & \quad D \\
B & \quad C \\
G & \quad C \\
& \quad C
\end{align*}
\]

\[
\begin{align*}
C & \quad B \\
( F ) & \quad E \\
( D ) & \quad C
\end{align*}
\]

\[
\begin{align*}
G & \quad F \\
E & \quad D \\
C & \quad B \\
& \quad C
\end{align*}
\]

(Note: Pepusch gave similar final cadence diagrams for D E F G and A, which all have three cadences like the above, except E, which has not the top one because the dominant was not available in the Phrygian mode.) Cadences in four parts are made by adding another part according to rule. The top cadence in the diagram Pepusch calls the "Grand Cadence":

(p. 44) "The Grand Cadence ... differs from the others, in that the last note but one of this Cadence is a sharp 3rd in the Treble, which rising afterwards a semitone major at the time that the Bass descends a 5th, or rises a 4th to the Cadence note, will be in the unison if the Bass rise a 4th; but if the Bass falls a 5th will be in the 8ve."

Pepusch says that this cadence should not be used in 2 parts, ("because the skipping to the last note of the cadence, is a movement more proper for the Bass in many parts") so how can it possibly end in the unison? For he can hardly mean that all 3 or 4 parts should converge on middle C for the final.

Describing 'Middle Cadences', Pepusch (p. 44) said: "the best or fullest of these is in a 5th;" [as the other middle
cadences are modulatory, this is presumably the perfect cadence on the dominant, it answers not only to the Colon, and to the semi-colon, but also to the interrogation, and to the admiration stops in writing." He adds that by ascending to the cadence note it expresses surprise, or joy, or an interrogation; and by descending to the cadence note it expresses grief.

Without specifying any key or mode, he says that the next best middle cadences are "in the sharp 3rd, or in the flat 6th." The "sharp 3rd" could only be used in the major key as the relative minor of the dominant; the "flat 6th" could only be used in the minor key as the relative major of the subdominant. He then says: "The last and worst middle cadences are in a flat 3rd, or in a sharp 6th." This statement is inconsistent with the foregoing rule, since, whilst the key of the major 3rd is good in the major key (i.e. the relative minor of the dominant): the key of the minor 3rd (i.e. the relative major) is good in the minor key; likewise, the key of the minor 6th is good in the minor key (i.e. the relative major of the subdominant), and the key of the major 6th (i.e. the relative minor) is good in the major key. However, Pepusch was not thinking specifically in terms of major and minor keys and could not define his middle cadences clearly.

Lastly, he mentions the "flying or avoiding cadence", (i.e. the interrupted cadence):

(p.46) "...what is meant hereby is, that when after having
prepared and resolved the discord which precedes the Cadence, instead of rising or falling a degree, we skip upwards or downwards, insomuch that after having done what is requisite for a Cadence, instead of finishing and completing it, we break off by going somewhere else."

The French theorists of the first half of the 17th century gave rules for cadences which were rather antiquated compared with those of the English theorists of the same period (Cf.) for they speak in terms of modes. The "Traicté de Musique" (1616) and Mersenne's "Harmonie Universelle" (1636) give similar rules and examples for final cadences in simple counterpoint note-against-note. (1) The cadence consists of three notes; (2) the 1st note should be concordant with the last by the 3rd, 4th or 5th; and (3) one part rises to the key-note by a tone or semitone, the other part falls to the key-note by a tone or semitone:

"Traicté" (f.14v)

Mersenne (p.215)

"Cadences to the Unison" — "Cadences to the 8ve"

The "Traicté" goes on to demonstrate syncopated cadences with dissonant suspensions; Mersenne proceeds to cadences in figured counterpoint, (all in 2 parts); they call an imperfect cadence
or "broken cadence" one which ends with the chord (i.e. interval) of a 5th, 3rd or 6th (instead of an 8ve or unison). Both theorists compare cadences with parts of a sentence and grammatical terms.

Antoine Parran (1646) gave examples of cadences of the twelve modes in 4 parts: three cadences for each mode, on the dominant, mediant and tonic. The three cadences for the Ionian mode are given below, (though it should be noted that all twelve modes have different cadences in Parran's examples):

(N.B. The "mediant" cadence does not modulate to the relative minor; it is a plagal cadence.) Parran says that if the piece is long, one may borrow one, two, or more cadences from another mode.

Even Charpentier's (c.1690) cadences were rather conservative compared with Simpson's (1667) and Purcell's (1694) (Cf.) He gave these rules:

"The Cadences where the Bass ascends a 4th or descends a 5th are the points of punctuation in music, and one should employ them in a finishing sense. That is why all pieces of music finish by this kind of Cadence; One calls it a final cadence when it falls on the key-note of the Mode."
"The cadence of a 7th resolving to the 6th is made when the Bass descends one degree. This one is used in a finishing sense but nevertheless demands something after it. This cadence is used in the Middle of a song and represents in music, what : or ; or ? represent in a discourse.

"The Intermediate Cadence is that when the Bass ascends a 5th or one degree, or descends a 4th on one of the chords of the Mode; it is only used in order to separate as much of the sound as is necessary to the sense like the commas in a discourse separate the lesser members of the period. Examples"

Full Close : or ; ? , , , ,

"Suppose that Sol is a chord of the Ut Mode."

The first three examples (in D minor with the B♭ omitted from the key signature) are on the tonic, dominant and mediant. The last four examples are imperfect cadences in C major (i.e. I-V, I-V, II₆-V, and V₆-I on the dominant). Charpentier's table of the usual cadences is very limited:

<table>
<thead>
<tr>
<th>Minor Mode</th>
<th>Major Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA Dominant</td>
<td>SOL Dominant</td>
</tr>
<tr>
<td>(All other</td>
<td>(All other</td>
</tr>
<tr>
<td>Cadences</td>
<td>cadences which</td>
</tr>
<tr>
<td>(which enter</td>
<td>enter will be</td>
</tr>
<tr>
<td>(will be</td>
<td>outside the</td>
</tr>
<tr>
<td>(outside the Mode.</td>
<td>Mode.</td>
</tr>
</tbody>
</table>
In the 17th century many theorists related certain elements of composition to grammatical principles and to oratorical art. Butler, who, it will be recalled, was also the author of "The English Grammar" (1633), compared the final cadence to the "Epilogus Orationis"; Marin Mersenne (1636, Book V, p.216) compared the use of different cadences in musical phrases to the construction of sentences; the German theorist Alstead (original treatise 1611) related grammatical terms to music. Cadences and rests found their counterparts in the punctuation marks; including the question mark, which equated the interrupted cadence. Later theorists who commented upon this were Descartes (1653), Charpentier (c.1690) whose cadences with the equivalent punctuation marks are given above, Pepusch (1730), Malcolm (1721) and Trydell (1766).
In this country, the forms which preceded the fugue (e.g. madrigal, motet, fantasia, "In Nomine") were constructed on a number of short expositions each on a different subject, and this type of composition was called "fuging". In Italy, Frescobaldi (1583-1643) was probably the earliest composer to write monothematic fugues, and he and his pupil Froberger (1616-1667) later influenced J.S. Bach. This development towards the perfect art-form did not permeate the English contrapuntists' forms; Purcell's Fantasias of 1680, though showing far greater skill in the use of contrapuntal devices, closely resemble the forms of the earlier English composers.

There was no set formula for the fantasia and its allied forms. In fact, so much variety may be found in the numerous compositions of this type that to systematize the various procedures adopted is well-nigh impossible.

Instructions given for "fuging" deal only with the exposition (i.e. the opening of the work; though some examples are neatly rounded off with a final cadence); the student who wished to write a complete composition had to make a careful analysis of a number of pieces by the best composers; from these he could learn how to proceed beyond the exposition, and select from them a hybrid method for prolonging and completing his own composition.

In the Second Part of his treatise, Thomas Morley (1597) defined imitation:
"We call that imitation when one part beginneth and the other singeth the same for some number of notes which the first did sing, as thus for example."

It will be seen that this is "canonic imitation; but Morley does make distinctions between imitation and canon: imitation may only be at the "unison, fourth, fifth, sixth and octave"; (canon can be at any interval); "there can be no point or imitation taken without a rest". Also, after giving an example with a "tonal" answer, Morley explained:

"but although it rise five notes [whereas the first voice has risen four notes] yet is it the point, for if it were in canon we might not rise one note higher nor descend one note lower than the plainsong did, but in imitations we are not so straitly bound."

When Morley's imaginary pupil provided an example maintaining the imitation for only five notes, Morley appeared to disapprove of this short "report" (Fr. rapport, used in 17th cent. England for 'imitation'), and contrived to improve upon it by making the "point" go through to the end.

In the exercises of imitation in two parts upon a plainsong, Morley points out that it is better to alter the plainsong than to lose a good imitation. (p.176)

In the Third Part of his book where he teaches 4-part composition, very little more is said about imitation.

Criticising an exercise (by the second pupil, Polymathes)
Morley says:

(p. 265) "...the nearer the following part be unto the leading the better the imitation is perceived and the more plainly discerned, and therefore did the musicians strive to bring in their points the soonest they could, but the continuation of that nearness caused them fall into such a common manner of composing that all their points were brought in after one sort, so that now there is almost no imitation to be found in any book which hath not been many times used by others, and therefore we must give the imitation some scope to come in and by that means we shall show some variety which cannot the other way be shown."

Morley's pupils ask for "some more examples which we may imitate, for how can a workman work who hath had no pattern to instruct him?"; and he gives them this advice:

(p. 276) "If you would compose well the best patterns for that effect are the works of excellent men, wherein you may perceive how points are brought in, the best way of which is when either the song beginneth two several points in two several parts at once, or one point foreright and reverted. [I.e. per arsin and thesin.] And though your foreright points be very good yet are they such as any man of skill may in a manner at the first sight bring in, if he do but hear the leading part sung, but this way of two or three several points going together is the most artificial kind of composing which hitherto hath been invented either for Motets or Madrigals, specially when it is mingled with reverts, because so it maketh the music seem more strange."

In his next examples (pp. 276-280) Morley departed from the strict canonic imitation which he had taught earlier in the book; his imitation is now rather lax; rarely exact for more than a few notes; intervals and note values vary; and on the whole it is nearer to the style of imitative counterpoint used in his own secular and sacred vocal works.

Coperario (c. 1610) in his section "How to Maintain a Fuge"
demonstrates some four-part imitative entries, any of which could very well have been the opening of an instrumental fantasia of his own composition. We must not expect to find some early type of fugue here, for what Coperario is really demonstrating is how to compose in imitation. The whole of the first page of his instructions (f. 36v) is given below. (N.B. This was used by Playford in the 1683 edition of his "Introduction.")

(f. 36v) "When you have chosen your fuge, you must examine all your parts, and see which of them may begin first, for the sooner you bring in your parts with the fuge, the better will it shew. After the leading part your fugues either must be brought in upon the 5th, 8th, 3rd or unison, [this is not the interval of imitation but the interval of sound with the leading voice] and then look on your two leading parts where you may bring in the 3rd part, and then you must let them three go together, until the 4th part be brought in, being brought in you must contrive it so as that you may conveniently come to a close, and so leave the fuge, and go to some other ayre, or else to some other fuge."

"After the first point is finished by the Bass, or before if it is possible, if you will maintain another, then what part soever be leader the rest of the parts must help to fill, and you must make a Bass of purpose for to agree with the leading fuge, and let one part rest after another, so there be three parts still going."
(Coperario wrote another example here, rather similar to the one above except that the first entry starts on the dominant, 2nd entry tonic, 3rd entry dominant and 4th entry tonic. The two upper parts and the two lower parts enter at a minim's distance as in the first example.)

Next, using the same theme, Coperario follows the exposition by four more entries of the same subject; those which entered on the tonic the first time, come in on the dominant the second time, and vice versa. The absence of a "counter-subject" and an episode between the two expositions, shows how remote this was from the later fugue forms.

(f.37v) "If you will twice use the fuge in all the parts, thence you must after the Bass once hath used the fuge, frame him of purpose according to the part wherein you use the fuge, with all you must observe, that your part may rest before his coming in with the fuge, which is a great grace to a part, and to the fuge."

(1) This auxiliary-note G makes a strange dissonance with the ornamental resolution in the upper part.
Coperario's next instructions are for a "subject" which it is not possible to "answer" after one or two notes:

(f. 38v) "If you cannot bring in your fuge whilst the leading part is handling her point, you must rest, and as soon as the point is done you must frame chords of purpose for to agree with the following part: Chords for two parts must be a 3rd, and a 6th: a 5th you may use so you pass unto a 3rd, or 6th again, an 8th is to be used in the same manner as the 5th is. When these two parts have finished their fuge you must force them to agree with the third part, and so you must afterwards force them to agree with the fourth part. This is now to be observed, when the fuge is not long, nor tedious, for otherwise it would be too single before all the parts be brought in."

The example Coperario appended to the foregoing instructions, shows the Answer entering after one measure. The upper voices proceed to new free counterpoint as the lower voices enter, but the material is unrelated to the main subject, and is never used more than once. Moreover, two new entries in the superius and tenor bear no link with the subject, nor with the accompanying counterpoints, nor with each other.

The final instructions are for a "point" which is long because it is made of semibreves and minims, and one which is also too difficult to bring the Answer in while the leading part is sounding. In this case another "point" must be invented, and the exposition be contrived like that of a "double" fugue. Coperario says: "first you must rest, and then come in upon a 5th, 3rd, 8th, or unison" (but no other interval) "and then you must use the 3rd, and 6th." A 5th and an 8ve may be used as long as they are followed immediately by a 3rd or 6th. "Then you must frame the two parts" in such a way that the two resting voices may be brought in as soon as possible. Ex:
Coperario gave a second example, composed in shorter note values and commencing at the interval of a 5th. He said nothing about inverting the two themes; nor did he have inversion in mind when he wrote the expositions, for the first example would have an irregular 4-5 suspension at the beginning of the 2nd measure; the second example which starts at the interval of a 5th would invert to a 4th. He ends with these remarks:

"This fashion of maintaining of double fuges is most used of Excellent authors, for in Single Fuges there can no such great art be shewed, but only in the invention thereof. Besides there hath so many been made already, as that hardly one shall invent a single report to be easily, and sweetly brought in, but it hath already been invented before."

Coperario's implication that it is possible to show great art in "double fuges" is not borne out in his instructions; though he undoubtedly knew that invertible counterpoint in them was a common device. His last remark is practically the same as one made by Morley in his treatise (p. 265) quoted earlier. Both masters appeared to believe that this type of imitative composition (i.e. close imitation, as in the first two examples) was nearing exhaustion. It is incredible to us that so much duplication really existed; and as it is not so obviously apparent in the imitative music which has survived, we must assume that much of this music has been lost.
Charles Butler (1636) takes his examples from both Morley (1597) and William Byrd. He begins his section "Of Fuga" with definitions of the terms used, and first of "Fuga":

(p. 71) "Fuga is the Repeating of some Modulation or Point, in Melody and harmony: an Ornament exceeding delightful, and without satiety; and therefore Musicians the more they are exercised in Setting, the more study and pains they bestow in this Ornament."

Butler's definition of a "point" comes close to actual practice:

(p. 71) "A Point is a certain number and order of observable Notes in any one part, iterated in the same or in divers parts: within the time commonly of two semibreves in quick sonnets, and of 4 or 5 in graver music."

He goes on to explain the terms "Report" (already defined), and "Revert" which was another term for per arsin and thesin. Among his observations on Fuga, the 2nd is a contradiction of Morley's rule: "there can be no point or imitation taken without a rest".

(p. 72) "(2) Fuga may come in well without a rest, though better upon a rest, so it be not above 3 or 4 semibreves: but best upon one odd minim rest or three."

Butler may have had in mind (1) a second set of entries (as in Coperario's example); a second entry is more effective preceded by a rest, but was often brought in without one; (2) the reiteration of the same point above a c.f. (as in the next example by Morley below); (3) the incidental type of imitation that occurs in free counterpoint (see example of Purcell's "imitation or reports", p. 338)

Butler has observed some laxity in imitative compositions for he says:

(p. 72) "Neither in Report nor in Revert, do Musicians always strictly tie themselves to the just Number, Figure, Interval, or Tactus, of the Notes in the Point; and
rising or falling a 4th for a 5th, or a 5th for a 4th is usual..."

This is clear except for his reference to "figure" which is not specific. Taking into account the fact that note-values were sometimes altered in imitation, there is a remote possibility that Butler used "figure" to mean "length of the notes"; (if he did not mean this, then it is a factor which he overlooked); alternatively, (as he next discusses Morley's examples of discants over a plainsong), by "figure of the notes" he may have meant the "shape" of the point which changes when the point is reverted, or when the note-values are shortened or lengthened, etc. This is quite different to the kind of imitation discussed so far, and to make the matter clearer, one of Morley's examples is given below together with Butler's analysis of it:

(Butler, p.72; Morley, p.163)

\[
\begin{array}{c|c|c}
\text{[8 notes]} & \text{[11 notes]} \\
\hline
\text{[The Point]} & \text{[Reverted]} & \text{[Reported]}
\end{array}
\]

(Butler, p.73) "...the point consists of 8 notes, in 4 semibreves; which is reverted in a 5th with 11 notes, in 4 semibreves; and then Reported in a 4th (for of that distance are all the notes, except the first which is a 5th) in 3 semibreves and a half, before the close note."
Christopher Simpson ("Compendium", 1667) defines "Fuga" thus:

(p. 12b) "This is some Point consisting of 4, 5, 6 or any other number of Notes, begun by some one single part, and then seconded by a following part, repeating the same, or such like notes; sometimes in the unison or octave, but more commonly, and better, in a 4th or 5th above, or below the leading part. Next comes in a 3rd part, repeating the same notes, commonly in an 8ve or unison to the leading part. Then follows the 4th part, in resemblance to the 2nd. The 5th and 6th parts do follow or come in after the same manner, one after the other; the leading parts still flying before those that follow; and from thence it hath its name Fuga."

Later, Simpson mentions other freedoms allowed in imitation:

(p. 131) "Note that the leading part begins with an even note, yet any following part may come in upon an odd note, with an odd rest before it, when the Fuge doth require it, or permit it. Likewise take notice that you are not so strictly obliged to imitate the Notes of the leading part, but that you may use a longer note instead of a shorter, or the contrary, when occasion shall require. Also you may rest or fall a 4th or 7th either instead of other; which is sometimes requisite for better maintaining the Air [i.e. Key] of the Musick."

Simpson says that it is better to injure the Point than the Air of the Music; "the design of a Composer being to please the ear rather than the eye" (p. 133). By this he means that it is necessary to alter the Point to keep within the tonic key (or its closely related keys); he probably had in mind such adjustments as the "tonal answer", alteration of melodic intervals, the addition of accidentals.

Simpson briefly explains (and gives examples of) per arsin and thesin, double fuge, and the Point reverted. By the latter he means turned backwärds (Canzicrands). He does not, as did Morley
TWO EXAMPLES FROM SIMPSON'S "COMPENDIUM" (1667)

(p. 132) "Example of a Fuge per Arsin and Thesin"

A = Arsin; T = Thesin; 1 = first theme; 2 = second theme.
and Butler, mean inverted. (Roger North used the word in the same sense as Simpson.)

His next instructions (p.135 "How to form a Fuge") are similar to those given by Coperario (f.36v and 37v see above) save that the language is more modern and direct.

Playford's "Introduction" contained no instructions about imitation until the 1683 edition when he pirated f.36v of Coperario's treatise. (This page is quoted above in its entirety in relation to Coperario.)

In the 1694 edition, Purcell devoted a large section to "Fuge, or Pointing", though here again the instructions relate to the exposition and to the devices of imitation, and not to a complete composition. He gives a brief definition of "Fuge":

(p.106) "A Fuge, is when one part leads one, two, three, four or more notes, and the other repeats the same in the Unison, or such like in the Octave, a Fourth or a Fifth above or below the Leading Part."

(1) In all his examples Purcell indicates new entries of the "point" by an oblique (/).

(2) The first six notes are the theme which Purcell uses throughout all his examples of the various devices.

(3) Purcell does not mention placing a rest before new entries and more often than not in these miniature examples he
brings in successive new "points" without a rest.

