

THE ORNAMENTATION IN THE FITZWILLIAM VIRGINAL BOOK  
WITH AN INTRODUCTORY STUDY OF CONTEMPORARY PRACTICE

by

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This dissertation is dedicated to  
MARIE-CLAIRE ALAIN  
whose pursuit of knowledge has  
never ceased to inspire me

AFRICANA

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SUMMARY

THE ORNAMENTATION IN THE FITZWILLIAM VIRGINAL BOOK, WITH  
AN INTRODUCTORY STUDY OF CONTEMPORARY PRACTICE

by

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This study sets out to examine the ornamentation in the manuscript GB-Cfm 32.G.29 (known as the Fitzwilliam Virginal Book) as representative of late sixteenth-century practice. The sixteenth- and early seventeenth-century ornamentation as practised on the Continent is also investigated, in order to elucidate the contemporary English practice, to evaluate it and place it in perspective. This period's concept of ornamentation is an ars diminutionis. The diminution technique (the breaking up of long note values into smaller ones) is expressed as passaggi (figurations) and ornaments, in order to provide a more elegant expression of the basic notes of a composition. Continental treatises describe the individual ornaments and thus provide a terminology with which to describe these ornaments.

The ars diminutionis manifests itself in the FVB as written-out figuration, written-out ornaments and ornaments indicated by sign, the latter consisting of the single and double stroke which are peculiar to virginal music. No explanation for the Virginalists' signs exists, nor are contemporary English instruction books concerning themselves with keyboard ornamentation available.

A comparison of the ornamentation of the manuscript with the printed edition of the FVB (1979-80), reveals many inaccuracies in the latter. These consist mainly of printer's errors, such as wrong placements and frequency of occurrence, which do

not correlate with the original, and stenographic cancellation signs which are wrongly interpreted as ornaments. All of these are corrected in the present study. A collation of other source copies with the same pieces found in the FVB reveals many textual and ornamentation variants between them.

Examining the written-out ornaments in the FVB, one finds that they are identical to the ornaments found in Continental sources. These ornaments are primarily employed as decoration of the individual closes in a cadence, where they occur as diminutions of the notes constituting the cadence. Here they are employed functionally, for example, to resolve the note of resolution in a discant close ornamentally, or to embellish the plain notes of a bass close. They are also used as virtuoso decoration as an intrinsic part of the passaggi, being diminutions of successive intervals.

The single- and double-stroke ornament signs appear at first glance to be indiscriminately scattered over the music without purpose. Research into their use reveals them to be employed systematically, besides being decorative elements which add brilliance to the music. The frequency with which they coincide with the pulse unit and the rhythmic pulsation created by it, together with the profusion of their occurrence, make these signs a unique phenomenon in late sixteenth-century ornamentation.

Their interpretation remains a difficult issue to clarify. The evidence assembled in this study points to a classification of the strokes according to the accenti e trilli principle. The single stroke can then be interpreted as a slide (from a third below the main note), and the double stroke as a tremolo or tremoletto - the most common sixteenth-century ornament. Its mirror-image, the mordent, is occasionally more appropriate in certain contexts, and in cadences the double stroke followed by a two-note suffix most likely signifies a grosso.

OPSOMMING

DIE ORNAMENTASIE IN DIE FITZWILLIAM VIRGINAL BOOK, MET 'N  
INLEIDENDE STUDIE VAN KONTEMPORÊRE UITVOERINGS-  
PRAKTYK

deur

WILLEM DIEDERIK VILJOEN

Promotor: Prof. S. Grové  
Departement: Musiek  
Graad: Doctor Philosophiae

In hierdie studie word die ornamentasie in die musiekmanuskrip GB-Cfm 32.G.29 (bekend as die Fitzwilliam Virginal Book) bestudeer as synde verteenwoordigende van die laat sestiende-eeuse Engelse versieringskuns. Die beoefening van die sestiende- en vroeg sewentiende-eeuse ornamentasie op die Europese Vasteland word ook ondersoek om sodoende die kontemporêre Engelse praktyk duideliker te kan maak, te kan evalueer en in perspektief te kan plaas. Die begrip 'ornamentasie' in hierdie tydperk is dié van 'n ars diminutionis. Die diminuerings-tegniek (die opbreek van lang nootwaardes in korteres) kom voor as passaggi (figurasies) en as ornamente wat ten doel het om 'n elegante uitdrukking te gee aan die basiese note van 'n komposisie. Die terminologie waarmee die ornamente beskryf kan word, is ontleen aan studies uit die Europese Vasteland.

Die ars diminutionis kry gestalte in die FVB sowel in die vorm van uitgeskrewe figuratiewe passasies en uitgeskrewe ornamente as in die vorm van twee ornamenttekens, naamlik die skuins enkel- en dubbelstreep. Hierdie twee tekens kom in die sestiende eeu hoofsaaklik in Engelse virginaalmusiek voor. Daar bestaan geen tydgenootlike verduideliking van die enkel- en dubbelstreep-ornamente nie, en tydgenootlike Engelse handleidings wat klawerbord-ornamentasie beskryf, ontbreek geheel en al.

'n Vergelyking van die ornamentasie in die manuskrip met die gepubliseerde uitgawe van die FVB (1979-80) bring verskeie onnoukeurighede in laasgenoemde aan die lig. Hierdie onnoukeurighede bestaan hoofsaaklik uit drukfoute (byvoorbeeld ornamente wat verkeerd geplaas is en ander wat weggelaat is) en uit stenografiese kansellasietekens wat verkeerdelik as ornamente vertolk is. Hierdie foute word in hierdie studie reggestel. 'n Vergelyking van musiekwerke wat in die FVB verskyn met weergawes wat in ander bronne voorkom, toon baie variante ten opsigte van sowel die musikale teks as die ornamentasie.

Die uitgeskrewe ornamente in die FVB is dieselfde as dié wat in die musiek van die Vastelandse komponiste aangetref word. Dié ornamente word primêr gebruik as versiering van die individuele clausulae in kadense waar hulle verskyn as diminuerings van die stempartye waaruit die kadens bestaan. In hierdie situasie word die uitgeskrewe ornamente funksioneel aangewend, byvoorbeeld om die oplossingsnoot van 'n diskant-clausula ornamenteel te laat oplos, of om die interval van 'n vyfde in 'n bas-clausula in te vul. Die uitgeskrewe ornamente word ook as 'n onlosmaaklike deel van die passaggi gebruik en dien as virtuose ornamentering van opeenvolgende intervalle.

Die verskyning van enkel- en dubbelstreep-ornamenttekens blyk met die eerste oogopslag lukraak te wees. Navorsing oor hulle aanwending toon egter dat hulle wel sistematies gebruik word, afgesien daarvan dat hulle ook dekoratiewe elemente is wat sprankel aan die musiek verleen. Die feit dat die tekens hoofsaaklik op die polsslag voorkom (en daardeur ritmiese stuwings aan die musiek verskaf) en die oordadigheid waarmee hulle verskyn, maak hierdie tekens 'n unieke fenomeen in die laat sestiende-eeuse ornamentasie.

Die interpretasie van die tekens bly 'n netelige kwessie. Die inligting wat in dié studie byeengebring is, dui daarop dat hulle volgens die accenti e trilli-beginsel geklassifiseer kan word. Die enkelstreep kan geïnterpreteer word as 'n glyer (vanaf die onderterts) en die dubbelstreep as 'n tremolo of tremolletto - die mees algemene sestiende-eeuse ornament. In sekere



omstandighede is die spieëlbeeld van laasgenoemde, naamlik die mordent, meer gepas, en in kadense kan die dubbelstreep saam met die tweeknotslag as 'n groppo geïnterpreteer word.

BIBLIOGRAPHIC ABBREVIATIONS

Manuscripts

- AC           Huntingdon, Cromwell Museum, Anne Cromwell's Book  
(known as 'Anne Cromwell's Virginal Book')
- Be           London, British Library, Add. MS 31403  
(GB-Lbm Add.31403)
- Bu           Paris, Bibliothèque Nationale, Fonds du Conserva-  
toire, Rés. 1185 (F-Pc Rés. 1185)
- Co           London, British Library, Royal Music Library  
MS 23.1.4 (GB-Lbm Royal 23.1.4, known as 'The  
Cosyn Virginal Book')
- D<sub>2</sub>          New York City, New York Public Library, Drexel  
MS 5612
- DVM         Dublin, Trinity College, Marsh's Lib. D.3.30  
(known as 'The Dublin Virginal MS')
- El           Oxford, Library of Christ Church College, Music  
MS 1113 (GB-Och 1113)
- Fo           London, British Library, Royal Music Library  
MS 24.d.3 (GB-Lbm Royal 24.d.3, known as  
'The Will Forster Virginal Book')
- L<sub>1</sub>         London, British Library, Add. MS 29996  
(GB-Lbm Add.29996)
- Ma           Edinburgh, National Library, MS Panmure 9  
(GB-En Panmure 9, known as 'Clement Matchett's  
Virginal Book')
- Me           London, British Library, Add. MS 23623 (GB-Lbm  
Add.23623)
- Mu           London, British Library, Add. MS 30513 (GB-Lbm  
Add.30513, known as 'The Mulliner Book')
- Ne           Private collection, 'My Ladye Nevells Booke'
- P<sub>1</sub> and P<sub>2</sub>   Paris, Bibliothèque Nationale, Fonds du Conser-  
vatoire, Rés.1186 and 1186 bis (F-Pc Rés.1186  
and 1186 bis)
- PB           Private collection, 'Priscilla Bunbury's Book'  
(known as 'Priscilla Bunbury's Virginal Book')
- Ro           London, British Library, Add. MS 10337 (GB-  
Lbm Add.10337, known as 'Elizabeth Rogers'  
Virginal Book')



- Roy App 56 and 58 London, British Library, Royal Appendix 56 and 58
- To Paris, Bibliothèque Nationale, Fonds du Conservatoire, Rés.1122 (F-Pc Rés.1122)
- Tr Cambridge, Fitzwilliam Museum, MS 32.G.29 (GB-Cfm 32.G.29, known as 'The Fitzwilliam Virginal Book')
- Tu London, British Library, Add. MS 36661 (GB-Lbm Add.36661)
- Wr London, British Library, Add. MS 30485 (GB-Lbm Add.30485)

Printed Music

- CEKM Corpus of Early Keyboard Music ([Rome]: American Institute of Musicology)
- EECM Early English Church Music (London: Stainer and Bell)
- FVB The Fitzwilliam Virginal Book, ed. by Fuller Maitland and Barclay Squire (New York: Dover, 1979-80), printed edition of GB-Cfm 32.G.29 (Tr)
- MB Musica Britannica (London: Stainer and Bell)
- I. The Mulliner Book, ed. by D. Stevens (1954), printed edition of GB-Lbm Add.30513
- V. Thomas Tomkins: Keyboard Music, ed. by S. Tuttle (1964)
- XIV. John Bull: Keyboard Music I, ed. by J. Steele and F. Cameron (1967)
- XIX. John Bull: Keyboard Music II, ed. by T. Dart (1970)
- XX. Orlando Gibbons: Keyboard Music, ed. G. Hendrie (1967)
- XXIV. Giles and Richard Farnaby: Keyboard Music, ed. by R. Marlow (1965)
- XXVII and XXVIII. William Byrd: Keyboard Music I and II, ed. by A. Brown (1976)



- Pa Parthenia (London: George Lowe, (1612/13)),  
facs. (New York: Broude, 1972)
- PI Parthenia In-Violata (London: John Piper,  
(c.1625)), facs. (New York: New York Public  
Library, 1961)





## INTRODUCTION

The Fitzwilliam Virginal Book was compiled by the younger Francis Tregian from 1609 until his death in 1619, during his imprisonment in the Fleet for recusancy. It is a monumental collection of virginal music, with 297 pieces totaling 936 pages of printed music. The earliest dated work is Felix Namque by Tallis (1562) and the latest Ut re mi fa sol la by Sweelinck (1612). The largest part of the anthology is taken up by works of Byrd and Bull, some of which have not survived in any other source, and it includes composers which would otherwise not have been known, such as Oldfield, Galeazzo, Oystermayre and Marchant. It is also the primary source for most of Giles Farnaby's and Peter Philips' keyboard output. The manuscript is presently preserved in the Fitzwilliam Museum, Cambridge, where it has long been erroneously known as 'Queen Elizabeth's Virginal Book'. It is named after Lord Fitzwilliam, in whose possession the manuscript was in 1783.<sup>1</sup>

English keyboard music from the sixteenth and early seventeenth centuries is generally referred to as virginal music. The term 'virginal' derives from the English word 'virgule' (Latin: virgula = a twig), and refers to the wooden jack in the instrument. The virginal is an instrument of oblong shape, with the keyboard on the long side. Its strings are plucked and run parallel with the keyboard. In the sixteenth and early seventeenth centuries the term 'virginal' was also used to describe any keyboard instrument of which the strings were plucked. Queen Elizabeth I herself possessed and played the virginal.

It is the purpose of this study to:

- provide a background against which the keyboard ornamentation of Elizabethan England can be understood and compared,

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<sup>1</sup> For a history of the manuscript, see J.A. Fuller Maitland and W. Barclay Squire, eds., The Fitzwilliam Virginal Book, 2 vols. (Leipzig: Breitkopf, 1899 : reprint, New York: Dover, 1963), I:v-xi. Newly rev. and ed. by B. Winogron (New York: Dover, 1979-80).



through a documentation of contemporary Continental practice, as well as the contemporary practice of other instruments in England;

- establish a correct printed text of the ornamentation in the Fitzwilliam Virginal Book;
- examine the use of both the written-out ornamentation and ornaments indicated by symbol;
- contribute to greater clarity concerning the interpretation of the Virginalists' ornament signs through the knowledge gained from this study.

As no bar numbers have been added to the FVB (the printed edition of Tr) by the editors, the following system will be used instead for ease of reference. For example, FVB II 2:6:1 will refer to: vol.2 of the FVB, page 2, system 6, bar 1. This procedure has been adopted due to the immensity of the FVB, and because pieces contained in the FVB available in other editions where bar numbers are supplied, are often based upon different primary sources (such as Bu and Co) in which the total number of bars may differ from that in Tr. The indication of note pitches follows the Helmholtz system where c' is middle c, c" the octave above, c the octave below c', C the octave below c, etc. The capital letters SATB identify the voice parts, i.e., soprano, alto, tenor and bass respectively, and when followed by a number, e.g. S.3, it will mean : the third note in the soprano.

The musical ornamentation of virginal music, and of the Fitzwilliam Virginal Book in particular, is a subject which has hitherto received little attention in research projects. The pioneer work of Nancy Mould Barnes and Erich Paul Schwandt has therefore been invaluable to the present study.



## CHAPTER 1

### 1. INTRODUCTORY STUDY: ORNAMENTATION ON THE CONTINENT IN THE SIXTEENTH AND EARLY SEVENTEENTH CENTURIES

#### 1.1 The Ars Diminutionis as a Sixteenth-Century Concept of Ornamentation

Ornamentation in music is as old as music itself. In keyboard music this flourishing art was already well established by the fourteenth century, with reference to it in a musical treatise being made as early as the thirteenth century. The sixteenth- and early seventeenth-century vocal and instrumental ornamentation can be seen as an ars diminutionis. Tinctoris defined it thus in 1495:<sup>1</sup>

Diminution is the reduction of any large piece into a small one.

Michael Praetorius' comment more than a hundred years later is much the same:<sup>2</sup>

Diminution is the breaking up and resolving of a long note into many faster and smaller notes.

During this period the concept of ornamentation was not limited only to short ornaments, affecting one note, but also included the embellishment of several notes or melodic intervals lasting for one bar or more: both of which constitute the breaking up of a note value or values. This technique can be traced back to the earliest extant source of keyboard music, the Robertsbridge Abbey manuscript of c.1320, as the following in-

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<sup>1</sup> Johannes Tinctoris, Terminorum Musicae Diffinitorium (c.1495), translated by C. Parrish, Dictionary of Musical Terms (London: Free Press of Glencoe, 1963), p.24; and E.P. Schwandt, The Ornamented Clausula Diminuta in the Fitzwilliam Virginal Book (Ph.D. dissertation, Stanford University, 1967), p.21.

<sup>2</sup> Michael Praetorius, Syntagma Musicum, 3 vols. (Wolfenbüttel, 1619), facs. ed. in Documenta Musicologica I, vol.15 (Kassel: Bärenreiter, 1958), 3:232.



strumental intabulation of a motet shows:<sup>3</sup>

Ex.1.1 Anonymous, Tribum quem, b. 1-14

The image shows a musical score for a piece titled 'Tribum quem'. It consists of two systems of music. Each system has a treble clef staff with a key signature of one sharp (F#) and a common time signature (C). The first system includes a vocal line with lyrics: 'Tribum quem non ab-hor-ru-it in-de-cen-ter as-cen-de-re Merito...'. Below the vocal line is a lute tablature line with letters 'a', 'b', 'c', 'd', 'e', 'f' and numbers '1-6'. The second system continues the music with lyrics: 'Quo-ni-am... fu-ri-bun-da non me-tu-it fortuna'. The score features complex rhythmic patterns, including triplets and sixteenth-note runs.

Another fourteenth-century source of this technique is the voluminous Codex Faenza.<sup>4</sup> In the fifteenth century, Conrad Paumann gave many examples of embellished ascending and descending intervals and pausae in his instruction book for organists, the Fundamentum organisandi (1452).<sup>5</sup>

It is in the sixteenth century, however, that one finds this art explained in several treatises and didactic manuals.<sup>6</sup> They are directed at both instrumentalists and singers, and their main concern is to provide musical examples, to enable them to master

<sup>3</sup> W. Apel, ed., Keyboard Music of the Fourteenth and Fifteenth Centuries, Corpus of Early Keyboard Music I (1963), p.6.

<sup>4</sup> D. Plamenac, ed., Keyboard Music of the Late Middle Ages in Codex Faenza 117, Corpus mensurabilis musicae, vol.57 ([Rome]: American Institute of Musicology, 1972).

<sup>5</sup> Apel, CEKM I: 32-51.

<sup>6</sup> For a comprehensive list of these tutors, see E.T. Ferand, 'Didactic Embellishment Literature in the Late Renaissance: A Survey of Sources,' Aspects of Medieval and Renaissance Music, ed. J. LaRue (New York: W.W. Norton and Co., 1966), pp.154-172.

the art of embellishing vocal polyphony. There are also several general theoretical works which include chapters on the problems of ornamentation. There are, however, several treatises directed at the viol, other stringed instruments, recorder and keyboard. They are not only concerned with the intabulation of vocal models, but also with the diminutio of basic intervals and cadences which are conceived in terms of instruments. All these authors show various ways of substituting one note, or a short melodic passage, with melodic formulas in smaller note values, and of embellishing cadences and intervals with diminutions that link notes together, in each case without affecting the progression upon which the diminution is based. An intabulation by Pierre Attaignant of a chanson by Claudin, Ung grant plaisir, is typical of the early sixteenth century:<sup>7</sup>

Ex.1.2 Attaignant, Ung grant plaisir, b. 5-8



Quant il me mist au lieu tant de - si - re.  
Quant il me mist au lieu tant de - si - re.  
il me mist au lieu tant de - si - re.  
Quant il me mist au lieu tant de - si - re.

An example from the later sixteenth century illustrates the excesses into which this technique fell. The diminutions were

<sup>7</sup> Pierre Attaignant, Dixneuf chansons musicales reduictes en la tablature des Orgues Espinettes Manichordions (1531), modern ed. by A. Seay, Pierre Attaignant: Transcriptions of Chansons for Keyboard, Corpus mensurabilis musicae XX (American Institute of Musicology, 1961), p.21.

added by Girolamo Dalla Casa to a madrigal of Cipriano de Rore:<sup>8</sup>

Ex.1.3 Dalla Casa, Tanto mi piacque, b. 35-37



ri e fron - - - - -

fio - - - - ri e fron - - - - -

s pur fior' e fron - - - - -

ri e fron - - - - -

di.

di.

di.

di.

An example of diminutions made on a cadence progression comes

<sup>8</sup> Girolamo Dalla Casa, Il vero modo di diminuir (Venice, 1584), facs. reprint in Bibliotheca Musica Bononiensis, Serie 2, no.23 (Bologna: Forni, 1980), pp.48-49; and in E.T. Ferand, ed., Improvisation in Nine Centuries of Western Music, an Anthology with a Historical Introduction (Cologne: Arno Volk Verlag, 1961), pp.61-62.



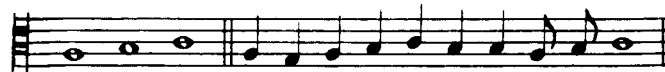
from Ganassi's Opera intitulata Fontegara (1535) for recorder:<sup>9</sup>

Ex.1.4



Two simple diminutions of intervals are taken from Adriano Petit Coclico's Compendium Musices (1552), a theoretical treatise which includes a discourse on 'Elegant Singing' (De Elegantia, et ornatu, aut pronuntiatione in canendo):<sup>10</sup>

Ex.1.5



simplex

elegans



simplex cantus

elegans

The original and the embellished versions make the intention clear: the 'elegant' expression of a musical phrase.

A variety of terms were applied to this technique in the sixteenth century: diminutio, minuta, passaggi, gorgia, glosa and coloratura, to name just a few. In Spain this technique was expressed in a musical form, called the Glosa, and in Italy in the Canzoni d'Intavolatura. In the FVB, the same technique can be observed in no. 233, which is a transcription by Farnaby of

<sup>9</sup> Silvestro di Ganassi, Opera intitulata Fontegara (Venice, 1535), English translation by D. Swainson (Berlin-Lichterfelde: Robert Lienau, 1959), p.97.

<sup>10</sup> Adriano Petit Coclico, Compendium Musices (Nüremberg, 1552), facs. ed. in Documenta Musicologica I, vol.9 (Kassel: Bärenreiter, 1954), fol. H iv.

his 15th canzonet 'Ay me, poore heart'. Tregian included five of Philips' keyboard intabulations of popular songs in the FVB. In the short examples which follow, the original is given together with the embellished version:

Ex.1.6 Farnaby, 24. (FVB II 330:1:1)

Philips based the following example on Orlande de Lassus' 'Bonjour mon coeur'.<sup>11</sup>

Ex.1.7 Philips, Bon Jour mō Cueur (FVB I 317:1:1)

<sup>11</sup> H. Expert, ed., La Fleur des musiciens de P. de Ronsard (New York: Broude Brothers, 1965), p.32.



The Spanish diferencias and English variations on songlike themes and grounds also employ the same technique discussed in this chapter: they all have the changing of a pre-existing musical event in common, and this change is brought about through the ars diminutionis.<sup>12</sup>

Most of the instruction manuals do not differentiate between vocal and instrumental ornamentation as far as the style of embellishment is concerned. In fact, some writers actually state that instrumentalists used the same techniques as singers. For instance, Giovanni Bassano's Motetti, madrigali et canzoni francese (1591), states on the title page that the book is intended for ogni sorte di stromenti as well as la semplice voce.<sup>13</sup> The title page of the earliest sixteenth-century tutor, Silvestro di Ganassi's Opera intitulata Fontegara (1535), addresses 'wind and stringed instruments as well as those who delight in singing'.<sup>14</sup> Ganassi stresses the importance of the human voice in these matters:<sup>15</sup>

Be it known that all musical instruments, in comparison to the human voice, are inferior to it. For this reason we should endeavour to learn from it and to imitate it.

The stylistic unity between vocal and instrumental ornamentation, however, started to disappear towards the end of the sixteenth century. This becomes clear from the appearance of treatises aimed at either the voice or particular instruments. Tutors written for the voice alone, for example, include those

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<sup>12</sup> C.G. Jacobs, The Performance Practice of Spanish Renaissance Keyboard Music, 2 vols. (Ph.D. dissertation, New York University, 1962), 1:124f.

<sup>13</sup> H.M. Brown, Embellishing Sixteenth-Century Music (London: Oxford University Press, 1976), p.xi.

<sup>14</sup> Ganassi, Opera, p.7.

<sup>15</sup> Ibid., p.9.

of Maffei (1562)<sup>16</sup> and Bovicelli (1594).<sup>17</sup> In range and style, Bovicelli's embellishments are specifically conceived for the voice.<sup>18</sup> At this time, the first description of the vocal trill was given in Conforto's Breve et facile maniera (1593).<sup>19</sup> (It is also described in Caccini's Nuove Musiche.<sup>20</sup>) This trillo is an idiomatically conceived ornament for the voice, consisting of a rapid repetition of a note, rather than an alternation of two notes.

The treatises written for keyboard instruments feature attempts to codify certain ornamental formulae which frequently occur as diminutions, as distinct from the passaggi which substitute for the slower basic intervals of a melody. This marks the beginning of the disintegration of the ars diminutionis as a sixteenth-century concept. From then onwards improvised ornamentation yielded to ornamentation which was written out in full, or indicated by means of signs. This process resulted eventually in the elaborate ornament tables of the seventeenth century. The composer's intentions became ever more clearly defined, while less was left to the skill of the performer/improviser. This helped to transform musical style and so bring the musical Renaissance to its end.

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16 Giovanni Camillo Maffei, Delle lettere ... Libri due (Naples, 1562), published in N. Bridgman, 'Giovanni Camillo Maffei et sa lettre sur le chant', Revue de Musicologie XXXVIII (1956), pp.3-34.

17 Giovanni Battista Bovicelli, Regole, Passaggi di musica (Venice, 1594), facs. reprint by N. Bridgman in Documenta Musicologica I, vol.12 (Kassel: Bärenreiter, 1957).

18 Brown, Embellishing, p.48.

19 Giovanni Luca Conforto, Breve et facile maniera d'essercitarsi ad ogni scolara (Rome, 1593), facs. ed. in Monuments of Music and Music Literature in facsimile, 1st series, no.115 (New York: Broude, 1980), p.25.

20 Giulio Caccini, Le Nuove Musiche (Florence, 1601), facs. ed. in Monuments of Music and Music Literature in facsimile, 2nd series, no.29 (New York: Broude, 1973), fol.B.

## 1.2 Passaggi and Specific Ornaments

The passaggi and specific ornaments are not easily classifiable into distinct categories, for both are expressions of the same technique, the ars diminutionis: the breaking up of a note into smaller rhythmic values. The ornamental formulae are diminutions which, because of their repeated use, crystallized into specific shapes and can be regarded as a fixed variety of diminution. The small size of these formulae contributes to their individuality; consequently they can be named and be indicated by sign. (Smallness is used here in the sense of a limited number of pitches involved, as well as their short duration.)<sup>21</sup> The sixteenth century referred to these ornamental formulae as mordant (murdant), tremolo and by other names, but in general we may call them graces or ornaments, even though these terms did not exist in the sixteenth century. These stereotyped or specific ornaments are applied to single notes, as opposed to the passaggi (diminutions), which are longer figuration patterns, in effect melodic variation, which substitute the actual notes of a melody. A specific ornament, however, though usually 'small', may sometimes also be 'large', in the sense of a greater number of pitches involved. Similarly, passaggi may occasionally involve only a few pitches, although on the whole they tend to be 'large'. These factors compound the difficulties of classification, for although they are separable, they are also related to each other.

The distinction between passaggi and graces was verbally expressed already in the early sixteenth century, when Martin Agricola wrote that other instrumentalists should decorate their performances the way organists do, i.e. with Coloratur (passaggi)

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<sup>21</sup> For a discussion of 'small' and 'large' ornaments, see F. Neumann, Ornamentation in Baroque and Post-Baroque Music (New Jersey: Princeton University Press, 1978), p.7.

as well as Mordanten (graces).<sup>22</sup> Ganassi's treatise is devoted almost entirely to passaggi: numerous examples for the embellishment of intervals and cadences are given, including 175 examples of the latter on a six-note theme. He makes no clear distinction between passaggi and graces, for the way he describes them implies that he regarded the graces as an elegant expression of the art of diminution:<sup>23</sup>

The various kinds of expression that depend on grace, as well as on imitation, are easier to explain, as they depend not only on articulation, but above all on the art of divisions. The simplest ingredient in elegant and graceful playing is the tremolo.