(4) Purcell explains the "tonal answer" used in the above examples saying that it "is done because it relates more to the key..."

The terminology of "imitation" becomes more confused in the next excerpt:

(p.108) "There is another diminutive sort of Fuge called Imitation or Reports, which is, when you begin counterpoint, and answer the Treble in some few notes as you can find occasion when you set a Bass to it."

(1) As we have noted, Fuge, Imitation and Reports all meant the same thing in the 17th century.

(2) "Diminutive" must apply to the length of the notes, since the "point" (3 measures) is longer than those in the other examples.

(3) In his instructions for writing in 3 parts, Purcell says "Imitation or Reports needs no example, because you are confined to a Treble, and so must make Imitation or Reports in the two parts as the Treble will admit of." This is consistent with the use of the term "reports" in the Scottish Psalter (1635) where tunes are set in a kind of free polyphony, not in strictly imitative style. (Grove's Dict. 1954, Vol.VII, p.126) None of the other theorists
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By "double fuge" Purcell intends the imitation of two subjects, though in the example the "subjects" are no more than short motifs. (N.B. Double or Invertible Counterpoint, which Purcell calls "Double Descant" is discussed in the concordance "Double Counterpoint".) He contrived some double counterpoint in the example below, though he does not draw attention to this, merely saying "the parts change":

Continuing his instructions for 2-part composition, and still using the same short theme, he gives examples of per arsin and thesin, per augmentation and diminution, per recte and retro, (and per double descant and canon, which are discussed in the two concordances of those subjects).

In the instructions for 3 and 4-part writing, little more is added by way of new information, and the student must study the examples to see how the devices are handled. (These include plain fuging, double fuging, per arsin and thesin, per augmentation, and per recte and retro, in 3 parts and in 4 parts.) In addition, he introduced a further example in 4-parts which might be described as "quadruple fuging"; another idea which he borrowed from the Italians.
(p.139) "...there is one sort of Fugeing to be mention'd which is, Four Fuges carried on, interchanging one with another."

In this example, the accent and the number of notes in the motifs are maintained; the note values are only altered for the first or last note; the intervals are maintained, except in motif 3, where, in Bar 3b, Purcell avoids a dissonant passing note on the 1st Beat of the bar; in Bar 4a he avoids the F, perhaps because of the false relation with the Bass; not because he objects to false relation per se, but possibly because it occurs in the following bar (5a) and to have it in two consecutive bars would be repetitious.

Lest it be thought that Purcell made a hasty study of all these contrapuntal devices for the sole purpose of flaunting his skill in Playford's "Introduction", it should be remembered that for many years he had been using them in his own compositions.
The interested reader may see a great variety of artifices in his Fantasias and In Nomines of 1680 (Novello, 1961, edited by Thurston Dart). In this respect, Purcell differed from Morley, who, though he wrote at great length (or at least translated from Zarlino) the rules for numerous contrapuntal devices, never included them in his own compositions. Morley's motets, madrigals, canzonas, etc. were, on the whole, constructed on a fairly lax imitative style which was far removed from the strict rules laid down in his treatise.

Dr. Pepusch (1730) wrote at length on the subject of Fugue, but he appeared to have misconstrued the rules of his predecessors. In the first place, he said that in fugues, as in canons, "the leading part and the answer to it must solfa alike; i.e. have the same syllables in their solmization." He does not acknowledge the necessity of a tonal answer for some subjects. His view that Fugue is as strict as canon, is perhaps more congruent with the kind of fugue evolving in Germany, than with the easy-going "fuging" practised in England.

(p.80) "In fugues that are not Canons, this regularity is necessary only in the beginning of them; For as the Fancy of the composer, or the words he composes upon, may in the course of the composition require various subjects, different from that which the Fugue did begin with, so he is at liberty to introduce those other subjects at his pleasure, which however in their answers must each of them have the same solfa, that they as Guides have, according to the different keys that the Modulation is accidentally brought into, and that are proper to the original or chief key of the composition."

Pepusch points out the necessity of (1) introducing a rest before a new subject enters to distinguish it from the subject that went
before; (2) not bringing the voices in too close together, not too far apart; and (3) attending to the Answer while composing the Guide, and deciding upon the distance and the interval at the outset.

Finally, he defines "imitation" stating that all Fugues whose answers are not in the 4th, 5th, 8ve or unison -

(p. 84) "...are distinguished from True and Regular Fugues by the name of Imitations, because that they only to the eye seem to be Fugues, for in these, the semitones in the Guide, and in their answers, do not fall in the same order in the one part as they do in the other, and although to the eye when in writing they seem to do so, (in respect to the lines and spaces the Notes are on) yet the solfaing them easily detects that they do not, and that the several parts consist of different intervals."

Pepusch must have had a poor opinion of the English style of imitation for he said:

(p. 84) "There are Fugues that in their several parts solfa alike, but then they differ in the intervals, i.e. make different intervals in the answer to those that were in the Guide; these also are but Imitations and very bad ones.

Of the French theorists, Salomon de Caus (1615) and Antoine Parran (1646) give clear definitions of fugue, the terms used in connection with fugue, and the different kinds of fugue (i.e. fugue with two subjects, and inverted fugue - per arsin and thesin etc.) but none of the French theorists provide instructions for composing fugues or imitation.

Charpentier (c. 1690), and the two French theorists just named, remark upon the beauty of fugue—a factor of this form of which their English contemporaries were perhaps not consciously aware. Roger North's remarks on fugue in general, and especially English works, are tinged with cynicism, though full of admiration when he speaks of Corelli's fugues.
28. CANON AND CATCH

Canon is one of the most difficult subjects to teach, "...for it may be said of all canons that, unlike fugues, they depend to a certain extent on coincidence - they either fit or they do not, and the subjects cannot be adjusted to do so." (Grove's Dict., 1954, "Canon") Instruction may be equally effective by a printed book or by personal tuition; for once the rules have been learned and examples studied, the pupil can do nothing better than experiment by writing canons himself and learn by trial and error.

Morley (1597) wrote at length about canons in the Second Part (pp.178-187) and the Third Part (pp.282-289) of his book. In the first set of rules he deals with canon two parts in one with a cantus firmus; (in eleven of the fifteen examples the cantus firmus is the same). In the first two examples he shows the canon in plain semibreves, followed by the same canon "divided", i.e. with the notes broken into smaller ones with some rhythmical interest (cf. "Division"). At this stage Morley was more concerned with showing his pupil the "most usual ways of making two parts in one upon a plainsong" than with teaching the strict rules of canon. His examples vary in interval of imitation from the 4th to the 10th, some above and some below; and the distance of the entries varies from a breve to a minim. His last exercise is per arsin and thesin, and he caps this with one by Byrd which is per arsin and thesin and reverted, (i.e. each phrase in the two parts is followed by the
phrase in reversed order of notes) upon a plainsong. Morley makes the following pertinent remarks about such plainsongs:

(p.185) "And to speak uprightly I take the plainsong to be made with the descant for the more easy effecting of his purpose. But in my opinion whosoever shall go about to make such another upon any common known plainsong or hymn shall find more difficulty than he looked for; and although he should essay twenty several hymns or plainsongs for finding of one to his purpose I doubt if he should any way go beyond the excellency of the composition of this [i.e. Byrd's canon] ."

Morley complains (p.186) that in England the canon is usually pricked down in one part only without any sign where to begin the following part; "which use many times caused divers good musicians sit a whole day to find out the following part of a canon, which being found (it might be) was scarce worth the hearing." He describes how the French and Italian composers place the appropriate clefs at the beginning of the stave along with the required rests before the entry of that part, the clef nearest to the music being the leading part, and the sign 2 indicating where the other voices should start. He criticised his countrymen for not making the solutions to their canons plain: "But such hath been our manner in many other things heretofore, to do things blindly and to trouble the wits of practitioners, whereas by the contrary strangers have put all their care how to make things plain and easily understood."

In the pages devoted to canon at the end of the treatise, he discussed a number of curious examples by earlier composers; but offered his pupil little more enlightenment on the method of composing them, for he says that there are so many divers ways
of making them that no general rule can be given. He referred his pupil to the canons of 2, 3, 4, 5 and 6 parts by Josquin, Petrus Platensis (sc. Pierre de la Rue) and Brumel, and to the "Introductions" of Raselius (1589) and Calvisius (1592), with their resolutions and rules how to make them.

The only remark that Morley made about Catches was that they are made in the same way as canons, "making how many Parts you list and setting them all after one." Of course, there are differences between Canon and Catch: (1) Catches (and Rounds) are always at the unison or 8ve, (2) the melody is not completed until the final note, and (3) they can be sung round and round until the singers decide to stop.

(p.289) "Four parts in one in the unison"

\[ \begin{array}{c}
\text{\textless} \\
\end{array} \]

which in its four-part harmony is resolved thus:

\[ \begin{array}{c}
\text{\textless} \\
\end{array} \]

It is obvious from this unmelodious and uninspired example that the Catch was not yet in its heyday.

Elway Bevin's treatise (1631) is a work confined to the study of canonic writing, although as Christopher Simpson stated ("Compendium", 1667) "Mr. Elway Bevin professes fair in the title page of his Book; and gives us many examples of
excellent and intricate Canons of divers sorts; but not one word of instruction how to make such like." Bevin does make occasional comments on the degree of difficulty involved in writing certain canons. In spite of his failure to provide substantial instructions, Henry Purcell appears to have considered the treatise useful and informative for he said: (p.114) "There is a wonderful variety of Canons in Mr. Elway Bevin's Book, published in the Year 1631, to which I refer the Younger Practitioners,..." The value of Bevin's painstaking efforts lies mainly in the great variety of canons which he has contrived. A music student who had attained a certain standard in composition might learn something of canonic artifice from Bevin's exercises; but first he would have the difficult problem of finding a tractable cantus firmus and then might find the prolonged search altogether too tedious. All the examples are composed on the following three "plainsongs":

(1) 77 examples

(Lest the 77 examples be thought to be all canons, it should be mentioned that the first 23 examples demonstrate the various Proportions, and some "species" of counterpoint above the cantus firmus.)

(2) 35 examples

(3) 5 examples
The first of these "plainsongs" with one semibreve to a measure and the last five notes descending conjunctly, might tempt an amateur to write a sequence, which would be an easy solution. Bevin rarely resorted to this device for all five measures, though he often used two sequences:

(Ex. 9 a)

The second cantus firmus is a well-tried one, used by Morley in his treatise for eleven of his examples of canonic exercises. Bevin discovered that this c.f. was capable of carrying the scale from G, above or below it, and wrote two canons to illustrate this. They contain no merit as canons:

(Ex. 33 b) "This Canon riseth a note at every returne, and riseth note by note to the end."
(1) An alteration to the c.f. to avoid direct octaves with the lowest part.

(2) This example has some characteristic "trailing 5ths" ( Cf.).

(3) Note the absence of any dissonance.

(Ex. 34 a) "Two parts falling, the third rising, making every note a Semibrief."

(1) Note the distance between the parts.

The cantus firmus is always an integral part of the harmony; cantus firmus theme no. 1 being used most often in the bass, and theme no. 2 appearing mostly in an upper part. Sometimes adjustments are made to the plainsong to make it fit the canon.

Bevin begins the canons methodically with a series at a crotchet's distance, with the interval of imitation starting at the unison and graduating to the 7th above; followed by a series at a minim's distance with the interval of imitation graduating from the unison to the octave above; ending the section with a similar series at a semibreve's distance. After this no sort of order is possible. Bevin works through a number of examples
illustrating canons per augmentation, per arsin and thesin, per recte and retro, and per double discant. Increasing the intricacy he then adds a 4th part and combines two or three canonic elements producing diminution per arsin and thesin, recte and retro per arsin and thesin, per augmentation and arsin and thesin, 4 in 2 per arsin and thesin, and canons which rise a note, or fall a note at each return. The examples in 5 parts include canons 4 in 2, and 3 in 1 with one part 'ad placitum'; and the final five canons surpass the rest either for the number of parts or for their ingenuity.

Bevin used the cantus firmus itself in several canons, as in the following where the alternate notes of the canon are the cantus firmus:

(Ex. 23 c) "Take one and leave one per augmentation. So the Plainsong contained therein."

(1) Bevin resorts to a sequence for four measures.

In spite of intimating in his dedication to the Bishop of Gloucester that he had "now laid downe this burden of my minde, the hopeful issue of my tyred braine", it appears from his final message to the reader that he had yet the stamina to consider writing more canons: "Thus much have I thought sufficient for young Practitioners at this present, but if I may perceive
any to take profit herein, I shall be encouraged hereafter to set out a larger volume..." However, he was about 77 when he published this treatise, and without writing another died eight years later.

Charles Butler (1636) based his rules for canon on Morley and used two of that master's examples for illustrations. He also cited a number of canons from Calvisius' treatise (1592) composed by Jacobus Gallus, Zarlino and Calvisius himself.

His remarks on the Catch are not enthusiastic:

(p. 77) "A Catch is also a kind of Fuga: when, upon a certain Rest, the parts do follow one another round in the Unison. In which concise harmony, there is much variety of pleasing conceits: the Composers whereof assume unto themselves a special licence, of breaking, sometimes, Priscian's head: in unlawful taking of Discords, and in special consecution of unisons and octaves, when they help to the Melody of a part."

The Catch was probably too unacademic a form for Butler's taste; he did not include an example of one.

Christopher Simpson ("Compendium", 1667) after defining a Canon said (p. 147): "Divers of our countrymen have been excellent in this kind of music: but none (that I meet with) have published any instructions for making a Canon." He took upon himself the task of writing a method for composing a canon in 2 parts, not without success:

(p. 148) "...The canon shall be set in a 5th above, and then your first Notes will stand thus:

\[\begin{array}{c}
\text{5th above} \\
\text{5th below}
\end{array}\]

"By the 5th, 6th, 7th etc. above or below is understood the distance of the key betwixt the beginning notes of either part."
"Having set down your beginning Notes, your next business is to fill up that vacant space in the second Bar, with what Descant you please; which may be done in this manner.

```
\begin{music}
\newclef \clef{bass}
\newstaff
\newtime{\frac{4}{4}}
\newkey\key{Bb}
\newnote\note{\C}{2}
\newnote\note{\c}{2}
\newnote\note{\c}{2}
\newnote\note{\c}{2}
\newnote\note{\c}{2}
\newnote\note{\c}{2}
\newnote\note{\C}{2}
\end{music}
```

"Now, seeing that the following Part must also sing the same Notes in a 5th above; it necessarily follows, that you must transfer the said new Notes to the upper Part; and apply new Descant to them also: and in this manner you are to proceed from Bar to Bar; still applying new Descant to the last removed Notes.

"In this manner you may continue 2 Parts in One, to what length you please. A short example may suffice to let you see the way of it."

```
\begin{music}
\newclef \clef{bass}
\newstaff
\newtime{\frac{4}{4}}
\newkey\key{Bb}
\newnote\note{\C}{2}
\newnote\note{\c}{2}
\newnote\note{\c}{2}
\newnote\note{\c}{2}
\newnote\note{\c}{2}
\newnote\note{\c}{2}
\newnote\note{\C}{2}
\end{music}
```

"The Canon ends where you see the little Arches over either Part. The rest is only to make up the conclusion; as we commonly do; unless we design the Parts to begin again, and so to go round without a conclusion."

Simpson removed part of the difficulty by dispensing with the cantus firmus and the freedom which he gained thereby enabled him to write a more musical example. However, later he adapts the above procedure to writing a canon to a plainsong in the manner of Elway Bevin's canons.

He describes a number of different canons, all of which were exemplified in Bevin's treatise, (e.g. syncopated canon, canon rising or falling a note, canon with each part entering a note above the one before, canon recte and retro, canons with various intervals of imitation, and distances of entry). Simpson did not include canon per arsin and thesin. He gave Morley's caveats against using pricks and discords in canon recte and retro.
By 1667 Catches were very popular and Simpson wrote some instructions for them; in fact, he was the only theorist after the Restoration to do so. Earlier Rounds and Catches, (e.g. those in Ravenscroft's "Pammelia", 1609) were conceived polyphonically; after the Restoration, they were more frequently conceived harmonically. The essential difference between a Round and a Catch lies in the fact that in the Catch the words and their treatment are so contrived as to bring in a point of humour. Before the Restoration very many Catches had a Rabelaisian rhyme; after it, they became bawdier; and by the end of the century they were so coarse that it is impossible to republish them nowadays without altering the words. Simpson's example (without words) is a typical 4-bar Catch of the mid-century; the 4-part harmony is bold and pleasing. Catches written towards the end of the century were mostly of 8 bars; longer ones were not uncommon. (N.B. In this example when the 2nd voice enters there are 3 consecutive 4ths in the 3rd bar.)

(p.174) "I must not omit another sort of canon, in more request and common use (though of less dignity) than all those which we have mentioned; and that is, a Catch or Round: Some call it a Canon in Unison; or a Canon consisting of Periods. The contrivance whereof is not intricate: for, if you compose any short strain, of 3 or more parts, setting them all within the ordinary compass of a voice; and then place one Part at the end of another, in what order you please, so as they may aptly make one continued Tune; you have finished a Catch."
The four-part harmonization:

Playford, in his "Introduction" of 1683, a few pages after giving six examples from Elway Bevin's treatise, gave the following instructions for making a Canon of Two Parts in one upon a plainsong:

(p.29) "...you are first to consider whether you will begin with Alto or Tenor to be the Leading Part; and what Notes will suit proper to the Bass, which done, you rest one or two Semibreves in the other Part, which follow according to the leading part that agreeing to the Bass or plainsong, then you are to fill up the vacant part of the first or leading part, with such Notes as will be Descant to the following part, and have reference to the succeeding Note of the Plainsong, so proceeding from bar to bar, still filling the empty bar of the leading part with such Notes as may agree both with the Plainsong, and following part for the next note of the plainsong."

(Ex. 14 b from Elway Bevin's treatise)

Playford, in attempting to paraphrase Simpson's instructions, lost some of the clarity and precision. He provided several other examples of straightforward canons, but since he believed that examples were more useful to the Practitioner than long discourses and precepts he gave no further instructions.
Purcell (1694) wrote very little about composing canons, merely stating: "The Eighth and noblest sort of Fugeing is Canon, the Method of which is to answer exactly note for note to the end." and giving an example in 2 parts based on the theme which he used throughout his instructions. His example for three parts was a "Gloria Patri" 3 in 1 which had first appeared in the 1687 edition; and in four parts, a "Gloria Patri" by John Blow. His rules for "Fugeing" embody a number of the devices usually associated with canonic composition, such as per arsin and thesin, per augmentation, per diminution, per recte and retro, etc. in 2, 3 and 4 parts. He recommended Elway Bevin's book to those who desired to learn more about writing canons.

One wonders why Purcell did not mention Catches since they were at the height of their popularity and he wrote very many himself, varying in length from 2 bars to 20 bars. They were almost exclusively composed for care-free male gatherings in taverns, clubs and coffee houses. (Coffee had only been introduced into London around 1656, but the places where it might be drunk increased rapidly and became the haunts each of its own clique.) In view of their bawdiness, Purcell may have been circumspect in keeping silent about them in a book mainly for young beginners, which included young ladies.

Dr. Pepusch (1730), in some general rules about Canon, Fugue and Imitation, explained the construction of a canon; but he strayed from the main subject and discoursed on its
relation to the church modes, and the unnecessary complication
of hexachords:

(p. 82) "If the Guide or Leader is in the Natural Hexachord, and the Answer to it is in the Durum Hexachord, the Guide being in the Natural may borrow from the Molle Hexachord, which will be Answered, by that part that was in the Durum borrowing from the Natural Hexachord."

Whilst criticisms have been levelled against Elway Bevin for giving only examples and no instructions, we may agree that Pepusch's treatise was impoverished by giving only instructions and no examples.

The French theorists did not pay much heed to the rules for writing canons. Marin Mersenne (1636) gave a brief definition of the form. Salomon de Caus (1615) was the only theorist who wrote at any length on the subject, suggesting a method of procedure rather like that of Simpson's, but constructing three measures of each part successively.

English composers appeared to prefer canons with entries as close together as possible; enjoying the tension created by the melodies repeated in such close succession. Certainly the examples provided by the English theorists support this argument, though exceptions may always be found. It is therefore interesting to find a French theorist putting forward a contrary point of view in this caution:

(Salomon de Caus, p. 41) "One ought to bring in the entry of the second voice in the canon (i.e. Consequent) not less than two measures after the first (i.e. Guide) and not more than four measures after the first, in order to give an agreeable modulation to the parts. For if they follow too closely together they are not audible, and if they are too far apart the memory cannot retain the melody and it is lost."
29. DOUBLE COUNTERPOINT

Nowadays it is hard to imagine double counterpoint being taught without the aid of Bach's "Forty-Eight" and "The Art of Fugue", which in themselves form a first class source of instructions on invertible counterpoint. This kind of counterpoint was very popular in the 16th and 17th centuries, though it was probably practised more extensively as a musicomathematical exercise and less for the purpose of practical compositions.

Thomas Morley (1597) when he discovered the rules for "Contrapunto doppio" in Zarlino's "Istitutione Armoniche", (Book III, Chap. lvi, 1558) thought that this type of composition had been invented by the Italians; though if he had looked through the works of Josquin (of which he appeared to have a collection, in addition to a copy of Glarean's "Dodecachordon", which is another Josquin source), he would have found several examples of double counterpoint, for it was used by the composers of the Netherlands School in the 15th century. (Vide: "Alma Redemptoris Mater", à 4, Alsbach, Vol. 4, No.21, composed c. 1459). The early examples of double counterpoint were at the octave, and quite straightforward. It seems likely that the more complicated types were developed in Italy in the 16th century. The first theorist to write rules for it was Don Nicola Vincentino ("L'antica musica", 1555), followed shortly after by Zarlino (1558) who greatly expanded the number of possibilities, and from whose treatise Morley drew his rules
and examples. (N.B. The small modifications which Morley made in the examples are listed by R.A. Harman on p.199 of his edition.)

Morley described two kinds of double counterpoint: the first: when either of the parts may serve as the upper melody or the bass at the interval of a 12th or 10th; (note that he does not bother to mention the easiest and commonest inversion at the 8ve): the second: when the individual melodies are inverted (i.e. by reversing the intervals of the melody; sometimes called 'by contrary motion'); this device is used in combination with the inversion of the parts at various intervals.

After defining double counterpoint, he proceeds to name the precautions necessary in writing at the 12th (an inversion which is effected by transposing the upper part down a 5th, and the lower part up an octave):

(1) The 6th may not be used because inverted at the 12th it becomes a 7th. [It can be used as a passing note.]

(2) The 7-6 suspension commonly used at the cadence must be avoided as its inversion at the 12th is irregular:

\[ \text{inverted at the 12th becomes:} \]

(3) The parts must never be more distant than a 12th.

(4) The parts must not cross.

(5) "we must not also put in the Principal a flat 10th after which followeth an 8ve or a 12th, nor a flat 3rd before an unison or a 5th when the parts go by contrary motions,
because if they be so put in the Principal there will follow 'tritonus' or false 4th in the Reply."

This rule is not clear and needs explaining. R.A. Harman says in his footnote: "A flat 10th or 3rd followed by an octave or unison results in a 'tritone' between the parts in successive notes, which was regarded as harsh in two parts, thus:

\[
\begin{align*}
\text{\begin{tikzpicture} \draw (0,0) node [fill=white] {\textcolor{black}{\flat C}}; \draw (0,1) node [fill=white] {\textcolor{black}{\text{\textregistered} D}}; \draw (0,2) node [fill=white] {\textcolor{black}{\text{\textregistered} F}}; \end{tikzpicture}} & \quad \text{becomes} \quad \begin{tikzpicture} \draw (0,0) node [fill=white] {\textcolor{black}{\text{\textregistered} C}}; \draw (0,1) node [fill=white] {\textcolor{black}{\text{\textregistered} D}}; \draw (0,2) node [fill=white] {\textcolor{black}{\text{\textregistered} F}}; \end{tikzpicture} \\
\text{\begin{tikzpicture} \draw (0,0) node [fill=white] {\textcolor{black}{\text{\textregistered} C}}; \draw (0,1) node [fill=white] {\textcolor{black}{\text{\textregistered} D}}; \draw (0,2) node [fill=white] {\textcolor{black}{\text{\textregistered} F}}; \end{tikzpicture}} & \quad \text{becomes} \quad \begin{tikzpicture} \draw (0,0) node [fill=white] {\textcolor{black}{\text{\textregistered} C}}; \draw (0,1) node [fill=white] {\textcolor{black}{\text{\textregistered} D}}; \draw (0,2) node [fill=white] {\textcolor{black}{\text{\textregistered} F}}; \end{tikzpicture}
\end{align*}
\]

"but it is not clear why Morley bans the 12th and 5th after the 10th and 3rd, for in the Reply they become a unison and 8ve respectively." Harman has overlooked the words "go by contrary motions" in Morley's rule, and it is these words which apply to the minor 10th followed by the 12th, and the minor 3rd followed by the 5th, thus:

\[
\begin{align*}
\text{\begin{tikzpicture} \draw (0,0) node [fill=white] {\textcolor{black}{\text{\textregistered} C}}; \draw (0,1) node [fill=white] {\textcolor{black}{\text{\textregistered} D}}; \draw (0,2) node [fill=white] {\textcolor{black}{\text{\textregistered} F}}; \end{tikzpicture}} & \quad \text{becomes} \quad \begin{tikzpicture} \draw (0,0) node [fill=white] {\textcolor{black}{\text{\textregistered} C}}; \draw (0,1) node [fill=white] {\textcolor{black}{\text{\textregistered} D}}; \draw (0,2) node [fill=white] {\textcolor{black}{\text{\textregistered} F}}; \end{tikzpicture} \\
\text{\begin{tikzpicture} \draw (0,0) node [fill=white] {\textcolor{black}{\text{\textregistered} C}}; \draw (0,1) node [fill=white] {\textcolor{black}{\text{\textregistered} D}}; \draw (0,2) node [fill=white] {\textcolor{black}{\text{\textregistered} F}}; \end{tikzpicture}} & \quad \text{becomes} \quad \begin{tikzpicture} \draw (0,0) node [fill=white] {\textcolor{black}{\text{\textregistered} C}}; \draw (0,1) node [fill=white] {\textcolor{black}{\text{\textregistered} D}}; \draw (0,2) node [fill=white] {\textcolor{black}{\text{\textregistered} F}}; \end{tikzpicture}
\end{align*}
\]

Morley's rule ought to have read something like this:

"we must not put in the Principal a flat 10th after which followeth an 8ve, nor a flat 3rd before an unison, and when the parts go by contrary motions, we must not put a flat 3rd followed by a 5th, nor a flat 10th followed by a 12th, because if they be so put in the Principal there will follow a tritone in the Reply."

The cadences with the suspended 2nd or 4th are good in the Principal because they make suspensions of the 11th and 9th in the Reply, thus:
The tritone here is permissible.

Morley next discusses inversion at the 10th, which is more difficult than at the 12th. He uses two forms of the inversion:

(1) the upper part lowered a 10th, and the lower part raised an 8ve, and (2) the upper part lowered an 8ve, and the lower part raised a 10th. The caveats are these:

(1) Consecutive 3rds and 6ths and their compounds must be avoided as consecutive 8ves and 5ths result in the Reply.

(2) No discords may be used at cadences.

(e.g. 4-3 suspension results in 7-8 bass suspension in Reply,
2-3 " " " 9-8 suspension in the Reply,
7-6 " " " 4-5 bass suspension in Reply,
and these were not conventional cadential suspensions. The dissonance resolving onto a perfect interval was considered to be inferior to that resolving on to an imperfect interval.)

(3) The parts may cross but to no greater interval than a 3rd.

(4) The music should proceed conjunctly as much as possible, and leaps of a 4th or 5th be avoided lest they result in the leap of a tritone in the Reply. [As the examples contain a 4th, and 5ths, this caveat really applies only to the tritone.]

The examples are too long to quote in full, but the opening bars
given below give some idea of the musical effect which cannot help being rather mechanical. The third example shows the second form of the inversion:

(p.191) The Principal

(p.192) The 1st Reply

(p.193) The 2nd Reply

A 3rd voice may be added, says Morley, if you insert a part a 10th above the lowest part of the Principal, or a 17th under the highest part. The rules for composing in this way are these:

(1) You must not put a 3rd or a 10th after an 8ve when the parts descend together, as they produce "hidden" 8ves or 5ths.

(2) You must not put a 6th after a 5th nor a 10th after a 12th
when the parts ascend, especially when the highest part does not proceed by degrees, as they produce "hidden" 5ths and 8ves.

(3) You must not go from an 8ve to a minor 10th, except when the highest part moves by a whole note and the lowest by a half note, or you produce "hidden" octaves.

(4) You must not go from a 3rd to a minor 10th by contrary motion, as this produces consecutive 8ves or from a 5th to a minor 10th as this produces "hidden" 8ves.

(5) You must not let the upper part go from a 5th to a major 3rd (the bass standing still), nor the bass from a 5th to a minor 3rd or from a 12th to a minor 10th (the upper part standing still), as these produce a false relation in the Reply.

In these examples with two of the three parts moving in compound thirds for the whole composition, the harmony is more pleasing than one might expect. Morley says:

(p.193) "It is true that the descant will not be so pure as it ought to be, and though it will be true from false descant yet will there be unisons and other allowances which in other music would scarce be sufferable."

One must take care to think about the third part when composing the Principal or, as in the case of the examples used by Morley (from Zarlino's treatise), there may be too great a distance between the outside parts in the Reply:
(p.194) The Principal

There are two caveats for double counterpoint where the Reply has contrary motions:

(1) The cadences must be without a discord because in the Reply it would resolve upwards. [Retardations were not generally approved, and would be unconventional at cadences.]

(2) You must not set a 10th before an 8ve, nor a 3rd before a unison when the parts descend together, because it produces "hidden" 8ves.

The amazing thing about this inversion of both harmony and melody is that it is capable of being set at various intervals, as Morley shows by inverting the one Principal in three different ways:
The Principal remain consonant in the three Replies. (Note that though Morley said (p.195) that you may use the 6th in the Principal, it must be a passing note if you intend to make the first type of Reply.)
<table>
<thead>
<tr>
<th>Principal</th>
<th>1st Reply</th>
<th>2nd Reply</th>
<th>3rd Reply</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th</td>
<td>8ve</td>
<td>6th</td>
<td>5th</td>
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<tr>
<td>8ve</td>
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<td>6th</td>
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<td>4th</td>
<td>9th</td>
<td>7th</td>
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<tr>
<td>9th</td>
<td>4th</td>
<td>9th</td>
<td>9th</td>
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</tbody>
</table>

Passing notes

It will be seen that the intervals are exactly the same in the Principal and the 3rd Reply. This is because it is a mirrored inversion, (which may be proved by holding it upside down to a mirror).

It will be agreed that the absence of suspended dissonances in this type of composition, and the frequent occurrence of bare 5ths and octaves, increases the severe, calculated effect of the music and debars all emotive qualities.

Like the plain inverted counterpoint, this doubly inverted counterpoint may have a 3rd voice added to either the Principal or the third Reply, which moves in 10ths above the bass part, or in 10ths below the treble part. (The first Reply is not possible because false relations result; the second Reply is not possible because 4ths would occur.)

Morley says that there are "many other ways of double counterpoint which it were too long and tedious to set down in this place, and you yourself may hereafter by your own study find out..." (p.199) (Double counterpoint is possible at other intervals. Triple counterpoint is not mentioned.) In actual fact he said a great deal more than any of his 17th century successors; even Elway Bevin did not demonstrate doubly inverted counterpoint.
In considering the reasons for the decline of this type of counterpoint, (even as a student's exercise), we have to take into account the transition to the major and minor keys; for the use of quasi-modal keys facilitated such composition by ignoring the major or minor quality of the 2nd, 3rd, 6th and 7th, and the perfect or imperfect nature of the 4th and 5th in the harmonic aspect of the inversion. And such alterations in the melodic inversion could take place without cluttering up the stave with accidentals. In this respect, we might compare the handling of one passage (Bars 18-19) of the four examples lately discussed:
Morley (and Zarlino) have allowed the harsh passage in the 1st Reply to stand, when a little of the inconsistency which is generally adopted for major and minor 2nds could have corrected the fault by removing the accidentals from B and E, without impairing the modal texture.

Another factor in the decline is that as music became more sonorous, and the melodic line took on a new colour consequent on the standardisation of the keys, so these mathematical types of counterpoint sounded more archaic than they did a century earlier; (except in the hands of a genius like Bach, who indeed instilled into them a unique quality which has never dated. The device under discussion may be seen in Fugue 22 of the "Forty-Eight", Book II).

Morley ends his discourse with a brief reference to double counterpoint in canon per arsin and thesin. The only caution is to omit suspended discords. In the Reply the 'leader' becomes the 'follower'. The opening bars of the Principal and the Reply show it to be a 'mirrored inversion' as described above:

(p.200)

The Principal

The Reply
Elway Bevin (1631) declared that double discant "is no Canon, but somewhat of the nature of a Canon, and sometimes also made in a Canon." Without more ado, he gives an example of double counterpoint at the 12th. This differs from Morley's example in that (1) it is very short, (2) it has a cantus firmus (in the alto in the Principal, and in the bass in the Reply), (3) the inversion is a real transposition, whereas Morley's, as stated above, is not, (4) the bass is inverted to the 12th above (in Morley's example the treble is inverted to the 5th below), (5) Bevin allows false relations, and dissonant crotchet auxiliary notes.

Later in the book Bevin gives an example of Double Discant at the octave, with the cantus firmus in the treble and a free part in the bass in both the Principal and the Reply. (These examples are Nos. 20, 21 and 30 in Bevin's book.)

Charles Butler (1636) connd Zarlino, Calvisius and Morley's treatises; he based his descriptions of the devices of double counterpoint on their several works and used their examples. He merely states the interval of inversion in each example and does not give any instructions for composing them, referring the reader who is curious "to try and exercise his wit in these abstruse and quaint conceits" to the treatises by the aforementioned theorists.

Christopher Simpson ("Compendium", 1667) defined double descant simply enough: "when the Parts are so contrived that the Treble may be made the Bass and vice versa" (p.169), but
may have overwhelmed his reader by the ensuing example of it in canon and per arsin and thesin. He hastens to render it "plain and easy" saying: "you must invert the Notes as you place them in the following part; accommodating your new Descant (Bar after Bar) to the Notes so inverted; as you may easily perceive by this instance of its beginning":

![Music Example](image)

"But I must give you one Caveat; which is, that you must not use any 5ths in this kind of Double Descant, unless in passage or Binding like a Discord; because when you change the Parts, making that the Treble which before was the Bass (which is called the Reply) those 5ths will be changed into 4ths."

His examples are inverted at the 8ve which is the simplest way. He adds that "the same method serves in what distance soever it be set", which was unhelpful of him when we remember the obstacles to be met in handling inversions at the 10th and 12th.

No mention was made of Double Counterpoint in Playford's "Introduction" until the 1694 edition when Purcell contributed some brief instructions for making it at the 8ve in 2 and 3 parts. In his section on 2-part writing, he introduced it thus:

(p.113) "There is a seventh sort of Fugeing called Double Descant, which is contrived so, that the upper part may be made the under in the reply; therefore you must avoid fifths, because in the reply they will become fourths."
Using the theme which happily adapts itself to all the requirements of his examples, he made the following examples:

The relaxation of Morley's strict rules is marked by (1) oblique lines for false relation of the tritone, (2) square brackets for sequences, and (3) ringed notes for dissonant echappée notes. Morley's examples did not even allow a 4th on the first half of a weak beat, as in those above marked by an asterisk.

In his section on 3-part writing Purcell's examples of double descant (i.e. triple counterpoint) at the 8ve are very short (4 bars). Using the same theme he adapts it for two trebles and a bass - an Italianism which he much preferred to S.A.B., and made two Replies: (1) "Where the Upper Part takes the Bass, and the Bass the Upper Part, and (2) "Where the Second treble takes the Bass & the Bass the Second Treble." He followed this with an example by Lelio Calista (flourished 17th century) which has a curiously Handelian flavour:
In the section on 4-part writing, Purcell said (p.138) "you hardly ever meet with [Double Descant] in 4 parts, because a 5th must be avoided, therefore 'tis defective, and wants a Cord to fill up in so many Parts, for which Reason I shall omit an Example." True, quadruple counterpoint was rare, but in spite of the special attention needed with the 5th, it was possible to contrive interesting 4-part harmony. (Bach used it in the "Forty-Eight" in Fuge 12, Book I, and Fugue 33, Book II.)

The French theorists, whose treatises were mainly concerned with elementary composition, omitted this subject altogether. This is a pity because it was in France that double counterpoint was possibly invented in the 13th century. (Y. Rokseth, "Le contrepoint double vers 1248").
PART III
THEORY OF MUSIC AND THE ENGLISHMAN
CHAPTER VI

GRESHAM COLLEGE IN THE 17TH CENTURY

In Thomas Ravenscroft's "Brief Discourse of the true
(but neglected) use of charactering the degrees by their
perfection, imperfection, and diminution, in measurable musicke", 1614, he says in his dedicatory letter to the governors of Gresham College:

(f.q3) "...I must, and doe acknowledge it as a singular
helpe and benefit, that I have received divers
Instructions, Resolutions and Confirmations of
sundry Points and Praecepts in our Art, from the
Musickes Readers of that most famous Colledge,..."

and later in the same dedication:

"What fruits my selfe in particular have received
by that one particular Lecture of Musicke (whereof
I was an unworthie Auditor) I dutifullly acknowledge
to have proceeded from that Colledge; and doe here
Commends and Dedicate them to your Worships, Who are
Visitors and Guardians of that most famous Foundation,
from whence I have receiv'd such benefit in these
my studies."

Even if we make allowances for the obsequiousness of 17th century dedications, these two statements do indicate that the instructions given at the gratuitious music lectures were of substantial value, and it may serve a useful purpose to look further into this subject.

Sir Thomas Gresham, who gave the City of London its first Royal Exchange, bequeathed his mansion in Bishopsgate, which he had had built on collegiate lines, to be founded as a college, and to accommodate seven lecturers, in divinity, astronomy,
music, geometry, law, physic and rhetoric. The lecturers were to be bachelors and were to receive a salary of £50 a year and their lodgings, these salaries to be paid from the rents of the hundred shops in the Royal Exchange.

The Joint Committee (composed of the Lord Mayor, representatives of the City of London, and representatives of the Mercers' Company) sought nominations for the professors from Oxford and Cambridge Universities. The caution of the period is reflected in the fact that the Vice-chancellor of Cambridge University was jealous lest this new foundation at London might be prejudicial to his University. Eventually three professors were selected from each University, and the seventh, the professor of music, was nominated by Queen Elizabeth: Dr. John Bull, the organist of her chapel.

The ordinance adopted concerning the music lecture (16.1.1597) ran thus:

"The solemn musick lecture is to be read twice every week in manner following, viz. the theorique part for one half hour or thereabouts, and the practique by concent of voice or of instruments for the rest of the hour; whereof the first lecture to be in the Latin tongue, and the second in the English tongue. The days appointed for the solemn lectures of musick are Thursday and Saturday in the afternoons, between the hours of 3 and 4. And because at this time Mr. Doctor Bull is recommended to the place by the queen's most excellent majesty, being not able to speak Latin, his lectures are permitted to be altogether in English, so long as he shall continue the place of the musick lecturer there."

(John Ward, "Lives of the Professors of Gresham College, 1740, p.viii.)

The excerpt next quoted, is taken from the directions to the professor of law, but would have applied equally to the other
professors, and throws light on two important points:

(1) The type of lecture given, and (2) the type of audience.

(ibid. p.vi)
"...it is thought meet, in respect of the end of ordaining of this lecture, as for the quality of the hearers, who, for the most part are like to be merchants and other citizens, that the said law lecture be not read after the manner of the university; but that the reader cull out such titles and heads of law, as best may serve to the good liking and capacity of the said auditory,..."