The authors from the middle of the sixteenth century onwards vary greatly in detail and terminology and are at times contradictory. Yet the essential techniques are the same, and latitude must be granted for personal preferences and differences from country to country. Of the sixteenth-century sources the Spanish are the most comprehensible, for they draw a clear distinction between the two categories.

Juan Bermudo, in his Declaración, omits a description of ornaments in his 1549 edition, but includes them in the 1555 expanded edition.<sup>24</sup> In the preface to the former, he remarks:<sup>25</sup>

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<sup>22</sup> Martin Agricola, Musica instrumentalis deutsch (Wittenberg, 1529), quasi-facs. ed. by R. Eitner, Publikation älterer praktischer und theoretischer Musikwerke XX (1896), p.222.

<sup>23</sup> Ganassi, Fontegara, p.87.

<sup>24</sup> Juan Bermudo, Declaración de instrumentos musicales (Ossuna, 1555), facs. ed. by M.S. Kastner, Documenta Musicologica I, vol.11 (Kassel: Bärenreiter, 1957).

<sup>25</sup> Quoted from R. Stevenson, Juan Bermudo (The Hague: Martinus Nijhoff, 1960), pp.14-15.



Neither do I tell how to execute ornaments (redobles), because the fashion of playing them changes every day, and because current methods of performing them cannot be set down in writing.

In the 1555 edition he distinguishes by implication between glosas (i.e. passaggi) and redobles (ornaments), and in fact condemns glosas:<sup>26</sup>

The player, above all things, (ought to) take one piece of advice, which is that, in performing music (on his instrument), he does not pour glosses (on the music), but performs it in the manner notated ... .. Permit yourself a redoble, and so inconspicuous that one hardly is aware (of it).

Diego Ortiz implies a distinction in Tratado de glosas, when he speaks of mixing quiebros amortiguados (muted 'trills') and passos (passages).<sup>27</sup>

Tomás de Sancta Maria, in Arte de Taner Fantasia (1565), devotes a whole chapter to the practice of glosas, complete with copious examples, whilst the specific ornaments (de los redobles y quiebros) are discussed in another chapter.<sup>28</sup> (The former is in Book I, Chapter XXIII, whereas the latter in Book I is erroneously labelled as Chapter XIX.) Sancta Maria divides the specific ornaments into two distinct classes, i.e. redobles and quiebros.

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26 Bermudo, Declaración, fol. 84<sup>v</sup> f.; and in English, Jacobs, Performance, 1:114-116.

27 Diego Ortiz, Tratado de glosas sobre clausulas y otros generos de puntos en la musica de violones (Roma, 1553), facs. ed. by M. Schneider (Kassel: Bärenreiter, 1936), fol. A iv.

28 Tomás de Sancta Maria, Libro Llamado Arte de taner fantasia (Valladolid, 1565), 2 vols., facs. reprint by D. Stevens (Farnborough: Gregg Press, 1972), 1:fols. 58r f., fols. 46<sup>v</sup> f.; and in English, Jacobs, Performance, 1:117-118, 152.



Four Italian authors, Zacconi, Viadana, Cima and Banchieri, also distinguish between accenti e trilli on the one hand and passaggi on the other. Their instructions are all directed at singers. Unfortunately they do not clearly define the terms accenti and trilli, except for stating that they are short ornaments.<sup>29</sup>

In Girolamo Diruta's Il Transilvano Dialogo (1593) and Seconda Parte del Transilvano Dialogo (1609), however, no clear distinction between the two groups is made.<sup>30</sup> In Part One of the Transilvano, groppi and tremoli are described in detail in a section which deals with diminutions. In Part Two, the first book is devoted to the art of intabulation by means of diminutions, and five kinds of diminutions are described with which to intabulate: minuta, gropo, tremolo, accento and clamatione.<sup>31</sup> By their nature, the first two are in the category of passaggi, and the last three are specific ornaments. The tremoli and groppi are further singled out as diminutions which can be used under special circumstances, where only sparing use of diminution is desired:<sup>32</sup>

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29 Neumann, Ornamentation, pp.21-26.

30 Girolamo Diruta, Il Transilvano Dialogo Sopra Il Vero Modo di Sonar Organi (Venice: G. Vincenti, 1593), and Seconda Parte Del Transilvano Dialogo (Venice, G. Vincenti, 1609), facs. reprint in Bibliotheca Musica Bononiensis, Serie 2, no.132 (Bologna: Forni, 1969); English translation by E.J. Soehnlein, Diruta on the Art of Keyboard-playing: an Annotated Translation and Transcription of 'Il Transilvano' (Ph.D.dissertation, University of Michigan, 1975).

31 Soehnlein, Transilvano, pp.153f., pp.249f.

32 Ibid., p.257.



The first canzona is in quick notes and has stretto imitations. One who would want to embellish it would only take away from its charm. You cannot use any diminutions except tremoli and groppi. The other canzona I shall partition and intabulate with diminutions of every description so that you can see on which notes they are done.

If one compares this with Bermudo's statement above, a similarity emerges: specific ornaments such as the redoble, tremolo and grosso are sometimes admitted where glosas or passaggi are undesirable, and as such can be classified separately.

The nineteenth chapter of Praetorius' Syntagma Musicum vol.3 (1619), is devoted to a codification of the elements that comprise diminutio. He was influenced by the Italian treatises, as he readily concedes, declaring that the greatest aids in his study had been Le Nuove Musice of Caccini and the Regole of Bovicelli.<sup>33</sup> To Praetorius, the elements of diminutio are diminutiones, modulos, coloratura, accentus, trilli, groppi and passaggi, as the following excerpt attests:<sup>34</sup>

He must know how to handle Accentus artistically and with taste, and to introduce Coloratura (called Passaggi by the Italians) ... how to express the Accentus and affectus; also the Trillern, Gruppen and other Coloraturen. A singer must know the science of making Diminutiones (generally called Coloratura) ...

Praetorius then proceeds to divide diminutions into two classes, those that move by step, and those that move by steps and leaps:<sup>35</sup>

There are different kinds and styles of diminutiones: those that move by step, as Accentus, Tremolo, Groppi and Tirata. The Diminutiones which do not move by step are Trillo and Passaggi.

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33 Praetorius, Syntagma, p.230.

34 Ibid., pp.229, 230, 232.

35 Ibid., pp.232, 237.



The term passaggi is further defined as:<sup>36</sup>

... rapid runs made both by step and skip filling up any interval, which ascend as well as descend. They are placed and made on notes of longer values.

Praetorius is the only author to classify diminutiones in this manner, i.e. by their intervallic structure. (Yet there is a small contradiction, as there are a few examples of Accentus which move by step as well as by leap.) The term passaggi is used by Praetorius for a special category, namely for passages that are not easily classifiable, as he gives no notated examples. Praetorius' classification is in broader terms much the same as those of most sixteenth-century authors, although he is more specific. The accenti, tremoli, gropi and tirate are specific in shape, codified by name and placed on one note, whereas the passaggi are of non-specific shape, are all codified under one name, and are placed on longer note values. Moreover, they move by step as well as by leap, thus according with the definition of 'large' ornaments.

### 1.3 The Earliest Records of Ornaments

The earliest description of an ornament or ornamental formula dates back to the thirteenth century. In Tractatus de Musica Hieronymus de Moravia describes an ornament for performance on the organ under the term flos harmonicus, unfortunately without notating examples. It is performed by depressing or holding the main note for a length of time, while rapidly repeating the upper auxiliary.<sup>37</sup> Three different styles of performance are mentioned, the differences concerning the distance between the held note and the upper note, and the speed of execution. The first type, flos longus, is made with the upper semitone added in slow reiteration.

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<sup>36</sup> Praetorius, Syntagma, p.240.

<sup>37</sup> E. de Coussemaker, ed., Scriptorum de Musica Medii Aevi I (Hildesheim: Georg Olms, 1963), p.91.

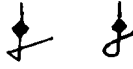





The flos subitus, with the same semitone, commences slowly, but has the reiteration accelerating to a rapid tempo. The third type, flos apertus, is performed with the upper whole tone and is moderately fast. The term for the reiteration is vibratione; it suggests the repeated striking and release of the ornamental note. The performance may approximate this:


Ex.1.8



Some of the earliest ornaments indicated by sign are found in the German organ tablatures of the fifteenth and early sixteenth centuries, assuming that one disregards the circles above notes in the Robertsbridge Codex (c.1320), since there is no evidence that these were intended as ornaments. The ornaments of the German organists are indicated by a sign consisting of a little loop attached to the lower stem of the note: . A compound sign for the chromatically altered ornament appears thus: . This sign occurs in great numbers in both the Fundamentum Organisandi of Conrad Paumann (1452) and the Buxheim Organ Book (c.1470).<sup>38</sup> In these sources, the sign appears mostly in connection with two melodic formulae:

Ex.1.9



A similar sign  is described as mordente in Buchner's Fundamentum (c.1520). This is a treatise on composition as well as a collection of organ pieces.<sup>39</sup> Buchner describes it thus:<sup>40</sup>

<sup>38</sup> B.A. Wallner, ed., Das Buxheimer Orgelbuch, in Das Erbe deutscher Musik, vols. 37-39 (Kassel: Bärenreiter, 1958-1959).

<sup>39</sup> Hans Buchner, Fundamentum, ed. by J.H. Schmidt, in Das Erbe deutscher Musik, vol.55 (Frankfurt: Henry Litolf Verlag, 1974).

<sup>40</sup> Buchner, Fundamentum, pp.12-13.

In this example you see certain notes on the staff which have a downward line; some of these notes have a curved tail, like this: ♪, other are crossed in this manner: ‡; keep in mind that the notes with curved lines are called mordentes and observe that always two notes have to be struck simultaneously, namely the one marked by the curved line with the middle finger, its lower neighbour with the index finger which, however, must be quickly repeated. The oblique crossed line indicates its raising by a semitone.

In modern notation, this description approximately corresponds to the following:

Ex.1.10



This ornament is found in the context of the two melodic formulae above, and also on single notes of longer duration. Sixteenth-century variants of the term mordente are mordant (Ammerbach, 1571) and murdant (Kotter). Kotter gives no verbal description, but includes it in his Fundamentum (c.1513) as murdantes, thus:<sup>41</sup> ♪ ♪

Symbols indicating ornaments are rare outside Germany. In Italian lute music, symbols occur in the Capirola Lute Book; Vitali, who copied this in 1517, added ornament signs to the music and gave a description of how they ought to be played at the beginning of the book. Dotted red numbers are used to indicate that the upper auxiliary must be repeated, and two dots above the fret number (called tremolo sun tasto sollo - a tremolo on one note) imply an alternation between the first fret and the open string, which amounts to using the lower auxiliary.<sup>42</sup> In the second edition of the

<sup>41</sup> Universitätsbibliothek Basel, MS. F ix 22; and K. Kotterba, 'Johannes Kotter', Musik in Geschichte und Gegenwart, ed. by F. Blume, 14 vols. (Kassel: Bärenreiter, 1949-1968), 7:1651.


<sup>42</sup> Brown, Embellishing, p.5; and D. Poulton, 'Graces of Play in Renaissance Lute Music', Early Music, vol.3, no.2 (1975), p.108.

Intavolatura di Lauto dell Divino Francesco da Milano et dell' eccellente Pietro Paolo Borrono (1548), signs are added, together with performance instructions. The signs consist of two half circles, or parentheses ( ) which isolate the two notes of the tremolo. The execution is described as a short alternation of the main note with its upper auxiliary.<sup>43</sup>

Another Italian source, Ganassi's Fontegara (1535), supplies a table of tremoli, with fingering for almost every note on the recorder. The tremolo, indicated by 't', can be made with a semitone, a whole tone or a third:<sup>44</sup>

The tremolo in thirds is a lively ornament; the interval may be larger or smaller than a third. The semitone tremolo, on the contrary, is a gentle and charming ornament;... Between these two, as a medium ornament, is the tremolo of a whole tone ...

In addition, the lively ornaments are marked with 'v' (vivace), and the gentle ones 's' (suave). No precise performance indication is given, but the chart of fingerings suggests that all begin with the main note, and alternate with the upper semitone, or whole tone or third.

In the Polish manuscript, Tabulatura De Lyublyn Canonic(orum) Regularium de Crasnyk 1540, the sign  is used.<sup>45</sup> It could have the same meaning as that of Buchner. Two other signs appearing here are:

Ex.1.11



43 Poulton, Early Music, p.108.

44 Ganassi, Fontegara, p.87.

45 J.R. White, ed., Johannes of Lublin Tablature of Keyboard Music, Corpus of Early Keyboard Music VI (1967).



Parallel passages which have been written out suggest that their interpretation is:<sup>46</sup>

Ex.1.12



The main characteristic of these ornaments is that they are graces of the alternating type; from this evidence it seems that ornaments such as the slide and appoggiatura (non-alternating) were not yet in use. The other feature emerging from the ornaments just described is the nature of the pitches involved in the melodic shape of each ornament. Except for Ganassi, who also gives examples using the upper third, the main note and upper auxiliary, or the main note and its lower auxiliary, are the constants. The German sources mention the lower auxiliary only. Although the Italian sources employ both the upper and the lower auxiliary, the latter appears in only one source of lute music. It would seem that the ornament with the upper note was favoured, as, indeed, Hieronymus de Moravia had described it already in the thirteenth century. These early tremoli or mordentes may thus be regarded as the first individual ornaments in the literature. But for those discussed in 1.4, the only remaining ornament signs derive from English sources.

#### 1.4 Ornamentation Practice on the Continent Contemporary with the FVB

The following account presents the commonly used standardized ornaments, with the emphasis on those related to keyboard performance. The information is derived primarily from theoretical sources and from music of the period in which these ornaments are found in written-out form. Certain melodic figures which occur so often as to be regarded as ornaments, are also included. In Spanish music, ornament signs are virtually absent, and in

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<sup>46</sup> White, CEKM VI, p.viii.



Italian music they are used with restraint. The ornaments were intended to be played spontaneously by the performer, a fact which must account for the numerous treatises written on the subject. The cadential ornamentation is almost always written out as part of the musical text, while ornaments such as the tremolo are only occasionally written out in full. The most detailed terminology and descriptions are provided by Tomás de Sancta Maria (1565), Girolamo Diruta (1593, 1609) and Michael Praetorius (1619). Sancta Maria represents the Spanish practice, and Diruta and Praetorius the Italian. There is no surviving French documentation for keyboard performance practice of this period, and apart from Praetorius, few details concerning German ornamentation.

One should note that the information in the treatises may reflect personal preferences of the author and therefore cannot be accepted unconditionally as representative of the general practice of the period or even a particular country. The ornaments described may also have been modified by musicians who varied them or invented others. The reverse may also be true, as the treatises often reflect the more standardized ornaments and general practice, as opposed to the individual wishes of composers or performers.<sup>47</sup> The reliability of at least Diruta and Sancta Maria is undisputable, as they were known to famous musicians of the time. Sancta Maria's treatise was examined and approved by the great blind Spanish organist and composer Antonio de Cabezón and his brother Juan. Although published only in 1565, it had already been ready for publication by 1557.<sup>48</sup> Juan Bermudo's Declaración (1555) has a preface to the Libro quinto in the form of a letter of recommendation by Cristóbal Morales, a contemporary composer of high rank. In it he praises Bermudo for a text which parallels the practice.<sup>49</sup>

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47 For a discussion, see Soehnlein, Transilvano, pp.13-28; and Neumann, Ornamentation, pp.9-15.

48 W.E. Hultberg, Sancta Maria's Libro Llamado Arte de taner fantasia: a Critical Evaluation, 2 vols. (Ph.D. dissertation, University of Southern California, 1964), 1:17,19.

49 J. Bermudo, Declaración, n.p.



Diruta's treatise is introduced by his teacher, Claudio Merulo, whose method Diruta admits to be propagating. Merulo states:<sup>50</sup>

... he has treated in an entirely skillful and first-rate manner, everything that one must know in the realm of practice ... every diligent student who values understanding the order of diminutions with which my intabulations deal should strive to have the abovementioned book.

Il Transilvano codifies the culmination of the Venetian school of playing as represented by Merulo, the Gabriellis and Padovano, and it is also the first method in Italy written specifically for keyboard players, whereas the Spanish counterparts address a variety of instrumentalists such as keyboard, harp, guitar and vihuela. Diruta's ornaments were, in fact, still employed by Praetorius in 1619. (Even though he does not acknowledge the source, the tremoli and gropi of Praetorius are the same as those of Diruta.) Praetorius further describes ornaments in terms of both keyboard and vocal performance. Correa de Arauxo's Facultad orgánica (1636) is mentioned here to complete the overall view of the Spanish practice, although he may not have had any influence on the English Virginalists.

#### 1.4.1 Tremolo

A tremolo consists usually of two or more alternations of the principal note with the note above, and sometimes of the principal note with the note below. Diruta condemns the use of the lower note: according to him only organists play it in that manner, whereas on the viola, violin, lute and other instruments the upper note is used.<sup>51</sup> Praetorius also recognizes two forms of the tremolo, but his condemnation of the lower note tremolo is less harsh:<sup>52</sup>

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<sup>50</sup> Soehnlein, Transilvano, pp.96-97.

<sup>51</sup> Diruta, Transilvano, fol.10; Soehnlein, Transilvano, p.157.

<sup>52</sup> Praetorius, Syntagma, p.235.

Tremolo, or Tremulo: is nothing other than a quivering of the voice over a note. Organists call it Mordanten or Moderanten.

Ex.1.13



'This tremolo is not as good as the rising one'.

Praetorius' statement that the German organists equate the tremolo with the mordant, had been preceded by Ammerbach's Orgel oder Instrument Tabulatur (1571), which declares that mordanten are performed by alternating a note with its neighbour.<sup>53</sup> The term trillo existed at the same time and was applied to both alternation and tone repetition. The alternating type is identical to the tremolo, and is called trillo by keyboard composers such as Valente, Frescobaldi and Trabaci. The trillo made by tone repetition is described by Caccini as a vocal ornament, a controlled vibrato of the throat on one note, gathering speed towards the end:<sup>54</sup>

Ex.1.14



Conforto's pattern for the trillo is a combination of both types:<sup>55</sup>

Ex.1.15



Diruta gives the most detailed account of how and when tremoli should be performed. They must be played 'with lightness and agility', and they take up half the value of the note upon which they are made. In order to perform them successfully two things must be borne in mind: the rapidity with which the

<sup>53</sup> Elias Nicolaus Ammerbach, Orgel oder Instrument Tabulatur (Leipzig, 1571), facs. in J. Rodgers, Early Keyboard Fingering (D.M.A. thesis, University of Oregon, 1971), p.196.

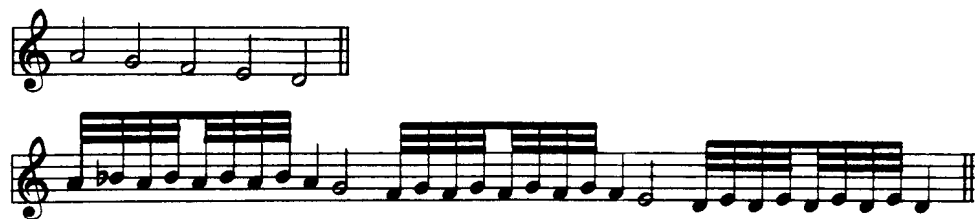
<sup>54</sup> Caccini, Nuove Musiche, fol. B ii.

<sup>55</sup> Conforto, Breve, p.25.

notes are played, and the name, tremolo.<sup>56</sup> According to the translator, Soehnlein, the latter remark may well imply a certain freedom of execution, as the verb tremolare means to tremble or quiver, which implies irregularity.<sup>57</sup> Tremoli ought to be used to begin a ricercare or canzona, 'or wherever else you wish'. Where the one hand plays a single part, and the other has chords, the single part must be adorned with tremoli. Diruta also remarks that 'with due regard for convenience and the discretion of organists ... the tremolo, executed with lightness and at the right moment, can adorn all of the playing and gracefully bring the harmony to life.'<sup>58</sup> These remarks imply that tremoli were the most frequently used ornaments of the time, their function being simply to add elegance to the music.

Tremoli are made on minims, crotchets and quavers, but not on semiquavers, because of their great velocity. Diruta's examples occur on ascending, but more frequently, descending notes:<sup>59</sup>

Ex.1.16 Tremoli on minims



Diruta's fingering for tremoli in the right hand is 2 3 and 3 4, and in the left hand they are played with 3 2 and 2 1:<sup>60</sup>

Ex.1.17



The custom of indicating tremoli by sign was still rare at the end of the sixteenth century. In vocal music Bovicelli (1594)

<sup>56</sup> Diruta, Transilvano, fols.10,10<sup>V</sup>; Soehnlein, pp.157-158.

<sup>57</sup> Soehnlein, Transilvano, p.158.

<sup>58</sup> Diruta, Transilvano, fol.10<sup>V</sup>; Soehnlein, p.159.

<sup>59</sup> Diruta, Transilvano, fol.10<sup>V</sup>; Soehnlein, p.160.

<sup>60</sup> Soehnlein, Transilvano, pp.157, 159.





used the symbol  $\wedge$  above notes to denote a tremolo,<sup>61</sup> while Cavalieri (1600) employed 't' for a trillo of the alternating variety:<sup>62</sup>

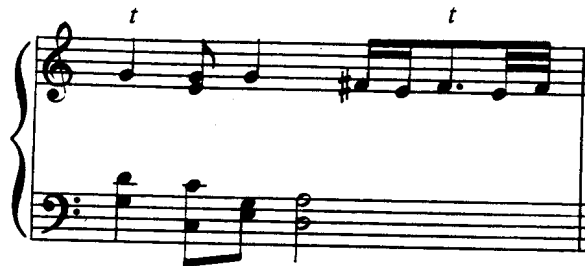
Ex.1.18



In keyboard music Valente was the first to use 't' for a trillo:<sup>63</sup>

... it is necessary in some cadences to apply the trillo, for clarity, you can see how in the example ... The t above the g in the right hand represents nothing but that the said key requires the trillo ....:

Ex.1.19



This direction to play the trillo in a cadence is an exception among sixteenth-century writers. Examples of tremoli with a suffix at cadences (outside the Neapolitan school), are found in the keyboard compositions of Erbach and Pasquini.<sup>64</sup>

As Valente gives no notated example of this trillo, one cannot be certain whether he expected the same pattern in cadences as elsewhere, for as a rule he writes out the cadential embellishments in the typical groppo pattern.<sup>65</sup> It is therefore

61 Bovicelli, Regole, p.13.

62 Neumann, Ornamentation, p.288.

63 Antonio Valente, Intavolatura de cimbalo (Naples, 1576), modern ed. by C. Jacobs (Oxford: Clarendon Press, 1973), p.8.

64 Christian Erbach, Collected Keyboard Compositions, ed. by C.G. Rayner, Corpus of Early Keyboard Music XXXVI, no.1 (1971), p.45; and Ercole Pasquini, Collected Keyboard Works, ed. by W.R. Shindle, Corpus of Early Keyboard Music XII (1966), pp.31,33,42.

65 See Ex.1.27.



likely that he required the trillo starting on the main note, in cadences whenever he indicates it. These 't'-signs in cadences appear in the same context as those written out, as can be seen in this example:<sup>66</sup>

Ex.1.20 Valente, Ricercar in Mode 1, b. 26,65,115



Valente employs the 't' in many contexts and on note values ranging from  $\frac{1}{2}$  to  $\frac{1}{4}$ , also occasionally on  $\frac{1}{8}$ . The first theme of a ricercare is often embellished with 't'-signs, which is in accordance with Diruta's directions.

A later publication connected with the Neapolitan school, Ascanio Mayone's Secondo Libro di Diversi Capricci (1609), gives many written-out examples of groppi commencing on both the upper and the main note, as well as trilli, in cadences.<sup>67</sup> Many examples of the sign 'tr' appear in Neapolitan keyboard music between 1580 and 1600.<sup>68</sup> A later source also introduces the 't' for trillo, which is in fact an alternating tremolo: Trabaci's Ricercate (Napels, 1603). In the Secondo libro (1615), Trabaci terms a trillo with suffix a trillo doppio, and illustrates it thus ('t<sub>+</sub>):<sup>69</sup>

<sup>66</sup> Valente, Intavolatura, pp.22-27.

<sup>67</sup> Ascanio Mayone, Secondo Libro di Diversi Capricci per Sonare (Napels, 1609), ed. by M.S. Kastner (Paris: Ed. Musicale de la Schola Cantorum, 1964).

<sup>68</sup> R. Jackson, ed., Neapolitan Keyboard Composers circa 1600, Corpus of Early Keyboard Music XXIV (1967).

<sup>69</sup> Giovanni Maria Trabaci, Ricercate, canzone Francese, capricci, canti fermi, book 1 (Napels, 1603), Secondo libro de ricercare (1615); in Neumann, Ornamentation, p.291.

## Ex. 1.21



The trillo doppio strengthens the above interpretation of Valente's trillo in cadences, whereas the 't<sub>+</sub>' is a manifestation of the contemporary composer's freedom to invent new signs and ornaments. The trillo in cadences was most likely an innovation of the Neapolitan keyboard school; similar evidence is lacking in the Venetian school. Also, the latter uses the term tremolo and never trillo.

 1.4.2 Tremoletto

The tremoletto is a short tremolo which consists of one, or sometimes two, alternations of the principal note and its upper neighbour. It is encountered in both dactylic (—♩♩♩) or more typically, anapestic (♩♩♩) form. Praetorius says that it is 'better suited to the organ and harpsichord than to the human voice.'<sup>70</sup> Tremoletti are made on crotchets and quavers, on notes which ascend or descend by step. Diruta observes that they are particularly associated with descending passagework which moves by step, and as such can fall on, before, after or even between the notes which they decorate. He nevertheless warns that these latter tremoletti are more complex than the others and should therefore not be attempted by the inexperienced player:<sup>71</sup>

<sup>70</sup> Praetorius, Syntagma, p.235.

<sup>71</sup> Soehnlein, Transilvano, pp.161-163. These anticipated tremoletti occur frequently in Merulo's Canzoni.

## Ex. 1.22



Diruta favours the use of the tremoletto with the alternating upper note; he gives no example employing the lower note. Similarly, Praetorius illustrates only upper-note tremoletti, using them in both ascending and descending contexts, and in anapestic (♩♩♩) and dactylic (♩♩♩) rhythms:<sup>72</sup>

## Ex. 1.23



These dactylic tremoli and tremoletti appear written out in both Italian and Spanish sources as part of the keyboard figuration. In Merulo's Canzoni, the tremoletti occur in both ascending and descending passages, although the latter occur more frequently.<sup>73</sup>

There is considerable latitude regarding the fingering of tremoletti. Diruta says:<sup>74</sup>

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<sup>72</sup> Praetorius, Syntagma, p.235.

<sup>73</sup> C.M. McDermott, The 'Canzoni d'Intavolatura' of Claudio Merulo (Ph.D. dissertation, University of California, Berkeley, 1979). For examples of tremoli in ascending passages see pp.30,33,46,49,50,72,90,102,126.

<sup>74</sup> Soehnlein, Transilvano, p.162.



When you come to a tremoletto on any note, you must do it with the finger that falls on it ... because with these kind of tremoli, you need not follow the rule for good or bad fingers.