It was also anticipated that foreign visitors to the City would attend the lectures:

(ibid. p.v)
"...and for that the greatest part of the inhabitants within the city understand not the Latin tongue, whereby the said lectures may become solitary in a short time, if they shall be read in the Latin tongue only; and yet withal it is very likely that diverse from foreign countries who resort thither, and understand not the English tongue, will greatly desire to hear the reading of the said lectures,..."

Despite the liberal intentions of Sir Thomas Gresham, the audience would have continued to be an educated one for as long as the morning lectures were delivered in Latin. The practice of reading the music lecture in English was continued after John Bull's retirement, "even tho' the professors of that science have been all men of learning." (John Ward, ibid. p.200.) It seems unlikely that Gresham's ideas of promoting a liberal education ever embraced a lower social class than the middle-class merchants and their families. His aim was to prove to businessmen that they could enjoy cultural pursuits as well as being actively engaged as city merchants. ("The Life of Sir Thomas Gresham, Anon. 1845.")
According to the Minutes of 24.9.1597 (p.17), the lectures were only advertised in the Gresham College area:

"And it is further agreed that publique notice shalbe given thereof by setting up of bills in Poules,[sc. St. Paul's] the Roiall Exchange, and upon Gresham house gates."

As the lectures were given at regular times and always in the same place, the city-dwellers probably heard about them in the general talk of the day.

John Ward (ibid. p.200) tells us:

"In the year 1601 his [John Bull's] health was so far impaired, that he was unable to perform the duty of his place; and therefore going to travel was permitted to substitute as his deputy, during his absence, Thomas Birde, master of the same science, and son of William Birde, one of the gentlemen of H.M. Chapel."

In 1607 John Bull resigned his professorship to get married. (Grove's Dict., 1954, p.1009) In the absence of a musical monarch, and perhaps owing to an unmusical selection committee, the professors of music for nearly two centuries after John Bull were medical men, lawyers, parsons, etc. That Thomas Birde, who was then only 31 years old, and had lectured as Bull's deputy, was not nominated for the professorship, makes one suspect that the committee members were disposed to favour candidates for reasons other than their musical qualifications. The Committee Minutes show that there was no statute governing the election of a new professor; at the times when a vacancy occurred, the candidate was (1) nominated by a member of the Committee, or by the retiring professor, or by his University; or (2) he made direct application for the professorship to the Gresham Committee,
or (3) he besought a member of the Committee to put forward his name as a candidate. Most of the professors of music, though not holding a specific musical qualification, held a Master of Arts degree, and at this time, music could have been one of the subjects for this degree. (Grove's Dict., 1954, 'Degrees in Music', p.634.) Another pertinent fact to be recalled, is that in the 17th century it was common for a man of learning to specialize in several subjects; and though our modern minds may tend to be prejudiced against a medical man being professor of music, it is interesting to note that Dr. Christopher Wren was the Gresham Professor of Astronomy; in 1657, a physician, Jonathan Goddard, was appointed professor of rhetoric. Yet another relevant factor was the growth of the Society which Charles II entitled the Royal Society in 1663, which during its developing years held informal meetings at Gresham College and was closely linked with the Gresham College professors. (John Ward, ibid. p.xii.) At the formation of the Society in 1660, five of its first members were drawn from the body of professors. ("Gresham College and The Royal Society", Hartley & Hinshelwood, 1960.) The City Fathers were probably becoming interested in the new philosophy at this time, favouring the fellows of the Royal Society when one of the seven professorships became vacant, and disregarding in consequence the qualifications in the science upon which they were elected to give their lectures. The religious and political troubles of this period may also have had some bearing on the selection
of professors, as we may deduce from this reference from Balliol College in support of John Taverner, (not to be confused with the more famous musician of this name who lived a century earlier), as a candidate for the music professorship.

(Minutes, 17.11.1610, p.192)
"Right ho[norables] and right wor[ships]: whereas the bearor hereof John Tavernor, Mr of Arts of our Coll. hath made known unto us the humble sute which he desireth to make unto your hon. and wor: to whome the pticular care and choise of those places of the ho[norable]ble foundations of Sir. Tho: Gresham is Comitted: And for his furtherance herein and to geve satisfaction to you from us amongst whom he liveth hath requested us to signifie unto you our knolledg of him. Wee do assure you that he is in religion verie sound: a dilligent ressorter to prayers, sermons, communions both in our coll: and in the University; A due observer of the statute and order of our Colledge. A dilligent hearer and pformer of all exercises of learninge pteyninge to his place and degree, of verie good and approved sufficiency in learninge, philosophie; historie, the tongues, and Arts, and pticularly hath taken paynes and delight in this, for the readinge whereof he is nowe a sutor to your hon. and wor. His conversacon amongst us hath ben alwayes faire, courteous, honest, civill and discreet. Thus satisfying you upon our knolledge for his religion, lief and learning wee ar bould to his sute to joyne our request for your good favor unto him, for the which wee shall account or selves much beholdinge unto you, alwaies comendinge you to the gracious ptecon [sc. protection] of God almightie.
Bal: Coll. Nov. 6 1610."

Whilst Taverner's religious life and varied accomplishments are amply accounted for, music is not mentioned once. Born in 1584, Taverner would have been only 26 years old when he was elected to the music professorship. If we are to believe Thomas Ravenscroft's remarks (q.v. dedication), the music lectures up to the time when he wrote his treatise in
1614 were highly satisfactory; and as Ravenscroft was a child prodigy, it is likely that he had heard all the lecturers in music. One may fairly suppose that he dedicated his treatise to Gresham College in order to prove his eligibility as a candidate for the music professorship should Taverner marry, die or resign, but Taverner held the post until 1638 - about five years after Ravenscroft's death.

When Stow ("Survey of London", 1631) listed the times of the lectures, he gave "Master John Taverner, Reader of Musicke, on Saturday." This meant one lecture in the morning and one in the afternoon. The weekly lectures were given during four terms each year, in accordance with the Ordinance of 16.1.1597:

(John Ward, ibid. p.iv-v)
"These solemn and publick lectures concerning matters in controversy, and other matters of great weight and moment, shall be performed at four terms throughout every year in the manner and form following, that is to say, The first term is to begin the Monday before the term of St. Michael of the common law, and to end with the same term. The second term is to begin the Monday next before Hilary term of the common law, and to continue untill the end of that term of the common law. The third term is to begin the Monday sevennight after Easter day, and to end with Easter term of the common law. The fourth term is to begin the Monday before Trinity term of the common law, and is to continue for one whole month, viz. the space of twenty eight days next ensuing."

In those days the £50 per year salary was adequate for the maintenance of a professor, who was required to be in residence throughout the year. The lodgings were spacious: two rooms and a gallery for the music professor, and seemingly large rooms for in 1699 (Minutes, 20.9.1699, p. 348) Mr. Newey was admonished for having his aunt and sisters and servants living with him.
(It was against the rules to have women in the lodgings, and even guests were restricted to 16 nights a year.)

The music lectures never took the form of a paper that was read, and consequently they were never published, and there are no manuscript lecture-notes whatever to enlighten us on the standard of the lectures, or how the different facets of the theory of music were expounded, or how deeply the lecturer went into the subject. We can only assume that the measure of importance given to each element of musical theory, was in the same degree as we find it in the 17th century treatises, and that the lectures were propounded in a simple manner, in conformity with the founder's will.

In the 1664 edition of Playford's "Introduction", he says in the Preface (f.A6v):

"Another establishment for this Divine Science, is in Gresham College, London, erected by that honour of his country Sir Thomas Gresham for a weekly Musical Lecture, but as I have been informed to the dishonour of the Donor, and Professor of Musick, the allowance for the same is converted some other way."

Playford was implying that the music professor was spending his salary on some other pursuit than his music professorship, and to some extent this was true. Dr. Thomas Baines, the music lecturer at this time, was rarely in residence in the College, or in England. He was the life-long friend and physician of Sir John Finch, and spent many years travelling abroad with that gentleman. In 1662 (Minutes, 16.7.1662, p.210) he was given permission to travel to Italy for one year, on condition that Dr. Henry Yerberry read the music lecture
each week during his absence. In 1664 he went to Florence and did not return until 1670. In 1673 he appeared before the Committee to ask permission for his absence "to accompany the Lord Ambassador Finch in his Ambassage to the Grand Seignior", (Minutes, 14.4.1673, p.118) and arranged for Dr. Allen to read his lectures in his absence. These deputies were negligent in their duties and in 1672 (Minutes, 10.2.1671-2, p.89) complaints were made to the Lord Mayor. In 1680 the Committee (Minutes, 25.5.1680, p.42) suspended the salaries of the lecturers "in regard some are and were out of the Kingdome and for that seldom any lecturer now read there."

The Committee seemed reluctant to take any action against Baines, but at last they dismissed him:

(Minutes, 4.8.1681, p.75)
"...Sir Thomas Baines Musique Reader who was elected in March 1660, and is now out of the Kingdome and soe hath bin, two pts of three, of the time since his Election without supplying the Duty of his place; for which reasons the Comittee, now, upon mature deliberacon voted him out of his place and declared him to be from henceforth actually dismissed from the same."

Baines died in Constantinople in September 1681 without hearing of his dismissal. It appears that William Perry, who succeeded Baines, had been urging the Committee to consider him as a candidate for the music professorship before Baines was actually dismissed, for he was elected only five days after Baines' dismissal.

Records of the numbers attending the lectures were not kept until the early 19th century, so we cannot gauge their
popularity. John Ward (ibid. px) wrote in 1740 "...the lectures were both constantly read, and well attended, as may be gathered from the lives of several of the professors. The Minutes prove that this was a false picture of the facts. A hint was given in the Minutes of 12.5.1685 (p.139) that attendance was low, for it was agreed that the lectures should be held at 9 a.m. and 3 p.m. instead of 8 a.m. and 2 p.m., and also that the dining and withdrawing rooms of the College should be "repaired and beautified in the hope of getting more Auditors at the Readings."

Whilst, since 1597, Gresham College offered to all and sundry a free lecture on the theory of music once a week during the four terms of the year, it is interesting to recall that the professorship in music at Oxford was not founded until 1626; (from 1619, the lecturer in geometry had included music among his other subjects). William Heather, who founded the chair in music, included in his endowment three pounds annually "for and towards the maintenance within the said Universitie of Oxon of one able and fitt man who shall lecture and read the Theorie of Musick once every tearme or oither." (Gibson, "Statuta", p.558; "Music in the Medieval and Renaissance Universities", N.C. Carpenter, 1958.)

The nominal music lecturers at Gresham College up to the end of the 17th century are listed below:

Dr. John Bull (1596-1607), Organist of the Chapel Royal.
Thomas Clayton (1607-1610) Doctor of Physic.
John Taverner (1610-1638) Parson.
Richard Knight (1638-1650) Medical man.
Thomas Baines (1660-1681) Doctor of Physic, F.R.S.
William Perry (1681-1696) F. R. S., Divine.
John Newey (1696-1705) F. R. S., Parson.
CHAPTER VII

THE SOCIAL SIGNIFICANCE OF THE
17TH CENTURY TREATISES

Delamotte's treatise, which unfortunately has not survived, introduced from the continent into England the idea of a vade mecum: a small compendium of instructions in the theory of music. This heralded the departure from the large tomes written especially for study by the learned, and led to the publication of the brief, simple treatises primarily for the less educated. Being small manuals, and consequently less expensive, they became available to the lower middle classes, some of their servants, and indeed to all who could read.

From a perusal of the pre-17th century large treatises, one has the impression that their authors deliberately intended to be abstruse and complicated. Indeed, one 17th century writer praised "the ancients for the care with which they wrapped up their meanings, thus ensuring that only the discerning should understand them." (Henry Reynolds, "Mythomystes", c.1633). At a time when every trade jealously guarded itself from too great an influx of master-craftsmen, this stratagem would stem the possible flooding of their profession by dilettanti and second-rate musicians.

In this respect, we may surmise that some plain and easy instructions would have been published long before Morley's were it not for the fact that the music masters were afraid of losing part of their livelihood. Morley gives to his readers more than a hint of the attitude of some of his contemporary teachers:
There have also been some who (knowing their own insufficiency and not daring to disallow, nor being able to improve anything in the book) have nevertheless gone about to discredit both me and it another way, affirming that I have, by setting out thereof, maliciously gone about to take away the livings from a number of honest poor men who live (and that honestly) upon teaching not half of that which in this book may be found;"

Taking into account that many of these treatises ran to several editions, - 22 separate issues in the case of Playford's "Introduction" - we have a total of about fifty different editions of these small hand-books. Obviously there was a growing demand for such instructions, and a glance at the social developments of the time shows whence it sprang.

A general social characteristic of the time was the relatively recent and continuing increase, in numbers and importance, of both independent yeomen, and small domestic manufacturers in villages and towns. Prior to Elizabeth I's time their numbers had been fewer. Poor and ignorant, with little resources or leisure to travel beyond their immediate confines, they could indulge in none but the most elementary cultural tastes and interests. But from Elizabeth's reign onwards their numbers increased extensively, and they gradually became more prosperous. This continued through the Stuart and Commonwealth period.

Whilst this tendency affected the whole country, the distribution of these people was most marked in three areas:

1. East Anglia (Norfolk, Suffolk, Cambridge and Essex)
2. The Pennines (between Yorkshire and Lancashire)
3. The West Country (Gloucester, Bristol, Taunton and Exeter)
Contact by travel and traffic developed among these areas, and between them all and the metropolis. Their populations, and especially the small yeomen landowners of the most cultivable part of the country (East Anglia) provided the chief support for the Commonwealth.

There is nothing more stimulating to a class of people than new-found prosperity, travel, and contact with others of different outlook and interests. With more money and leisure, nothing could stop such people developing an interest in music; yet they were the classes of people most separated, for political and economic reasons, from the church and aristocratic houses which had until then monopolised music.

Playford, originating in Norwich, which was probably second to London as a cultural capital at that time, must have felt this potential market for music books growing and spreading around him; and from his commercial grounding as a youth he would be well aware of its economic possibilities.

Percy Scholes ("Puritans and Music", 1934) has written at great length on the evidence he found to disprove the notion that the Puritans were against music and hated all forms of music-making. In the first place, the term 'puritan' is used loosely to embrace whole classes of people, political groups and religious sects, who were not strictly puritan at all. The social influence of the old aristocratic class was largely expressed through the powers of the Church. The clergy of the Establishment thought of the Church as an edifice; the Puritans meant by the Church the people of God indwelt by the Holy Spirit. The objection
to the ceremonies was not due to a failure to appreciate beauty, but was founded on theological grounds. The Puritans did not object to singing in Church worship, but to elaborate church music which did not edify the congregations; for the complexities of such music prevented the common people from taking part in praising God musically. When the more extremist Puritans destroyed church organs and choir-books, etc. they were not striking at music, but at the elaborate ceremonial rites, which they sincerely believed to be in contradiction to the simplicity of the primitive Church. Scholes points out that John Hawkins, the 18th century historian, was the first to express the idea that this destruction was a serious drive against music; Burney took up this idea and supported it in his History; it gradually spread everywhere and was popularised into the body of English history by Macaulay, "History of England" (1848) Chap.I:

"It was a sin to touch the virginals... The solemn peal of the organ was superstitious. The light music of Ben Jonson's masques was dissolute. Half the paintings in England were idolatrous, the other half indecent. The extreme Puritan was at once known from other men by his gait, his garb, his lank hair, the sour solemnity of his face, the upturned white of his eyes, the nasal twang with which he spoke, and, above all, by his peculiar dialect."

This fearfully exaggerated misrepresentation of the Puritans also infected the history of the U.S.A. since so many of the migrations originated in this same puritan period. This excerpt from "Purcell & English 17th century Music" by A.K. Holland ("No.26, "Music and Western Man", 1958) gives a truer picture of the circumstances.
"The Puritans have often been blamed for destroying the English musical tradition, but in point of fact the Puritans were not in the least hostile to music as such. They were opposed to elaborate church music, and there is plenty of evidence that the extremists carried their hatred of church music to the lengths of destroying a number of church organs and music books. On the other hand most of the leading Puritans were musically minded. Cromwell had an organ set up at Hampton Court - he had borrowed it (shall we say?) from one of the Oxford Colleges. And he ran State concerts and entertained musicians. Music publishing made its first great strides during this period, and many famous collections such as Playford's 'English Dancing Master' appeared on the scene. Roger North, the old chronicler of the times, tells us that there was a great deal of amateur practice in country houses. Not exactly a picture of a country bereft of all musical activity!"

Reviewing the history of the popular musical treatise, after Delamotte's book, we have "The Pathway to Music" (Anon. 1596), another small handbook of instructions borrowing largely from two continental treatises by Lossius (1570) and Beurhusius (1580). Then we have Morley's book which was very significant from the social point of view, because he deliberately planned to make it as "plain and easy" as he could; and since there was in his lifetime the social requirement of being able to sing madrigals, and all kinds of part-songs at sight, his imaginary pupil, Philomathes, confesses at the very outset:

(p.9) "But supper being ended and music books (according to the custom) being brought to the table, the mistress of the house presented me with a part earnestly requesting me to sing; but when, after many excuses, I protested unfeignedly that I could not, every one began to wonder: yea, some whispered to others demanding how I was brought up, so that upon shame of mine ignorance I go now to seek out mine old friend Master Gnorimus, to make myself his scholar."

Perhaps Morley supplied this confession because it was the most common one among the pupils who sought his tutorage. Henry Peacham provides further evidence that the art of singing
at sight was a social requirement, in his book "The Compleat Gentleman" (1622): "I desire no more in you than to sing your part sure and at first sight, withal to play the same upon your viol, or the exercise of the lute privately to yourself."
The cultivated Elizabethan gentleman was also expected to be able to discuss music intelligently. The unfortunate Philomathes (ibid., p.9) was shamed by his ignorance of the subject when the gentlemen at the banquet fell into an argument and requested him to examine and confute the reasoning, for when he refused to take part in the argument "the whole company condemned him of discourtesy," disbelieving that he refused on grounds of ignorance. Henry Peacham (ibid.) again echoes Morley in recommending the reader who aspires to be a complete gentleman, to study the theory of music: "Infinite is the sweet variety that the theorique of music exerciseth the mind withal, as the contemplation of proportion, of concords and discords, diversity of moods and tones, infiniteness of invention, etc. But I dare affirm there is no one science in the world that so affecteth the free and generous spirit with a more delightful and inoffensive recreation or better disposeth the mind to what is commendable and virtuous." Peacham (c. 1576-1642) was an ardent supporter of the Royal cause, but it is interesting to note that his book teaches a more or less Puritan concept of duty. Strunk ("Source Readings", 1952) suggests that "The Compleat Gentleman" may be called an English Puritan counterpart to Castiglione's "Cortegiano", (1528).
The great English Madrigal School declined during the period of Puritan ascendency; another cause for misunderstanding the puritan attitude towards music. At this time all the madrigal schools of Europe similarly began to wane, as most art forms do when they pass their apogee. Long before madrigals passed out of favour, other forms were developing and occupying a new class of amateur musicians. One might here pause to recall the wide variety of tastes which Ravenscroft's publications from 1609 to 1621 catered for; ranging from tavern songs and catches to psalms and hymn tunes; and to wonder whether the propriety of the sophisticated madrigal singers was offended by the Ditties appended to his "Briefe Discourse"; especially those delightful songs in the Somerset dialect for Denor, Dreble and Bazis.

The earlier contrapuntal forms were being superseded by Catches, Rounds, solo songs, duets, dialogues for two voices, etc., and from the beginning of the 17th century, publishers with an eye to the main chance were trying to reach a new public with these popular and semi-popular compositions. During the Commonwealth instrumental music was banned in public Church worship, but all kinds of domestic instrumental music was allowed; and instrumentalists were taking a great interest in the art of playing divisions and the figured bass. Many music teachers became available at this time, for most of the singers and instrumentalists who had been employed in the church, theatre and court, had lost their positions through the new
regime and were forced to find new means of earning a living. Playford said in 1651 ("Musicall Banquet") that to procure some good [music] teaching "is of no difficulty to a happy Londoner."