This deviation from the rule of 'good' and 'bad fingers' in the case of tremoletti is justified by the speed of the smaller note values, a fact substantiated by Finck, Ganassi and Ortiz in their treatises.<sup>75</sup> Diruta nevertheless remarks later that 2 3 in the right hand is better on 'good' notes, and 3 4 on the 'bad' notes. When the tremoletto falls on a syncopated note or two repeated notes, one should choose the fingers more convenient for continuing the passage.<sup>76</sup>

#### 1.4.3 Mordent

The mordent, in its commonest form, consists of an alternation between the principal note and its lower neighbour. It was a favoured ornament of the early sixteenth-century German organists, who indicated it by sign and called it mordant.<sup>77</sup> The later sixteenth century presents a confused picture of this ornament, as the sources do not always agree.

Two types occur:

- (i) The short mordent, which is used in ascending passages on short note values.
- (ii) The mordent which can occur on any note value and may be long or short, and which is not bound to any specific context.

Neither of these mordents is distinguished by name from its upper-note counterpart, the tremolo, except by Sancta Maria, who calls the rising and descending type quiebro sencillo.

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<sup>75</sup> Soehnlein, Transilvano, p.207.

<sup>76</sup> Ibid., p.164.

<sup>77</sup> Apart from Buchner's explanation, little is known about its interpretation.

Praetorius terms the second type tremulus descendens. Ammerbach's description of the mordant in 1571 applies to the first type:<sup>78</sup>

Mordanten are done by alternating a note with its neighbour, and if properly used give grace and sweetness to the song. They are of two kinds, rising and falling ...

Ex.1.24



In Spain, Sancta Maria describes it identically, giving it the name quiebro sencillo, to distinguish it from the longer reiterated quiebro. Hernando de Cabezón calls the same ornaments quiebro, but does not elaborate on the context in which they should be used.<sup>79</sup> The Italian sources indicate a dislike for the tremolo with lower auxiliary, which, according to Diruta, was reserved for organ music.<sup>80</sup> The dual nature of the tremolo is confirmed by Praetorius, who also draws attention to the fact that it is known as mordant to the Germans. At the same time he echoes Diruta's dislike of the tremulus descendens. In accordance with their comments, both Diruta and Praetorius consistently give examples employing only the tremulus ascendens in both ascending and descending passages.<sup>81</sup> Praetorius' tremulus descendens can be seen as the first clear example of the mordent as an independent ornament not connected

<sup>78</sup> Rodgers, Fingering, p.196.

<sup>79</sup> See 1.4.10.

<sup>80</sup> See 1.4.1 and 1.4.2.

<sup>81</sup> An exception occurs where Diruta writes a mordent in a descending passage: see Soehnlein, Transilvano, p.162. In the Toccata dell'undecimo et duodecimo tono, Diruta writes out one mordent in an ascending passage (b.3), and two in a descending passage (b.23,25); see L. Torchi, ed., L'arte Musicale in Italia, vol.3 (Milan: Ricordi, 1897), pp.167,169.

with either an ascending or descending context.<sup>82</sup> The only other sources which describe the mordent thus are Bermudo, who calls it a redoble, though he uses one name for both the upper and lower note type, and Correa, who calls it a simple quiebro. Significantly, Bermudo states that this ornament was not approved by some players, who regarded it as 'ungraceful', thus echoing Praetorius' sentiments. In Merulo's Canzoni d'Intavolatura for organ the mordent makes rare appearances, usually in ascending passages, and in one example the opening note of a canzona is embellished with a mordent.<sup>83</sup> Correa also advises that the simple quiebro be used at the beginning of works.<sup>84</sup> As a vocal ornament, it appears in Cavalieri's table of 1600 as a monachina:<sup>85</sup>

Ex.1.25



Mordents are also found in Bovicelli's Regole.<sup>86</sup>

#### 1.4.4 Groppo

The groppo, first labelled thus by Dalla Casa in 1584, stems from the diminution of original note values. It is used 'in cadences and formal closes and is to be played more crisply than the tremolo'.<sup>87</sup> Its typical function is structural, as

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<sup>82</sup> I.e., disregarding the early sixteenth-century German mordant.

<sup>83</sup> See McDermott, Canzoni, p.14 b.7, p.31 b.9, p.51 b.4, p.66 b.4, p.6 b.1.

<sup>84</sup> See 1.4.10.

<sup>85</sup> Neumann, Ornamentation, p.24.

<sup>86</sup> Bovicelli, Regole, pp.17,43,65,67,80,81. See Pasquini, CEKM XII, p.30, where a mordent on a long note value appears.

<sup>87</sup> Praetorius, Syntagma, p.236.



it ornamentally resolves dissonance as an embellishment of the characteristic progression of the discant close:<sup>88</sup>

Ex.1.26



The typical groppo consists of two or more alternations of the suspended dissonance<sup>(i)</sup> and its resolution (the subsemitone).<sup>(ii)</sup> It reaches the final note via a two-note figure by first touching the note below the note of resolution<sup>(iii)</sup>:

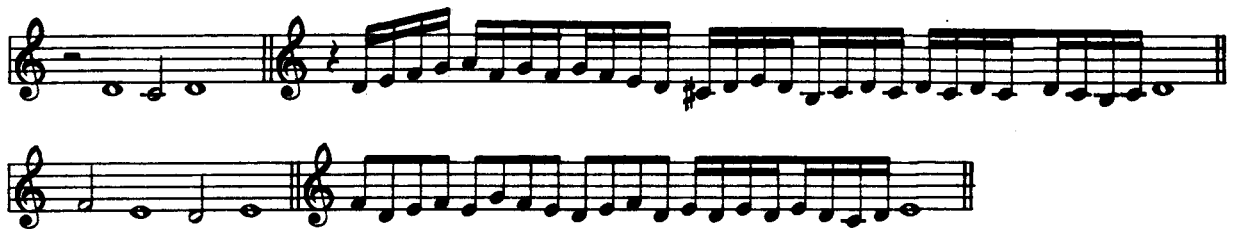
Ex.1.27



The cadential groppo is made with quavers, semiquavers, demisemiquavers or mixed values, and is often introduced by an elaborate passaggio:<sup>89</sup>

Ex.1.28

Groppi in Accadentia



The groppo sometimes lacks an upper-note start, and is then prepared by the subsemitone. All of Praetorius' examples are prepared in this manner, whereas Diruta uses both forms:<sup>90</sup>

88 John Dowland, Andreas Ornithoparcus his Micrologus, or introduction containing the art of singing (London, 1609), facs. reprint (New York: Da Capo, 1969), p.84. See also 4.2.2.

89 Diruta, Transilvano, fols. 9<sup>v</sup>-10.

90 Ibid., fol. 9<sup>v</sup>.



## Ex.1.29



Both forms are also encountered in the treatises of Bovicelli and Dalla Casa. Praetorius' remark that groppi ought to be played more crisply ('Scherffer') than tremoli, did not pass unchallenged at the time. Dalla Casa implies the existence of unmeasured groppi where he gives an example of a groppo battuto (measured groppo),<sup>91</sup> and Zacconi states that the two notes of a groppo may be repeated as often as time allows.<sup>92</sup> Unmeasured groppi could possibly begin slowly, then accelerate, as Praetorius' example suggests:<sup>93</sup>

## Ex.1.30



Cavalieri's groppolo suggests unmeasured performance, as there are nine semiquavers to the value of a minim. Indeed, it resembles a tremolo with an added suffix rather than an upper-lower note alternation design:<sup>94</sup>

## Ex.1.31



Diruta's fingering for the cadence groppi is: right hand 4 3, left hand 2 3 or 1 2, whichever is the more convenient.<sup>95</sup>

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<sup>91</sup> Dalla Casa, Il vero modo, 1:6-7.

<sup>92</sup> Lodovico Zacconi, Prattica di musica (Venice, 1592), 2 vols., 1:fol. 62v; and in F. Chrysander, 'Lodovico Zacconi als Lehrer des Kunstgesanges', Vierteljahrsschrift für Musikwissenschaft, vol.7 (1891), p.361.

<sup>93</sup> Praetorius, Syntagma, p.236.

<sup>94</sup> Neumann, Ornamentation, p.288.

<sup>95</sup> Soehnlein, Transilvano, p.156.

The grosso was not only employed in cadences. Diruta writes: 'they are found in different ways ... ascending, descending.'<sup>96</sup> This is also observed from the examples where the cadence groppi are labelled Groppi in Accadentia, while the others have no designation. Judging from his examples, consisting of crotchets, quavers and semiquavers, these groppi have a different function to those used in cadences. They are actually free diminutions which fill up intervals, and their tempo increases from slow to fast. Such designs stand midway between the typical grosso-figures and the freer diminutions (passaggi), and they usually include some element of alternation:


Ex.1.32



A third type of grosso, of which the last two notes ascend, is also demonstrated by Bovicelli:<sup>97</sup>

Ex.1.33



Conforto calls a similar figure grosso di sotto.<sup>98</sup> This figure is used extensively to fill in intervals, often rhythmically varied , especially by Merulo and Gabrieli.<sup>99</sup>

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<sup>96</sup> Soehnlein, Transilvano, p.154.

<sup>97</sup> Bovicelli, Regole, pp.12, 23.

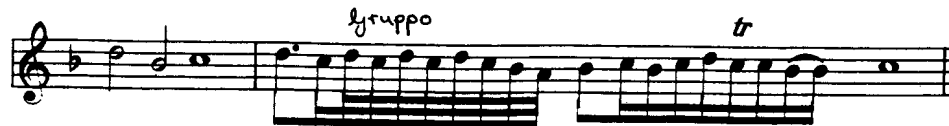
<sup>98</sup> Conforto, Breve, p.25.

<sup>99</sup> For examples by Merulo, see McDermott, Canzoni, pp.49,66, 75,76,82,103; and by Gabrieli, see Torchi, L'arte, pp.61,67,77.

1.4.5 Groppetto

An important variant of the gropo, in which the last two notes descend, will be called groppetto in this study, after Bovicelli.<sup>100</sup> Praetorius calls it gruppo, and gives an example in Syntagma:<sup>101</sup>

Ex.1.34



Caccini likewise calls it gruppo.<sup>102</sup> This type of gropo often fills in the interval of either a third, fourth or fifth. Occasionally it appears as a diminutio of a tirata (here a" descending to f<sup>#</sup> ), especially in the passaggi preceding a gropo:<sup>103</sup>

Ex.1.35



The groppetto may also immediately precede an ordinary cadential gropo, so that they are distinguished from each other with difficulty:

Ex.1.36



Schwandt sees it as an ornamented tirata:<sup>104</sup>

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- 100 Bovicelli, Regole, p.12.  
101 Praetorius, Syntagma, p.239.  
102 Caccini, Nuove musiche, fol.c.  
103 Diruta, Transilvano, fol.10.  
104 Schwandt, Clausula, p.28.

Ex.1.37



1.4.6 Tirata

Tirate are 'long and rapid little runs up or down the keys, and are conjunct.'<sup>105</sup> They are usually made of quavers or shorter note values, and consist of stepwise ascending or descending notes in diatonic succession. Tirate are played as rapidly and crisply as possible: 'The faster and crisper they are, the better':<sup>106</sup>

Ex.1.38



They serve to connect the ends of phrases, and fill up the time of longer notes, link up disjunct notes and expand close intervals, for example, converting a second into a ninth:

Ex.1.39



Because the tirata may descend by step, it often becomes the model upon which tremoletti are made:<sup>107</sup>

Ex.1.40




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105 Praetorius, Syntagma, p.236.

106 Ibid.

107 Soehnlein, Transilvano, p.161.

This is confirmed by Diruta, who declares:<sup>108</sup> 'Signor Claudio introduces (tremoletti) into his tirate in the Canzone alla Francese.'

#### 1.4.7 Accento

The accento is an ornament of variable shape, but never of the alternating type. It can consist of one or more ornamental notes. The sources suggest that the accento was generally associated with vocal music. Praetorius describes it only in terms of vocal performance: 'Accentus results when the notes of the following patterns are drawn into the throat.'<sup>109</sup> It was nevertheless employed as a keyboard ornament, as illustrated and codified by Diruta. He gives no detailed description, but simply explains it as a vehicle with which one can make diminution:<sup>110</sup>

Ex.1.41



From the example above, the basic melodic line upon which this accento is made, can be derived thus:

Ex.1.42



The accento therefore takes the form of an ornamental note occurring between two stressed consonant notes. This same pattern was still in use a century later in French music, where it was

108 Diruta, Transilvano, p.20

109 Praetorius, Syntagma, p.232.

110 Diruta, Seconda Parte, p.13; and in Soehnlein, Transilvano, p.253.

known as an accent:<sup>111</sup>

Ex.1.43



One source which deals with abstract diminution patterns for all kinds of instruments, is Richardo Rogniono's Passaggi per potersi essercitare nel diminuere. It includes an example similar to Diruta's accento:<sup>112</sup>

Ex.1.44



Rogniono offers related patterns which fall between beats and are made with one ornamental note:<sup>113</sup>

Ex.1.45



Zacconi discusses an accento (only in terms of vocal performance) applied to the intervals of a third, fourth and fifth:<sup>114</sup>

111 Etienne Loulié, Éléments ou principes de musique (Paris, 1696), facs. reprint (Genève: Minkoff, 1971), pp.68-69.

112 Richardo Rogniono, Passaggi per potersi essercitare nel diminuere (Venice, 1592), Part II: Il vero modo di diminuere, pp.17-18; and Neumann, Ornamentation, p.97.

113 Rogniono, Il vero modo, pp.17, 20, 22.

114 Zacconi, Prattica, 1:fol.56r.

## Ex.1.46



Two other accento-type ornaments discussed in terms of vocal performance are Cavalieri's Zimbalo (1600) and Caccini's Ribattuta di gola (1601), which are identical:<sup>115</sup>

## Ex.1.47



As mentioned earlier, accento was used by authors such as Zaccconi and Viadana as a general term for a variety of small ornaments, to distinguish them from passaggi. These accenti assume variable shapes and may consist of one to four or five notes. Praetorius illustrates such accenti which embellish the unison, as well as the intervals of the second, third, fourth and fifth, both ascending and descending. His examples, taken from Bovicelli's tables of interval diminutions, show both onbeat and inter-beat designs:<sup>116</sup>

## Ex.1.48



Banchieri offers a pattern related to (a) which is called accenti.<sup>117</sup> Bovicelli is the earliest theoretical source

115 H. Goldschmidt, Die Lehre von der vokalen Ornamentik, 2 vols. (Charlottenburg: Lehnsten, 1907), 1: Anhang B, p.6.

116 Praetorius, Syntagma, pp.232-234.

117 See Ex.1.52.

to introduce the single-note, onbeat accento. Nothing comparable can be found in contemporary treatises:<sup>118</sup>

Ex.1.49



Bovicelli's examples appear only in stepwise ascending passages, not in descending ones, nor in intervals larger than the third. The onbeat accento is the forerunner of what was to become the Baroque appoggiatura, as its function differs from that of other accenti, and indeed other Renaissance ornaments, in that it has an effect on the harmony. This development had its roots in the relationship between words and music - both Zacconi and Bovicelli stress the importance of the text in the choice of an ornament - and this might be an explanation for the absence of a description of such ornaments in terms of instrumental performance during this period.<sup>119</sup>

#### 1.4.8 The Slide

The slide - a term not used in the late Renaissance - consists of two or three ornamental notes rising diatonically from below to the principal note. Diruta is the first to describe it as a keyboard ornament, termed clamatione.<sup>120</sup> It consists of a dotted note on the beat, followed by a shorter note, leading to the main note as in the example:

Ex.1.50



<sup>118</sup> Bovicelli, Regole, pp.17-18, 61, 69, 81.

<sup>119</sup> Neumann, Ornamentation, p.22.

<sup>120</sup> Diruta, Seconda parte, p.13.



In his embellishments of a canzona by Antonio Mortaro, Diruta employs a prebeat slide in addition to the others:<sup>121</sup>

Ex.1.51



In his interval diminutions Banchieri illustrates onbeat slides spanning the interval of a third under the heading accenti:<sup>122</sup>

Ex.1.52



Slide-like patterns are frequently encountered in the interval diminutions of Rogniono. He features such prebeat slides appearing in both rising and falling contexts:<sup>123</sup>

Ex.1.53



Although not known by a specific term, the slide was used extensively as a vocal ornament. Bovicelli presents prebeat and

<sup>121</sup> Diruta, Seconda parte, p.181.

<sup>122</sup> Adriano Banchieri, Cartello overo regole utilissime (Venice, 1601), p.58; and Neumann, Ornamentation, p.212.

<sup>123</sup> Rogniono, Il vero modo, pp.11,25,30.

onbeat slides in dotted rhythm as patterns for the unison and rising second to sixth intervals. The descending fourth shows anticipated slides only, of which one is undotted.<sup>124</sup> Praetorius reproduces Bovicelli's patterns under the term accentus. Bovicelli frequently employs the onbeat dotted slide to begin a piece, the embellished motets in Regole being proof of this.<sup>125</sup> In 1601 Caccini acknowledged this practice as being in common use, but he nevertheless criticized the lengthened first note of the ornament; his personal preference is that the third under the principal note should be played rapidly.<sup>126</sup> Diruta's keyboard intabulation of Mortaro's canzona confirms the vocal practice of starting a piece with a slide. Both the statement of the subject and the entry of the alto are embellished in this manner:<sup>127</sup>

Ex.1.54

Diruta, Intabulation L'Albergona, b.1-2


The second entry with its resulting dissonance apparently did not bother Diruta. Caccini on the other hand, says that the intonazione (his term for slide) often does not suit the harmony and should therefore not be used; clearly this is an indication that Caccini rejected dissonant slides.<sup>128</sup>

<sup>124</sup> Bovicelli, Regole, pp.17-20,24,38,42,47,59.

<sup>125</sup> Ibid., pp.38,42,47,59.

<sup>126</sup> Caccini, Nuove Musiche, fol. B<sup>i</sup>.

<sup>127</sup> Diruta, Seconda parte, p.18; and in Soehnlein, p.263.

<sup>128</sup> Caccini, Nuove Musiche, fol.B<sup>i</sup>.



Slides rarely occur in German and Spanish keyboard sources of the sixteenth century, and then, characteristically, not as ornaments, but as part of the written-out keyboard diminutions. In Italian keyboard literature they appear in dance music. They are, however, not found in the earlier collections which were published at mid-century.<sup>129</sup> Marco Facoli's Il Secondo Libro Intavolatura di Balli (1588) and Giovanni Radino's Il Primo Libro d'intavolatura di Balli d'Arpicordo (1592) are the first Italian sources to contain an abundance of written-out slides. Both books appeared late in the sixteenth century. Here the slides are used indiscriminately on strong and weak beats, and often occur on ascending intervals of a second.<sup>130</sup>

#### 1.4.9 Minuta

Diruta alone mentions the minuta, indicated by the sign 'm'. The only description given is that it 'goes on to the following note by step or by leap'.<sup>131</sup> In its most typical form, it departs from and returns to the note that it embellishes. This is done with even quavers or semiquavers, relying mainly on stepwise motion and up and downward skips of a third. As it retains the original consonances of the notes embellished,

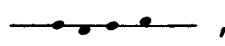
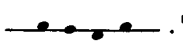
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<sup>129</sup> See Intabolatura Nova di Balli (Venice, 1551), modern ed. by W. Oxenbury and T. Dart (London: Stainer and Bell, 1965); D. Heartz, ed., Keyboard Dances from the Earlier Sixteenth Century, Corpus of Early Keyboard Music VIII (1965); and H. Colin Slim, ed., Keyboard Music at Castell' Arquato, Corpus of Early Keyboard Music XXXVII (1975).

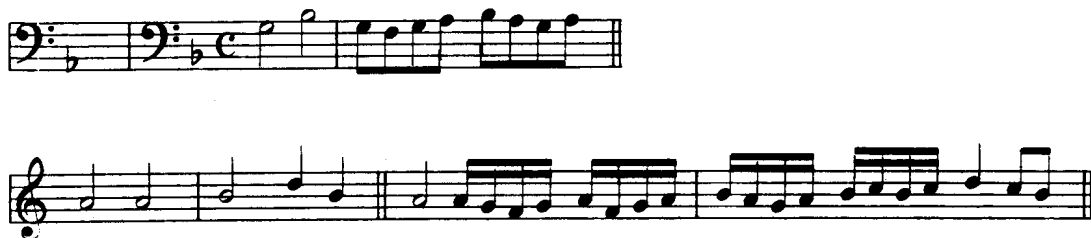
<sup>130</sup> For examples, see Marco Facoli, Collected Works, ed. by W. Apel, Corpus of Early Keyboard Music II (1963), p.1 b.18, p.3 b.65, p.4 b.80,89, p.6 b.119,121, p.7 b.137,152,161, p.8 b.164, p.13 b.5, p.14 b.25, p.15 b.2,3,7, p.20 b.16, 17,20; Giovanni Maria Radino, Il Primo Libro d'Intavolatura di Balli d'Arpicordo (Venice, 1592), modern ed. by S. Ellingworth, Corpus of Early Keyboard Music XXXIII (1968), p.12 b.5,6,7, p.13 b.11,14,25-27,29, p.17 b.26,27,31,36, p.18 b.37,51,59, p.22 b.8; Giovanni Picchi, Collected Keyboard Works, ed. by J. Evan Kreider, Corpus of Early Keyboard Music XXXVIII (1977), p.7 b.84; and McDermott, Canzoni, p.46 b.13, p.58 b.26, p.132 b.41.


<sup>131</sup> Soehnlein, Transvilvano, p.254.



the minuta is an example of strict diminution (il diminuire osservato).<sup>132</sup> It can be classified as a fixed type of diminution, i.e., a passaggio of a more or less stereotyped shape, rather than as an ornament. Diruta's examples clearly illustrate this, as the minuta's continual movement breaks up an entire melodic line, whereas an ornament appears only on one note as occasional decoration. The examples given by Diruta vary slightly, though within the framework of the abovementioned characteristics. The most typical minuta consists of two groups of four notes each. The first group is contoured thus , while the second follows a related pattern: . They are used in ascending intervals of the third, and stepwise rising and descending notes:<sup>133</sup>

Ex.1.55



Two other patterns appear regularly on stepwise ascending notes. The first resembles a dactylic mordant; the second (and more frequent) is always used when the rhythmic values are .<sup>134</sup>

Ex.1.56



132 Soehnlein, Transilvano, p.254.

133 Ibid., pp.263,264.

134 Ibid.



1.4.10 Quiebro and Redoble

Two ornaments related to the tremolo are found in Spanish sources: the quiebro (from quebrar: to break) and redoble (literally 'redouble'). These two are related to each other, but are yet distinct, for the redoble incorporates one note below the main note. Sancta Maria presents the most detailed account of these two basic ornaments:<sup>135</sup>

Ex.1.57

Redoble

Quiebro



According to him there is only one kind of redoble and that is always made with a tone and semitone. It may involve the tone below and the semitone above or vice versa. Redobles which involve two tones are prohibited:<sup>136</sup>

Ex.1.58

Prohibited



The right hand fingering for these is: 32343, and for the left hand 23212/34323. The redoble may be confined to the first four notes, but the appendage of alternating main and upper notes would then be omitted. The redoble is applied only to entire bars, and is thus appropriate for ornamenting semibreves. Sancta Maria points out that the ornament should not be made too long, for it is then less agreeable.<sup>137</sup>

135 Sancta Maria, Arte, 1:fol. 46<sup>r</sup>f.; and in Hultberg, Sancta Maria, 1:137 f.

136 Hultberg, Sancta Maria, 1:139, 2:242.

137 Ibid., 1:137.

Quiebros are divided into two types: the quiebro reyterado (repeated or reiterated) and quiebro sencillo (simple).<sup>138</sup>

Ex.1.59



(a) Descending

(b) Ascending

The fingerings for these are: right hand 34/23, left hand 21/32. Quiebros are made with either a tone or semitone, except for one kind which uses a tone and semitone. Sancta Maria explains that there are six types of quiebros, of which two are performed on minims and four on crotchets. Although he initially states that quiebros may also be 'performed marvellously on quavers', he later contradicts himself by saying that they are not applied to quavers or semiquavers because of their short duration.<sup>139</sup> For the same reason the repeated quiebro is not applied to crotchets. The one kind of quiebro used on minims is the repeated one which has already been illustrated. The other kind, made up of a tone and a semitone, always has the semitone below and the tone above, starting on the upper neighbour note:<sup>140</sup>

Ex.1.60



Sancta Maria also describes 'a new and elegant' way of playing the redoble and repeated quiebro, and recommends them rather than the 'old-fashioned' ones. These new kinds commence with the upper note

<sup>138</sup> Jacobs, Performance, 1:153, 2:119.

<sup>139</sup> Ibid., 1:153.

<sup>140</sup> Ibid., 1:153, 2:120.

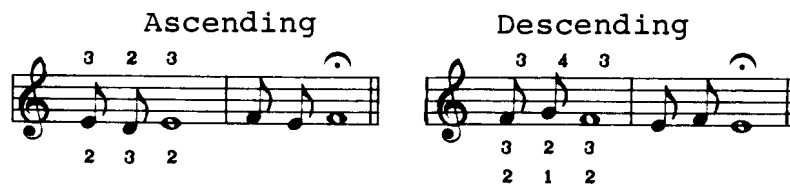
which is struck alone, so that the second note is played on the beat:<sup>141</sup>

Ex.1.61



The other four types of quiebros applied to crotchets (simple quiebros) are used in both ascending and descending passages. Two consist of three notes and two of two notes. In ascending passages, both forms may use either a tone or a semitone below and in descending passages a tone or semitone above:<sup>142</sup>

Ex.1.62



They are used on alternative crotchets and not successively. Alternate weak beats are the 'better and more elegant way', but they can also fall on alternate strong beats.<sup>143</sup> The quiebro which consists of only two member notes is performed by striking the main note an instant before the ornamental note, and sustaining the main note while the ornamental one is immediately released: '... the second note of the quiebro is to be struck so quickly after the first that the two notes almost sound together.'<sup>144</sup> This quiebro can be used in ascending and descending contexts, but Sancta Maria recommends that it be performed more often in descending passages, as this is more pleasing to the ear. No examples are given by him, but one can interpret his instructions thus:<sup>145</sup>

<sup>141</sup> Hultberg, Sancta Maria, 1:140.

<sup>142</sup> Ibid., 2:243.

<sup>143</sup> Ibid., 1:143.

<sup>144</sup> Jacobs, Performance, 1:158.

<sup>145</sup> Ibid., 1:158, 2:121.

## Ex.1.63



Certain exceptions and special rules are added to the information already given. Firstly, the quiebro of crotchets for descending passages may occasionally be used in ascending passages, provided that the quiebro is performed on a note which precedes a semitone:<sup>146</sup>

## Ex.1.64



Secondly, in descending passages quiebros are sometimes made on two successive crotchets, for grace and elegance. This is justifiable when a semibreve is followed by two descending crotchets:<sup>147</sup>

## Ex.1.65



Thirdly, when crotchets first ascend, then descend, the descending form of the quiebro is used on the higher note; similarly, when crotchets first descend, then ascend, the lowest note is ornamented with the ascending form of quiebro:<sup>148</sup>

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146 *Sancta Maria, Arte*, 1: fol.51r; and in Jacobs, *Performance*, 1:160, 2:123.

147 Hultberg, *Sancta Maria*, 1:144, 2:244.

148 Ibid.



Ex.1.66



Fourthly, crotchets which follow dotted minims in descending passages are always ornamented:<sup>149</sup>

Ex.1.67



Finally, redobles and quiebros on minims may be performed simultaneously or in imitation by the two hands, the latter endowing the music with particular charm.<sup>150</sup>

Sancta Maria's contemporary, Bermudo, in the preface to his first treatise of 1549, declares that he does not 'tell how to execute redobles, as the fashion of playing them changes every day, and because current methods of performance cannot be set down in writing.'<sup>151</sup> In his more comprehensive Declaración of 1555, however, Bermudo discusses redobles, his only term for all the different ornaments. Here he says that redobles can be played in two ways: with either a tone or a semitone, in the mode in which one is playing, this determining the choice of notes on which to ornament.<sup>152</sup>

This rule is not inflexible. The redoble can be made with

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149 Hultberg, Sancta Maria, 1:144, 2:244.

150 Jacobs, Performance, 1:161.

151 Ibid., 1:165.

152 C. Johnson, Spanish Renaissance Keyboard Performance Practices: An Introduction (D.M.A. research project, Northwestern University, 1973), p.85.



either the note above or the note below, and in both hands simultaneously. He observes that the lower note redoble was held in disfavour by some players, who regarded it as ungraceful.<sup>153</sup> Bermudo, however, advises that one should learn to use both, as there are occasions where both can be played. It is possible that the lower note redoble referred to here is of the repeated type. (Sancta Maria only gives an example of an upper-note repeated quiebro, whereas the simple type employs both the upper and lower note.)

Bermudo also describes the simultaneous use of redobles. When they occur on the interval of an octave, they cannot be made with the above note only, as this would produce parallel octaves. Instead, when ornamenting the octave, one would use the lower ornamental note on the upper octave note, and the upper ornamental note on the lower octave note, or vice versa. With regard to the intervals of a fifth and third, the example below is self-explanatory:<sup>154</sup>

Ex.1.68



Bermudo does not say whether the ornaments above should be long or short, but the short redobles would resemble the simple quiebros of Sancta Maria. At all times the main and ornamental notes must be consonant. These redobles are performed with adjacent fingers. Bermudo also states that one must learn to play them with any finger, in contrast with the limited finger-

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153 Johnson, Spanish Renaissance, p.86.

154 Jacobs, Performance, 1:163-164.



ing choices of the other treatises.<sup>155</sup>

Bermudo then describes another redoble, used by 'one of the most distinguished players in Spain', which is made 'with two fingers: one above the beat (i.e. note), and the other below; so that this redoble always remains within (the range of) a third'.<sup>156</sup> Bermudo's remarks can only be interpreted as involving three adjacent fingers, so that the redoble in question resembles Sancta Maria's:

Ex.1.69



This interpretation is further supported by Bermudo's statement:<sup>157</sup>

... The said redoble is a pleasant thing because of the good harmony it makes, principally when one voice enters alone ... Whenever the right hand can remain free with only the soprano to play, it ought to do so in order to be able to perform the redoble.

In the light of this, Johnson's interpretation of this ornament as two notes alternating a third apart, is patently incorrect.<sup>158</sup> The two ornamental notes would not fit the harmony and the main note would not be heard at all when the voice enters on its own.

Luys Venegas, who included many of Cabezón's compositions in his Libro, describes the quiebro only by its fingering. The right and left hand quiebros differ from each other, but Venegas makes no comment on this fact. According to his instructions,

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155 Bermudo, Declaración, fol.61.

156 Jacobs, Performance, 1:163-164.

157 Ibid., 1:164.

158 Johnson, Spanish Renaissance, pp.78,81.

the right hand quiebro will approximate the following:

Ex.1.70



This is the same as Sancta Maria's redoble. The quiebro of the left hand would be:

Ex.1.71



It should continue for the full value of the note.<sup>159</sup>

In the preface to his father's Obras de Música, Hernando de Cabezón also describes quiebros only by fingering. Like Bermudo, he favours the soprano as the ornamented part. In the right hand the quiebro is presumably played with the third and fourth, or second and third fingers:

Ex.1.72



In the left hand it is played with 2 and 3, or 2 and 1:

Ex.1.73



159

Luys Venegas de Henestrosa, Libro de Cifra Nueva para tecla, harpa y vihuela (Alcalá, 1557), facs. reprint in H. Anglés, ed., La música en la Corte de Carlos V, 2 vols. (Barcelona: Instituto Español de Musicología, 1965), 1:159; in Rodgers, Fingering, pp.211-212; and in Johnson, Spanish Renaissance, p.86.

This is similar to Sancta Maria's simple quiebros. Cabezón also comments on the performance of the quiebros, a topic which is treated only vaguely by other Spanish theorists. They should be played as fast and as briefly as possible, and always with an accent on the main note.<sup>160</sup>

Francisco Correa de Arauxo's Facultad orgánica was published in 1626, more than sixty years after Sancta Maria's Arte, but stylistically he still belongs to the Renaissance. He discusses two kinds of quiebros and two kinds of redobles.<sup>161</sup>

Of the former, the first is the simple quiebro which resembles Sancta Maria's simple quiebro for ascending passages:

Ex.1.74



The second is the repeated or reiterated quiebro, in which, however, there is no repetition:

Ex.1.75



The simple redoble starts with an inversion of the reiterated quiebro and ends in the same way as Sancta Maria's quiebro reyterado:

Ex.1.76



160 Antonio de Cabezón, Obras de Música para tecla, arpa y vihuela (Madrid, 1578), ed. by H. Anglés, Monumentos de la Música Espanola XXVII (Barcelona: Instituto Espanol de Musicología, 1966), p.28.

161 Francisco Correa de Arauxo, Libro de tientos y discursos de música práctica y theórica de organo intitulado Facultad orgánica (Alcalá, 1626), ed. by M.S. Kastner, Monumentos de la Música Espanola VI, XII (Barcelona: Instituto Espanol de Musicología, 1948, 1952), fols.xv<sup>r</sup>-xvi<sup>r</sup>.



The reiterated redoble has an additional lower note appended to the beginning:<sup>162</sup>

Ex.1.77



The redoble must be used on the penultimate note of unadorned cadences that last one bar or more, and on all unornamented 'greater' or usable semitones that last one bar. (Sancta Maria divides the tone into two unequal semitones; the major or greater one is considered usable and the other unusable. He forbids the use of a quiebro or redoble with the latter, e.g. that above B<sup>b</sup> and E<sup>b</sup>, and the semitone below F<sup>#</sup> and C<sup>#</sup>.)<sup>163</sup> Further, the redoble is employed at the beginning of large works on 'mi' (i.e. the semitone between the mi-fa solmization), when playing on the clavichord.<sup>164</sup>

The redoble should never be used between two tones, but always between semitones. The quiebro may be used on whole tones, and on the organ, one would always play a quiebro, instead of a redoble, where one voice enters alone. (The sustaining power of the organ generally requires a shorter ornament than the clavichord.) The simple quiebro is used at the beginning of versets or small works, and in the course of such works on unadorned semibreves and minims. They are especially employed in compás mayor (♩) or fast tempo. In a slow tempo, the simple quiebro may occasionally be applied to crotchets but not to successive ones. In a very slow tempo a quaver followed by semiquavers may be ornamented with a quiebro, but semiquavers are never ornamented. The reiterated quiebro is recommended for the beginning of a long, serious work in a slow tempo, as

<sup>162</sup> C.G. Jacobs, Francisco Correa de Arauxo (The Hague: Martinus Nijhoff, 1973), pp.21-22; and Correa, Facultad, fols.xv<sup>r</sup> - xvi<sup>r</sup>.



<sup>163</sup> Jacobs, Performance, 1:174,175.

<sup>164</sup> Jacobs, Correa, p.22.



well as on semibreves or unornamented minims.<sup>165</sup> Correa is remarkable for being the first Spaniard to indicate ornaments by means of a symbol, an 'R' above the note.<sup>166</sup> He stresses freedom in the execution of ornaments, for he says that there is no determined number of notes in a redoble or quiebro.<sup>167</sup> Thus, finally, it appears that composers were free to invent their own ornaments:<sup>168</sup>

... some masters have invented other redobles, and those I leave for your good education...

This freedom is confirmed by the ornaments written out in Cabezón's keyboard music. Only the redoble and simple quiebro occur frequently, and the redoble often consists of only the first four notes without reiteration. Many of the simple quiebros employ the dactylic rhythm  instead of the usual . The reiterated quiebro is found less often than its inverted form, while both the quiebro of minims and its inversion in semiquavers are often encountered.<sup>169</sup>

## 1.5 Classification of Ornaments

From the evidence supplied by Renaissance theorists and the music of the period, certain observations can be made. The ornaments described in 1.3 and 1.4 can be classified into three groups, according to their purpose. This aspect is only touched upon lightly in the theoretical sources.

### 1.5.1 Three Groups of Ornaments

The first group includes those intended purely as decoration, their purpose being simply to add grace and elegance. The

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<sup>165</sup> Correa, Facultad, fol.xvi<sup>r</sup> - xvi<sup>v</sup>.

<sup>166</sup> Jacobs, Correa, p.22.

<sup>167</sup> Ibid., p.24.

<sup>168</sup> Ibid., p.22.

<sup>169</sup> Jacobs, Performance, 1:161, 2:19.



sources suggest this as the primary purpose of ornaments in the sixteenth century. Ganassi and Diruta specifically mention the tremolo and Ammerbach the mordant in this connection, but the same holds true for most sixteenth- and early seventeenth-century ornaments. These ornaments are occasional decorations and can be made on virtually any suitable note. They are essentially melodic, as the consonances of the notes upon which they occur are retained and therefore the vertical aspect, the harmony, is unchanged.

The second group contains the ornaments which are integrated into the structure of the composition, such as the tirata and the grosso. While they may add grace to the music, they are employed in more specific contexts in a composition. Where the tirata expands the small interval of a second to a larger one, or connects one phrase with another, its function is structural. Similarly, the grosso is employed especially in cadences, where it enhances the structural aspects of the cadence progression. In contrast to the tremolo, the grosso has harmonic significance.

The third group consists of ornaments whose purpose is to compensate for the quick decay of sound on instruments such as the clavichord and harpsichord. One recalls Correa's remark that where a voice enters solo, one starts with a quiebro on the organ and a redoble on the clavichord. The redoble, being the more elaborate ornament, would therefore sustain the sound longer. Diruta suggests the same idea:<sup>170</sup>

... the player should embellish the harmony with tremoli and graceful accenti ... on a quilled instrument ... it is necessary to strike the key more often in a graceful manner ...

Some ornaments were assigned to a particular instrument, without necessarily having to compensate for the acoustical deficiencies of the instrument. Here one has in mind Diruta's and

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<sup>170</sup> Soehnlein, Transilvano, pp.133-134.



Praetorius' remarks concerning the tremolo with the lower note, which was employed by organists. The point is that the instrument itself may have influenced the player in his choice of ornaments. This is also evidenced in lute ornamentation.

### 1.5.2 Alternating and Non-Alternating Ornaments

Another mode of classification can be based on the melodic patterns exhibited. Alternating and non-alternating types can be distinguished. The alternating group (1) includes the tremolo, mordant, groppo, redoble and quiebro; this is the largest body of sixteenth-century ornaments derived from one basic form. The non-alternating group (2) includes the accento, slide (clamazione), minuta and tirata. Diruta makes this distinction by implication when referring to ornaments added by the performer as tremoli and accenti. Similarly, it has been seen that Viadana and Cima speak of accenti e trilli. The accenti patterns given by Rogniono, Banchieri and Zacconi never include the alternating type; neither does Praetorius, under the term accentus. The main differences between these groups involve:

- the melodic design: alternating (reiteration involved) and non-alternating (no reiteration);
- group one appears only on the beat, but group two both on the beat and between beats;
- group one exhibits standardized designs, group two not;
- group one is much commoner than group two;
- the ornaments of group one involving the main and the ornamental note are melodic (except for the groppo) as they do not alter the harmony of the note on which they occur; group two may also be melodic, or it may introduce dissonance into the harmony.

Group one can be further subdivided: the main note - ornamental note type (e.g. tremolo), and the ornamental note - main note type (e.g. groppo). These two ornaments are the ones most

commonly found, both in the treatises and the music of the period, vocal as well as instrumental. The groppo's first description as an ornament as late as 1584 is likely to be due to the fact that it served a function other than that of the tremolo. Also, it was traditionally written out in the music, where it was considered part of the decoration of the stereotyped cadential formula.

The main note - ornamental note form is the earliest type of ornament of which there is evidence, as Moravia's Flores harmonici proves. In sixteenth-century sources the dual nature of this ornament often causes confusion, because of the picture presented by the theorists on the one hand, as against the musical evidence on the other. The main - upper and main - lower note alternation are both known as tremolo. They can be found from the beginning of the sixteenth century; in Germany the lower note form was favoured. In Italian lute sources both forms are described, whereas Ganassi's fingering chart for recorder suggests only the upper note tremolo. In the later sixteenth century, the Italian, Spanish and German sources prefer the main - upper note type. The only lower-note form described - and often found in the music - is the short, simple quiebro (= Ammerbach's mordant), which is employed in ascending passages. A third type, Sancta Maria's redoble (also described by Bermudo), which employs both the upper and lower note, is only encountered in Spanish sources. Diruta and Praetorius do not mention the ascending form, and employ the upper-note tremoletto for both ascending and descending passages.

The keyboard literature shows that the short lower-note tremolo is not restricted only to stepwise ascending passages, even though this is its most typical application. At least four sources do not link it specifically with ascending motion: Cavalieri (monachina), Cabezón (quiebro), Correa (simple quiebro) and Bermudo (redoble).



The preference for the upper-note tremolo (reiterated quiebro) can be understood as traditional, or even as a matter of personal preference. Bermudo's remark that the lower-note redoble was regarded by some players as 'ungraceful' is significant in this context. Furthermore, his statement that both forms should be mastered for use in appropriate places proves that the lower-note redoble was certainly used by some players. It is clear, however, that:

- the lower-note tremolo (reiterated quiebro) was held in disfavour by some in Spain, Italy and Germany, especially by keyboard players other than organists;
- the lower-note tremolo was typically used in German and Italian organ music;
- in Spain the lower-note reiterated quiebro was employed by some players;
- the lower-note tremolo was used with restriction on keyboard instruments other than the organ, in relation to the upper-note tremolo.

An analysis of the various alternating-type ornaments described by Renaissance theorists reveals that the differences between them stem from the following factors:

- Pitches involved. One finds at least three types: main-note and upper-note, main-note and lower-note, and a combination of main-note, lower- and upper-note. The Spanish sources prescribe, specifically, tone or semitone intervals.
- Length of ornament. The tremolo, reiterated quiebro and redoble are much longer than the short tremoletto and simple quiebro.
- The note values upon which they occur.
- The context in which they are applied and the type of composition. Some ornaments are reserved for the beginning of a *ricercare* or *canzona*; others are intended only for ascending and descending passages.



- The manner of performance; rapid or slow, measured or unmeasured.
- Their purpose: tremoli are mainly decorative, while the groppi and tirate are part of the structure of the composition.
- The choice of instrument can influence the type of ornament used.
- The time signature and tempo of a composition may influence the ornamentation, and the latter can in turn have a deciding influence upon the tempo.
- The type of ornament may be influenced by a technical feature such as fingering.

Group two, the non-alternating ornaments, exhibit the following characteristics:

- They are encountered much less frequently than the alternating category.
- They are described in the theoretical sources and found written out in the music only toward the end of the sixteenth century.
- They have no standardized patterns as far as pitches involved are concerned, and are therefore of variable shape; as such, they can consist of one or more notes.
- They are essentially melodic; they can, however, introduce dissonance, e.g. Praetorius' onbeat accentus and Diruta's clamatione.
- The contexts in which they appear vary greatly, as the different ornaments require different situations in which they are used.

### 1.5.3 Comparison between Italian and Spanish Ornamentation

A comparison between the sixteenth-century Italian and Spanish ornamentation reveals many similarities as well as differences. (One should remember that Germany was greatly influenced by the Italian tradition during this period.)









The function of the Italian and Spanish ornaments is the same: they serve as additional graceful decorations of the music. Both write out their cadential embellishments, but only the Italians identify the stereotyped formula used at cadences as a groppo. The alternating-type ornaments agree largely: the Italian tremolo and Spanish quiebro are one and the same thing; the fingering and note values upon which they are made are the same, except that the Spanish sources do not prescribe them for use on notes shorter than a minim. Diruta alone says that they should take half the value of the note upon which they are made. Both sides agree that they should be played rapidly.

The Spanish sources employ no signs to indicate their ornaments (except for Correa, a late source), whereas the Italians use them sparingly (Valente, Trabaci, Cavalieri). Except for Bermudo, no Spanish source mentions a lower-note reiterated quiebro - Diruta and Praetorius alone speak of it, and then unfavourably. The latter also prefer upper-note tremoletti, whereas Sancta Maria and Ammerbach explicitly prescribe the upper- and lower-note type for descending and ascending passages respectively. Neither Sancta Maria's quiebro of minims, simple quiebros that 'cannot be notated', nor his redobles (a reiterated quiebro with a lower note added) are found in Italian sources. The non-alternating group of ornaments are not mentioned by the Spanish sources at all, and they are not found written out in the music to a large extent.

In Table 1.1 all the vocal and instrumental ornaments discussed in this chapter are tabulated.





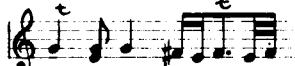

TABLE 1.1

VOCAL AND INSTRUMENTAL ORNAMENTS IN USE ON THE CONTINENT  
C.1250 TO THE EARLY SEVENTEENTH CENTURY

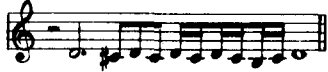

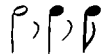







Source	Name	Sign	Notation and fingering	Comment
Moravia (c.1250)	Flos longus			Slow reiteration of upper semitone required
	Flos subitus			Begin slowly, then accelerate; use upper semitone
	Flos apertus			Moderate tempo; use upper whole tone
Robertsbridge Codex (c.1320)		o		
Paumann (1452) Buxheim Organ Book (c.1470)				When chromatically altered, the sign becomes: 
Buchner (c.1520)	Mordente			 Horizontal line indicates a raised semitone
Kotter	Murdant			
Capirola (1517)	Tremolo			Make with upper auxiliary Make with lower auxiliary



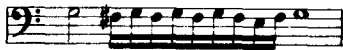
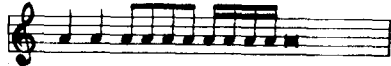


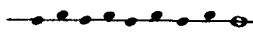
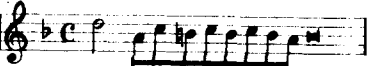
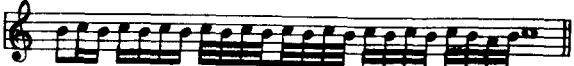














Source	Name	Sign	Notation and fingering	Comment
Borrone (1548)	Tremolo	( )		Main-note and upper-note alternation
Ganassi (1535)	Tremolo	t		Fingering suggests main and upper notes
Bermudo (1555)	Redoble			Simultaneous use of <u>redobles</u> possible
	Redoble of thirds			Used when right hand is free, or when one voice enters alone
Venegas (1557)	Quiebro		RH LH	
Sancta Maria (1565)	Quiebro reyterado		 RH 34/23 LH 21/32	Made on ♩; use either tone or semitone
	'New kind'			
	Redoble			Always made with tone and semitone on ♩
			 RH 3234 LH 2321/3432	'New kind': upper auxiliary played before the beat; fingering then RH 4323, LH 123/234



Source	Name	Sign	Notation and fingering	Comment
	Quiebro of minims		 RH 4 3 2 3 LH 1 2 3 2 2 3 4 3	Made on $\text{♩}$ ; must have semitone below and tone above
	Simple quiebro		 RH 3 4 3/3 2 3 LH 3 2 3/2 3 2 2 1 2	Used in ascending and descending passages, on $\text{♩}$ and $\text{♪}$ . Best used on alternate weak beats, not on successive notes. 'Short' simple <u>quiebros</u> sometimes used. A <u>quiebro</u> used for descending may be used ascending if made on a note which precedes a semitone
Ammerbach (1571)	Mordant		(a)  (b) 	(a) made ascending (b) made descending
Valente (1576)	Trillo	t		't' often found at cadences
Hernando de Cabezón (1578)	Quiebro			Must be played as fast as possible, with accent on main note



Source	Name	Sign	Notation and fingering	Comment
Diruta (1593)	Gropo		 <p>RH 43 LH 23/12</p>	Used at cadences; must be played crisply
	Tremolo		 <p>RH 23/34 LH 32/21</p>	Must be played lightly and agilely, takes up half the value of note; made on 
	Tremoletto			Made with any finger available on  ; use on stepwise ascending or descending notes; upper-note version preferred
	Clamazione			Use at the beginning of a piece
	Accento			
Conforto (1593)	Trillo			
Bovicelli (1594)	Groppetto			
Cavalieri (1600)	Trillo	t		

Source	Name	Sign	Notation and fingering	Comment
	Zimbalo	z		
	Monachina	m		
	Groppolo	g		
Caccini (1601)	Trillo			Described for vocal use only
	Gruppo			
	Ribattuta di gola			
Trabaci (1603)	Trillo	t		
(1615)	Trillo doppio	t+		
Praetorius (1619)	Gropo			'Used in cadences and formal closes; must be played more crisply than the tremoli.'
	Gruppo			

Source	Name	Sign	Notation and fingering	Comment
	Tremolo ascendens			'Organists call the lower note tremolo a mordant; it is not as good as the upper note tremolo.'
	Tremolo descendens			
	Tremoletto			Praetorius employs the upper-note type only, also ascending
	Tirata			'Tirate are rapid runs up or down the notes.'
	Accentus			Various possibilities of the non-alternating type
Correa (1626)	Simple quiebro			Used at the beginning of a piece on  or  in fast tempo and on  in slow tempo; never on 
	Reiterated quiebro	Q		Used on the organ in place of the <u>redoble</u> if one voice enters alone; recommended for the beginning of long, serious works

Source	Name	Sign	Notation and fingering	Comment
	Simple redoble	R		Used in cadences and at the beginning of larger works on the clavichord
	Reiterated redoble			
Frescobaldi (1637)		tr		'If either hand has to play a trill and the other a passage at the same time, one should not play note against note, but only endeavour to play the trill quickly but the passage slower and with expression, otherwise confusion would arise.'

## CHAPTER 2

### 2. BACKGROUND TO ENGLISH ORNAMENTATION IN THE SIXTEENTH AND SEVENTEENTH CENTURIES

#### 2.1 English Treatises

There is no English treatise from the sixteenth or early seventeenth century in existence which deals with the subject of diminutio or ornamentation as is the case on the Continent. Instruction books for the lute-cithern family had been published in England since 1568,<sup>1</sup> but the equivalents for the viol, wind instruments, keyboard instruments and the voice were either never written or have been lost. A treatise on keyboard playing was licensed for printing in 1597, but no copy has survived.<sup>2</sup> The evidence is to be found in the registers of the Company of Stationers of London, where the third entry for 7 March 1597 reads:<sup>3</sup>

William hoskins Entred for his copie in full Court holden this day A booke called A playne and perfect Instruction for learnynge to play on ye virginalles by hand or by booke both by notes and by letters or Tabliture never heretofore sett out by any etc.

The only explanation of ornament signs for keyboard music during this period appears in GB-Lbm Add.31403. The manuscript is dated c.1700 as a whole, but the first section (fols.3-33) contains keyboard music from the beginning of the seventeenth century, having been compiled by Edward Bevin. A table of ornament signs appears on fol.5, where the 'Graces in play' is attributed

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<sup>1</sup> R. Steele, The Earliest English Music Printing (London: The Bibliographical Society at the Chiswick Press, 1903), p.101.

<sup>2</sup> It is listed in Steele, Music Printing, p.100.

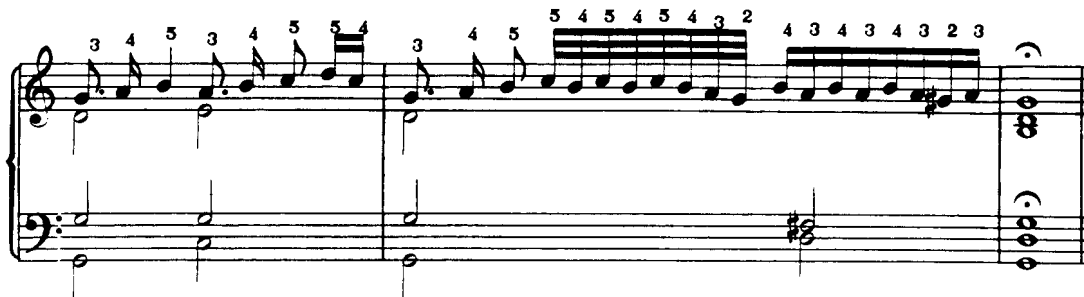
<sup>3</sup> E. Arber, ed., A Transcript of the Registers of the Company of Stationers of London; 1554-1640 A.D., III (Privately printed, London 1876; reprint, New York: Peter Smith, 1950), p.19.

to Edward Bevin. The ornament signs are explained in written-out notes, complete with fingering:

Ex.2.1 'Graces in play'



'The graces before, is here exprest in notes'



Of these ornaments, unfortunately only the first accords with those found in virginal music of c.1560-1620; the remainder seems to be an attempt at codification by one person.

It is ironical that we do not possess a single English treatise explaining the ornament signs used in virginal music, whereas the subject of ornamentation is discussed in many a Continental source. This is, however, not difficult to understand: on the Continent ornament signs were considerably much less used than in England; more important still, the Continental treatises make it clear that it was expected of keyboard players to add ornamentation impromptu as they performed a composition.

In comparison with the output of the Continent, relatively few books on music were written in England during the sixteenth and early seventeenth century. Early in the period John Dygon translated the fourth book of Gaffurius' Practica musicae (Milan, 1496). Apart from the two translations in 1568 and 1574 of Le Roy's lute instruction book (1567), William Bathe's A Brief Introduction to the True Art of Musicke (1584) was the first to break the period of silence. The most important books to follow were those by Bathe, Morley, Dowland, Coperario, Campion and Ravenscroft. All are concerned mainly with music theory (rudiments, terms, sight-singing, counterpoint), the writing of canons and acoustics. In addition, apologias for church music were printed.<sup>4</sup>

The general lack of sixteenth-century English treatises is demonstrated by Morley's list of theorists he had studied. There, English writers are conspicuous by their absence.<sup>5</sup> On the one hand, English theorists relied on Continental authors for much of their material, e.g. Dowland's translation of Ornithoparcus' Micrologus; Ravenscroft's A brief discourse; and Morley, who draws heavily on Continental treatises. On the other, English theorists showed independence with their progressive ideas, particularly in areas such as solmization, notation, composition and the major/minor key theory.<sup>6</sup> The absence in these books of any discussion of ornamentation or melodic embellishment, as well as the lack of instruction books (except for lute) similar to the Continental ones, remains a curious fact, particularly as diminution was an adjunct to part-writing in the contrapuntal theory of this period.

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<sup>4</sup> See M.C. Boyd, Elizabethan Music and Musical Criticism (Philadelphia: University of Pennsylvania Press, 1962), pp.222f.

<sup>5</sup> Thomas Morley, A Plain and Easy Introduction to Practical Music (London, 1597), ed. by R.A. Harman (London: J.M. Dent, 1966), pp.321-322.

<sup>6</sup> See W.T. Atcherson, 'Symposium on Seventeenth-Century Music Theory: England', Journal of Music Theory XVI (1972), pp.6-15.

In Morley's Introduction the subject of diminution is discussed, but only as a technique connected with the subject of proportions. He states:<sup>7</sup>

Diminution is a certain lessening or decreasing of the essential value of the notes and rests by certain signs or rules ...

The only contemporary theoretical work in England dealing with diminution as the melodic elaboration of a simple progression, is Giovanni Coperario's Rules how to compose.<sup>8</sup> Dated c.1610, it remained unpublished at the time. Coperario nevertheless enjoyed a high reputation as a composer of both vocal and instrumental music. Fols. 11<sup>v</sup> to 18 are devoted to a section entitled 'Of Division'. The subject is treated in two sections, namely the diminution of single intervals in one voice, and diminution in four parts. Coperario gives examples of how to make simple intervals more elaborate by breaking them up into smaller note values; the intervals used are the rising and falling third, fourth and fifth. Consisting mostly of passing notes, these diminutions exhibit the same principles as their Italian counterparts, in that they do not modify the function of the structural intervals, yet they do not appear to be taken directly from another source. Here is Coperario's diminution of the rising third:<sup>9</sup>

Ex.2.2



Compared to other treatises, his choice of intervals is limited, since the Italian writers usually include examples extending to the octave. Coperario's diminutions, too, are less flamboyant than some of the Italian passaggi, and an interesting phenomenon of theirs is that they are made only on the first of the two notes

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<sup>7</sup> Morley, Introduction, p.43

<sup>8</sup> Giovanni Coperario, Rules How to Compose, ed. by M.F. Bukofzer (Los Angeles: E.E. Gottlieb, 1952).