One might tentatively suggest that the reason why music reached its nadir during the Commonwealth was not primarily the result of a civil war, which in any country and at any time would disrupt the arts and cultural activities of a community, but the fact that in England the finest music emanated from the cathedral and the court. All our great composers before and after the Commonwealth were gentlemen of the Chapel Royal, and it was for their royal patrons that they composed all their secular and sacred music. The puritans hated elaborate church music and so under the Commonwealth the most inspired compositions came to a sudden halt. If we examine the state of music at this time from an idealistic point of view, we find it barren; but looked at from the point of view of the living relationship between music and society it has some value.

The practice of psalm-singing which spread after the Reformation in 1534, had by the mid-17th century become the chief form of church music; the Puritans held the opinion that it was the only proper form of musical worship. It was unisonal and syllabic, because complexity, voice-weaving, and all forms of ornamentation were anathema to the Puritans. The use of psalm-singing in ordinary social life became very widespread and was not, by any means, confined to the Puritans. This love
of psalm-singing, coupled with the desire to sing them well and to learn new ones, lead to the publication of large numbers of psalters; and right from the earliest ones in the mid-16th century they contained an introduction which instructed the psalm-singer in the rudiments of music. (Cf. "On the Musical Introductions Found in Certain Metrical Psalters", Sir John Stainer, P.M.A. 1900). Hence it was this simplest of all vocal forms which served to bring to the middle and lower (non-madrigal-singing) classes some knowledge of musical notation and sight singing.

Apart from psalm-singing, the Puritan policy acted as a great incentive to the cultivation of secular musical activities. Country dancing became a major pastime. This was objected to on Sundays, but was greatly encouraged by Cromwell as a week-day entertainment. It was celebrated by Milton in "L'Allegro"; it was an essential part of the education in many Commonwealth families; and it was at the height of the Puritan regime that Playford published his "English Dancing Master" (1651). Thus it was during the Commonwealth that dancing was systematically described for the first time. Playford's book contained over a hundred tunes with the directions for dancing to each one: a work which remains an authority on the subject. It went through 18 editions during the following eighty years.

The significant thing about the vocal music published in the mid-century was its simplicity. A great number of solo songs for amateur singers were published, and these gradually replaced the madrigal in the homes where this had
been the evening entertainment. The composers appear to have deliberately supplied a kind of music which would enable people with little singing ability to recite poems in a melodious semi-recitative. The accompaniment was reduced to the simplest possible limits, merely consisting of the bass notes, from which the accompanist had to play chords, sometimes with the help of a few sparsely supplied figures. Monologues and dialogues in a quasi-recitative style depicting domestic situations were very popular. After the Restoration this style of composition was embodied in church music and in operas. Singing rounds and catches was another popular amusement during the Commonwealth, and one which was catered for by Playford in "Catch as Catch Can" (1652).

It was for participation in these largely domestic musical activities that many people desired some rudimentary knowledge of music, and Playford gave them just what they wanted. He was no more than a dilettante musician himself, and it is not likely that serious students of music, or budding composers found any material assistance in his "Introduction"; and though his book purported to teach composition, he could only have intended it for the increasing number of amateurs.

These handbooks, along with those which provided instructions for learning the various musical instruments, formed part of the multitude of 'teach-yourself' books for nearly every subject and pastime, which made their appearance in the 17th century, and which undoubtedly arose as a result of
the social developments in the wide middle class strata of society. A brief examination of this trend will reveal some of the advantages of the teach-yourself book.

In aristocratic families the music master held a position in the household retinue so that tuition was always readily available. The new middle class people were, of course, not rich enough to keep a resident music teacher, and were perhaps not sure that their potential musical ability merited the expense of regular lessons from the local, or the itinerant teacher; and if compelled to count the cost, and choose between a "teach-yourself" book (for 10/- or more in present day money) and prolonged personal tuition, they would have found the former less of a financial loss should the experiment fail. Moreover since many of the purchasers of these instruction books were adults, they may not have been prepared to face embarrassment or injury to their pride should they be subjected to criticism and correction; while the mature men among them may have felt unease about pursuing a subject which has ever had the tendency to carry the imprint of a feminine accomplishment. Lastly, there was this advantage in that a handbook could be studied pleasantrably, at leisure, and at a pace best suited to the reader's own mental capacity.

After the Restoration several new tendencies developed anent the theory of music and the demand for tuition. The restoration of the monarchy saw the rebirth of elaborate music both sacred and secular, and with it the need to find singers and instrumentalists to fill the numerous vacancies in cathedral
choirs, operatic productions, court entertainments, etc.

The simple tastes of the lower middle classes were completely pushed into the background; it was for the upper middle classes that Playford published his post-restoration books, adapting new editions to suit their tastes.

The controversy over Thomas Salmon's "Essay" (1672) throws light on the attitude of some musicians towards any proposal to simplify music. They did not want music to be simplified, because they were afraid it would be abused by the lower classes. Salmon himself was prompted to pose this argument against his own proposals:

(p.78) "Object V. But will not Musick hereby become common and contemptible, prostituted to the weak and rabble? and be no longer the delight of Princes, but the mean pastime of the vulgar."

Sir Thomas Browne (1605-1682), who was a tolerant and charitable man, wrote a more general expression of this fear of the "mob" becoming cultured. In his "Pseudodoxia Epidemica" (1646) he exclaimed upon "that great enemy of reason, virtue and religion, the Multitude." The culture of the Renaissance was essentially aristocratic, and Browne wished to preserve it from the "contamination of the vulgar"; nor was he alone in his dislike of the profanum vulgus. However, the middle classes, from which Cromwell originated, had acquired some culture and intended to keep it; and with their broad sympathies made this culture available to lower social classes.

The middle class amateurs, many of whom were accomplished instrumentalists, were apparently taking a deeper interest in the theory of music, and were ambitious to learn composition
in the post-restoration years. Christopher Simpson's "Compendium" (1667) was a mine of information on composition. In 1683 Playford wrote a new Third Book for his "Introduction" giving a mass of collated rules and examples on the art of composing. When his son Henry took over the business, he secured Purcell to write a revised Third Book on composition.

There is much to support the view that amateur composers were on the increase. First, we may look to John Playford who had a penchant for addressing, and confiding in, his customers (vide "Preface to all lovers of Musick", which appeared at the front of nearly all his music books; and "J.P. to the Reader" which often appeared at the end of a chapter, to offer an explanation why Playford had provided that particular subject). Bearing in mind that the "Introduction" was for "young practitioners" (or beginners, amateurs, music lovers, etc.) we read this advertisement in the 1679 edition:

(p.7) "...And all such as have anything of Musick to Print, are desired to take notice, That the ancient and only Printing-House in England, for Variety of Musick and Workmen that understand it, is still kept in Little-Britain, London, by A. Godbid and J. Playford junior..." Seemingly an invitation to amateur composers to have their pieces printed.

As to the known amateur composers, admittedly few, they were not as in former times royal persons, but middle class gentry. There is John Playford himself, who with all the material for self-instruction at hand, and with his own music publishing business, could not resist publishing some of his own songs for 2, 3 and 4 voices, and psalm tunes. (For a full
list of his compositions see Dict. of Nat. Biog., 1917, Vol. XV, p.1302.)

In Samuel Pepys' Diary there are some interesting entries. Pepys must have been Playford's ideal customer, for he bought and studied the "Introduction", (22.3.1666-7), "The English Dancing Master", (22.11.1662), "Musick's Recreation on the Lyra Viol, containing 100 Ayres, etc. with Instructions for Beginners", (1656), (23.5.1663), as well as many of Playford's song books; he studied Morley's "Plain and Easy Introduction" which he thought "a very good but unmethodical book..." (10.3.1667); and Descartes' "Excellent Compendium of Music" (1653, translated by Lord Brouncker), (3.4.1668).

During March and April 1668, Pepys was busily trying to devise "a better theory of musique than hath yet been abroad," but though he made a fair copy of his ideas (5.4.1668), he probably destroyed them later as they have never been found among his methodical collection of papers. That he looked with disapproval upon the doctrine of music as taught in his own day and age he admitted in a letter written to Dr. Charlett on November 5th 1700, where, proposing that the science of music be added to an educational curriculum which Dr. Charlett had drawn up, he says:

"While the same [i.e. the science of music] might to much better effect, both for variety and delight, to themselves and friends, be ever to be had, within their own walls, and of their own composesures too as well as others; were the Doctrine of it brought within the Simplicity, Perspicuity, and certainty, common to all other parts of mathematic knowledge, and of which I take this to be equally capable,
with any of them: in lieu of that fruitless jargon of obsolete Terms, and other unnecessary perplexities and obscurities, wherewith it has been ever hitherto delivered;"

Pepys composed a few small pieces. To help him in his efforts he bought a "composition box", (preserved in the Pepys Library at Magdalen College, Cambridge), more properly called "Arca Musarithmica", described and illustrated by Athanasius Kircher in his "Musurgia universalis" (Rome, 1660, II, p.185): a mechanical device for composing music in four parts. Pepys found "setting his base" difficult, and we may presume that he had little talent for composing; and yet such was his pride in his small achievements as a composer that he had his portrait painted by John Hayls holding his own manuscript of "Beauty retire". It is significant that he displayed this elation at his composing ability, and that he desired posterity to esteem him as a composer, rather than as an admiralty official, or even as the president of the Royal Society.

The North brothers might well be described as the amateur musicians par excellence of the late 17th century, though it was probably more by the assistance and instructions of John Jenkins, their tutor, than by the theoretical treatises of the day, that they gained their knowledge. However, Roger North recorded that he studied a number of treatises and made attempts at composition: ("Notes of Me", Add. MS 32,506, ff.1-193)

"...having wrote [i.e. transcribed] -over much musick, and some in the score, I observed a little of the composition, and offered at a little of that kind, which Mr. Jenkins seeing was so kind to correct it, and shew me the faults; then it was play'd, which was no small pride. But afterwards I gott books, Mr. Sympson's "Devision Violist",
and his "Compendium". Mr. Jenkins lent me Butler, with a comendation of it that it was the best in the kind. ...I also procured Morley's "Introduction", which books together with constant playing and wrighting, and in London in very edifying consorts, I became as I thought a master of composition, which was great pleasure; and I essey'd some compositions of 3 parts, which I cannot comend. Some of 2 I made aiery enough, which my brother [Francis], the Cheif Justice, would be content to play. I was not out at song neither, for my father translated that Italian old song which his daughters had learnt, "Una volta finira, etc." 'Time at last will set me free, etc.', and gave it to me to sett, which I did in 3 parts, imitating somewhat I had heard of Italian. It was in f.f.a.ut 3rd b [i.e. F minor] a solemn key, and I thought succeeded well. My brother gave me the encouragement to ask where I stole severall passages."

Francis, Lord Keeper North, was the most noteworthy amateur composer in this musical family, advancing "so far as to complete divers consorts of two and three parts, which at his grandfather's house were perform'd with masters in company; and that was no small joy and encouragement to him." ("Roger North on Music", John Wilson, 1959). Francis North also wrote a tract on the relation between harmony and mathematics entitled "A Philosophical Essay of Musick" (1677).

Among the clergy there were a number of dilettante composers whose works were esteemed in the 17th century including:

(1) Dr. William Holder (1616-1698) who composed several anthems, and was also a learned writer on the theory of music; (see Chapter I); (2) Dr. Robert Creyghton (c.1639-1734) who, though he studied music as an amusement, composed two Services and two anthems which were considered "very pleasing"; (see concordance 23, "Consecutive Sevenths"); (3) Rev. William Tucker (d.1679) who was precentor of Westminster Abbey and an ingenious composer of sacred choral music; (4) the Hon. Edward Finch (1664-1738)
an ecclesiastic who composed several pieces of church music; he also wrote a tract entitled "Grammar for Through Bass", which is in the Euing Library (Glasgow University); (5) Dr. Henry Aldrich (1647-1710), English scholar, theologian, architect and composer; dean of Christ Church, Oxford; who wrote a number of sacred and secular compositions. At one time, a collection of MS notes for a treatise on harmony were attributed to him; (they were among the books under his name in the library at Christ Church); they have since been found to be in the hand of James Talbot who matriculated in 1685. Thus, it seems that yet another large-scale treatise was planned for publication. There are notes on history, ancient music, acoustics, composition, instruments, etc. all giving evidence of a serious study of the recondite authors.

In Chapter VI it was observed that the members of the Royal Society, and the lecturers at Gresham College, were never specialists in one subject, but were learned in several. In the case of the amateur composers discussed above whose professions undoubtedly occupied most of their time, we have cause to wonder at their diligence in studying the art of composition; and knowing, as we do, how clumsy and ill-contrived most amateur attempts at composition sound in performance, we must acknowledge that their study of the subject was far from superficial, since their works were incorporated in the repertoire of church music at that time.

FINIS
BIBLIOGRAPHY

W. D. Allen, "Philosophies of Music History" 1939
Willi Apel, "Harvard Dictionary of Music" 1944
F. T. Arnold, "The Art of Accompaniment from a Thorough-Bass" 1931
Dennis Arundell, "Henry Purcell" 1927

William Bray (Ed.) "Diary of John Evelyn" 1862
Robert Bremner, "Rudiments of Music" 1756
Sir Frank Bridge, "A 17th Century View of Musical Education" P.M.A. Vol. XXVII 1901

Manfred F. Bukofzer, "Introduction" to "Rules how to Compose" by Coperario. (Facsimile edition) 1952
Charles Burney, "A General History of Music" (2 Vols.) 1789

Giulio Caccini, "Le Nuove Musiche" 1602
N.C. Carpenter, "Music in the Medieval & Renaissance Universities" 1958

J.B. Craven, "Robert Fludd, the English Rosicrucian" 1902
C. Crussard, "M.A. Charpentier théoricien", Revue de Musicologie, 1945
W.H. Cummings, "Henry Purcell" 1894

R. Thurston Dart, Foreword to Morley's "Plain & Easy Introduction", Edited by R.A. Harman 1952
Henry Davey, "History of English Music" 1921
Dictionary of National Biography 1917
Henri Dupré, "Purcell" 1928

R. Eitner, "Quellen-Lexicon der Musiker" 1959
Ellis, List of Editions of Playford's "Introduction" 1926

F. J. Fétis, "Biographie Universelle des Musiciens" 1860
J. J. Fux, "Steps to Parnassus", Ed. Alfred Mann 1944

Grove's Dictionary of Music and Musicians 1954

R. E. M. Harding, "Origins of Musical Time & Expression" 1938
Curt Sachs, "A Short History of World Music" 1949
Percy A. Scholes, "The Puritans & Music" 1934
Harold Watkins Shaw, "John Blow as Theorist", Mus. Times, Sept 1936
J.S. Shedlock, "Evolution of Fugue", P.M.A. Vol. XXIV 1898
Ian Spink, "Playford's 'Directions for singing after the Italian Manner', Monthly Musical Record, August, 1959
W. Barclay Squire, "Purcell as Theorist" 1905
Sir John Stainer, "On the Musical Introductions found in certain Metrical Psalters", P.M.A., November, 1900
Oliver Strunk, "Source Readings in Music History" 1952
John Trydell, "Two Essays on theory of Musick" 1766
Ernest Walker, "History of Music in England" 1907
Henry Watson, "Thomas Mace, The Man, the Book, and the Instruments", P.M.A., April, 1909
J.A. Westrup, "Purcell" 1937
H.B. Wheatley, (Ed.) "Diary of Samuel Pepys" 1923
H.G. Whittaker, "Some Observations on Purcell's Harmony" 1940
Basil Willey, "The 17th Century Background" 1934
John Wilson, "Roger North on Music" 1959
H.H. Wintersgill, "Handel's Two-length Bar", Mus. & L. 1936
Anthony à Wood, "Athenae Oxoniensis" 1721

Vincent Duckles, "Florid Embellishment in English Song of the late 16th & early 17th Centuries", Annales Musicologiques 1957

Note: Full details of the title-pages of the treatises discussed in this thesis are given in Chapter I.
# APPENDIX I