<sup>9</sup> Ibid., fol.11<sup>v</sup>.





comprising the interval, contrary to Bovicelli's examples, for instance, where the latter note is often also broken up. The examples for the interval of a fourth therefore resemble pre-beat clamationi:<sup>10</sup>

Ex.2.3



## 2.2 Ornaments in Virginal Music

The ornamentation used by keyboard players of the period is of two kinds: those written out in full in the text - integrated as such into the compositional structure - and those indicated by sign. It is in the use of ornament signs that English keyboard and lute music differs from that of its contemporary Continental counterparts: in the latter, the signs occur only sporadically; in the virginal and lute sources, they abound on every page of music.

The two most common signs used in English keyboard music of the period are the oblique single and double strokes: ♯ and ♯♯. Their origin is unknown, but may be connected to the two signs most commonly used by contemporary English lutenists: × and #. With but few exceptions, the Virginalists used only two signs at a time when signs were proliferating in lute music. The earliest extant sixteenth-century English sources, Roy. App. 56 (c.1530) and Roy. App. 58 (c.1540-60), contain no signs. Two other early sources, GB-Lbm Add. 15233 (before 1550) and GB-Lbm 29996 make use of the double stroke.<sup>11</sup> L<sub>1</sub> is the earliest important source showing the use of the double stroke: it appears in sixteen of the ninety-four liturgical organ works. The single stroke appears in only one piece of this collection of Tudor organ music, and there it occurs three times in one bar, drawn through the






<sup>10</sup> Coperario, Rules, fol.12<sup>v</sup>.

<sup>11</sup> L<sub>1</sub>, fols.6-45 (c.1547-49), fols.45<sup>v</sup>-67<sup>v</sup>, 158-178<sup>v</sup> (copied round about the reign of Mary); GB-Lbm Add. 15233, fol.6<sup>v</sup>.

note head:<sup>12</sup>

Ex.2.4 Coxsun, Veritas mea



The single stroke is absent from the Mulliner Book (written c.1560-75, and containing Elizabethan and pre-Elizabethan music), while the double stroke is used sparingly.<sup>13</sup> In addition to the double and single stroke (the latter occurs frequently), the Dublin Virginal Manuscript (c.1560-70) employs this sign:<sup>14</sup> . Virginal music of the later sixteenth and early seventeenth centuries employs the single stroke considerably less often than the double stroke, except in the Cosyn Virginal Book where its occurrence is very frequent. The simultaneous use of two ornaments occurs already in Mu:<sup>15</sup> . In the DVM the following combinations are found:<sup>16</sup> , and in Parthenia In-Violata:<sup>17</sup> . In addition to the two most commonly used signs, a third, consisting of three oblique strokes, is occasionally encountered. Its first appearance is found in Mu, in Blitheman's Gloria tibi Trinitas (fol.88<sup>v</sup>). Thomas Preston's Felix Namque (L<sub>1</sub>, fol.40) shows multiple crossings of the note stem ()

<sup>12</sup> D. Stevens, ed., Early Tudor Organ Music: II, Early English Church Music X (London: Stainer and Bell, 1969), p.112, b.13; and in L<sub>1</sub> no.51, fol.43.

<sup>13</sup> Mu, fols.3-6<sup>v</sup>, 8,12,71<sup>v</sup>,88<sup>v</sup>.

<sup>14</sup> J. Ward, ed., The Dublin Virginal Manuscript, The Wellesley Edition no.3 (Wellesley, Mass.: Wellesley College, 1954), pp.1,17,18,19,29,30.

<sup>15</sup> Mu, fol.4<sup>v</sup>.

<sup>16</sup> Ward, Dublin Virginal MS, pp.2,6,7,8,11.

<sup>17</sup> Parthenia In-Violata (London, c.1625), facs. reprint (New York: The New York Public Library, 1961), p.54.



used three times in succession in the same melodic pattern.<sup>18</sup> Probably this, too, indicates an ornament. The triple-stroke ornament is otherwise rare, appearing occasionally in Co (fols. 106, 109, 110, 168, 169, 171) and in the second half of Priscilla Bunbury's Virginal Book.<sup>19</sup> In Wr the signs 'w' or 'w' - unique to this source - are used up to fol. 25, in conjunction with double-stroke ornaments.

The placement of the signs on the note stems, and in the case of stemless notes, above or below or through the notehead, is very inconsistent. The significance of this is still uncertain; modern editions do not show the exact placement as they occur in the manuscripts. In the Tudor organ music of L<sub>1</sub>, the double stroke is always drawn through the top of the stem (♯), and in the case of a semibreve, through the note:<sup>20</sup> ♯ ♯ . In My Ladye Nevells Booke, which is carefully written out in one hand, both ♯ and ♯ appear. In Parthenia the single stroke appears as ♯ (nos. 16, 18), whereas in PI (by the same engraver as Pa) ♯ (nos. 5, 9, 10, 11, 14, 15, 16, 18), ♯ (nos. 2, 8, 9) and ♯ (nos. 19, 1, 2, 9) are used. In PI no. 9, all three lateral dispositions are used. In Co, Cosyn usually draws the single stroke through the top of the stem of minims and crotchets, but with quavers it passes through the stem: ♯. Occasionally, he reverts to ♯ and ♯ (fols. 86-87, 100-114, 162, 196-199).


One, two or more strokes are occasionally used, not as ornament signs, but as erasures. More ambiguously, the strokes may sometimes be intended as a visual aid to indicate voice leading or badly aligned parts. In the early sixteenth-century source, Roy. App. 56, there is an instance where the stems are crossed.

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<sup>18</sup> Stevens, EECM X, p. 62, b. 19-21.


<sup>19</sup> J. Boston, ed., Sixteen Pieces from Priscilla Bunbury's Virginal Book (London: Stainer and Bell, 1962).

<sup>20</sup> L<sub>1</sub>, fols. 40, 43, 171<sup>v</sup>.

The purpose is probably to show the badly aligned tenor part.<sup>21</sup> The fact that no other ornament signs are used in this manuscript, strengthens this view. The crossing of a stem as a cancellation sign also occurs in L<sub>1</sub> (fols.19<sup>V</sup>,63), and in Fo (p.110). In L<sub>1</sub> the horizontal line drawn through the stem of a note is certainly intended to cancel the stem of a note erroneously written, e.g. fol.51<sup>V</sup>, and in PB, thus:<sup>22</sup>  .

### 2.3 English Keyboard Ornamentation after c.1625

The period c.1625 to c.1660 forms the transition to the period in which the style of keyboard music changed greatly and a new system of ornaments was introduced. The changes which took place included the invention of new ornament signs and ornaments, and, also, those signs taken over from the Virginalists, underwent a change of placement. During the transition, the single and double strokes of the Virginalists were still commonly used, drawn through the stems of the notes. Later in the seventeenth century these signs were still employed, but their placement changed: they were transferred from the note stem to a position above or below the note:  .

In Anne Cromwell's Virginal Book (1638) and Elizabeth Rogers Hir Virginall Booke (1656) the signs are still drawn through the stem of the notes. A few exceptions occur in these sources. One such case is a combination sign in AC where the single stroke is removed from the note:<sup>23</sup>  . In Ro the double stroke is placed beside a note if the ornamented note is the middle note of a chord:



 . Only one other sign occurs in these sources, and then

<sup>21</sup> Stevens, EECM X, p.54, b.17.

<sup>22</sup> J. Boston, 'Priscilla Bunbury's Virginal Book', Music and Letters XXXVI (1955), p.371.

<sup>23</sup> H. Ferguson, ed., Anne Cromwell's Virginal Book (London: Oxford University Press, 1974), p.23.



only once, in Ro: .<sup>24</sup> The most noteworthy element present in AC and Ro, however, is the replacement of the gropo by a stereotyped melodic formula which includes the double stroke. Even though this formula is sporadically found in earlier sources of virginal music, its repeated use in these two later sources is a new development:  .

In AC the written-out gropo occurs only three times, and then in one piece (p.29, b.16,24,30), and in Ro only in one piece by Byrd. The use of the stereotyped formula in cadences instead of the gropo leaves little doubt about its interpretation as a gropo:

Ex.2.5



In the following piece from Ro a gropetto precedes this formula, exactly as the written-out gropetto and gropo follow each other in earlier sources, where it is a stereotyped pattern followed in cadences:<sup>25</sup>

Ex.2.6 Glory of ye North, Ro fol.43<sup>b</sup>









This evidence supports the interpretation here of the double stroke plus suffix as a gropo. Another noteworthy phenomenon

<sup>24</sup> Ro, fol.39<sup>b</sup>. See also J. Caldwell, English Keyboard Music before the Nineteenth Century (Oxford: Blackwell, 1973), pp.153-154,162; and C.J.F. Cofone, ed., Elizabeth Rogers Hir Virginall Booke (New York: Dover, 1975), p.78. In his edition Cofone omits the sign without comment.

<sup>25</sup> Cofone, Elizabeth Rogers, p.87.

in Ro is the use of both the single stroke and written-out slides in the accompanied songs. Here the sign is used for the solo accompaniment, and the written-out slide for the singer. Concording passages suggest that they mean one and the same thing.<sup>26</sup>

Stylistic conflict marked the period 1625-1660. Men such as Tomkins (died 1656), Luge and Carleton continued to write in a style similar to that of the earlier Virginalists, as opposed to progressives such as William Lawes (died 1645). Tomkins adhered strictly to the use of ornaments as employed by Byrd, Bull and Farnaby, with groppi written out in full. Opposed to this are the collections of music in AC and Ro, which exhibit features of a more homophonic style, and in which the gropo is replaced by an ornament sign. This stylistic ambiguity becomes even more evident if one considers a manuscript contemporary with Ro, GB-Och 1236, which employs various signs and placements: ♯    , as well as a comma above the note, thus:  .




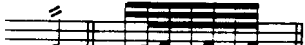
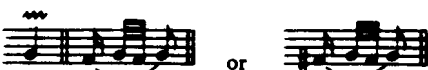

As Caldwell has pointed out, the emergence of the new system after 1650 is somewhat enigmatic.<sup>27</sup> It is surely an adaptation of the French system to English practice; the retention of certain typically English signs such as the single and double stroke (now placed above the note) highlights English individualism in this matter. This is also proven by the English adaptation of the French tremblement sign (  ) - which is a trill or shake - as an English sign indicating a mordent. In the absence of sufficient evidence, it is impossible to establish exactly when the old system gave way to the new. It is clear, however, that under French influence the shake starting with the upper note became the fashion in England around mid-century or slightly later. The

<sup>26</sup> Ro, fols. 20<sup>b</sup>, 21<sup>b</sup>-22, 23, 41<sup>b</sup>.

<sup>27</sup> For discussions of post-Restoration ornamentation, see Caldwell, English Keyboard, pp. 151-156; J. Harley, 'Ornaments in English Keyboard Music of the seventeenth and early eighteenth Centuries', Music Review XXXI (1970), pp. 177f.; and B.A. Cooper, English Solo Keyboard Music of the Middle and Late Baroque (Ph.D. dissertation, Oxford, 1974), pp. 377-422.

double stroke above the note had almost certainly acquired that meaning by the time Musick's Hand-Maid (1663) was published.<sup>28</sup> In music before c.1660, such as in Ro, where the double stroke is still drawn through the stem of the note, the question is whether the ornament should be interpreted according to the meaning it had held for the Virginalists, or according to the new convention. As the style of the music is different, one might contend that the new meaning is more likely, even though the placing of the ornaments had not yet been stabilized. In Musick's Hand-Maid, the only sign used is the double stroke. In pieces 1-55 the sign is drawn through the stem, whereas in 56-72 it appears above the note. It is significant here that pieces 56-72 were engraved by another craftsman.<sup>29</sup> This suggests that whereas by 1660 the placement of these signs had not yet been standardized, by the 1670's all ornaments were placed above the note, as may be seen in the keyboard music in Locke's Melothesia of 1673. Locke's 'Advertisements to the Reader' lists the names and signs, but not the realizations, of five ornaments. This is the earliest printed reference to keyboard ornaments in England:<sup>30</sup>





Ex.2.7

'forefall'	—	
'backfall'	\	
'shake'	=	
'forefall and shake'	—=	
'beat'	~	 or 

<sup>28</sup> In French lute music, an upper-note shake (tremblement) had already been described by Basset in 1636, in Mersenne's Harmonie universelle.

<sup>29</sup> The First Part of Musick's Hand-Maid (London, 1663), ed. by T. Dart (London: Stainer and Bell, 1969), p.26.

<sup>30</sup> Matthew Locke, Keyboard Suites, ed. by T. Dart (London: Stainer and Bell, 1964), n.p. The realizations are taken from Purcell's ornament table.

The works of Christopher Gibbons (1615-1676) include all ornaments described by Locke.<sup>31</sup> Locke's ornaments are the first irrefutable printed evidence of ornament signs in English music other than the single and double strokes. The proof of the use of a variety of ornament signs in English lute music goes back to 1620 and earlier,<sup>32</sup> yet it remains a curious fact that keyboard players used only two signs, at least up to the 1650's. Locke's pupil, Henry Purcell, included in his posthumous A Choice Collection of Lessons for the Harpsichord or Spinnet, 1696, an 'Instruction for beginners' (sic) in which nine ornaments with their symbols and their interpretations are given. The forefall, backfall, shake and beat are explained here, using the same nomenclature and stenographs as Locke. Conspicuous, however, is the absence of Locke's forefall and shake. In addition, Purcell gives examples of backfall and shake (  ), turn (  ), shake turned (  ) and slur (  ). The absence of the slide (Purcell's slur) from Locke's table may be significant: Locke wrote at a time when both Mace and Simpson had labelled this ornament as almost obsolete, and possibly this applied to keyboard music too. Also, Christopher Gibbons does not include any signs other than those of Locke. The hypothesis can therefore be made that the slide came back into fashion during Purcell's time.

#### 2.4 Ornamentation of the Lute-Cithern Family and the Lyra Viol in England : the Early Sources

The lute, being an important, popular sixteenth-century instrument, must have influenced virginal music, and hence also its ornamentation. It is important, nonetheless, to bear in mind that it is the nature of the plucked strings and the limitations imposed by playing technique which give to lute ornamentation its special character. In England, lute tutors do not mention the

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<sup>31</sup> Christopher Gibbons, Keyboard Compositions, ed. by C.G. Rayner, Corpus of Early Keyboard Music XVIII (1967).

<sup>32</sup> See R. Spencer, ed., The Board Lute Book (Leeds: Boethius Press, 1976).





virginal at all.<sup>33</sup> In contrast, a treatise such as Sancta Maria's Libro addresses both keyboard instruments and the vihuela equally; Venegas, for instance, describes the quiebro for keyboard and vihuela separately.<sup>34</sup> The English instruction manuals for lute often include related instruments such as the orpharion, bandora and cithern; Robinson's The Schoole of Musicke, for example, also includes the viol. This is not surprising, as the lyra viol was tuned and fingered in exactly the same way as the lute, and its music was performed from lute tablatures.

In spite of the written treatises and the ornamented source material, we have very little information on the subject of lute and lyra viol ornamentation. To aggravate the situation, available facts are often at odds with one another, and there is no standardization of ornament signs. After 1600 the signs used in lute music became more numerous, while lutes and their playing techniques were also constantly changing. In Dowland's life-time the lute grew from six to ten courses, the right-hand finger was used for the first time, and the thumb's use also changed from inside to outside.<sup>35</sup> It is possible that the same situation of change may apply to ornamentation on the lute as well, all of which complicate the issue.

The prevailing attitude in sixteenth-century England toward the study of graces, as well as the lack of instructions, are highlighted by Jean Baptiste Besardus' often-quoted words in Robert Dowland's Varietie of Lute Lessons (1610):<sup>36</sup>

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<sup>33</sup> W.S. Casey, Printed English Lute Instruction Books 1568-1610, 2 vols. (Ph.D. dissertation, University of Michigan, 1960).

<sup>34</sup> Venegas, Libro, p.159.

<sup>35</sup> R. Spencer, 'Approaches to performance, the lutenists' view', Early Music, vol.7, no.2 (1979), p.229.

<sup>36</sup> Robert Dowland, Varietie of Lute-Lessons (London, 1610), ed. by E. Hunt (London: Schott, 1958), p.12.

You should have some rules for the sweet relishes and shakes if they could be expressed here, as they are on the lute: but seeing they cannot by speech or writing be expressed, thou wert best to imitate some cunning player, or get them by thine owne practice, onely take heed, least in making too many shakes thou hinder the perfection of the Notes.

The difficulty of conveying in words how ornaments should be performed, had been voiced earlier by Rudolf Wyssenbach (Tabulatura uff die Lutten, 1550) and Matthäus Waissel (Lautenbuch Darinn von der Tabulatur und Application der Lauten, 1592), who expressed similar doubts:<sup>37</sup>

Mordanten serve to make the playing lovely ...  
Of these things certain rules cannot be described, they must be left to time and practise.

The only English lute instruction book in which the performance of ornaments is mentioned is Thomas Robinson's The Schoole of Musicke (1603).<sup>38</sup> He describes three graces, but gives no signs or any notational examples explaining their performance; nor is his text very clear. A summary of his explanations follows.

(i) 'Relish'

Frequent references to relishes are made in Robinson's book, and he uses the word both as a general and as a specific term for ornaments employing the upper neighbouring note. It is difficult to determine from the text whether Robinson intends an ornament of the alternating type (such as the tremolo) or not - Poulton believes that it could also mean an appoggiatura from above.<sup>39</sup> When playing the relish in single stops, Robinson advises:<sup>40</sup>

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<sup>37</sup> Poulton, Graces, p.110.

<sup>38</sup> Facs. reprint in Casey, Lute, 2:65-120.

<sup>39</sup> Poulton, Graces, p.113.

<sup>40</sup> Casey, Lute, 1:94.



Now you shall have a generall rule to grace it, as with passionate play and relishing it: and note that the longer the time is of a single stroke, that the more need it hath of a relish, for a relish will help, both to grace it, and also helps to continue the sound of the note his full time: but in a quick time a little touch or jerke will serve, and that only with the most strongest finger.

Concerning full stops, he writes:<sup>41</sup>

... so take this for a generall rule, that you relysh in a full stop, with that finger which is most idlest, in any string whatsoever: either a strong relysh for loudnesse, or a mild relysh for passionate attencion.

Casey regards Robinson's 'finger that is most idlest', as important, since it implies that the relish ought to be played by some finger not engaged in stopping. This means that the relish can only be to an upper neighbouring note, since the lower neighbour is produced by removing one of the stopping fingers.<sup>42</sup> This implies that in chords where all four fingers are stopping strings, the upper-note relish would be impossible. Furthermore, Robinson also defines the relish as an ornament played by the left hand. From the quotations above, one learns something about the performance of the relish: longer notes require it to help sustain the sound; on short notes a short, quick ornament suffices. The latter most likely was accented, since Robinson says it should be done 'with the most strongest finger'. The relish also involves dynamics: 'a strong relysh for loudnesse, or a mild relysh for passionate attencion'.

(ii) 'A Fall without a relish'

There is no agreement on the interpretation of Robinson's 'fall without a relish'. Poulton and Spencer see it as an appoggia-

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<sup>41</sup> Casey, Lute, 1:94.

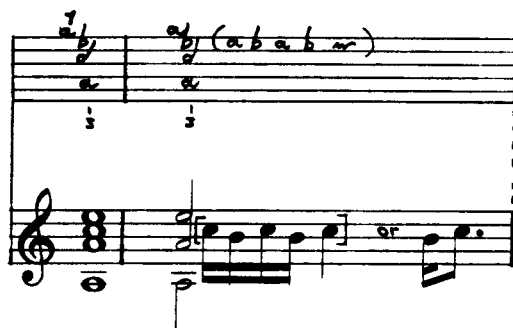
<sup>42</sup> Ibid., 1:95

tura, a tone or a semitone below the note, according to the key.<sup>43</sup> Casey interprets it as a mordent, i.e. an ornament of the alternating type. It is nevertheless clear that, whatever the melodic shape of the ornament, it involves the lower neighbouring note. Robinson reads as follows:<sup>44</sup>

Now to your fall with a relish, or a fall without a relish: take this for a generall rule, that all fals in what stop soever, in a flat note, must bee performed with the neerest finger to the halfe notes, and in a sharp note or stop, with the neerest and strongest finger to a full note. As heere you see underneath for example.

The following is one of the given examples (notes in brackets are Casey's interpretation):<sup>45</sup>

Ex.2.8



(iii) 'A fall with a relish'

This ornament combines the previous two. Robinson says:<sup>46</sup>

In the next where c is in the Treble, because c is sharp, must have his fall from the full note a, and c having had his fall, may so be held still without moving the forefinger, and the relish continued (with the little finger) in d which is under halfe note:

<sup>43</sup> Poulton, Graces, p.113; R. Spencer, 'Thomas Robinson, The Schoole of Musicke, 1603', Lute Society Journal XV (1973), p.52.

<sup>44</sup> Casey, Lute, 1:95, 2:75.

<sup>45</sup> Ibid., 1:96.

<sup>46</sup> Ibid.

Ex.2.9



Should the fall not be regarded as an alternating ornament, the only other interpretation would be an appoggiatura from below, followed by a relish.

By turning to the sources of lute music, one finds the two commonest ornament signs. The one is the double cross: ✖ or # , which occurs most often, and at times is the only ornament sign used in a manuscript. In the latter case it is used presumably to denote all the various ornaments, for it appears in many different contexts. The other sign is the single cross: ✕ or + . There is a conspicuous resemblance here to the signs employed by the Virginalists: // and / .

Early English lute manuscripts bear no ornament signs, while those written or copied after 1600 contain the largest variety and quantity of signs per piece. Barley's A New Booke of Tabliture (1596) uses the double cross ✖ only, whereas Anthony Holborne's pieces for lute (1599) contain both ✖ and ✕ . No signs are used in his music for bandora and cittern.<sup>47</sup> Sampson's lute book (c.1609) employs ✖ , + , ✕ , and ) ✖ .<sup>48</sup> From this evidence it appears that the number of ornaments coming into use after 1600 increased tremendously, in comparison to earlier times. It would be difficult, however, to prove that fewer ornaments were used earlier, and that they simply

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<sup>47</sup> M. Kanazawa, ed., The Complete Works of Anthony Holborne, 2 vols. (Cambridge: Harvard University Press, 1973).

<sup>48</sup> R. Spencer, ed., The Sampson Lute Book (Leeds: Boethius Press, 1974).

were not indicated by various signs. The appearance of more ornament signs in English lute music was undoubtedly the result of French influence, as several idiomatic features of French lute ornamentation began to be employed in England c.1615, during the Jacobean period (1603-1625).

The Margaret Board Lute Book (c.1620-30) is a source which employs a great variety of ornaments. Before piece no.111 (fol.32<sup>V</sup>), the scribe wrote out a table of graces. Only the sign and description of the ornament are provided:<sup>49</sup>

- ) a pul back
- ( a fale forward
- + to beat down the finger with a shake
- : 3 pricks to be struck upward with one finger
- # for a long shake
- c for a slide

Spencer suggests the following interpretations:

- ) a back-fall (appoggiatura from above)
- ( a half-fall (appoggiatura from below)
- + perhaps a half-fall repeated
- : one right-hand finger playing a chord
- # a tremolo beginning and ending on the same note
- c slurring two or three notes with left hand fingers

Five scribes contributed to this manuscript, which accounts for the fact that nineteen signs are encountered in this collection's music:

- + 7 +· ·+ ∴ ∴ ∴ ∴ ) † # ∴ ∴ : || ( ∴  
c †† †

In Dowland's lute music the double cross is the most frequent sign, but the single cross (x or +) and other signs (· ∴ ∴ ∴ † #)

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<sup>49</sup> Spencer, Board, see Introductory study, n.p.

also occur in various manuscripts.<sup>50</sup> Three new ornaments occurred regularly in lute music after c.1615. The one was the backfall, indicated by a comma), the other the backfall and shake combined (')#), and the third the 'shaked beat'. In some sources the sign used for the 'shaked beat' was an upside-down looking comma or a single cross, together with the shake-sign ( '# or<sup>x</sup>#), while in Board only the single cross (x) was used.<sup>51</sup> What is important about these three ornaments is that they introduce features not earlier in evidence: the backfall and backfall shake introduce the use of upper-auxiliary ornaments with harmonic implications; the upper note may cause a dissonant harmony similar to the grosso, in contrast to Elizabethan ornaments which were essentially melodic. The 'shaked beat' is a fore-fall 'shaked', just as the backfall shake is a backfall 'shaked'. The backfall probably takes one-quarter of the value of the main note, as the comma is thus described as a backfall in Playford's An Introduction to the Skill of Musick (1654), and illustrated in musical notation. This would only be true if the manner of playing the backfall had not changed between c.1615 and 1654, which is impossible to know.

The variety of signs and their haphazard use in manuscripts are discouraging, as they are placed before, after or below the letter to which they belong, or even between two letters. Various manuscripts of the same work often disagree on the placing of the ornaments and also on the amount of ornamentation. This leaves one with the unanswerable question: was it carelessness on the part of the scribe or was it intentional? The various signs possibly had personal meanings for each writer. In the Board Lute Book, for instance, the variety of ornaments used by each scribe suggests that each felt free to

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50 For examples, see D. Poulton, ed., The Collected Lute Music of John Dowland (London: Faber, 1974), p.199, b.1,5, and p.237, b.24.

51 D. Marriott, 'English Lute Ornamentation', Guitar and Lute, no.10 (July 1979), pp.25-26. The Sampson Lute Book (c.1609) already employed the sign ')# before 1615.

use his own system. As there is so little concrete evidence concerning ornamentation for the lute of the period, and since the actual intentions of the composers are unknown, one can only speculate on the exact meaning of the signs.

There is one other source which sheds light on this period's ornamentation. It is an undated manuscript (c.1610-1622) and it contains a collection of songs and pieces for the lyra viol.<sup>52</sup> It is known as Robert Downes' Lyra Viol MS (GB-Lbm Egerton 2971) and it includes a table of ornaments for viol. It was written in Downes' hand on a scrap of paper pasted on to the back fly-leaf of the manuscript, and is probably his own attempt to interpret the ornaments found in the solo viol music in the manuscript:<sup>53</sup>

		relish	
	#	shake	with ye hand
	x	falle	
		tast	
Carrecters for	∪	traile	
ye graces	..	thump	with ye bowe
of ye violl	?	shake	

Because of damage to the paper, the signs for the 'relish' and 'tast' are illegible.

The three sources, Robinson, Downes and Board, throw some light on the subject even though Robinson gives no signs, but only explanations; the Downes and Board manuscripts conversely offer only signs and names, but no explanations. The interpretation of the two most commonly found ornaments of Elizabethan lute

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52 T. Dart, 'Ornament Signs in Jacobean Music for Lute and Viol', Galpin Society Journal, no.14 (March 1961), p.31.

53 M. Cyr, 'A Seventeenth-Century Source of Ornamentation for Voice and Viol: British Museum MS. Egerton 2971', Research Chronicle of the Royal Musical Association IX (1971), p.62.





music becomes clearer through this evidence. The double cross (#) is interpreted by Downes as 'shake' and by Board as 'for a long shake'. Robinson's 'relish' no doubt means the same thing as their 'shake', because the double cross was the commonest sign in Robinson's time, and Robinson refers to the 'relish' as a general term for ornaments as well as indicating a specific grace. One may therefore accept the fact that the sign # represents a 'shake', equivalent to the keyboard tremolo. The cross (#) in Board ('for a long shake') suggests that the scribe who wrote out pieces 111-186 distinguished between long and short shakes by means of signs. This would be true only if the 'pull back' of fol. 32<sup>V</sup> were the short shake or 'quick jerke' to which Robinson refers. No other English or Continental source confirms this practice. Robinson's 'fall without a relish' seems the closest counterpart of Downes 'falle' (x), and 'a fale forward' (c) in Board, fol. 32<sup>V</sup>. The sign + ('to beat down the finger with a shake') in Board is a fall extended by shaking, similar to Simpson's 'shaked beat'.

English lute ornaments fall into two distinct categories: those made with the upper and those made with the lower auxiliary note. If Robinson's relish were the same as Downes' shake and that found in Board (likely, because it was the commonest ornament of the period), it would mean that the shake was always made as an alternation of the main note with the upper auxiliary. It is significant that in none of the discussed sources is any reference made to the mordent, either long (as the mirror image of the shake) or short, in the same way as in contemporary Continental keyboard sources. The only quasi-reference to a mordent in English sources is the sign '·' used in Board, which is explained in the Manchester Lyra Viol Book as a short mordent. Whether they meant one and the same thing is impossible to ascertain.<sup>54</sup> We know from Robinson's explanation ('... in a quicke time a little touch or jerke will serve ...') that short shakes as well as long shakes were employed according to the

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<sup>54</sup> Spencer, Board, fols. 10<sup>V</sup>, 22<sup>V</sup>; and Spencer's Introductory study, n.p.



musical context, but whether the long mordent (tremulus descendens) and short mordent (Ammerbach's mordant ascendendo) were used, remains enigmatic. The double cross (✕) occurs in Elizabethan lute music in situations where such an interpretation would be possible, and at least one commentator feels that it should be included in the performance of this music, even though the sources do not mention it.<sup>55</sup> The sign x involves a lower auxiliary in all the sources described above. In the earlier sources (before c.1615), the single cross signifies a 'fall', or appoggiatura from below, but by the late Jacobean period the sign c had replaced the single cross as the sign for a 'fall'. In Board the single cross apparently indicates a 'fall' extended by shaking, but still it remains an ornament involving the lower auxiliary. The similarity of this latter ornament to the longer mordent complicates the issue of the use of the mordent in Elizabethan lute sources even further. The single cross may also be interpreted as a slide if the preceding letter is two letters below the written note. None of the sources discussed mentions a slide; Board is the only one to use this name and a sign (c) for it. The same sign is referred to as 'whole-fall' by Mace, a much later source. Mace's reference to the effect that it was an ornament much in use earlier, strengthens this supposition.<sup>56</sup>

This still does not solve the problem of whether one should assign various meanings to the two commonly used lute ornament signs of the Elizabethan period: can the double cross signify both upper-note shake and lower-note mordent, and can the single cross be seen as indicating an appoggiatura from below as well as a slide? In view of the differentiation of signs which became the practice in the Jacobean period, where each ornament received its own symbol, two hypotheses are possible. Firstly, one can take the viewpoint that the signs had specific, singular meanings, as Robinson's explanations suggest: the double cross suggests a long or short shake, the single cross an appoggiatura

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<sup>55</sup> D. Marriott, 'English Lute Ornamentation', Guitar and Lute, no.9 (April 1979), pp.31-32.

<sup>56</sup> See p.98.

from below ('fall'), and the 'fall with a relish' is a combination of these two ornaments:<sup>57</sup>

Ex.2.10

Shake	
Fall	
Fall with a relish	

Secondly, in the light of the little information available concerning lute ornamentation of the Elizabethan period, it would also be possible to formulate an hypothesis whereby one could say that the ornaments described by Robinson probably signified the commonly-used ornaments. One might then occasionally interpret the two signs in appropriate musical situations as signifying other, related ornaments popular during the period, such as the mordent (as interpretation of #) and the slide (as interpretation of x).

## 2.5 Later Sources for the Lute, Viol and Violin

John Playford's Introduction to the Skill of Musick (1654) is the first English source of any kind to include the interpretation of ornaments in musical notation.<sup>58</sup> The table is also found in the seventh edition of 1674, with a few changes, and here it is clear that this table was taken from Simpson's table of ornaments, first published for the viol or violin in 1659.

<sup>57</sup> See also Marriott, Lute Ornamentation (April 1979), p.32.

<sup>58</sup> As I was unable to obtain a copy of the 1654 edition, my only source of information is Marriott, Lute ornamentation (July, 1979), p.25.

The other important source, for lute, is Mace's Musick's Monument published in 1676. In all these sources stenographic signs are used which also appear in the virginal and lute music of the Elizabethan and Jacobean era. As usual, there is some disparity between the sources with regard to the signs and their interpretation, as well as the placement of signs.

Christopher Simpson's The Division - Viol (1659) gives the following table:<sup>59</sup>

Ex.2.11



The image shows four staves of musical notation with various signs and their corresponding musical phrases. The signs are: Beat, exp: Backfall, exp: Double-Backfall, exp: elevation, exp, Springer, exp: Cadent, exp: Backfall shakod, exp, Shaked Graces, Close Shake, exp: Shaked Beat, exp: elevation, exp: Cadent, exp: Double-Relish, exp: or thus: exp: For this, I am obliged to the ever famous Charles Colman Doctor in Musick.

As can be seen at the bottom of the table, Simpson obtained his information from Dr. Colman, an expert in these matters. Some similarities to earlier sources, either in the sign used or the written-out form, are apparent. Of these, the demisemiquaver figures in the double relish (♫) resemble the gropetto plus groppo which is often found written out at cadence points in virginal music. The springer is identical to Diruta's accento, and the sign for the elevation (+) is the same as that found in some of the earlier lute sources already discussed. The back-fall resembles the sign found on fol.32<sup>v</sup> of Board.

<sup>59</sup> Christopher Simpson, The Division-Viol or The Art of Playing ex tempore Upon a Ground (London, 1667), facs. ed. (London: Curwen, n.d.), p.12.



Simpson also makes interesting general statements about ornaments. He classifies them in two ways: those made with the bow, and those made with the fingers, as Downes did many years before. Those made with the fingers are again subdivided into two groups: 'smooth' graces and 'shaked' ones. The 'smooth' graces are of the non-alternating type, and the 'shaked' ones speak for themselves. One is immediately struck by the similarity of this classification to the accenti e trilli of the Italians, discussed earlier. The 'smooth' graces are more specifically those 'when in rising or falling a Tone or Semitone, we draw (as it were) the Sound from one Note to another, in imitation of the Voyce.'<sup>60</sup> One recalls the analogy with the accentus described by Praetorius, which is also explained in terms of vocal performance. From Simpson's table and his text it is clear that the direction of the melodic line determines which type of 'smooth' grace is to be used: ascending, the 'plain-beat' and 'elevation', and descending, the 'backfall' and 'double-backfall'.<sup>61</sup> Of the 'elevation' (a slide), he says that it is 'now something obsolete',<sup>62</sup> thereby suggesting that it had once been commonly used.

The 'shaked' graces are divided into 'close-shakes' and 'open-shakes'. The 'close-shake' is the equivalent of the vocal trillo described by Caccini and others and would, in effect, constitute a vibrato on the viol. The 'open-shakes' may be equated with the groppo, here used in combination with the 'smooth graces'. The most important feature of Simpson's 'open-shakes' is that they start with the upper auxiliary, not the main note. The groppo design has therefore superseded the tremolo. The 'shaked' beat is simply a 'beat' or forefall 'shaked', the inversion of the 'backfall shaked'. Simpson's verbal description strengthens this reasoning: 'The Beat is the same in nature with the Plain-Beat, the difference only a short shake of the finger before we fix it on the place de-

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60 Simpson, Division, p.10.

61 Ibid., pp.10,11.

62 Ibid., p.11.

signed.<sup>63</sup> This is no doubt the same as the ornament described in Board on fol. 32<sup>V</sup>, 'to beat down the finger with a shake', where Spencer suggests a forefall repeated in alternation with the upper main note. Simpson's 'shaked beat' bears, however, a close resemblance to the later 'beat', as explained by Purcell, which is a mordent preceded by a forefall. Further, the Manchester lyra viol book's sign '·', which is a short mordent, is equated with the three dots used by Simpson. In Simpson's case, the compound sign for the 'shaked beat' '·/' can likewise be interpreted as a forefall plus mordent, if the sign '·' of the Manchester book is the same as Simpson's three dots:

Ex.2.12



Simpson also remarks that the above ornament and the plain 'beat' are usually made with a semitone. (There is a similarity here with Praetorius' example of the tremulus descendens, which is also made with the lower semitone.) It is unlikely, though, that Simpson intended it as such; his 'shaked beat' is clearly only the forerunner of what was to become the later 'beat' (= forefall plus mordent) for keyboard instruments.

Another interesting feature of Simpson's table is that for the 'beat', 'springer' and 'cadent' only one sign is used, but its placement and direction of slant determines the difference between them: the upward slanting stroke for the 'beat' is placed between notes, that for the 'springer' above the note, and that for the 'cadent' between notes, but slanting downwards. That the viol was much influenced by vocal ornamentation, is indicated by Simpson's remark that 'any Movement of the Voyce' may be imitated on the viol. Finally, he divides ornaments once again into two categories: firstly, 'masculine' ones, such as 'backfall' and 'shaked beat', which are more appropriate for use in the bass;

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<sup>63</sup> Simpson, Division, p.11.



secondly, 'feminine' ones such as the 'close shake' (vibrato) and 'plain graces' (= smooth graces?), which are more suited to the treble. Nevertheless, these are interchangeable if the situation demands it, e.g., if one wishes to express 'courage or cheerfulness' in the treble or 'sorrow' in the bass.<sup>64</sup> Simpson's table must have been highly regarded, because it was included in the seventh edition of Playford's Introduction to the Skill of Musick.<sup>65</sup> The fashion of changing ornament symbols is reflected in the differences between the 1654 and 1674 editions:<sup>66</sup> whereas the comma › is used in both for the backfall, two commas designate the 'backfall shaken' in the 1654 edition and a double-backfall in the 1674 edition; in the latter, the 'backfall shaken' is indicated `); .

The second important source is Mace's Musick's Monument (1676) for the lute. The book was published only towards the end of his life (he was born in 1613), and by then lute playing was already a dying art. His explicit directions on ornamentation reflect seventeenth-century English lute practice and he is the most coherent of all writers on the instrument, therefore being a very important source. French lutenists exerted a dominant influence on seventeenth-century lute playing, and Mace can be regarded as an English representative of the French School.<sup>67</sup> He describes the following ornaments as those 'graces commonly in use upon the lute', unfortunately without giving notated examples for all of them:<sup>68</sup>

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64 Simpson, Division, p.12.

65 John Playford, An Introduction to the Skill of Musick (London, 1674), facs. ed. (New Jersey: Gregg Press, 1966), p.116.

66 See Marriott, Lute Ornamentation (July 1979), pp.25-26; and Playford, Introduction, p.116.

67 Neumann, Ornamentation, p.67.

68 J. Dodge, 'Ornamentation as Indicated by Signs in Lute Tablature', Sammelbände der Internationale Musikgesellschaft IX (1907-8), pp.328-331.

(i) 'The shake': .a

The 'first and chiefest' ornament, it can be performed either 'hard (loud) or soft'.

Ex.2.13



(ii) 'Beate': /c

Explained as a quick ornament, it can be made with the lower semitone.

Ex.2.14



(iii) 'Back-fall': )a

It can be 'shaked' afterwards, becoming a trill. It uses either the whole tone or semitone from above.

Ex.2.15



(iv) 'Half-fall': ,a

Always made with a semitone.

Ex.2.16



(v) 'Whole-fall': +a

'A grace much out of use in These our Days'.

Ex.2.17





(vi) 'Elevation': † a

It is always made on the middle note of three ascending or descending notes.

Mace's tablature suggests an ascending and descending slide:

Ex.2.18



The image shows two musical staves for 'Elevation'. The top staff is a six-line tablature with letters 'a', 'c', 'e' on the strings. The first part is labeled 'Ascending' and shows the sequence a-c-e, then a-c-e-f-g-e. The second part is labeled 'Descending' and shows e-c-a, then e-c-f-g-e-a. The bottom staff is a standard musical staff in treble clef, showing the notes A, C, E, F, G, E, C, A, E, C, F, G, E, A with slurs indicating the ascending and descending slides.

(vii) 'Single Relish': ∴ a

'This grace is akin to the true shake: it is played with the fingers as upon a Viol'.

The tablature explains it as a shake which starts with a Back-fall (c), and terminates with two notes in the manner of the gropo:

Ex.2.19



The image shows two pairs of musical staves for 'Single Relish'. Each pair consists of a six-line tablature and a standard musical staff in bass clef. The left pair is labeled 'Ascending' and shows the sequence a-c-e, then a-c-e. The right pair is labeled 'Descending' and shows e-c-a, then e-c-a. The standard notation shows the notes A, C, E, C, A, E, C, A, E, C, A with slurs and a 'c' above the first note indicating a back-fall.

(viii) 'Double Relish': ∴∴ a

'In Encient Times the Well and True Performance of It, upon the several Keys, throughout the Instrument (either Lute or Viol) was accounted an Eminent piece of Excellency, though now, we use it not at all in our Compositions upon the Lute'.



Ex.2.20

(ix) 'Springer': a/

Ex.2.21

(x) 'Sting': w a

This is a vibrato.

Simpson and Mace are interesting mainly for the light they shed on earlier practices. Both refer to the slide (Simpson: elevation, Mace: whole-fall) as an ornament that had become obsolete in their time, but which had been used earlier. Obviously, they refer to its use on the lute and viol specifically, which is not to say that it was also used on the keyboard. Both employ the single cross (x). Their reference to it as a near obsolete ornament leads one to infer that the sign and its interpretation is that which was used earlier. (Both Simpson's and Mace's sign for the backfall is the same as that found in the Board table.) Mace refers to the double relish as a much used ornament in earlier music, and the notation for it in the two sources largely agrees. As will be seen, this ornament is always found in written-out form in the music of the Virginalists. It is clear from both sources that, although they were undoubtedly bound to a new era and subject to new influences, they remained rooted in an English tradition and still retained a few ornaments which had earlier been in common use. Although neither mentioned it, Simpson's 'beat' and 'backfall' (=Mace's 'half-fall' and 'back-fall') had already been in use since c.1620, as they appear in the ornament table of Board as 'fall

forward' and 'pull back', the sign for the backfall being identical in Board, Simpson and Mace. The lack of uniformity which characterizes seventeenth-century signs and their interpretations is also a feature of Mace and Simpson, for here, too, there is not always agreement. Simpson's 'beat', for example, is an appoggiatura from below, whereas Mace's 'beate' is a mordent. Mace's sign for the elevation (≠) appears in Board on fol.20<sup>V</sup>. Simpson also uses it for an elevation, but obviously he must have meant a 'shaked elevation'. Mace's 'shake', which starts on the main note, is described for use on an open string, which leaves the possibility open that an upper-note shake may otherwise have been used, as in Simpson's case. Indeed Simpson says: 'The shaked Back-fall is also the same in nature with the plain ...'<sup>69</sup>

## 2.6 Contemporary Lute Ornamentation on the Continent

The graces described by contemporary European lutenists will be briefly discussed here. Although the English lutenists need not necessarily have copied their Continental counterparts, they must have been acquainted with their techniques; Le Roy's lute instruction book which was translated into English, and Dowland's inclusion of Besardus' short treatise in Varietie, are evidence of this. The earliest lute ornaments (Capirola, Borrono) have already been discussed, as well as the ornaments described by Sancta Maria which apply as much to the keyboard as to the vihuela.

In 1557 Venegas, in his Libro de Cifra (for keyboard, harp and vihuela), described two quiebros and four redobles. The quiebro is described as 'to shake the finger on the string and fret' or 'to keep it in place and shake with the second and third finger one or two frets higher': the first interpreted by Poulton as a vibrato and the second as a tremolo.<sup>70</sup> The

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<sup>69</sup> Simpson, Division, p.11.

<sup>70</sup> Poulton, Graces, p.109; and Venegas, Libro, 1:159.

redobles are described by their fingering, which differs in each case. The first method is called dedillo and is made with the second finger of the right hand; the second is called Castillean, which is the crossing of the first finger over the second; the third is the 'foreign' way, which is the opposite of the second, i.e. crossing the second finger over the first; the fourth method is done with the second and third fingers. Unfortunately, these descriptions do not make the actual execution clear. The fact that Venegas discusses them separately from the keyboard quiebros is a definite indication that they were idiomatically conceived for the lute, and not likely to be applied to the keyboard. None of the other vihuelists is clear in his descriptions of ornaments. Luys Milán says that redobles are commonly called 'making dedillo' (dedillo = fingertip) and they must be played fast. Elsewhere he refers to a redoble called dos dedos (dedos = finger). Also, he refers to an ornament as a quiebro; yet nowhere is it explained. Alonso Mudarra distinguishes more clearly between the dos dedos redoble and dedillo redoble. He prefers the dos dedos, but states that if one can play both, it is a good thing, as both are needed at times.<sup>71</sup> The dedillo is for descending passages, and dos dedos for ascending passages and cadences. Redobles are to be made on notes of this value: ♪, but should the tempo be faster, for example, if the tempo indication is ϕ, notes of ♩ may also have redobles. Dos de means a redoble with two fingers, and de di means dedillo.<sup>72</sup> Miguel de Fuenllana describes three ways of playing redobles on the vihuela: firstly the dedillo, secondly dos dedos played with the thumb and index finger, and thirdly played with the first two of the four fingers (sic) of the right hand.<sup>73</sup> It is unfortunate that in spite of the des-

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<sup>71</sup> Luys Milán, Libro de Musica de vihuela de mano intitulado el Maestro (Valencia, 1535), ed. by L. Schrade (Wiesbaden: G. Olms Hildesheim, 1967), pp.48,64,170.

<sup>72</sup> Alonso Mudarra, Tres libros de Música en cifra para vihuela (Sevilla, 1546), ed. by E. Pujol, Monumentos de la Música Espanola VII (Barcelona: Instituto Espanol de Musicología, 1949), p.40.

<sup>73</sup> Miguel de Fuenllana, Libro de Música para vihuela intitulado Orphénica lyra (Sevilla: Martin de Montedoca, 1554), fols.5<sup>v</sup>-6; and Johnson, Spanish Renaissance, pp.109-110.



criptions, one cannot ascertain exactly how these redobles were played. It is nevertheless an affirmation of the fact that various ornaments were in use in Spain at mid-century, and that two distinct kinds of redobles were in use.

The lute manuscript Arie e Canzoni in musica di Cosimo Bottegari (1574), contains Italian music for voice and lute.<sup>74</sup> The symbol # appears a few times and could be an ornament similar to the tremolo. The very existence of this sign in an Italian lute source is extraordinary, since I know of no other Italian source which employs it; it is possibly not an ornament sign, as the signs #, x and + in Francesco da Milano's music indicate that the note or chord should sound 'as long as the consonance thus produced is perfect.'<sup>75</sup> The same possibly applies here. Kapsberger describes a trillo in his Libro Primo d'Intavolatura di Chitarone (1604). It is indicated by two dots above the tablature number, and seems to be a tremolo with the upper auxiliary, as it is always placed on an open string.<sup>76</sup> He also gives two signs indicating a slur and an arpeggio. Pietro Melii's Intavolatura di Liuto Attiorbato Libro Secondo (1614) uses a capital T to mark places where he desires a tremolo.<sup>77</sup>

Nicolas Vallet is the earliest French lutenist to give explicit directions about ornamentation. In Secretum Musarum (1615) he explains two ornaments. The first is indicated by a comma , , which is an appoggiatura from above. The second is a single cross (x), which is similar to the first, but indicating that it should be repeated two or three times, according to the length of the written note, therefore being a tremolo commencing with the upper auxiliary.<sup>78</sup> In the example Vallet adds

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74 C. MacClintock, ed., The Bottegari Lutebook, The Wellesley Edition no.8 (Wellesley, Mass: Wellesley College, 1965).

75 A.J. Ness, ed., The Lute music of Francesco Canova da Milano, 2 vols. (Cambridge: Harvard Univ. Press, 1970), p.11.

76 Dodge, Ornamentation, p.321.

77 Poulton, Graces, p.111; Dodge, Ornamentation, p.322.

78 Text published in Dodge, Ornamentation, p.323.

a turn of two notes, which he writes out in the tablature, and this would equal a grosso. It is significant that at the time of Vallet's writing, the backfall comma and backfall plus shake ( ' # ) began to appear in English lute manuscripts (e.g., the Sampson Lute Book).

Alessandro Piccinini describes three ornaments in his Intavolatura di Liuto e di Chitarrone Libro Primo (1623). He uses signs for tenues and slurs only, but not for ornaments, 'since the places where tremoli should be made are infinite, I have not wished to obscure the tablature by making any'. He adds, 'in all places where there is a pause ... there must be a shake, sometimes one sort of shake, sometimes another, according to convenience'.<sup>79</sup> Elaborate directions are given for three tremoli, which he calls first, second and third. The first should last for the whole value of the note, and Piccinini seems to imply the use of the semitone above the main note. The second is fast and short, and uses the lower semitone, therefore being a mordent; it 'may be done in an infinite number of places, and yields a lovely grace'. The third is a vibrato, which is not often used, as it takes the hand out of its playing position.

Finally, Basset, writing in Marin Mersenne's Harmonie universelle (1636), introduces seven symbols, which is his attempt at classification. According to him, the ornaments of his time 'have never been so frequent as they are at present.' Clearly, at that time ornament signs were not very diverse, for he says of the comma:<sup>80</sup> 'Now the one which is formed in this fashion: > is called tremblement ordinarily, and most people use no other character to express all the different sorts'. By adding a dash or dot to the basic sign, he distinguishes between an ornament which uses a semitone, from that using a tone. The basic

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<sup>79</sup> The original text of this and the following appears in Dodge, Ornamentation, pp.322-323.

<sup>80</sup> Marin Mersenne, Harmonie Universelle: The Books on Instruments (Paris, 1635), translated by R.E. Chapman (The Hague: Nijhoff, 1957), p.107.



ornaments described are:<sup>81</sup>

- (i) Tremblement: ) Apparently a tremolo with the upper auxiliary, or sometimes an appoggiatura from above.
- (ii) Accent plaintif: ) An appoggiatura from below.
- (iii) Martelement: ✕ or ^ A Mordent, using the lower auxiliary.
- (iv) Verre cassé: ) A vibrato.
- (v) Battement: z A long tremolo? It is practised more upon the lute than the violin.
- (vi) Accent plaintif and battement: ·z Combination of (ii) and (v).
- (vii) Accent plaintif and Verre cassé: ) Contrary to the description, the given tablature letters suggest a mordent plus verre cassé.

Judging from the Continental evidence, one concludes that the English lutenists had developed an individual system of indicating ornaments. It is at once evident that they used signs more abundantly and at an earlier date than their European counterparts (but for Capirola and Borrono). The Spanish employed no signs, and the Germans began using them only much later than 1600. Vallet's two ornament signs resemble the two used by the English: the single cross (x) and the comma (,). Vallet's description of the comma accords with that given on fol.32v in Board, but the single cross employs the upper auxiliary and not the lower, which seems to have been standard in English lute music. On the Continent, Mersenne describes only the appoggiatura from below. For the rest, the signs used on both sides have little in common, strengthening the belief that there was little standardization. The English double cross is not found in lute music outside England (except for Bottegari). The tremolo (the equivalent of the early English shake) is the most commonly described ornament of the Continentals, therefore confirming the fact that it was the one most often used on the

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<sup>81</sup> Mersenne, Harmonie, pp.107-109; Poulton, Graces, p.111; and Dodge, Ornamentation, pp.324-325.















Continent and in England. The appoggiatura from above is the next most often mentioned (Kapsberger, Melii, Piccinini, Mersenne). In England, in contrast to this, the appoggiatura from below is the ornament first to be described (Robinson), whereas the later Board Lute Book mentions both and gives separate signs for each. The English and Continental lutenists agree on two ornaments: the shake or tremolo with upper ornamental note and the fall (appoggiatura), using the lower ornamental note. Robinson's 'fall with a relish' has a counterpart in Mersenne's accent plaintif plus batement, but is nowhere else described. Neither is the slide in Board mentioned elsewhere on the Continent. The mordent is described by both Piccinini and Mersenne. As with the English, a clear distinction is made between ornaments utilizing the upper note and those with the lower ornamental note. An example is Piccinini, who describes two tremoli, one with the upper, and one with the lower auxiliary note; Mersenne gives them different names and signs (tremblement, martelement).

In Tables 2.1 to 2.5 the ornaments discussed in this chapter are tabulated.



TABLE 2.1

ORNAMENTS IN ENGLISH KEYBOARD MUSIC 1530-1660

Source	Name	Sign	Notation and Fingering	Comment
GB-Lbm Add.15233 (before 1550)				Double stroke
GB-Lbm Add.29996  (c.1547, and c. the reign of Mary)		  		Single stroke occurs only in one piece  Triple stroke
GB-Lbm Add.30513				The single stroke does not appear in this source
Marsh's Lib.D.3.30 (c.1560-70)		 		This sign occurs only in this source
Parthenia In-Violata (c.1625)		 		Simultaneous use of ornaments
All sources of virginal music written c.1560- 1650		 		Not the same as the triple stroke
GB-Lbm Royal 23.1.4 Priscilla Bunbury's Virginal Book(c.1630)				It occurs only in the second half of this manuscript
GB-Lbm Add.30485		 		These two signs are used in conjunction with double-stroke ornaments, up to fol.25 of <u>Wr</u>





Source	Name	Sign	Notation and fingering	Comment
Anne Cromwell's Virginal Book (1638)				
GB-Och 1236				The double and single strokes in this source appear above the note stem and through it
GB-Lbm Add.10337 (1656)				Only one appearance
Edward Bevin: 'Graces in play' (c.1700 or earlier)				<p>The fingering and notation are original</p> <p>'The graces, before, is here exprest in notes'</p>

TABLE 2.2

ORNAMENTS IN ENGLISH KEYBOARD MUSIC 1660-1696


















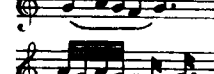






Source	Name	Sign	Notation and fingering	Comment
Musick's Hand-Maid (1663)				In the latter part of the book the double stroke is no longer drawn through the stem of the note
Locke:Melothesia (1673)	Forefall			No note examples are supplied
	Backfall			
	Shake			
	Forefall and shake			
	Beat			
Purcell (1696)	Shake			
	Beat			
	Plain note and shake			
	Fore fall			
	Back fall			
	Turn			
	Shake turn'd			
	Slur			
	Battery			



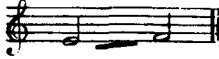

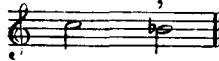
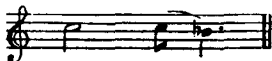
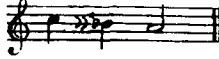



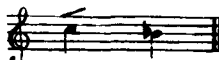

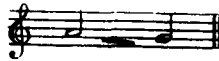
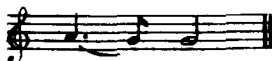
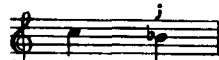

TABLE 2.3

## LUTE AND VIOL ORNAMENTS OF THE ELIZABETHAN AND JACOBAN PERIODS

Source	Name	Sign	Notation and fingering	Comment
Robinson(1603)	Relish			Employs upper auxiliary note
	Fall without a relish			Appoggiatura from below (possibly a mordent too?)
	Fall with a relish			Combination of Relish and Fall
Board Lute Book (c.1620-30)	Pull back	)		Appoggiatura from above
	Fall forward	(		Appoggiatura from below
		+		'To beat down the finger with a shake' (= a forefall 'shaked'?)
		:		'Three pricks to be struck up- ward with one finger'
	Shake	#		A long shake
	Slide	∪		
Downes (Lyra Viol) c.1615	Relish			Vibrato?
	Shake	#		Alternation between main and upper note
	Fall	X		Forefall?
Sampson Lute Book c.1609		)		Backfall
		)#		Backfall 'shaked'?
		(#		Beat 'shaked'?
Cosens Lute Book c.1600-15		X#		Beat 'shaked'?