## GLOSSARY OF TERMS

*When the term is a rare one the source is given.*

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Alligation</td>
<td>Suspension (Butler, p.66)</td>
</tr>
<tr>
<td>Arch</td>
<td>Slur</td>
</tr>
<tr>
<td>Arsin</td>
<td>Up-beat (Roger North)</td>
</tr>
<tr>
<td>Artificial</td>
<td>Contrived with skill</td>
</tr>
<tr>
<td>Ayre</td>
<td>1. Key or Mode</td>
</tr>
<tr>
<td></td>
<td>2. Song with the melody supported by voices or instruments, or both.</td>
</tr>
<tr>
<td>Backfall</td>
<td>Appoggiatura (Simpson, 1659, p.12)</td>
</tr>
<tr>
<td>Beat</td>
<td>Lower appoggiatura (Simpson, 1659, p.12)</td>
</tr>
<tr>
<td>Binding-note</td>
<td>Suspension</td>
</tr>
<tr>
<td>Bound</td>
<td>Bar-line (Dowland, 1609, p.83)</td>
</tr>
<tr>
<td>Breaking a note</td>
<td>Same as Division (q.v.) (Simpson, 1659)</td>
</tr>
<tr>
<td>Cadence</td>
<td>7-6 suspension followed by the Bass falling a tone or semitone; or 4-3 suspension after which the Bass falls a 5th or rises a 4th. (Simpson, 1659, p.37.)</td>
</tr>
<tr>
<td>Cardinal</td>
<td>Pause [Lat. &quot;Concordance Cardinalis&quot;] (Ravenscroft, 1614)</td>
</tr>
<tr>
<td>Catch</td>
<td>A Round, contrived to introduce a point of humour; often bawdy.</td>
</tr>
<tr>
<td>Chord or Cord</td>
<td>Interval of two notes</td>
</tr>
<tr>
<td>Cliff</td>
<td>Clef</td>
</tr>
<tr>
<td>Close</td>
<td>Cantus firmus descending on the final of the mode. (Morley)</td>
</tr>
<tr>
<td>Compound note</td>
<td>Ligature (Ravenscroft, MS, f.18r)</td>
</tr>
<tr>
<td>Concent or Concentus</td>
<td>Musical concord</td>
</tr>
<tr>
<td>Concordance</td>
<td>Pause [Lat. &quot;Concordance Cardinalis&quot;] (Ravenscroft, 1614)</td>
</tr>
<tr>
<td>Crooked</td>
<td>Oblique (of ligature) (Dowland, 1609, p. 40)</td>
</tr>
<tr>
<td>Custos</td>
<td>Direct (⌜) (J. Alstead, p.25)</td>
</tr>
<tr>
<td>Cut</td>
<td>Inserted page of examples.</td>
</tr>
<tr>
<td>Dash</td>
<td>Tie (Bremner, 1756, p.41)</td>
</tr>
<tr>
<td>Defective 8</td>
<td>Augmented 8ve (Salmon, 1672, p.32)</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Degrees</td>
<td>Mood, Time &amp; Prolation.</td>
</tr>
<tr>
<td>Descant or Discant</td>
<td>1. To compose counterpoint. 2. To improvise variations on a set theme.</td>
</tr>
<tr>
<td>Diabolus in Musica</td>
<td>The tritone: considered the most &quot;dangerous&quot; interval.</td>
</tr>
<tr>
<td>Dialogue</td>
<td>A type of vocal duet (very popular in the 17th cent.) in which the voices sing in alternation, often combining at the end in what was called a chorus.</td>
</tr>
<tr>
<td>Diapason</td>
<td>The interval of an 8ve.</td>
</tr>
<tr>
<td>Disproportion</td>
<td>Discord</td>
</tr>
<tr>
<td>Disproportioned</td>
<td>Lacking in harmony.</td>
</tr>
<tr>
<td>Diminution</td>
<td>1. Filling out of intervals, and breaking up of large notes into smaller ones. 2. Imitation in smaller note-values.</td>
</tr>
<tr>
<td>Ditty</td>
<td>A simple but often solemn song.</td>
</tr>
<tr>
<td>Division Viol</td>
<td>A small sized viola da gamba, capable of the agile playing of divisions (q.v.)</td>
</tr>
<tr>
<td>Divisions</td>
<td>Florid melodic passages. The breaking up of a melody into shorter notes.</td>
</tr>
<tr>
<td>Double Descant</td>
<td>Invertible counterpoint in imitation (Purcell, 1694)</td>
</tr>
<tr>
<td>Double Fugue</td>
<td>Two different themes in imitation. (Simpson, 1667)</td>
</tr>
<tr>
<td>Driving notes</td>
<td>Syncopated notes</td>
</tr>
<tr>
<td>Eights</td>
<td>Octaves</td>
</tr>
<tr>
<td>False Close</td>
<td>Cadence other than a perfect cadence. (Morley)</td>
</tr>
<tr>
<td>Fancies</td>
<td>Fantasias; instrumental compositions in one movement of no set form, but using imitation and contrapuntal devices.</td>
</tr>
<tr>
<td>Fift</td>
<td>Fifth</td>
</tr>
<tr>
<td>Figurative melody</td>
<td>Same as divisions (q.v.)</td>
</tr>
<tr>
<td>First or leading-note</td>
<td>The first note of a piece (Simpson, 1659)</td>
</tr>
<tr>
<td>Flying cadence</td>
<td>Interrupted cadence (Pepusch, p.46)</td>
</tr>
<tr>
<td>Forefall</td>
<td>Appoggiatura</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Fuga ligata</td>
<td>: Canon (Butler, p.75)</td>
</tr>
<tr>
<td>Fugue or Fuge</td>
<td>: 1. Imitation</td>
</tr>
<tr>
<td></td>
<td>: 2. Canon</td>
</tr>
<tr>
<td></td>
<td>: 3. A composition (choral or instrumental) in which the parts enter one by one with the same melodic phrase.</td>
</tr>
<tr>
<td>Full sound</td>
<td>: Whole tone (Ravenscroft, MS, f.6r)</td>
</tr>
<tr>
<td>Fundamental bass</td>
<td>: Fictitious bass line consisting of the roots of the chords to demonstrate the theory of inversion. (Rameau, 1752)</td>
</tr>
<tr>
<td>Gamut</td>
<td>: 1. The first note (gamma-ut) of the scale</td>
</tr>
<tr>
<td></td>
<td>: 2. The musical scale</td>
</tr>
<tr>
<td></td>
<td>: 3. The compass or range of an instrument.</td>
</tr>
<tr>
<td>Governing note</td>
<td>: Dominant</td>
</tr>
<tr>
<td>Grand cadence</td>
<td>: Perfect cadence (Pepusch, p.43)</td>
</tr>
<tr>
<td>Greater 3rd (2nd, 6th, 7th)</td>
<td>: Major 3rd (2nd, 6th, 7th)</td>
</tr>
<tr>
<td>Guide</td>
<td>: Direct (✓) (Percourt, f.23v)</td>
</tr>
<tr>
<td>Half-note</td>
<td>: Semitone (Campian, 1619)</td>
</tr>
<tr>
<td>Hanging note</td>
<td>: Oblique (of ligature) (Morley, p.20)</td>
</tr>
<tr>
<td>Hold</td>
<td>: 1. Pause</td>
</tr>
<tr>
<td></td>
<td>: 2. Tie (Playford)</td>
</tr>
<tr>
<td>Imperfect chords</td>
<td>: 2nd, 4th, 7th and 9th (Coperario)</td>
</tr>
<tr>
<td>Imperfect 3rd (2nd, 6th, 7th)</td>
<td>: Minor 3rd (2nd, 6th, 7th) (Butler)</td>
</tr>
<tr>
<td>Improper cadences</td>
<td>: Cadences on the 6th, 2nd and 7th of the minor key (Butler, p.83)</td>
</tr>
<tr>
<td>Index</td>
<td>: Direct (✓) (Morley)</td>
</tr>
<tr>
<td>Inégéales</td>
<td>: Substituting for small bar line</td>
</tr>
<tr>
<td>Lesser 3rd (2nd, 6th, 7th)</td>
<td>: Minor 3rd (2nd, 6th, 7th) (Campian)</td>
</tr>
<tr>
<td>Lesson</td>
<td>: A piece of instrumental music for study purposes. The word sometimes means any instrumental piece.</td>
</tr>
<tr>
<td>Ligature</td>
<td>: 1. Two or more notes bound together in a group.</td>
</tr>
<tr>
<td></td>
<td>: 2. Suspension (Coperario)</td>
</tr>
<tr>
<td></td>
<td>: 3. Slur (Butler, p.36)</td>
</tr>
<tr>
<td></td>
<td>: 4. Note tied across bar-line in syncopation (Fux, p.55)</td>
</tr>
</tbody>
</table>
Long note: Oblique (of ligature) (Morley, p. 20)
Masque: The precursor of the opera. It included music, poetry, and pageantry. It was not publicly exhibited but was a costly private or royal entertainment for great social occasions.
Mean: A middle voice part; the alto.
Minor notes: Shorter notes (semibreve, minim, crotchet) (Ravenscroft, MS, f. 18r)
Mood: Mode
Note: Sol-fa name (Morley, p. 11)
Overthwart: Oblique (of ligature) (Barley, 1596)
Passing close: Cadence other than a perfect cadence (Morley)
Pause: Rest
Per Arsin and Thesin: 1. Canon by inversion in which ascending intervals in the Dux become descending intervals in the Comes.
2. Canon in which the strong beats in the Dux become weak beats in the Comes.
Perfect chords: 3rd, 5th, 6th and 8th (Coperario)
Perfect 2nd or 7th: Major 2nd or 7th (Butler, p. 51)
Plain-song: 1. Cantus firmus
2. A theme on which variations can be played, or to which harmonies may be added.
Pointing: Imitating (Purcell, 1694)
Postposition: Appoggiatura (Pepusch, p. 37)
Prick: Dot
Pricked: 1. Composed in measured notes as opposed to plainsong.
2. Dotted notes (Morley, p. 17)
Pricksong: Song that has been 'pricked' down (i.e. written), as distinct from plainsong, which was conveyed by tradition and learnt by ear.
Primary cadence: Perfect cadence on the tonic (Butler, p. 83)
Proportions: 1. In mensural notation, the diminution or augmentation of the normal note-values. Still referred to by the
(Proportions continued)

17th cent. theorists, though obsolete in practice.

2. The ratios of musical intervals.
   (Late 17th cent.)

Reports : Points of Imitation.
Retardation : Appoggiatura (Pepusch, p.37)
Revert : 1. Invert (Morley, p.162)
          2. Retrograde imitation
Rule : Line of the stave
Scale : Stave (Dowland, 1609, p.83)
Scotch snap \[\text{rhythm. Inverted dotting.}\]
Secondary cadence : Cadence in related key (Butler, p.83)
Semicircle : Slur (Butler)
Shaked beat : Inverted trill with its resolution.
Short key : Black note; the shorter notes of the keyboard. (Prencourt, f.23v)

Sight : Voice part (Barley, 1596). Interval from the Plainsong.
Sixt : Sixth
Slur : Tie (Bremner, 1756, p.4)

Song : Hexachord (Barley, 1596)

Sphere : In Pythagorean astronomy one of the orbs or hollow globes, in which the heavenly bodies were set, revolving about the earth as a common centre, and giving forth sounds inaudible to human ears. Hence, 'music of the spheres'.

Springer : Echappée note ornament (Simpson, 1659, p.12) thus:

\[
\text{Springer Exp.}
\]

Stay : 1. Pause
       2. A half close (Coperario, f.31v)
Stroke : 1. Bar (or tactus) (Campian, 1619)
         : 2. Bar-line (Morley, p.99)
         : 3. Slur (Simpson, 1659, p.11)
Symphony : Musical concord in general.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesin</td>
<td>Down-beat (North)</td>
</tr>
<tr>
<td>Three primary concords</td>
<td>Unison, 5th and 8ve (Butler, p.56)</td>
</tr>
<tr>
<td>Through-bass</td>
<td>Thorough bass or figured bass.</td>
</tr>
<tr>
<td>Tied notes</td>
<td>Quavers (or shorter notes) joined together in groups, e.g. ( \underline{\dddot} )</td>
</tr>
<tr>
<td>Tone</td>
<td>1. Major 2nd</td>
</tr>
<tr>
<td></td>
<td>2. Key (Campian, 1619)</td>
</tr>
<tr>
<td>True</td>
<td>Harmonically accurate</td>
</tr>
<tr>
<td>Tune</td>
<td>Whole tone (Barley, 1596)</td>
</tr>
<tr>
<td>Verse</td>
<td>Stave (Morley, p.12)</td>
</tr>
<tr>
<td>Whole note</td>
<td>Major 2nd (Campian, 1619).</td>
</tr>
</tbody>
</table>
This diagram is similar to those which appear in other treatises of the 16th and 17th centuries. (Cf. Concordance No.1, "The Gamut"). "Smallest" refers to the small double letters in the highest part; "Meanest" is the Mean or Middle part; "Great" refers to the capital letters in the lowest part. The terms "Sharpe, Natural and Flat", and "Quare, Properchant, and b molle" relate to the three hexachords: Durum, Naturalis, Mollis. The various terms are simply intended to indicate the shape of the letter "b"; thus, in the hexachord on G the b is square, making a natural; and in the hexachord on F the b is round, making a flat.

The same scale must be said backwards and forwards three times over upon your fingers [1] and they are to be said perfectly without book.

[(1) If this refers to the Guidonian Hand, some instructions would be necessary before it would be possible.]

[1] Playne 4Torwards Backwards
[2] In rule 4Forwards & in space 4Backwards

[The above instructions are a paraphrase of those in Morley's treatise, pp.11-12. (1) "Plain" : the letter-names of the notes; (2) "In rule and in space" : saying after each letter-name whether the note was on a line or in a space; (3) "With Cliffes & Notes" : the full name of the note, e.g. F fa ut, A la mi re, G. sol re ut, etc.]

This scale doth also demonstrate lines and spaces: in which lines and spaces are the sounds comprehended;
APPENDIX II

(British Museum, Add. 19758, ff.19. Early 17th century)

TREATISE OF MUSICK

by Thomas Ravenscroft

(f.2r) Musick is an Art in which all Discords are made to agree with the concords in a sweet and well tuned harmony, of which musicke there be 2 kindes: Practive and speculative. Practive Music is that which doth teach one how to sing skilfully: tunably: the which doth consist only in sounds and agreeable harmony.

Speculative Music is that which doth way [sc. weigh] the proportions of divers sounds and doth only require knowledge of things (not by sound) but by judgment; not by ear or hearing; but by wit and understanding: the which is very hard for any practical musician to attain unto: except he hath the Lattin tongue; then with little pains it may be attained: but we must let that pass for this time, and only treat of practical Music.

Music must be directed and governed by an Index (or a Scale) or ladder, the which music is built by: This same scale in our Mother tongue is called Gamut the which proceedeth from a Greek Letter called Gam.ma which is made  but in our mother speech the sillable ma is taken away and Ut put in the place.

(f.2v)
This diagram is similar to those which appear in other treatises of the 16th and 17th centuries. (Cf. Concordance No.1, "The Gamut"). "Smallest" refers to the small double letters in the highest part; "Meanest" is the Mean or Middle part; "Great" refers to the capital letters in the lowest part. The terms "Sharp, Natural and Flat", and "#Quare, Properchant, and b molle" relate to the three hexachords: Durum, Naturalis, Molliris. The various terms are simply intended to indicate the shape of the letter "b"; thus, in the hexachord on G the b is square, making a natural; and in the hexachord on F the b is round, making a flat.

The same scale must be said backwards and forwards three times over upon your fingers and they are to be said perfectly without book.

If this refers to the Guidonian Hand, some instructions would be necessary before it would be possible.

The above instructions are a paraphrase of those in Morley's treatise, pp. 11-12. (1) "Plain": the letter-names of the notes; (2) "In rule and in space": saying after each letter-name whether the note was on a line or in a space; (3) "With Clives & Notes": the full name of the note, e.g. F fa ut, A la mi re, G. sol re ut, etc.

This scale doth also demonstrate lines and spaces: in which lines and spaces are the sounds comprehended;
Also I have divided your scale into 3 forms of letters, Great, Meane and small: The great letters signifieth the bass or graver sound; The meane or single letters are of meane or meaner sound. And those letters which are smallest and double set are of a shrill or smaller sound.

Some doth affirm that these 3 sort of letters were made for to show the 3 properties of music [i.e. & quare, properchant, and b molle] but in my judgment they do err, they are only to show the distinction of sounds.

This aforesaid Scale also prefigureth in the great, meane and double letters certain cliffs of Keys: which doth open unto us the manner both how to take our tunes and to prove our notes either ascending or descending, of which Cliffs (or Keys) there be 20.

[Twenty keys was the limit of the Guidonian Hand. In the 17th century, the diagrams of the Gamut usually extended above and below the 20 notes. Morley pointed out that the compass of the scale could be continued up or down infinitely (p.16).]
manner of Cliffs: made no great choice of any one particularly, but all was as one to them: but since as time changeth that hath changed; so that it hath been into a more steadfaster fashion of observing our manner of rules united engenerall.

But in general I spake of the 3 chief Cliffs; I do apply them to the 3 properties aforesaid mentioned:

[Note: Although the three clefs stand in the position of the three hexachords, they were never used to indicate the hexachord, but were placed purely for the convenience of the voice or part.]

\[ F \text{ fa ut } \begin{array}{c} \text{\#quare} \\ \text{\#quare} \end{array} \]
\[ C \text{ sol fa ut } \begin{array}{c} \text{Molle} \\ \text{Properchant} \end{array} \]
\[ G \text{ sol re ut } \begin{array}{c} \text{\#quare} \\ \text{\#quare} \end{array} \]

b Molle signifieth Ut in F fa ut with a b flat in b fa b mi and a flat in Elami.

Example

Properchant is that which carrieth Ut in \( C \) sol fa ut, mi in Elami; with a b flat in b fa b mi:

(f.4v)

This information is incorrect. The hexachord on F had only one flat: B. The hexachord on C had no flats. B fa b mi means B fa or b mi. Thus B fa in the Molle hexachord was flat, and B mi in the Durum hexachord was natural.

\#quare

\#quare is called our natural or chantsong and is known by Ut in Gsolreut: mi in b fa b mi and la in Elami.

Example

2 sounds After the cliffs there is to be noted certain distances of
sounds and the properties of the notes. There be 2 kinds of sounds: A Natural Sound and an Artificial sound. A Natural sound is that which cometh from the breath of any living kind or creatures.

An artificial sound is that which is made by the Art of man to sound either upon Instrument or anything else.

From sounds there are derived many sort of tunes which is done by lifting up and down of the voice. [Tunes = tones or notes.]

Of which there be 7

A unison, a second, a 3rd, a 4th, a 5th, a 6th, and a 7th; all which the other following repeated are but their Octaves as 8th, 9th, 10th, 11th.

Sethus Calvisius, "Melopeiam...", 1592] doth affirm that the names of the sounds were derived from a Lattin verse which was made of St. John.

Versus

Ut queant Laxis Resonare fibris
Mira gestorum Famuli tuorum
Solve poluti Labii reatum
Sancte Johannes.

Also he affirmeth that the country of Belgia [Belgium] doth differ from all other countries in their names of their notes, for they have 7 several names for their 7 sounds where we have but six or four which be commonly used: but all their 7 they do use commonly.

English names

fa sol la fa sol la mi fa mi la sol fa la sol fa.

Ascending

Descending

[N.B. Ravenscroft was the first theorist to say that only four solfa syllables were used in England at this time.]

Belgiol names

Bo ce di ga lo ma mi Bo mi ma lo ga di ce Bo.
This was the 'Bocedisation' system invented by the Belgian, Waelrant, 1517-1595. It was strongly advocated in Italy, France and Germany without success, and was only used extensively in Belgium. ("The History & Uses of the Sol-fa Syllables", W.G. McNaught, P.M.A. Jan. 1893.)

Also they have another denominated which is from E la mi (or Ela) flat to B mi (or B fa# mi) flat, or when either of them cometh on the sudden or by the property of b Molle.

Example

```
Bo ce di ga lo ma pa pa ma lo ga di ce Bo
```

or

```
Bo ce di ga lo ma pa pa ma lo ga di ce Bo
```

This is their nature and property of their form of singing as Calvisio affirmeth but now to our fashion of our names and distances of the sounds.

[The following section appears to be taken from "Erotemata Musicae Practicae", by L. Lossius (1570) ff.38r-39v. The same material was used by the anonymous writer of "The Pathway to Musicke", 1596, in the section "Of Tune Keeping".]

A unison is so termed because he cometh of unius soni of one sound keeping always in one line or in one space.

Example

```
Unisons
```
Semitone

After your Unison cometh a certain distance of half a sound ascending and descending from mi to fa [and] from la to fa.

Example

\[
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet}
\end{array}
\]  
[Minor second]

Ascending  Descending

Also following there is a second or full sound which comprehendeth perfectly a distance of two sounds:

Example

\[
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet}
\end{array}
\]  
[Major second]

Ascending  Descending

Then there cometh a certain distance which consisteth of one sound and two halves: which is from re to fa; from mi to sol.

Example

\[
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet}
\end{array}
\]  
[Minor third]

[It will be observed that Ravenscroft adds one semitone too many to all his intervals; except the Tritone which he says is "four sounds" when it should be three.]

Then there cometh a distance of two full sounds and a half from fa to la.

Example

\[
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet}
\end{array}
\]  
[Major third]

Also following a 4th distance which comprehendeth two full sounds and two distances of half sounds from fa to fa: from sol to sol, from la to la:

Example

\[
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet}
\end{array}
\]  
[Perfect fourth]

After that 4th distance followeth a perfect distance of four sounds although unproper it is to be tuned from one to the other yet in measuring it is found apropos: from fa to mi or from mi to fa.

Tritone  Example

\[
\begin{array}{c}
\text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet} \\
\text{\textbullet} \quad \text{\textbullet} \quad \text{\textbullet}
\end{array}
\]  
[Tritone]
Then followeth a certain distance of a 5th which hath more distance than the former example and yet hath not so many sounds perfect; it hath two perfect sounds and three half sounds from mi to fa.

**Semi-diapente**

Example

\[\begin{array}{c}
\text{[Imperfect fifth]}
\end{array}\]

[N.B. The Semidiapente appears to have "more distance than the former example", but it is a tritone, composed of two tones and two semitones.]

(f. 7r)

Then cometh your perfect distance of a 5th which comprehendeth three full sounds and two half sounds from fa to sol, from sol to fa [this should read "sol to la" = D to A in the example below] from la to mi, from fa to fa.

**Diapente**

Example

\[\begin{array}{c}
\text{[Perfect Fifth]}
\end{array}\]

Also the next sound which doth pursue that aforementioned is in substance three whole sounds and three half from la to fa.

**Semitonius cum diapente**

Example

\[\begin{array}{c}
\text{[Minor sixth]}
\end{array}\]

Also in the selfsame distance is comprehended four full sounds and two halves the which is from fa to la, from sol to mi.

**Tonus cum diapente**

Example

\[\begin{array}{c}
\text{[Major sixth]}
\end{array}\]

After your perfect six sounds followeth other sounds which consisteth of seven distances and yet hath but four perfect sounds and three halves from ut to fa, from sol to fa.

**Semitonius cum diapente**

[This side-heading should read "Semiditone sum diapente".]

Example

\[\begin{array}{c}
\text{[Minor seventh]}
\end{array}\]

[N.B. A six-line stave was preferred to leger lines.]
Also in the aforesaid distances is comprehended five full perfect sounds and two halves which is from fa to mi.

Ditonuscum diapente

Example

\[ \text{Major seventh} \]

or

\[ \text{Diminished octave} \]

The major 7th and the diminished octave are enharmonically the same.

Then cometh your latter distance which is of [an] eight which in some it hath five perfect sounds and three halves, in other some is comprehended six sounds and two halves.

(1) The octave has five tones and two semitones. It is not clear what Ravenscroft means as the examples below are all plain octaves.

(2) At this point Ravenscroft inadvertently copied the last two pages again: an indication that he may have been making a fair copy for publication.

(f. 9r)

Thus far touching your distances of perfect and unperfect sounds and now will I treat of notes and what they are.

A note is a sound well tuned showing also the loudness or stillness of the voice; of which there be two kinds, Simple and Compound. [Simple = single notes; compound = ligatures.]

A simple note is like a noun substantive which requireth none other to be joined with him neither to show his sign or signification but of himself will be chief commander.
Example of Simple Notes

<table>
<thead>
<tr>
<th>All these notes may be made</th>
<th>Large</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>compound notes</td>
<td>Long</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Brief</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sembrief</td>
<td>1</td>
</tr>
<tr>
<td>None of these are to be compounded but all are simple</td>
<td>minim</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>crotchet</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>quaver</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>semiquaver</td>
<td>16</td>
</tr>
</tbody>
</table>

(The above table is similar to one in Lossius' treatise (f. 4v, and Book II, f. 57v & 58v), which was also included in "The Pathway to Musicke". Ravenscroft omitted to indicate that the first four figures on the right equal semibreves, and the second four figures show the subdivisions of the semibreve.)

Also simple notes after this manner set do contain with their pricks of adherence.

```
12              12 Semibreves
  6                      6 Semibreves
  3                      3 Semibreves
  3                      3 Minims
  1                      3 crochets
  2                      3 quavers
  3                      3 semiquavers
  4                      3 demiquavers.
```

Likewise unto the aforesaid simple notes doth pertain certain rests which rest is a certain character of pauses or breathing in music and these being seen how they are made, must be joined with notes and moods together, and for the better performance of them I will lay them in a most simple manner.
The rest of a Large perfect or Imperfect

\[ \text{In the examples of the Large, Long and Breve, Ravenscroft places two rests beside the note.} \]

The character of a long in the mood perfect carrieth his distance the length of 4 lines.

\[ \text{mood perfect} \]

In the mood Imperfect the longest character reacheth but the distance of three lines.

\[ \text{mood imperfect} \]

A breve rest both in mood perfect and imperfect carrieth his distance always one manner the space of 2 lines.

Although it is to be noted that in mood perfect the same distance carrieth the number of 3: and mood imperfect it beareth but the number of 2.

\[ \text{Mood perfect} \quad \text{Mood Imperfect} \]

The Rest of a semibreve likewise carrieth both in mood perfect and imperfect sometimes the number of 3 but in the one imperfect which is of the less it beareth always but the number of 2. It reacheth from one line to half the space descending.

\[ \text{Mood perfect} \quad \text{Mood Imperfect} \]

Then also the next diminution under a Semibreve is a Minim the which always keepeth one stay both in mood perfect and imperfect. [I.e. mensural notation does not affect notes smaller than a semibreve; all notes from the minim onwards have a duple subdivision.] It reacheth from a line unto half the space ascending.

\[ \text{Mood perfect and Imperfect} \]
Also the crotchet rest which is the next less under him reaches from one line to half the space ascending, having on his head a little tittle bearing to the right side.

![Moods Perfect and Imperfect](image)

Next following is the Quaver rest which in the like manner ascendeth as the aforesaid doth, having on his head bending somewhat to the right side two tittles both in mood perfect and imperfect.

![Moods Perfect and Imperfect](image)

(Ravenscroft's descriptions of the quaver and semiquaver are rest incorrect, and his examples are muddled.)

Last of all is the semiquaver whose rest is as aforementioned but trebled in the tittles.

![Moods perfect and imperfect](image)

Thus far touching your simple notes and rests: and now I will speak of the compound notes and what they are.

A Compound note (or otherwise called a ligature) is like a noun adjective which cannot stand by himself but must needs require another to be joined with him both for to shew his nature and property.

![Ligatures](image)

Also you must note that there be three kinds of ligatures;

- those which begin
- those in the midst
- those at the end.

![Symbols](image)
Ravenscroft gave no rules for ligatures, nor are the examples in any order.

1. Corrections made to the 1st and penultimate examples are based on the rule that ligatures of two notes with the tail upwards on the left, in any shape, equal two semibreves.

2. Ex. 7: All middle notes are breves; the third note could only equal a long if it had a tail downwards on the right as in Ex. 6.

3. Ex. 9: If the first note has a tail upwards on the left, the first two notes are semibreves. In "Perfect" time the second note would be a breve, but in that case the last note would be equal to six breves, thus: \[ \begin{array}{c} \text{Perfect} \end{array} \]

4. Ex. 10 If these 2 notes are maximas, the figures should be 8 8; if they are breves, the figures should be 2 2.

5. Ex. 15. This example is among those in "The Pathway to Musicke", 1596, which has a similar set of examples of ligatures without any rules.

Note: Ravenscroft's ligatures are so badly written that it is difficult to tell (1) whether there are tails or not, (2) whether the tails are supposed to go upwards or downwards,
and (3) whether longs are maximas and vice versa, though
this is solved by the figures. Some ligatures have been
adjusted to correspond with the figures beneath them.]

Thus have I shown you simple [and] compound both for their
form and quantity, and yet the simple notes hath certain
degrees by which their value in measuring is known. Of
which degrees of simple notes there be three kinds. Example.

1 Moode
2 Time [Respecting
3 Prolation

[Much of the following section is similar to the one entitled
"Of the Degrees of Music, and of their Signs" in "The Pathway
to Musick", 1596.]

(f. 12v) A mood is a quantity of longs and larges measured by two or
by three and is both perfect and imperfect.

Time is a quantity of semibreves and minims measured by two or
by three and is either perfect or imperfect.

A Prolation is a formal quantity of minims and semibreves
measured by three and is both perfect and imperfect. Also when
either the mood, time, or prolation is measured by three it is
called perfect and when they are measured by two they are
imperfect.

Of Moods (or Measures) there be four.

\[ \text{Perfect of the more: prolation} \]
\[ \text{Perfect of the less: prolation} \]
\[ \text{Imperfect of the more: prolation} \]
\[ \text{Imperfect of the less: prolation} \]

These four moods be divided into two measures, Perfect and
Imperfect, and to each of them belongeth two prolations the
which is nominated the greater and the lesser.
Prolation Major
Prolation Minor
Diminutio Major
Diminutio Minor
Perfect Mood
Imperfect Mood
Perfect Mood
Imperfect Mood

[ R Ravenscroft gives "Imperfect time" at \([1]\) and "Perfect time" at \([2]\); from the table which Morley gave on p. 125 of his book (Harman edition), and which he took from Ludovico Zacconi's "Prattica di Musica", (1592, p. 132), one sees that the figure 3 after a sign indicates Perfect time; and the figure 2 after a sign indicates Imperfect time.]

Prolation, as I have said before, is a quantity of minims and semibreves measured by three, and wheresoever his character is set he is perfect both of time and numbers.

[There are 3 minims to the semibreve only when the Prolation is Perfect, and this is indicated by a dot in the sign, thus: \(\odot 3, C 3, \odot 2, C 2, D, C.\)]

Diminution is a certain decreasing both of perfect and imperfect prolation, both of his notes and rests by a certain figure annexed unto him and by that figure he beareth force over all the prolations; which figure is of two kinds, Arithmetical and Geometrical.

\[
\begin{array}{cccc}
\odot & \odot & \odot & \odot \\
\odot & C & C & C \\
2 & 2 & 2 & 2
\end{array}
\]

Geometrical
Arithmetical

Also he is known Geometricalwise by turning a semicircle as thus: \(\odot \odot \).

By arithmetical kind he is known by Coloration: \(\mid \mid \mid \mid \).

Note also that in all Diminution in the which more or less
is (exhibited) or taken away it must either be discerned by the proportionate number.

[In "The Pathway to Musick", this last paragraph reads:

"Note that in all Diminution in the which sometimes more and sometimes less is taken away, and that must be discerned by the Canon, or by the proportionate number."

The above section on "Diminution" is similar to the one in "The Pathway" entitled "Of Diminution and what it is", which was taken from Lossius' treatise, ff.80v-81r. Neither the anonymous writer of "The Pathway", nor Ravenscroft, seemed to be able to make a sensible translation.]

Measures

\[ \phi \]

Then for your perfect and imperfect measures, first the round circles betokeneth perfect Mood and perfect time.\[^1\]

\[ \phi \]

The half circles betokeneth Imperfect Mood and Imperfect time.

\[ \phi \]

Perfect Mood is called the Long that containeth three breves.

\[ \phi \]

Perfect time is called the breve that containeth three semibreves.

\[ \phi \]

Imperfect Mood is called the Long which containeth two breves.

\[ \phi \]

Imperfect time is the breve which containeth two semibreves.

\[^1\] These rules are in accordance with Lossius' treatise, f.72v-73r, also in "The Pathway" in the section "What every Mood doth contain".

There followeth an Example of the four Moods (or measures) showing how many Longs, breves, semibreves, minims, crotchets, and quavers goeth to a large in every Mood particularly. Likewise every measure is set by himself.

Example Sequiter
The following tables were used in the "Briefe Discourse" (1614). Figures, signs, etc. in square brackets, show where the "Briefe Discourse" differs from the earlier manuscript.

### Perfect of the More

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[Large]</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

### Perfect of the Less

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[Large]</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

[See p. 156 where the sign 23 is explained.]
This last table is so inaccurate and muddled in both the 1610 and 1614 versions, that a corrected table is given below. In "Perfect of the Less" only the semibreves go by threes, i.e. one breve = 3 semibreves.

<table>
<thead>
<tr>
<th>Perfect of the Less</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large</strong></td>
</tr>
<tr>
<td><strong>Long</strong></td>
</tr>
<tr>
<td><strong>Bre.</strong></td>
</tr>
<tr>
<td><strong>Semb.</strong></td>
</tr>
<tr>
<td><strong>Min.</strong></td>
</tr>
<tr>
<td><strong>Cro.</strong></td>
</tr>
<tr>
<td><strong>Qua.</strong></td>
</tr>
<tr>
<td><strong>Semq.</strong></td>
</tr>
</tbody>
</table>

(f. 15r)

The Imperfect of the More

| **Large** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| **Long** | 2 Bre. | 2 Semb. | 2 Min. | 3 Cro. | 2 Qua. | 2 Semq. |
| **Bre.** | 4 Semb. | 4 Min. | 6 Cro. | 4 Qua. | 4 Semq. |
| **Semb.** | 8 Min. | 12 Cro. | 12 Qua. | 12 Semq. |
| **Min.** | 24 Cro. | 24 Qua. | 24 Semq. |
| **Cro.** | 48 Qua. | 48 Semq. |
| **Qua.** | 96 Semq. |
| **Semq.** | 192 |

[It will be seen from this last table that in "The Imperfect of the More" only the minims go by threes.]
The modern equivalents of these four times are:

- Perfect the More \( \bigcirc \) \( = \frac{9}{8} \)
- Perfect the Less \( \bigcirc \) \( = \frac{4}{3} \)
- Imperfect the More \( \bigcirc \) \( = \frac{6}{5} \)
- Imperfect the Less \( \bigcirc \) \( = \frac{2}{5} \)

Unto these two perfect and Imperfect measures are annexed certain pricks: the which some of them doth add and some diminish; of which there be five manner of pricks.

1. The prick of perfection
2. The prick of imperfection
3. The prick of division
4. The prick of addition
5. The prick of alteration.

The ensuing rules are similar to both Lossius' treatise, ff. 85v-86v, and "The Pathway" in the section entitled "Of the Four Kinds of Pricks and What is a Prick". (N.B. This treatise omits "The prick of Imperfection".)
perfect note set on the right side defendeth it from imperfection lest it should be made imperfect by a less note following.

The prick of imperfection maketh perfect figures Imperfect placed above on his head it taketh away the third part of the value of the note perfect and is always found in the perfect figures.

There be three things that belongs to Imperfection.

Notes, Rests and Colours

The 2[nd] is by rests when they are set after the perfect note of half the value.

Example

[Lossius, f.83r]

[1] This is a Maxima rest; not a bar-line.]

The 3[r]d is of Coloration; That is when any perfect notes are made black, which note (as I have said touching diminution) are diminished by the 3[r]d part by virtue of the colour.

Also I do object that there be three principal kinds of Imperfection. The first is when that a note is made imperfect both before and behind a rest made imperfect only behind so that the rest hath some force of making imperfect as the note hath. The 2[nd] is when that the rest of two times touching on another doth follow in the perfect time a breve that never maketh no imperfection or (if by chance) a point of perfection doth follow a breve; or when two compound notes are put betwixt the distance of two breves, it never causes no imperfection. Also the 3[r]d is generally to be noted that a rest makes a[n] Imperfection, although it be not Imperfect.
The prick of Division is that which departeth altering figures and reduceth them from rightful to unrightful: and is set somewhat higher than the prick of addition and is put most commonly between two notes.

You are to note that the prick of division is never put but in Mood perfect.

Addition

The prick of addition is that which doth add unto his note that he is set with half his value and is set just ever with the figure.

The prick of addition is put both in Mood Perfect and Imperfect.

The 5th and last prick which is called Alteration is nominative two ways. The first way is that which doubleth the value of the second note following the same prick. The second is that which is set over the right side of the note and doth make that note to be repeated twice; the which prick representeth the number of three in the perfect mood as thus

In Lossius' treatise, this example is given thus:

This same prick of alteration is never put but in mood perfect when there is found Imperfect number of figures of perfection so that when there cometh a perfect figure after 2 imperfect figures, the latter of the imperfect shall be altered to be [twice] as much more as his own figure is.

Also unto the 2 measures there belongeth 2 other rules the which is

Augmentation and Syncopation
Augmentation is that which many times happeneth to notes by figures or certain Rules which doth just augment the note so much as he is himself.

[N.B. This section, from Lossius' treatise f.77v-79r, and also in "The Pathway", in the section "Of Augmentation, and What it is", is so abridged that it contains little information.]

There belongeth 3 Rules unto Augmentation: The 1st is when the minim rest is measured with a whole time. [I.E. In Augmentation, the minim becomes the tactus, instead of the semibreve.]

The second is to observe that no otherwise than the notes are, the rests may be.

The third is that which comprehendeth all manner of notes but the Large.

(f.18r)

Then for Syncopation.

Syncopation is always most in the simple Minor [i.e. smaller] notes and in them he shews his nature and property. He is pronounced by a division of a smaller note driven through a greater, as an odd Minim by the Dividiation driven through a semibreve or a crotchet driven through a Minim.

You may find in one of the compounds [i.e. ligatures] syncopation the which your time compounded as thus:

Compound notes syncopated.

Of figures which belong unto the aforesaid simple and compound notes.
These signs wheresoever you see them, stand for to repeat at a place when you are at the end of a song.

These figures you shall see most commonly either in pavins, almaines, or galiards, when a song is divided into two or three strains as they term them. Then wheresoever you see any of these signs they are to be repeated either from the beginning of the song or from the beginning of the next strain.

This same sign is only for the ditty which doth demonstrate that the ditty aforenamed must be over again repeated.

This wheresoever in any kind of songs you see him demonstrated indicates that there must be made a pause.

This seen in any song prescribeth that there you must end and it is the signification of the end, or a close.

This seen in any song forsetteleth you that you double the length of the note and it is never set but where the song hath been pricked false, a Minim set in the stead of a semibreve.

This mark doth direct a man to the next note following in the beginning of the next line.

And so much touching the directions of the first part of Musick from the Scale unto Descant.

FINIS.

BY THOMAS RAVENSCROFT, BACHELOR OF MUSICK

AND ONE OF THE CHILDREN OF POULES [sc. Paul's]
APPENDIX III

The text of Dr. Blow's "Rules for Composition" is taken from a manuscript in the British Museum, (Add. 3093, ff. 162-171), believed to be in the hand of his pupil, Daniel Henstridge. Nobody has ever questioned the authenticity of the treatise, but even a cursory comparison with "Rules how to Compose" by Giovanni Coperario will show that the treatise accredited to John Blow is a garbled and abridged version of Coperario's work. Blow may have based his teaching method on these Rules, though most of them would have been out-dated by his time. Henstridge probably copied them for study purposes. (There is also an MS in the British Museum in his hand of Elway Bevin's treatise.) It is not likely that he was making an extra copy for Blow, for Blow could hardly have seen the heading, and the final bold flourish "Made by John Blow" and allowed them to stand. Judging by the numerous mistakes it contains and deviations from Coperario's original MS, which is in a fine, clear hand, Blow's own copy of the Rules was probably illegible. We can learn from many of the errors in the transcription that Henstridge sometimes did not understand the text; though he was a competent musician and later became organist of Canterbury Cathedral. In his MS there is a lack of sentence formation and punctuation, which has been corrected as far as possible in order to simplify the reader's task.

Explanatory Notes

(1) Square brackets are used to show where Henstridge's
transcription differs from Coperario's MS.

(2) The editorial notes are marked by an asterisk (*).

(3) Annotations are in square brackets and double spaced.

(4) Sharps placed before B or E are the equivalent of naturals.

It may be helpful to draw attention to a few points which Coperario does not mention. The consonant 4th (i.e. the fourth prepared dissonantly) occurs frequently.

As Coperario did not think in terms of vertical chords, but of individual melodies and intervals, it would not occur to him to analyse some of the peculiar harmonies which he wrote in his examples. No reference is made to the augmented and diminished fifths and their inversions as they were only incidental to the combined melodic lines. They may be found in the following examples:

1st Inversion of Aug. 5th : f.164v, 1(b), 3(b); f.169r, 1(c)
                          : f.169v, 1(a), (b), (c), and (d).
2nd Inversion of Aug. 5th : f.165r, 1(a)
1st Inversion of Dim. 5th  : f.166v, 2(b); f.167r, 1(c).
Dim. 5th                  : f.167v, 3(e)
Dim. 4th                  : f.167r, 1(c); f.167v, 2(a); f.167v, 2(b).

Examples of false relation, which Coperario's contemporary, Thomas Campian (1619) found "offensive to the ear", and Thomas Morley (1597) considered "one of the worst faults", also occur in the examples, proving that his style was more "English" than that of his fellow composers, in spite of his affected Italian name. (Vide: f.164r, 1(c) s. & a; f.165r, 1(b) a. & b; f.167v, 1(a) a. & t; f. 169r, 2(a) a. & b. and 2(b) t. & b; f. 169v, 2(b) a. & b; f.169v, 2(f) s. & t.)
**DR. BLOW'S RULES FOR COMPOSITION**

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By the words "from the Bass upwards", Coperario means from the lowest part upwards, and in his MS he uses the solfa-note-names of the tenor octave (i.e. Gsolreut to Ffaut, or g to f'). Blow seems to have considered this use of the word Bass an error, and has altered the solfa-note-names to the octave below (i.e. G to f). The use of these solfa-note-names would have been considered old fashioned by the early 18th century. Thos. Salmon advocated the use of letter-note-names in his Essay of 1672, and after that date most theorists used letters; though Playford's "Introduction" retained the solfa-note-names until the last edition in 1730.
CONCORDS FROM THE CANTO DOWNWARDS

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f162v A unison is good so it be [in a minim, or] a Crotchet or a minim. But a unison is better so the one hold and the other be going [from] thence.

[This means when the unison occurs as a passing-note. In the 1683 Edition of Playford's "Introduction", in which the Third Book (i.e. the third part) is by John Playford himself, the above rule appears in practically the same words: "A Unison is good so it be in a Minim or a Crotchet, but it is better if the one hold and the other be going:" This and other excerpts referred to on page 72-4, prove that John Playford had access to a copy of Coperario's "Rules how to compose".]
PERFECT CHORDS

[Octaves]


IMPERFECT CHORDS

[Octaves]

Octaves: 11 : 18 14 : 21 16 : 23

(Note: Perfect chords = consonant chords; Imperfect Chords = dissonant chords. The division of chords into three groups: perfect, imperfect and dissonant was clearly propounded by Thomas Morley in his "Plain and Easy Introduction to Practical Music", 1597, (on page 141 of the Harman edition). In Coperario "imperfect chords" are called discords in "How to come from a discord" on the same page.)

Two eighths and two fifths (or their octaves) are unlawful.

WHAT CHORDS OR* PARTS ARE TO BE USED* ['or' omitted; 'to use' instead of 'to be used']

If Canto use the eighth then Alto must use the 5th and the Tenor the third.

If Canto use the 12th then Alto must use the 10th and the Tenor the 8th.

If Canto use the 10th then Alto must use the 8th and the Tenor the 5th.

If Canto use the 5th then Alto must use the 3rd and the Tenor the unison with the Bass, or else Alto may use the unison with Canto and the Tenor must use the 3rd.