TABLE 2.4

ENGLISH LUTE AND VIOL ORNAMENTS AFTER c.1650

Source	Name	Sign	Notation and fingering	Comment
Playford (1654)	Backfall	.a		'A smooth grace'; it takes a quarter of the value of the main note
		ja		
	Elevation	a)		'A smooth grace'
		+a		
Simpson: The Division-Viol (1659)	Beat			'Smooth graces'
	Backfall			
	Double-Backfall			
	Elevation			A slide
	Springer			
	Cadent			
	Backfall shaked			'Shaked graces'



Source	Name	Sign	Notation and fingering	Comment
Simpson	Close shake			'Shaked graces'
	Shaked beat			
	Elevation			
	Cadent			
	Double relish			'Groppetto plus groppo'
	Or thus:			
Mace: Musick's Monument (1676)	Shake	.a		Main-note start, with upper auxiliary alternation
	Beate	/c		Mordent
	Back-fall	)a		Appoggiatura from above
	Half-fall	,a		Appoggiatura from below, semitone specified
	Whole-fall	+a		Slide





Source	Name	Sign	Notation and fingering	Comment
Mace	Elevation	⦿		Slide up and down
	Single relish	∩a		Similar to the <u>groppo</u> ( <i>'akin to the true shake'</i> )
	Double relish	∩∩a		<u>Groppo</u> plus <u>groppetto</u>
	Slur	a		Sliding up with left hand, as many notes as possible
	Slide	a		Same as slur, used only descending, never more than two or three notes at a time
	Springer	a/		
	Sting	~ a		Vibrato

TABLE 2.5

LUTE ORNAMENTS OF THE CONTINENT

Source	Name	Sign	Notation and fingering	Comment
Capirola (1517)	Tremolo	..		Two kinds: upper or lower auxiliary used
Borrone	Tremolo	( )		
Venegas	Quiebro Redoble			A <u>tremolo</u> and vibrato Described by fingering
Milán	Redoble Quiebro			Two types redobles: <u>dedillo</u> and <u>dos dedos</u>
Mudarra	Redoble			<u>Dedillo</u> : descending; <u>Dos dedos</u> : ascending
Kapsberger (1604)	Trillo	..		<u>Tremolo</u> ?
Melii (1614)	Tremolo	T		<u>Tremolo</u>
Vallet (1615)		) x		Note from above Repeat two or three times note from above
Piccinini	Tremolo			Three kinds: (1) Lasts whole value of note, uses upper auxiliary (2) Short mordent (3) Vibrato



Source	Name	Sign	Notation and fingering	Comment
Pieta Royale		≠		Vibrato
Mersenne (1635)	Tremblement	)		Start with upper auxiliary
	Accent plaintif	)		Appoggiatura from below
	Martelement	* or ^		Mordent
	Verre cassé	)		Vibrato
	Battement	Z		Long <u>tremolo</u> ?
	Accent plaintif and battement	·Z		
	Accent plaintif and verre cassé	)		Described as a mordent and vibrato combined

CHAPTER 3





3. THE PRINTED EDITION OF THE FITZWILLIAM VIRGINAL BOOK:  
A CRITICAL COMMENTARY OF THE ORNAMENTATION

3.1 Background to the Printed Edition

The original printed edition of the complete FVB available is that edited by J.A. Fuller Maitland and W. Barclay Squire, first published in 1899 by Breitkopf & Härtel. Dover issued a reprint in 1963, and in 1979-80 a revised edition with numerous corrections was issued under the editorship of Blanche Winogron. A careful comparison of ornamentation between a microfilm of the original manuscript (Tr) and the printed edition (FVB), reveals many discrepancies, these being mainly printer's errors and editorial misjudgements. Bearing the extensiveness of the collection in mind (418 hand-written, or 936 printed pages), a few misprints might well be considered inevitable, but taking into account the great number of errors in the FVB, the proofreading must have been careless. The FVB is not the only work to suffer in this way; mistakes have likewise been discovered in MB editions in pieces where Tr is the only source.<sup>1</sup>

In spite of the revised edition's title page claim to be a 'corrected' version, most of the original ornamentation errors persist. In fact, while a few mistakes were rectified, new ones were made in the corrected edition. In Bull's Pavana of my L Lumley (FVB I p.149), for instance, four ornaments are missing in the printed edition of 1963. Yet the editor corrected only two of the four ornaments in the revised edition of 1979-80, even though they all occur in one bar.<sup>2</sup> Nonetheless, the editor

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<sup>1</sup> For instance:  
FVB I 48:3:3 B.1  not in MB XXVIII p.122, b.37.  
 I 51:5:1 S.6  left out in MB XXVIII p.124, b.93.  
 I 138:1:2 S.2  left out in MB XIV p.124, b.2.  
 I 141:4:1 B.2 no ornament in Tr, MB XXIV p.44, b.16  
 has 

<sup>2</sup> FVB I 149:1:2, A.4, T.7.



claims in the Preface that 'it was only after a thoroughgoing critical reexamination of the entire collection was undertaken by the present Editor ... that the full extent and nature of the corrections was realized.'<sup>3</sup> Taking the number of errors into account, it becomes evident that little attention was given to ornamentation when the earlier edition was revised and that the editor was unaware of the extent of error, for it is further stated that the printer's errors include 'occasional omission of ... a few ornaments ...'.<sup>4</sup>

A detailed comparison of both the 1963 and 1979-80 editions with a microfilm of the original manuscript, forms the basis for the list of errors and textual deviations recorded in the following pages. This list deals with errors and peculiarities concerning ornament signs in the FVB (1979-80), of which misprints form the greatest part. There are three categories:

- ornaments which appear in Tr, but which are omitted in the FVB,
- ornaments which have been added in the FVB but which do not appear in Tr,
- ornaments placed on the wrong note.

Editorial misjudgement has caused certain signs to be printed as ornaments, when they are in fact slips of the pen, or correction signs, or signs whose meaning is uncertain. The exact shapes as they appear in Tr are reproduced here. Ornament signs or parts thereof which are blotted or incomplete, indistinct or difficult to read or indentify, are all mentioned. In these cases the appropriate ornament in the collated source is given as a guide.




The commentary on the text and the abbreviations are presented thus:

- The number and title of the piece appear as in Tr, followed

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


<sup>3</sup> FVB (1979), vol.I, Preface to the revised Dover edition, n.p.
























<sup>4</sup> Ibid.

- by the composer's name and the page number in Tr in brackets.
- Thereafter the FVB page and bar number indication are given, with the Tr page number again in brackets.
  - To identify the notes, voices are indicated by the letters S A T B and followed by a number, so that S.3 indicates, for example, the third note in the soprano.
  - Notes are counted individually, whether tied or not, e.g. in  the last note is counted as the third. Rests are not counted, e.g. in  the last note is counted as the fourth. For example: 2:6:1 A.2 , read: on page 2, system 6, bar 1 the second note in the alto bears a double stroke on a minim.
  - Where divisi occurs in one of the voice parts, or where uncertainty may arise, the note pitch is indicated in brackets, by means of the Helmholtz system.

























### 3.2 Errors Occurring in the FVB (1979-80)

#### 3.2.1 FVB Volume I

- 1 Walsingham Doctor Jhon Bull (p.1)  
2:6:1 (p.1) A.3  (b')
- 2 Fantasia Jhon Munday (p.9)  
20:2:2 (p.10) S.2   
20:3:3 (p.10) S.3 
- 3 Fantasia Jhon Munday (p.12)  
23:4:2 (p.12) S.6   
S.9   
26:6:2 (p.13) B.5 The lower line is vague and short 
- 4 Pavana Ferdinando Richardson (p.14)  
27:1:1 (p.14) S.8  Indistinct (  in Wr, f.75b)  
27:4:2 (p.14) A.3  (horizontal line) (not in Wr,  
f.75b)
- 6 Galiarda Ferdinando Richardsõ (p.16)  
32:4:3 (p.16) S.9 









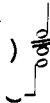













- 8 Fantasia William Byrd (p.19)  
37:5:2 (p.19) S   
38:3:4 (p.19) A.5  (f#')
- 10 Jhon come kisse me now William Byrd (p.23)  
47:3:2 (p.24) T.11 The lower stroke is faint   
47:4:1 (p.24) A.6   
47:5:2 (p.24) S.4   
48:3:3 (p.24) B.1   
51:3:2 (p.25) S.10   
51:5:1 (p.25) S.2 . no =  
S.5   
S.6   
51:5:4 (p.25) S.3 
- 11 Galliarda to my L. Lumley's Paven Doctor Bull (p.27)  
55:4:3 (p.27) S.5  (b')  
55:5:2 (p.27) T.3 
- 12 Nancie Thomas Morley (p.28)  
60:1:2 (p.29) S.20 d" i.s.o. f"   
60:2:1 (p.29) B.2  (horizontal) In Tr 
- 13 Pavana Doctor Bull (p.30)  
62:1:1 (p.30) S.2 
- 17 Galiarda Doctor Bull (p.34)  
71:1:2 (p.34) S.1  Sign indistinct
- 18 Barafostus' Dreame (Anon) (p.35)  
72:1:4 (p.35) T.1   
73:2:3 (p.36) A.9  (f' j)
- 25 Praeludium (Anon.) (p.41)  
86:4:1 (p.42) T.5 
- 26 The Irishe Ho-Hoane (Anon) (p.42)  
87:3:3 (p.42) S.1 
- 31 The Quadran Pavan Doctor Bull (p.49)  
99:3:3 (p.49) S.5 
- 32 Variation of the Quadran Pavan Doctor Bull (p.54)  
116:2:4 (p.59) S.1 



- 34 Pavana Doctor Bull (p.63)  
127:6:3 (p.65) S.9  Sign indistinct
- 38 (No title) Doctor Bull (p.70)  
140:5:3 (p.72) S.1 The lower of the 2 lines is very faint and thin 
- 39 Pavana Rob. Jhonson. Sett by Giles Farnabie (p.72)  
142:1:1 (p.73) S.4   
142:2:4 (p.73) A.7   
142:6:1 (p.73) S.1   
143:2:3 (p.73) A.1 
- 41 Pavana of my L. Lumley Doctor Bull (p.76)  
149:1:1 (p.76) S.3  The lower line is short. Co has , none in Bu, D<sub>2</sub>  
149:1:2 (p.76) T.2  The lower line is only on the left side of the stem; no ornaments in Bu, D<sub>2</sub>; Co has   
A.4   
T.7 
- 42 Goe from my window Jhon Munday (p.78)  
153:1:3 (p.78) T.1  Not in Tr  
153:3:4 (p.78) T.10  The top line is short, but distinct  
154:3:3 (p.78) S.4  The note is wrong, it should read S.5   
155:3:1 (p.79) B.3   
B.7   
155:3:3 (p.79) B.9   
156:4:4 (p.79) T.4 
- 47 Variatio Doctor Bull (p.87)  
176:5:1 (p.89) T.15 
- 48 Galiarda Doctor Bull (p.89)  
178:5:1 (p.90) S.1   
179:5:1 (p.90) B.13  (misprint )



- 52 Fantasia William Byrd (p.97)  
193:6:1 (p.97) S.11,12 should read c", d"
- 54 Spagnioletta Giles Farnabie (p.100)  
201:2:1 (p.100) S.5
- 55 For Two Virginals Giles Farnabie (p.101)  
202:1:1 (lower system) (p.101) S.5
- 56 Passamezzo Pavana William Byrd (p.102)  
203:1:3 (p.102) S.1 Lower line short (Ne and Fo )  
204:6:2 (p.102) T.8
- 58 The Carmans Whistle William Byrd (p.106)  
214:1:4 (p.106) S.5   
214:2:4 (p.106) S.3   
214:3:3 (p.106) T.1   
215:3:1 (p.107) A.2  $\equiv$  B.2   
215:3:2 (p.107) A.3   
216:5:3 (p.107) S.10   
217:4:2 (p.108) S.4
- 60 Treg Ground William Byrd (p.111)  
228:3:1 (p.112) S.8 (e')  
233:6:4 (p.115) S.2
- 61 Monsieurs Alman William Byrd (p.114)  
235:1:2 (p.115) T.4   
235:3:2 (p.115) S.7   
235:3:4 (p.115) S.7
- 62 Variatio William Byrd (p.116)  
244:3:4 (p.118) A.11
- 64 Sellinger's Round William Byrd (p.120)  
248:3:3 (p.120) S.4   
248:4:3 (p.120) B.1   
248:6:1 (p.120) A.3  $\equiv$   
249:2:5 (p.121) B.1 is very indistinct  
251:2:5 (p.122) Last chord right hand:   
252:3:3 (p.122) S.1






















- 66 O Mistris Myne William Byrd (p.125)  
 262:3:4 (p.126) T.6  Not in MS  
 262:4:3 (p.126) T.6  Not in MS  
 262:4:5 (p.126) T.6  Faint, short lines
- 67 The Woods so Wild William Byrd 1590 (p.127)  
 263:5:2 (p.127) S.1 
- 68 Walsingham William Byrd (p.129)  
 267:4:2 (p.129) A.6   
 270:4:1 (p.130) S.1   
 271:3:3 (p.130) S.8   
 273:5:3 (p.131) B.13 
- 91 Pavana Bray William Byrd (p.169)  
 361:1:2 (p.169) Second chord (c'e'g')   
 362:4:3 (p.169) S.5   
 S.9 
- 94 Galiarda William Byrd (p.173)  
 371:4:3 (p.173) S.5 . The top of the ornament consists of a thick blot; it was probably not intended as an ornament. In 371:5:1 the ornament is not repeated in the imitation.  
 371:5:1 (p.173) S.3 is a very indistinct 
- 95 Toccata Giovanni Pichi (p.174)  
 373:5:3 (p.174) Second chord right hand 
- 101 Ut, re, mi, fa, sol, la William Byrd (p.187)  
 395:2:3 (p.187) S.2   
 396:6:1 (p.188) S.11   
 399:1:3 (p.189) B.3 
- 102 Ut, mi, re William Byrd (p.190)  
 401:2:4 (p.190) S.2   
 S.4   
 T.6 
- 104 All in a Garden Green William Byrd (p.194)  
 412:1:1 (p.194) B.2 
- 109 Felix Namque 1562 Thomas Tallis (p.201)  
 428:6:1 (p.201) A.6  is blotted


























3.2.2 FVB Volume II

- 110 Felix Namque Thomas Tallis (p.205)  
1:5:1 (p.205) A.1
- 7:6:4 (p.208) S.7 is ambiguous in Tr
- 113 Pawles Wharfe Giles Farnaby (p.212)  
17:4:1 (p.212) S.4 is wrong, it should be S.5
- 17:5:3 (p.212) S.5
- 18:1:2 (p.212) S.12
- 114 Quodlings Delight Giles Farnaby (p.213)  
19:3:3 (p.213) S.8 not in Tr
- 19:5:2 (p.213) S.1
- 117 Praeludium (Anon) (p.215)  
25:2:3 (p.215) S.3
- 119 In Nomine John Bull (p.219)  
34:1:4 (p.219) T.1
- 35:5:2 (p.219) T.1 There is a blot in Tr, which makes it difficult to determine whether there is a double stroke
- 121 Pavana Lachrymae Jhon Dowland, sett foorth by William Byrd (p.222)  
45:2:2 (p.223) B.5
- 122 Galiarda James Harding, sett foorth by William Byrd (p.223)  
47:1:2 (p.223) S.1 not in Tr
- 50:2:2 (p.224) S.1 not in Tr
- 123 Pavana Thomas Tomkins (p.225)  
51:1:1 (p.225) S.5
- 51:1:2 (p.225) S.2
- 53:6:1 (p.226) S.1
- 56:3:1 (p.227) Right hand, first chord
- 126 The Maydens Song William Byrd (p.231)  
70:1:1 (p.232) B.5
- 127 Put up thy Dagger, Jemy Giles Farnaby (p.233)  
74:5:2 (p.234) S.2 no in Tr
- 5:4 (p.234) B.1

- 128 Bony sweet Robin Giles Farnaby (p.235)  
77:3:1 (p.235) S.9  not in Tr  
79:1:3 (p.235) A.5   
79:6:3 (p.236) S.3 
- 130 A Grounde Thomas Tomkins (p.239)  
87:4:1 (p.239) S.5.   
92:3:3 (p.241) S.1   
3:3 (p.241) S.3   
3:3 (p.241) A.4   
93:6:2 (p.241) A.3 
- 131 Barafostus Dreame Thomas Tomkins (p.241)  
94:3:1 (p.241) T.4   
95:3:1 (p.242) S.3 
- 133 The Quadran Paven William Byrd (p.245)  
104:5:2 (p.246) A.3 
- 135 The King's Hunt Doctor Bull (p.250)  
116:5:2 (p.250) A.9  A blot makes the stroke doubtful  
117:3:3 (p.251) B.7 
- 136 Pavana Doctor Bull (p.252)  
121:1:3 (p.252) B.2  Horizontal thick line, doubtful as a single-stroke ornament  
124:4:2 (p.254) A.3  not in Tr
- 143 Rosasolis Giles Farnaby (p.262)  
148:2:1 (p.262) T.7  Tr has only one faint line
- 146 Alman Rob. Johnso (p.267)  
159:2:2 (p.267) S.3  There is no ornament in Tr
- 150 Malt's come downe William Byrd (p.269)  
167:4:2 (p.270) S.9 
- 154 Galiarda Thomas Morley (p.274)  
178:2:4 (p.274) S.4  The lower line is blotted  
179:4:4 (p.275) A.1 
- 155 La Volta William Byrd (p.275)  
181:3:1 (p.275) S.1 No  in Tr



- 157 Wolseys Wilde William Byrd (p.276)  
184:1:3 (p.276) T.4 ♯ appears in Tr, not ♯
- 160 Rowland William Byrd (p.278)  
191:1:1 (p.279) T.5 ♯
- 164 Galliard William Byrd (p.281)  
198:2:1 (p.281) S.7 ♯  
198:4:2 (p.282) A.4 ♯  
198:5:2 (p.282) A.4 ♯  
5:2 (p.282) S.7 ♯  
199:5:2 (p.282) S.5 ♯, s.7 ♯
- 167 Pavana William Byrd (p.284)  
205:5:2 (p.285) S.1 ♯  
206:1:4 (p.285) T.2 ♯  
2:1 (p.285) S.2 ♯  
3:3 (p.285) A.2 ♯
- 168 Galiarda William Byrd (p.285)  
208:2:3 (p.286) A.2 ♯  
208:6:1 (p.286) S.1 ♯
- 169 Pavana Thomas Morley (p.286)  
212:5:1 (p.287) B.8 is difficult to read. The stem is broken, thus ♯. It is uncertain whether an ornament is intended.
- 172 The Queenes Alman William Byrd (p.289)  
218:5:3 (p.290) S.5 ♯
- 177 Miserere William Byrd (p.295)  
233:3:1 (p.295) T.3 ♯ above chord; rather indistinct
- 182 Pipers Paven Martin Pierson (p.298)  
240:5:2 (p.299) S.5 ♯  
241:2:1 (p.299) S.7 ♯
- 191 Sr. Jhon Grayes Galiard W.B. (p.307)  
258:4:2 (p.307) S.6 (d" )  The double lines in the FVB are vague
- 197 Fayne would I Wedd Richard Farnabye (p.309)  
263:2:3 (p.309) S.3 ♯
- 199 A Maske Giles Farnabye (p.310)  
265:3:3 (p.310) B.3 ♯ Indistinct horizontal line

- 203 Corranto (Anon) (p.311)  
267:2:1 (p.311) S.6 ♯• looks like ♯
- 207 Worster Braules Thomas Tomkins (p.312)  
269:1:4 (p.312) S.1   
S.2   
S.3   
S.4   
269:2:3 (p.312) S.1   
269:3:2 (p.312) A.3 (d")  ambiguous in Tr
- 208 Fantasia Giles Farnabye (p.312)  
270:3:1 (p.312) S.3  is faint  
S.5   
S.7 There is no  in Tr  
270:3:1 (p.312) S.3,5 are faint. The sign below  
the note is added to ,  
thus:   
270:5:4 (p.312) S.4 
- 214 Pavana Chromatica William Tisdall (p.315)  
278:1:2 (p.315) A.6 The  is not in Tr
- 220 Pavana William Tisdall (p.328)  
307:4:3 (p.328) S.2 
- 236 27. (no title) Giles Farnaby (p.343)  
340:2:1 (p.343) A.4  is faint
- 238 Fantasia 29. Giles Farnaby (p.346)  
347:3:1 (p.346) S.1 ♯•
- 239 The L. Zouches Maske 30. Giles Farnaby (p.347)  
350:2:1 (p.347) S.8  The lower line is thin  
and short;  is more  
likely in view of the  
imitation of the first  
bar  
2:2 (p.347) S.1   
352:1:4 (p.348) B.9 
- 240 Groude 31. Giles Farnaby (p.349)  
354:2:2 (p.349) S.8 



- 251 The Leaves bee greene 2. William Ingot (p.362)  
381:2:2 (p.362) A.1 ♯
- 252 Pavana William Byrd (p.364)  
384:1:1 (p.364) In the first right hand chord the  
ornament on the middle note is  
missing ♯  
384:2:1 (364) S.8 ♯
- 253 Galiarda William Byrd (p.365)  
387:2:1 (p.365) S.10 ♯  
S.11 ♯ S.10 is clearer than the  
faint S.11  
387:5:1 (p.365) S.6 ♯
- 254 Pavana William Byrd (p.366)  
389:2:1 (p.366) S.2 ♯  
389:6:4 (p.366) S.5 ♯  
390:6:3 (p.367) S.1 ♯
- 255 Galiarda William Byrd (p.367)  
392:4:3 (p.367) S.5 ♯ is not in Tr
- 256 Pavana William Byrd (p.368)  
394:1:1 (p.368) S.4 ♯ is very faint in Tr  
1:2 (p.368) S.1 ♯  
397:1:3 (p.369) S.3 ♯ is not in Tr
- 257 Pavana Fant William Byrd (p.370)  
398:1:1 (p.370) A.3 ♯ is not in Tr
- 262 The Duchesse of Brunswick's Toye Doctor Bull (p.377)  
412:1:4 (p.377) S.4 ♯
- 265 Corranto. Lady Riche (Anon) (p.378)  
414:4:6 (p.378) S.1,4 Neither ornament is in Tr  
5:5 (p.378) T.3 ♯ has a very short horizontal  
stroke
- 267 A Gigge Giles Farnaby (p.379)  
417:1:1 (p.379) S.1 ♯  
S.3 ♯
- 271 The Primerose Martin Peerson (p.381)  
422:4:1 (p.382) S.1 ♯ faint

- 274 Allemanda (Anon) (p.383)  
426:1:3 (p.383) B.7  $f$  is not in Tr  
2:1 (p.383) S.1  $f$  is not in Tr
- 275 Pavana, Canon, Two parts in one William Byrd (p.384)  
429:2:1 (p.385) S.5  $f$
- 294 Lady Montegle's Paven William Byrd (p.411)  
485:3:3 (p.412) S.1  $f$

### 3.3 The New Edition

In spite of some ornamentation errors having been eliminated in the FVB (1979-80), the fact that the subject was neglected is once again proven by the presence of other, new mistakes in the 'corrected' edition, not one of which is to be found in the FVB (1899/1963). In five instances ornaments are omitted, and in another an ornament is added where none exists in Tr. All the mistakes given below are found in 3.2, but ought to prove useful to those who do not possess the later edition of 1979-80.

#### 3.3.1 Mistakes peculiar to the New Edition, FVB (1979-80)

##### Volume I:

- 38:3:4 (Tr p.19) A.5  $f$  ( $f\#'$ ) There is no  $d'$  in Tr.  
373:5:3 (Tr p.174) The second chord in the right hand should read  $f$ . (The ornament has been omitted in the new edition.)











##### Volume II:

- 1:5:1 (Tr p.205) A.1  $f$  (Omitted in the new edition.)  
181:3:1 (Tr p.275) S.1  $f$  is not in Tr. (This has been incorrectly added by hand, therefore it is not a misprint.)  
218:5:3 (Tr p.289) S.5  $f$  (The note values have been corrected, but the ornament has been omitted.)  
387:2:1 (Tr p.365) S.10  $f$ , S.11  $f$ ; S.11 is very faint.







3.3.2 Corrections Introduced into the New Edition, FVB  
(1979-80)





Volume I:

- 23:1:1 (Tr p.12) S.1  (a") There is no ornament;  
FVB (1963) has g" 
- 23:2:3 (Tr p.12) A.6 
- 53:1:2 (Tr p.26) S.16 has no double stroke
- 58:2:1 (Tr p.28) T.3 There is no  (c')  
T.6 
- 131:3:3 (Tr p.67) T.9  (c') Tr has 
- 149:1:2 (Tr p.76) T.2  (Tr has  )  
T.4 










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




- 218:5:3 (Tr p.290) S.5 to 8   
- 398:1:1 (Tr p.370) A.1 (d') has no 

3.4 Non-Ornament Stenographic Signs in Tr

In autographs of virginal music, signs which were never intended as ornaments, occasionally appear. Unless these are identified for what they are, they may add greatly to the confusion surrounding single- and double-stroke ornaments. Many of these signs were printed in collections of virginal music because the editors failed to understand their meaning. Rather than leave them out, the editors incorporated them into the text, as has been the case with the FVB. Comparison with other virginal autographs reveals them to be cancellation signs, either of the note value, the note stem or of an ornament. Occasionally none of the above reasons applies, in which case the sign may be either a slip of the pen on the part of the copyist, or cryptic. In the FVB four such signs occur: the horizontal line (single or multiple   ), the horizontal line flanked by two vertical lines (  ), the double stroke flanked by two vertical lines (  ), and a cross (+).



### 3.4.1 The Horizontal Line Through the Stem







In the case of a minim, the horizontal line drawn through the stem of a note, thus: , cancels the stem, altering the note value to a semibreve. In another example,  becomes . The sign also appears in other virginal music autographs. In the Tudor organ music of L<sub>1</sub>, the horizontal single line is definitely intended to cancel the erroneously written stem of a note, in other words to alter the note value. It may be found in nos. 18,37,55,56,57 and 60, where  is meant to be . In this manuscript, the horizontal line is always much thicker than those of the double strokes of the ornament and also in the one instance of the oblique stroke. In no. 55 (folio 51<sup>V</sup>, EECM 10, p.41, b.129, tenor E), the horizontal line converts the value of an erroneously written crotchet () to a minim (). Another source in which the horizontal line cancels the stem of a note ( = ) is the Mulliner Book (Mu, fols. 92,96<sup>V</sup>).

In FVB I 60:2:1, the horizontal line is used once by Tregian as in the above-mentioned examples. It indicates a wrong note value in the manuscript, where  should read . In the FVB this has been interpreted as a single-stroke ornament (). This has baffled many a scholar, for its peculiar location on the bottom note of a chord makes the accepted interpretation as a slide impossible. The horizontal line is also found in FVB I 27:4:2, A.3. It must be a slip of the pen, as there is no ornament in the other copy, Wr fol. 75b. In FVB II 414:5:5 T.3, the cross-line is very short () , and is unlikely to be either an ornament or a cancellation sign. In FVB II 121:1:3 B.2, the thick horizontal line at the top of the stem could be an inkblot: . It is not to be found in the collated sources Fo, D<sub>2</sub> or Co. In view of its unique appearance, it is unlikely to be a horizontally drawn single-stroke ornament.