(Note: The wording implies that the Bass is considered as the voice of reference. This rule is a guide to spacing the parts above the Bass.)
HOW TO COME FROM A DISCORD

If you use a 4th or a 11th your next note must be a 10th or a 3rd.
If you use a 9th your next note must be a 8th.
If you use a 7th your next note must be a 6th.
If you use a 2nd your next note must be a 3rd.
If you use a false 5th your next note must be a 3rd.

f.163r  If Basso use a sharp the 8th is not to be taken [in Diatonic songs] but the 8th underneath the 10th or else the unison of the 3rd; neither is the 5th to be used but the 6th instead of the 5th.

This rule refers to the use of the sharp leading-note in the bass which should not be doubled; nor should it have a 5th above it as this would make a false 5th. The inversion of chords had not been defined at this time, but the rule implies that the first inversion of the chord should be used when the sharp leading-note occurs in the bass. It is interesting to note that Coperario specifies 'diatonic songs', thus acknowledging that a sharp in the bass of a chromatic song might not be a leading-note.

If the song be flat in Befabemi ascend with Elami sharp and descend with Elami flat except it be a 5th or a 12th.

This rule is rather obscure. Coperario refers to the modal characteristic of ascending with the leading-note sharp, and descending with it flat. This occurs frequently in 17th century English music in the 'English cadence' formula. The words "except it be a 5th or 12th" refer to the need to avoid using the false 5th.

If the Bass rise a 2nd, 4th, or fall a 5th or a sharp 3rd then the 10th or the 3rd (if it ascend) ascending must be sharp. No part ought to descend with Flaut, Csolfaut or Gsolreut sharp neither ought you to descend with befabemi sharp if the song be flat in Befabemi* except you make a Chromatic song and then of necessity you must, but in a song diatonic you must shun it.

*except chromatic songs in the which of necessity you shall be forced, by the reason they will descend sharp,
and use either 5, or 8. But in songs Diatonic you must shun to descend with sharps in Ffaut, Csolfaut, Gsolreut, and Bfabmi sharp so the song be flat in Bfabmi.

[Note: "Bfabmi sharp" means B natural. The terms 'sharp 3rd' and 'flat 3rd' were commonly used in the 17th century to mean 'major 3rd' and 'minor 3rd'. However, in the foregoing rule 'to fall a sharp 3rd' means to fall to a note with a sharp, e.g. from e to c sharp, which is a minor 3rd. The rule is that the 3rd or 10th should be sharpened (like a leading-note) when the bass moves to a cadence or half-close. The rule which follows this stresses the fact that in diatonic songs an ascending line will use sharps (or naturals), and a descending one will use flats, in the manner of the modal composers.]

RULES OF RISING AND FALLING ONE WITH ANOTHER

It is not good to rise or fall with the Bass from a 12th or 5th unto an 8th or from an 8th unto a 12th or 5th. As for example:

\[
\text{[Unfortunately, the transcriber of this treatise (believed to have been Blow's pupil, Daniel Henstridge) has reversed the bass progression, so that the upper part moves not with it but against it. As the example stands, the weakness is removed by the contrary motion, though it would have been considered faulty in two parts only.]}
\]
It is not good to rise with the bass from a 6th to an 8th.
It is not good to fall with the bass from an 8th to a 6th.
As for example:

IF BASS MEANS TO MAKE A CLOSE* WHAT CHORDS ARE TO HOLD

["what chords are to hold' omitted.]

If Basso rise a 5th to use a Cadent, the 8th or 5th must hold
and then use the 3rd or 10th.
If the Basso rise a 2nd to use a Cadent the 5th or 12th must
hold and then use the 3rd or 10th.
If the Bass fall a 4th to use a Cadent the 8th or 15th or unison
must hold and then use the 3rd or 10th.
If the Bass fall a 2nd to make a Close the 3rd must hold and then
use the 3rd or 10th.
If the Bass rise a 3rd to make a Close the 6th or 13th must hold
and then use the 10th or 13th. As for Example:

[Blow has altered the text here so that the five rules apply to
the five examples shown on the next page. There are two errors:
in the first rule '5th' should read '15th'; in the 5th rule, the
last '13th' should read '3rd'. Coperario's versions of the rules
are as follows:

The Bass means to make a close when he rises a 5th, 2nd, or 3rd,
and then falls a 5th, or rises a 4th.
Likewise if the Bass fall a 4th, or 2nd, and then fall a 5th,
he means to use a close, then that part must hold, which in
holding can use the 11th, or 4th with the Bass in the next
note rising, or falling, and then you must use either the 3rd
or 10th. As for example:

[here the 10th is used]
Here the 3rd is used

\[\text{\textbf{OF LIGATURES}}\]

\[\text{\textbf{If the Bass rise a 2nd how the 10th may hold}}\]

If the Bass rise 3 or 4 seconds, or after a 2nd rise a 3rd or fall a 4th or a 3rd, the part which useth the 10th must hold and next use the 8th. As for example:

\[\text{\textbf{This holding is upon a 9th}}\]

\[\text{\textbf{[N.B. Coperario was the only theorist who called suspensions "ligatures". (Ligature was a term used in mensural notation for a group of two or more notes bound together.) In the body of the text he speaks of "holdings". In the 17th century suspensions were commonly called "ties" or "binding notes".]}}\]
The 10th must hold when the Bass ascends 3 [or 4] seconds and then [means] to make a kind of close upon the 3rd ascending note.

Other 17th century theorists gave general rules for suspensions of the 4th, 7th, 2nd, etc., but Coperario based his instructions for suspensions on the bass progressions, thus illustrating an overwhelming number of possibilities for each suspension.

If the Bass rise a 2nd how the 12th or 5th may hold

If the Bass rise a 2nd and then rise a 4th or fall a 5th; or if the Bass rise a 2nd and then fall a 4th [or 5th] or a sharp 3rd *or 5th, let the part hold which uses the 12th or 5th, and then come unto the 10th *or 3rd.

[The words 'or 5th' and 'or 3rd' omitted by Coperario.]

This hold is upon the 4th and 11th. As for example:
The 12th or 5th must hold when the bass rises and will have its first ascending note to be made a Close. The Bass then must rise by two 2nds.

N.B. Coperario gives the bass line only. Blow omitted the 4th example, presumably because the upper part does not fit it, owing to the last note (A) being a mistake; it should be G or B flat.
Blow has omitted the next two pages (fols. 19v and 20r) of Coperario's "Rules" which give a number of examples of bass progressions with a 7-6 suspension in an upper part.

If the Bass rise a 2nd in Minims and then fall a 3rd, the 8th or 10th may hold, and use unto the third note of the Bass either the 3rd or 10th.

How the 8th may hold How the 10th may hold
upon the 7th upon a 9th

[If the Bass ascend three 2nds in minims or crotchets the 15th or 8th may hold and then use unto the 3rd note of the bass the 12th or 15th.]

[N.B. In Coperario's version of the 2nd example the bar-lines are placed differently (as shown by dotted lines) and the last chord on A is not included.]
The holding is upon the 7th

If the Bass rise two 2nds in minims or crotchets and then fall a 5th you may use to the 2nd note of the Bass a 6th for a 5th. As for example:

*Coperario's version:

*By altering this note to F the transcriber has removed the 6/5 chord, and created consecutive 5ths.
The preceding examples show not a "6th for a 5th" but the 6th and 5th taken together in a 6/5 chord. A separate section (f. 169r, "How to use the 5th and 6th together") gives further instructions on the use of this chord.

It will have been observed that in some examples of suspensions the harmonic rhythm moves in minims and in others in crotchets. The minim rhythm was most common in sacred music; the crotchet rhythm belonged to instrumental music and madrigals. Many of the examples do not lend themselves to being written both ways.

If the Bass rise many 2nds let the part which useth the 5th divide and then use a 6th and so hold as it appeareth [in the Tenor] in the next example.

In Coperario's MS the next example appears on fol. 23r, and the one following it on fol. 22v.

f. 165r If the Bass rise a sharp 3rd the part which useth the 12th must divide and [then] use the 13th holding the same. Then next use the 10th. [The part which uses the 8th must hold and then descend with the false 5th unto the 3rd.]
This holding is upon the 11th

This holding is on the 13th. This holding is upon the 13th.

This holding is upon the 11th and 4th.

Coperario describes the above suspensions as being "upon the 11th"; Blow indicates that the "holding is upon the 13th. In fact, the suspensions are upon both the 11th and 13th making the double suspension 4-3.

If the base rise a 3rd and then rise a 2nd or fall a 2nd or 4th or 5th, let your part which useth the 5th or 12th divide and then use a 6th or 13th holding the same you must use the 10th or 3rd.

This holding is upon the 11th and 4th.
If the Bass rise a 4th and then fall a 2nd or if the Bass rise a 4th and two seconds and then another 2nd or fall a sharp 3rd or a 5th, the part which useth the 10th must hold and then use the 6th as it appeareth in the first two examples but in the three last the 10th holds and then uses the 6th ascending or falling down to a 3rd to make a close.

Five examples are given by Coperario; Blow has omitted the 5th example which "falls a 5th". The altus part of the 4th example has been copied wrongly and is one minim short.

The holding is upon the 7th.

If the Bass rise a 4th and then fall a 3rd the part which useth the 10th or 17th may hold and then use the 13th or 6th.

This holding is upon the 7th.

"Coperario omitted this sharp."
If the Bass rise a 5th and then fall a 3rd, 4th or 5th or Rise a 2nd or a 4th let the part which useth the 5th [15th] or 8th hold and then use a 10th or 3rd.

This holding is upon the 11th and 4th.

If the Bass rise a 6th the part which useth the 12th must hold and then use the 13th.

This holding is upon the 7th.

*Coperario has the bar-line here.*
If the Bass rise a 2nd and then a 3rd next falls a 2nd and then a 5th making a Close, Canto is to use first the 15th and then the 13th as for example.

This holding is upon the 4th and 11th.

[Hopping demonstrated the method of writing suspensions on a bass that ascends in the order of intervals from the 2nd to the minor 6th, Coperario continues with suspensions on a bass descending in the order of intervals from the 2nd to the 5th.]

If the Bass fall a 2nd and then rise a 4th or 5th or fall a 3rd, 4th or 5th, the 10th or 3rd may hold [next use the 10th or 3rd again.]

[The holding is upon the 4th and 11th.]
If the Bass fall a sharp 2nd in a semibreve and then rise a 2nd let the part which useth the 5th or 12th divide and use a 6th [or 13th] with holding the same he must use a 6th or 13th again.

The next examples demonstrate the suspension of the diminished 7th. In the third example the transcriber has altered the upper parts, thereby creating a diminished 4th and an inverted diminished 5th, and eliminating the diminished 7th suspension which the example portends to show.

This holding is upon a false 7th.

[Coperario has no bar-line.]
[Coperario has the bar-line here.]
[A set of clefs were placed at the beginning of this bar, as if it were a separate example.]

[Coperario's version of the 3rd example:]
The basses in the next examples are similar to those in the last examples, but here the harmonic rhythm is in minims and crotchets which is considered too fast for such dissonances as the diminished 7th, so the 6th is "demanded" instead.

N.B. The 6th example is not given in Coperario's MS, but it will be observed that this is only a transposition of the 4th example, with the upper parts inverted.

If the Bass fall a sharp 2nd in minims or crotchets and then rise a 2nd again, the 2nd note of the Bass demands a 6th or [for] a 5th.

In Coperario's MS the next example appears on fol. 28r and the one following it on fol. 27v.

Or if the Bass fall many 2nds you may begin to divide with the 6th and [then use] the 5th, holding the same you must use the 6th again.
The holding is upon the 6th.

These chains of alternating 5ths and 6ths are commonly found in music from the 15th to the 17th centuries, and were regarded as legitimate suspensions by many 17th century theorists. (Cf. page 236 of the 'Concordances'.) By the middle of the 18th century such progressions descending were regarded as a faulty progression of 5ths. Other examples of these progressions ascending may be seen on page 444 (fol. 164v), and another example of a descending progression in "uneven 2nds" appears on page 462 (fol. 170v).

Coperario's alternative treatment of a bass which descends by step is a sequence of 7-6 or 4-3 suspensions, as shown in the two succeeding examples.

f.167v If the bass fall many seconds in semibreves or minims, the part which uses the 5th must divide and then use the 6th holding the same he must use the 6th again until you come to the last note of the bass and then the part that hath used the 6th must use the 8th.
[The transcriber has shortened the first example, thereby removing the sequence.]

The holding is upon the 7th.

If the bass fall many 2nds in semibreves Canto may hold using 10th and tenor will be [begin with] the 5th, and then use a 6th. (This way is [used] but seldom.)

[This is the only example in the treatise which Coperario warns us should be "used but seldom", but he does not draw attention to the harshness of the dissonances, nor to the]
fact that the note of resolution is present in another
voice in three of the suspensions."

This holding is upon the 11th.

If the Bass fall a 3rd and then fall a 2nd or rise a sharp 2nd
the part which useth the *15th or 12th must hold and
then use the *16th or 3rd. "6th or 13th"

This holding is upon the 7th.
If the bass fall a 3rd in minims or crotchets then rise a 2nd, the part which useth the 5th or 12th must hold and next use a 5th or 10th (12th) again unto the 3rd note of the bass.

\[\text{This holding is upon a 7th}\]

\[\text{\textit{Coperario has an anticipated note in these two places.}}\]

If the bass fall a 4th the part which useth the 8th must hold and then use the 10th.

\[\text{This holding is upon the 11th and 4th.}\]

\[\text{\textit{Coperario's canto:}}\]

\[\text{\textit{Coperario's tenor has a dotted semibreve, making a 7-6 suspension.}}\]
If the bass fall a 4th and then fall a 5th and then fall a 2nd or rise a sharp 2nd, the 3rd or 10th must hold and then use the 13th or 6th. Sometimes you may close speedily if the bass fall a 5th in minims or crotchets and then rise a 3rd as it appeareth in Canto in the last example.

[N.B. The underlined words are obviously an error. They do not appear in Coperario's version. It is difficult to say what Coperario meant by "choose" in this context.]

This holding is upon the 7th and 14th.

If the bass fall a 5th and then rise a 3rd to make a close the 10th or 3rd may hold and next use the 13th or 6th or else the 3rd, or 10th, and then come unto the 6th, or 13th again.

This holding is upon the 14th and 7th.
If the bass fall a 4th or rise a 5th meaning to make a stay, the 8th or 15th must hold next using the 3rd or 10th.

If the bass fall a 2nd the 10th or 3rd must hold **and next use the 3rd or 10th again.

If the bass rise a 2nd the 12th or 5th must hold ** and then use the 3rd or 10th.

If the bass rise a 3rd, the 13th or 6th must hold ** and then use the 3rd or 10th.

[**Coperario ends the sentence here. By a "stay" in the bass Coperario means that the bass note should be prolonged to form an imperfect cadence.]

This holding consists on the 4th and 11th.

[Coperario now proceeds to give rules for special combinations, and the first of these is the suspension of the diminished 5th over the sharpened leading-note in the bass.]

** HOW TO USE A FALSE 5TH **

If the bass fall a sharp 3rd and then rise a 2nd the part which useth the 3rd or 10th must hold and then come unto the 10th or 3rd again. If the bass rise a sharp 2nd and then rise another 2nd the part which uses the 6th or 13th must hold and then use the 3rd or 10th.
This holding is upon the false 5th.

**HOW TO USE A 5TH AND 6TH TOGETHER.**

If the bass rise a 2nd then the 6th or 13th must hold and then use the 11th *and [or] 4th then holding the same you must use the 10th or 3rd, the other 6th must rise a 2nd and next use the 15th [5th]

If the bass fall a 3rd the 10th or 3rd must hold and then use the 11th or 4th to come to the 10th or 3rd, holding the other 3rd must rise a 2nd and next use the 5th.

If the bass rise a 4th then the part which useth the 8th or 15th must hold and then use the 11th or 4th to come unto the 3rd or 10th holding, the part which useth the 10th must then use the 6th next the 6th [5th]

(This is what we now call an internal suspension as the dissonance lies between two upper parts. Coperario treats the six-five more fully than any other 17th century theorist, even though it had been common for some time in the cadence formula $II_5^6 - V - I$, as a prepared dissonance.

The first three examples resolve into a cadential 4th, and the 4th and 5th examples move directly to a cadence or half-cadence.

Note that the transcriber's alterations to the 4th example have removed the six-five chord and substituted an unprepared 7th in its place.)
In the two last examples you must note the bass holding of his first note and the next is a minim. In the first of the two last examples that the bass rises a 2nd and then falls a 5th. In the last example the bass rises a 4th and in the two examples the 6th and 5th are used both together [in several parts] and clean contrary to the other three first examples.

[Though Coperario rules that where the six-five chord immediately precedes the cadence, as in the last two examples, the first note of the bass should hold, six-five chords where the bass moves up a step, as in the examples on fol. 164v, were more frequently used.]

**HOW TO USE A 6TH INSTEAD OF A 5TH IN A CLOSE**

The 6th instead of the 5th is most *continually [*commonly] used in a close if the bass rise to his close with seconds *and [for] fall a 2nd as it appeareth in the 3rd*example [*score.]*

[The transcriber's alteration to the tenor in the 2nd example removes the 6th of which the rule speaks.]
Here, as elsewhere, Coperario does not comment upon the dissonance created by the augmented triads in first inversion which appear in the 1st, 2nd and 4th examples, (and in the 3rd example, where the transcriber has placed a sharp over the first F in the Canto, but this is omitted in Coperario's MS.). These augmented triads were not yet regarded as individual chords, but were incidental to the combined melodic lines. They were a far more common feature in the 17th century cadence than the dominant 7th.

**HOW TO USE A 7TH**

If the bass fall a 2nd, 3rd or 5th or rise a 2nd or 4th meaning to make a close, *the 7th may be used next the 8th then the 5th.*

[*Coperario ends this sentence thus: "that part which in holding can use the 7th, or 14th with the bass in the next note rising or falling, and next the 6th, and then the 5th."

*We might expect the dominant 7th in a cadential position to be discussed here, but the dominant 7th in these examples is used only in the approach to the cadence.*
Nowhere in this treatise is the dominant 7th introduced in the penultimate chord of the cadence. The cadential 4th was the indispensable characteristic of Coperario's cadences.

If the Bass rise a 2nd.

If the Bass rise a 4th.

The transcriber has altered the altus and removed the 7-6 suspension.
Coperario's version:
[The remaining instructions are concerned with syncopation in the bass. This would have been the appropriate place to speak of the 2-3 suspension in the bass, but though it was a common suspension, and was discussed by nearly all the other 17th century theorists, Coperario does not mention it. It occurs only once in this treatise, in an unusual double suspension in the 2nd bar of the next example, where the outside parts make a $\frac{2}{2} - \frac{1}{3}$ suspension again the altus, followed by a 7-8 bass suspension. These are the only bass suspensions in the treatise.

What Chords are to be used when the Bass descends [seconds] and goes against the time holding his notes.

If the bass descends [seconds] let Canto use all 10ths, alto and tenor must go as many 3rds and 6ths together to themselves as possibly they can.

Hitherto the other parts have led [held] upon the bass. Here the bass holds upon the rest of the parts.

Another way if the bass fall many*3rds [uneven seconds] Canto still must go 10th with the bass and tenor comes after the bass a half note first using a 5th and then a 6th. Alto will be forced to make [take] many unisons with the rest of parts by the reason of his going through all the parts.
This example shows alternating 5ths and 6ths in sequence with the syncopation in the bass. This type of sequence is shown elsewhere with the syncopation in the tenor (f.164v) and the alto (f.167r).

If the bass descends 2nds and holds his first notes and the rest be minims you may ascend in Canto either from the 12th, 10th or 8th unto the 15th and hold until you can use the 17th [and then descend with the bass in 17ths.]

This example shows dissonant minim passing notes.

*Coperario has a semibreve A in the alto.*
What Chords are to be used when the Bass ascends seconds and goes against the time holding his notes.

If the bass ascends [seconds] let Canto use all 10ths [and ascend with him,] and Tenor must first use the 5th and next the 6th [and must go with the time contrary to the basses time.]

[This is an ascending sequence of alternating 6ths and 5ths with the syncopation in the bass. See f.164v for a similar sequence with the syncopation in the tenor.]

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[Blow omits the last section of Coperario's treatise: "How to maintain a fugue", fols. 36v-40r.]
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