The horizontal line occurs twice in Tr in conjunction with the double stroke:

FVB I 153:3:4 T.10  (very short top line)  
II 412:1:4 S.4 



These have been reproduced as double strokes in the FVB. They cannot be regarded as triple-stroke ornaments, for in the sources where such ornaments occur they all present the same lateral disposition:  - slanting upward. The paucity of other such signs in Tr weakens the theory that they were simply carelessly written by the copyist. The horizontal line is not intended to cancel the double stroke, for the sign employed for that in Tr is . As the note values in both instances are correct, the horizontal line cannot indicate a change in note value. In PI  is found as a composite ornament, but again its isolated appearance in the FVB makes it unlikely to be a cancellation sign. In the case of FVB I 153:3:4 there is no other source to collate with, but in the case of FVB I 412:1:4, the reading in Bu is a double-stroke ornament. One concludes that in both cases they are slips of the pen. In many virginal sources multiple strokes through the note stem are used to cancel the note completely, as in Fo p.110 (  ), L<sub>1</sub> fol.19<sup>v</sup>, 16<sup>v</sup> (  ) and fol.63 (  ). Here the strokes slant more or less in an upward direction, one line being drawn through the note head. No such example is found in Tr.





### 3.4.2 The Horizontal Line Flanked by Vertical Lines

There are two instances of an almost horizontal line flanked by vertical lines drawn through the stem of the note, for example, FVB I 72:1:3 A.2 . Here the horizontal line slopes slightly downward. It indicates the cancellation of the stem, changing the note to a blackened one, in accordance with the black notation (which is stemless) throughout the piece. In FVB II 381:2:1 (  ) the horizontal line is flanked by two vertical lines which do not extend below the horizontal.

As there is only one double-stroke ornament in the piece, this isolated sign cannot indicate an ornament. The vertical lines may well be the cancellation of the accidentally drawn horizontal line. PB is another source containing a sign of similar shape, where the sign  is used to neutralize a note flag.<sup>5</sup>

### 3.4.3 The Flanked Double-Stroke Ornament

The sign  is used in Tr to cancel the double-stroke ornament and should not be confused with the sign  of the DVM.<sup>6</sup>

<u>FVB</u> I	71:1:1	S.1		(In <u>Bu</u> this ornament has been removed.)
	73:1:1	A.2		
	86:2:3	A.3		
	127:6:3	S.9		

### 3.4.4 The Cross

A cross (+) is used to draw attention to grammatical irregularities: it appears between the two staves in I 119:4:4, where attention is focused on the dissonant first quaver.<sup>7</sup>

### 3.5 Alignment of Ornaments

It remains to be proved whether significance may be attached to the position of ornament signs on the stem of the note, or, in the case of stemless notes, above, below or through the note. One can speculate that the position distinguishes between ornaments which are either on or before the beat (for which there is no equivalent in Continental sources), or to indicate a specific

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
<sup>5</sup> Boston, Priscilla Bunbury, p.371.

<sup>6</sup> See 2.2.

<sup>7</sup> See the editorial note in MB XIX, no.127e, p.236.







type of ornament. In Tr, which is written throughout in a very careful, neat hand, the position of most ornaments is consistent throughout the manuscript, although exceptions occur which are not reflected in the printed edition. In the FVB a policy of normalization has been followed, placing double and single strokes about two-thirds up the stem, without reference to their original position in Tr.

### 3.5.1 Alignment of the Single Stroke

In Tr, the most puzzling aspect regarding the positioning of ornament signs is the manner in which the single stroke is written. Most single strokes appear as upward slanting lines at the top of the stem: . However, a sizeable number of single strokes are drawn through the stem: . In a few rare instances the single stroke appears as a horizontal line, where circumstances rule it out as a cancellation sign; here, slips of the pen are a distinct possibility, especially in a collection as large as Tr. Most of these different single strokes appear slanting upwards about two-thirds of the way up the note stem, and a few halfway up the note stem. In a few cases it is only a very short horizontal stroke. In three pieces single strokes are placed successively above or below the note head. Twice the ornament is drawn through the stem where the note is tied over the bar line (  ), and at least here it must have been done because of the horizontal flag of the tied note. Noticeable, too, is that most of these strange alignments are found in conjunction with crotchet and minim note values.


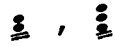

In Table 3.1 a list is given of single-stroke ornaments other than those drawn through the top of the note stem, excepting the horizontal lines already discussed. The exact alignment and degree of slant are given as they occur in Tr. The alignment in collated sources is given in brackets.

### 3.5.2 Alignment of the Double Stroke

This ornament is treated with more consistency in Tr than is the case with the single-stroke sign. It ordinarily occurs about two-thirds up on the note stem (  ), slanting upwards. Only rarely does it occur at the top of the stem (  ), where it is more a matter of carelessness than of imparting new significance to an ornament. More exceptionally, the ornament is found above the note stem:  . Other ambiguities occur only on stemless notes and chords. With semibreves, the double stroke is as a rule placed above the note, the double stroke drawn through the note being the exception (  ). In chords, the ornamented note has the double stroke either close to it  or through it:  . Whether these placings have special meaning or not has yet to be established. The original alignment of double strokes in Tr is not reproduced in the FVB, except in a few instances where the position of double strokes on the middle note of a chord is shown.

A list of the exceptions, i.e. double strokes drawn through, above or below the note, is given in Table 3.2.

### 3.6 Coloration (Blackened Notation)

The ornamentation of blackened or coloured notes in Tr is consistent.<sup>8</sup> The ornament appears above the note when it is standing alone (  ), and where the lower note of a group of two or more is to be ornamented, the sign is placed below that note:  . It is drawn through the note head itself only when the note occurs in the middle of the chord:  . In the FVB the coloration has been translated into modern notation, examples of which appear in FVB I pp.51,66,72,214,224 and 248; FVB II pp.14,15,79,92,94,138,305,317,412 and 414.

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<sup>8</sup> For a discussion of this phenomenon, see W. Apel, The Notation of Polyphonic Music, 5th ed. (Cambridge, Mass.: The Medieval Academy of America, 1953), pp.10 ff., 126ff.

### 3.7 Duration of Notes and Ornaments

As the value of the note upon which an ornament is made is of crucial importance - it is a factor influencing the length of the ornament in execution - it is necessary to understand the composer's original intention.<sup>9</sup> In this example, it is clear that the composer intended the ornament to last for the full value of the tied notes:

Ex.3.1 Richardson, Galiarda (FVB I 93:4:4)



There are, however, many examples where the original notation has not been preserved in the printed musical text, so that ♯ in Tr becomes ♯, ♯ is given as ♯, and ♯ becomes ♯ in the FVB, resulting in a distorted view of the original. Particularly noteworthy are the semibreves which are often divided into two tied minims, the reason for this being not because they straddle a barline. Often, only one of these minims is ornamented: ♯. In this way one may clearly distinguish between shorter and longer ornaments, should the latter be taken as ♯. The correct note values of the particular cases as they appear in Tr, are given in Table 3.3.

### 3.8 Note Value Ambiguities

In Tr one encounters the practice of notating triplets and groups of short notes in a single metric diminution, i.e. semiquavers are written as demisemiquavers and demisemiquavers as semi-demisemiquavers. This phenomenon is due to the practice

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<sup>9</sup> See 1.4, where treatises recommend that ornaments take up half the value of the note.



of coloration which was applied in the notation of virginal music.<sup>10</sup> Tregian's practice is, however, far from consistent. Although most examples are written in a single metric diminution, there are sporadic examples written in a single metric augmentation, or even in a double metric diminution. In FVB I:271, for instance, all three deviations appear within a span of four bars. It may well be that the sources at Tregian's disposal utilized these note values. In all of Peter Philips' works in Tr, the demisemiquavers are consistently written as semi-demisemiquavers, while this is not the case in the works of Byrd and Bull in Tr.<sup>11</sup> Adjacent bars may have eight demisemiquavers and eight semi-demisemiquavers juxtaposed, the one group notated correctly, the other in a single metric diminution (e.g. FVB I 83:3:1,2).

### 3.8.1 Notations in a Single Metric Diminution

In Tr, groups of six sextuplets notated as the equivalent of a crotchet appear as demisemiquavers, thus corresponding to a modern sextuplet of semiquavers:

Ex.3.2

Tr

Modern values



Groups of eight notes corresponding to the value of a crotchet appear as semi-demisemiquavers, rather than as demisemiquavers:

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<sup>10</sup> The editors of the FVB realized this, and discussed it in FVB I, Introduction, p.xv; see also M.B. Collins, The Performance of Coloration, Sesquialtera and Hemiolia (Ph.D. dissertation, Stanford University, 1963), p.175.

<sup>11</sup> The works of Byrd and Bull are preserved in many different sources, which may be used to confirm or authenticate the notation in Tr. The MB editions mention the differences between the sources, e.g. MB XIV, XIX, XXVII and XXVIII.











Ex.3.3

Tr

Modern values



It is important to be aware of these notational irregularities when comparing Tr with the FVB, where the note values of such passages have been modernized. One may easily blame the copyist for carelessness (indeed this is sometimes the case), since certain editors of virginal music do not explain this phenomenon. The MB editions of virginal music are an example, where only the varying number of alternations between the sources is mentioned.<sup>12</sup>

It is necessary to know the original notation, for although one could normally adapt the note value to a single metric augmentation, there are ambiguous cases where the grouping of notes provides more than one interpretation:  in the original may be transcribed as either  or , for example FVB I 260, II 108. The written-out ornaments affected by this manner of notation involve groppi, groppetti and tirate. Six-note groppi often occur as two plus four (  ), or as a group of six notes. Eight note groppi occur either as four plus four notes (  ), two plus four, or one group of eight notes. The grouping is entirely left to the composer's (scribe's?) fancy, with an apparent measure of carelessness. The majority of 'incorrect' note values are groups of four, six or eight demisemiquavers notated in a single metric diminution as semi-demisemiquavers (  notated as  ). Semiquaver sextuplets (  ) are almost uniformly notated as demisemiquavers, and in a few cases, eight semiquavers are written as demisemiquavers. There are also two cases of quavers notated as semiquavers. In Table 3.4 these notations in a single metric diminution are given.

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<sup>12</sup> MB XIX, p.xvi.

### 3.8.2 Notations in a Double Metric Diminution

In a few cases semiquavers are notated as semi-demisemiquavers. They are tabulated in Table 3.5.

### 3.8.3 Notations in a Single Metric Augmentation

There are a few instances of notation in a single metric augmentation, and in at least one case it is due to the coloration of a whole section written in a single metric augmentation, e.g. FVB I:53. A list of these appears in Table 3.5.

### 3.8.4 Inconsistent and Incorrect References

In the FVB most of the notations in a metric diminution or augmentation have been corrected without comment, but in a few cases they are inconsistently referred to in footnotes, e.g. FVB I 83:3:1 and I 260:4:2, 5:1. Incorrect references to the original note values are made on pp.76,111,112,127,452 and 459 of FVB II. A list of these is also given in Table 3.5.

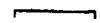
### 3.9 Textual Variants in Virginal Music Sources

A comparison of the pieces in Tr with the same preserved in other sources exemplifies the problems involved in establishing a definitive text. A collation of sources reveals variants in both the text and the ornamentation. This is largely due to the fact that music printing in England was still in its early stages, the first printed book of virginal music (Parthenia) having been published only in 1612/13. Most virginal music from this period was therefore copied by hand. Because of the variants it is not always possible to ascertain the original intention of the composer, nor to distinguish it from the additions and omissions of the copyist. A collation of sources may sometimes date a copy as an earlier or later version, depending on the textual variants.



### 3.9.1 Textual Variants in Dr. Bull's Juell

A collation of four sources of Dr. Bull's Juell (FVB II p.128, Tr no.138, p.255), reveals the textual differences which are typical of those found in other sources when collated: they differ in detail in matters such as the indication of accidentals, rests, number and distribution of voice parts, constituent notes of passages and ornament signs.

In Ex.3.4 sixteen bars of Dr. Bull's Juell are reproduced. Taking Bu as the point of reference, the variants in Me, Co and Tr are marked thus: . It is evident that variants in note values (i.e. rhythmic changes) and the layout of chords are substantial. Differences between chord notes and dissolution of chords are apparent in b.1 (Me, Co), 4(Co, Tr), 6(Me), 7(Tr), 8(Me, Tr, Co), 9(Co, Me), 10(Co, Me, Tr) and 12(Tr, Co, Me). Rhythmic differences occur in b.1 (Co, Tr), 2(Co), 3(Co, Tr), 4(Me), 12(Me, Co, Tr), 13(Tr), 15(Me), 16(Me). Parts where texts differ completely occur in b.2 (Co), 3(Me, Tr), 4(Co), 9(Me), 12(Me, Co, Tr), 13(Tr), 14(Co, Tr) and 15(Me). A study of all four sources reveals that, in spite of the differences, the sources never stray far apart. At any given moment the relationship between each is clearly recognizable. None of the four sources seems to be more closely related to any particular one more than the others (except perhaps Bu and Tr). Two or more sources may agree at various places, sometimes within one bar. In b.3, for example, the right hand agrees in Me and Tr, whilst the left hand is identical in Tr and Co. One concludes that each of the four versions is a valid text: each was made from differing copies. Me is sixteen bars longer than Bu and eight longer than Co and Tr, while Bu and Me are slightly more elaborate than the other two.

### 3.9.2 Variants in Ornamentation

When considering the differences in ornamentation between various sources of the same piece, the independence between

Ex.3.4 Bull, Dr. Bull's Juell (MB XIX no.141, p.210)

The image displays a musical score for the piece 'Dr. Bull's Juell' by Bull. The score is arranged in two systems, each containing four staves. The instruments are: Me: (Mellophone), Co: (Cornet), Tr: (Trumpet), and Bu: (Bassoon). The first system includes performance markings such as 'p.124', '3', 'p.125', and '331'. The second system includes markings like 'p.110', '10', and 'Rip.'. The music is written in a key with one flat and a 3/4 time signature, featuring complex rhythmic patterns and articulation marks.



Me:  
Co:  
Tr:  
Bu:


Me:  
Co:  
Tr:  
Bu:

15

them emerges as the most striking feature. Not only does the number of ornaments differ from one to the other, but no two agree completely on their placement, the type of sign used, or the written-out ornamentation. Frequently, a sign in one source is substituted by a written-out ornament or an ornamental figure in others. In the Galliard Saint Thomas Wake by Bull (Tr no.36), this is the case in b.23,39,40,49,60 and 61. The readings in Tr differ from the primary source Pa (no.11) and are supported by Co (p.122) in two instances. The readings in the corresponding sources are given below in the primary source, Pa, in Ex.3.5:

Ex.3.5 Bull, Galliard St. Thomas, Wake! (MB XIX no.126b, p.147)

b.23 Pa:



Tr: 

b.39,40 Pa:



Tr:  Tr: 

b.49 Pa:



Tr: 



b.60,61

Pa:

Four sources of a Byrd Pavana follow, illustrating the differences in the occurrence of ornaments (Ex.3.6). All ornaments in all sources are listed, as well as other small differences in the text which affect the ornaments. The signs used to indicate the differences, are:

- ✓ : This denotes that the ornament in Tr also appears in the particular source.
- x : The ornament in Tr is not found in the particular source.
- # } : A double- or single-stroke ornament appears in the source concerned, the note upon which it is made being encircled in Tr.
- + }

Different note values are notated on separate staves.

The following discussion concerns the ornament signs in Ex.3.6.

- Number of ornaments in each source. Wr, Ne and Tr are within fair agreement, Ne having the most ornaments. Wr and Tr have almost the same and D<sub>2</sub> has very few by comparison:


<u>Ne</u>	:	91 ornaments
<u>Tr</u>	:	83 ornaments
<u>Wr</u>	:	81 ornaments
<u>D<sub>2</sub></u>	:	8 ornaments

- Ornaments which accord in all four sources. Only three ornaments are common to all four sources (b.1,26,35). This represents 3,6% of the Tr total. The number of common ornaments is higher for the three sources Ne, Wr and Tr, namely 28, which represents 33,7% of the Tr total. Differences between individual sources are fewer:

Ex.3.6 Byrd, Pavana (FVB II 384)

Wr (fol.4)	✓		x	♯	x	✓	♯	✓	✓
D <sub>2</sub> (p.62)	✓		x		x	x		x	x
Ne (fol.67)	✓		x	♯	✓	✓	♯	✓	✓

Tr (p.364)



Wr		♯	x	♯			♯	
D <sub>2</sub>		✓					x	
Ne		♯	x	♯			♯	x

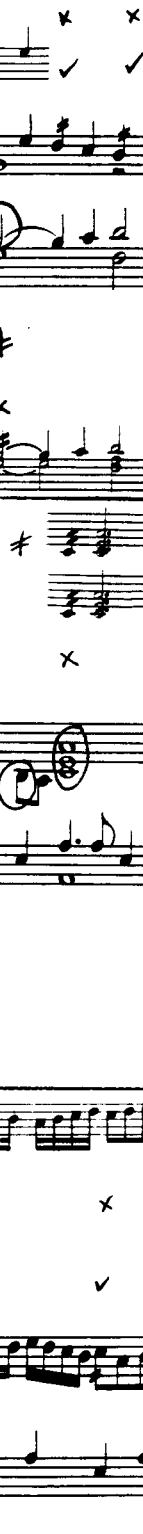
Wr	✓	x	✓	x	x	♯	♯	x	x	♯
D <sub>2</sub>	x	x	x	x	x			x	x	
Ne	✓	✓	✓	♯	x	♯	♯	x	✓	x



Wr		♯		♯		♯	x	
D <sub>2</sub>							x	
Ne		♯		♯		♯	✓	

Wr	x	♯			x			
D <sub>2</sub>	x				x		x	x
Ne	x	♯			x		✓	✓

Rep.



Wr	✓							
D <sub>2</sub>		x						
Ne		✓						



Wr	x	x	≠	≠	✓		x
D <sub>2</sub>	x	x			x		x
Ne	x	x	≠	≠	✓		x

Wr  
D<sub>2</sub>  
Ne

≠

Wr  
D<sub>2</sub>  
Ne

Wr  
D<sub>2</sub>  
Ne

Wr  
D<sub>2</sub>  
Ne

♯  
♯  
♯

≠  
≠  
≠

Wr  
D<sub>2</sub>  
Ne



Wr	✓	✓	x	✓	✓	♯	♯	∞	✓	✓	xx	✓
D <sub>2</sub>	x	x	x	x	✓		♯		x	x	xx	x
Ne	✓	✓	x	✓	✓	♯			✓	✓	xx	✓

Wr		♯		x		♯		
D <sub>2</sub>					x			
Ne		♯		x		♯	♯	

Wr		♯		✓	✓	♯	♯	✓
D <sub>2</sub>				x	x			x
Ne		♯	✓	✓	✓	♯	♯	✓

Wr						♯	♯		✓
D <sub>2</sub>									x
Ne						♯	♯		✓

Wr		♯	✓		x	x	
D <sub>2</sub>			✓		x	x	
Ne		♯	✓		✓	x	

Wr		x		x		x		✓
D <sub>2</sub>		x		x		x		x
Ne		x		x		x		✓





Wr ♯ ♯ ♯ ♯

D<sub>2</sub>

Ne ♯ ♯ ♯

Wr ♯

D<sub>2</sub>

Ne ♯

Wr ♯ ♯ ♯ ♯

D<sub>2</sub>

Ne ♯ ♯ ♯

Wr ♯ ♯ ♯ ♯

D<sub>2</sub>

Ne ♯ ♯ ♯

Wr ♯ ♯ ♯ ♯

D<sub>2</sub>

Ne ♯ ♯ ♯

Wr ♯ ♯ ♯ ♯

D<sub>2</sub>

Ne ♯ ♯ ♯





Wr	x		x
D <sub>2</sub>	x		x
Ne	x		✓

Musical score for measures 64-66. Measure 64 starts with a treble clef, a key signature of one sharp (F#), and a common time signature. The melody in the treble clef begins with a quarter rest, followed by a series of eighth notes. The bass clef accompaniment consists of eighth notes. Measure 65 continues the melody and accompaniment. Measure 66 features a more complex rhythmic pattern in the treble clef, including sixteenth notes, while the bass clef accompaniment remains consistent.

Wr	
D <sub>2</sub>	
Ne	

---

Wr		x (8)
D <sub>2</sub>		x (8)
Ne		x (8)

Musical score for measures 67-70. Measure 67 continues the melody and accompaniment from the previous section. Measure 68 features a more complex rhythmic pattern in the treble clef, including sixteenth notes. Measure 69 features a more complex rhythmic pattern in the treble clef, including sixteenth notes. Measure 70 features a more complex rhythmic pattern in the treble clef, including sixteenth notes.







Wr	
D <sub>2</sub>	
Ne	



<u>Tr</u> and <u>Ne</u>	:	42 ornaments	(50,6% of <u>Tr</u> total)
<u>Tr</u> and <u>Wr</u>	:	31 "	(37,3% of <u>Tr</u> total)
<u>Ne</u> and <u>Wr</u>	:	66 "	(72,5% of <u>Ne</u> total)
<u>D<sub>2</sub></u> and <u>Tr</u>	:	4 "	( 4,8% of <u>Tr</u> total)
<u>D<sub>2</sub></u> and <u>Wr</u>	:	7 "	( 8,6% of <u>Wr</u> total)
<u>D<sub>2</sub></u> and <u>Ne</u>	:	6 "	( 6,5% of <u>Ne</u> total)

These calculations reveal that Ne and Wr are in closer agreement with each other than with Tr, which is a more independent source.

- Ornaments unique to each source. Thirty-five ornaments, or 42,1% of the ornaments in Tr do not concur with any of the other sources. This contrasts with Ne which has far fewer (twelve, or 13,1%), and Wr (twelve, or 14,8%), and D<sub>2</sub> which has none. This indicates that Tr either copied this piece from a revised or reworked text, or that he modified it himself, the sources to which Tregian had access being unknown. The independence of Tr as a source for this piece is further seen in its use of single-stroke ornaments, none of which are found on the same notes in the other sources.

The independence of the texts is further revealed by the fact that the various sources agree at different moments: Wr, D<sub>2</sub> and Ne may have a double-stroke ornament where Tr has none (b.24, 53). While Ne and Wr have more in common, there are still thirteen instances where Ne and Tr accord with each other, whereas Wr does not. Differing signs occur on the same note in the various sources: in b.50 (Tr has , Wr and Ne have ); b.57 (Tr has , Wr and Ne have ); in b.56 (Wr has , Ne has ). Tr is also the most independent text as far as written-out ornaments are concerned: b.64 and 67 have different ornamental figurations before the groppi, whereas Wr, D<sub>2</sub> and Ne agree. The number of notes and note values differ, nevertheless, greatly in all four sources: in b.22, all sources have eight notes for the gropo, with Tr being the sole one to write it in a single metric diminution. In b.63,64 and 67 the



note values between Ne, Wr and D<sub>2</sub> agree, but the number of notes in the groppi is different. Except for b.64, Tr consistently employs eight semi-demisemiquavers.



TABLE 3.1

ALIGNMENT OF THE SINGLE STROKE

FVB I

25:1:3	S.2	
54:1:1	S.1	
56:4:1	S.8	
57:4:1	S.3	
74:2:1	S.17	
75:1:3	A.5	
77:2:2	S.4	
131:5:3	S.1	
132:4:3	S.1	
196:1:3	S.1	
2:2	S.3	
2:3	S.1	
	S.3	
3:1	S.2	
202:1:1	S.5	
218:4:1	S.7	
4:3	S.8	
5:1	S.1	
5:3	A.6	
221:5:2	S.10	
	S.13	
229:3:3	S.8	
231:5:3	A.1	
233:4:1	A.3	



242:2:3	S.8	
254:1:3	S.8	
262:3:1	S.1	
3:3	S.1	
358:6:2	A.7	
401:1:1	S.6	(through stem because of tie?)

FVB II

51:1:1	S.5	
75:3:1	T.6	(virtually horizontal)
117:1:3	B.11,13,15	
117:2:1	B.9	
117:2:2	B.3,5,7,9	
2:3	B.1,3,5,7	
3:1	B.9,11,13,15	
3:2	B.5,7,13,15	
3:3	B.1,3,5,9,11,13,15	
193:5:1	S.1	
203:1:1	S.5	
208:5:2	S.5	
217:1:1	S.9	
265:3:3	B.3	(indistinct horizontal line)
270:3:1	S.5	
	S.3,5	have additional -below notes:
386:3:3	A.1	
387:2:1	S.10	















TABLE 3.2

ALIGNMENT OF THE DOUBLE STROKE
















FVB I

23:1:3	S.7		
2:3	S.5		
37:5:2	S.1		
114:2:2	S.1, S.3		
3:1	S.3		
120:1:1	S.1		
131:3:3	T.9		(c')
132:3:2	S.1		
3:3	S.1		
3:4	S.1		
4:3	S.2		
4:4	S.1		
5:2	S.1		
133:1:2	S.1		
2:1	S.1		
2:2	S.1		
4:1	S.2		
4:2	S.1		
5:2	S.1		
150:5:3	T.5		
167:1:3	B.4		
183:3:2	A.3		
203:3:2	T.1		
226:2:3	S.1		



- 248:2:5 right-hand chord  (upper line not through note)
- 250:6:4 first chord right hand 
- 6:5 first chord right hand 
- 251:2:5 right-hand chord 
- 254:2:2 right-hand chord 
- 274:1:2 S.1 
- 1:3 S.1 
- 274:2:1 2:2, 2:3, 2:4, 2:5, 2:6 
- 391:2:3 right hand last chord 
- 401:2:4 A.5 
- 406:5:4 second chord right hand 
- 408:2:1 third chord right hand 

FVB II

- 51:3:2 A.1 
- 53:3:1 first chord right hand 
- 56:3:1 first chord right hand 
- 92:4:3 right-hand chord 
- 94:3:1 last chord right hand 
- 97:6:2 S.2  (given as  in the FVB)
- 233:3:1 T.3 
- 234:5:2 T.1 (d) 
- 258:4:2 right-hand chord 
- 269:1:3 second chord right hand 
- 269:2:2 A.1  (a')
- 271:5:1 A.4 
- 293:5:1 S.1 
- 317:1:1 second chord left hand  (coloration)



384:3:1	right-hand chord	
3:5	first chord right hand	
387:3:1	S.2	
388:3:2	second chord right hand	
	fourth chord right hand	
388:3:3	right-hand chord	
391:2:1	A.1	
400:2:3	S.4	
422:1:1	right-hand chord	
422:1:2	right-hand chord	
425:3:3	S.3, S.5	
4:1	S.3	



TABLE 3.3

DURATION OF NOTES AND ORNAMENTS

<u>FVB I</u>		<u>FVB II</u>	
44:2:2	S.7	12:3:1	T.1
49:3:2	B.9 (e)	17:3:2	B.2
50:3:2	A.4	18:4:4	S.1
179:4:3	A.2	22:2:2	A.3
183:3:1	A.5	39:5:2	S.2
201:4:2	S.3	46:3:1	S.1
208:2:2	S.12	51:1:1	A.2
215:3:1	A.2	51:1:3	T.1
	B.2	51:1:4	B.2
3:2	A.3	52:5:2	T.5
249:3:3	A.1	52:5:3	T.2
252:5:4	A.3		T.3
269:5:1	S.1	6:1	T.4
269:5:4	S.2	6:1	T.5
312:1:1	T.1	6:2	T.3
351:1:1	T.1	57:1:1	S.1
359:2:2	S.2	1:2	S.1
5:3	S.2	58:6:3	S.1
	S.5	59:3:3	S.1
	S.8	64:1:1	T.2
365:3:2	S.1	73:3:4	S.2
398:3:2	S.1	79:5:2	S.1
407:6:3	A.1	92:5:2	T.4



121:3:1	T. 1		297:4:3	S. 4	
135:2:2	A. 3		308:3:2	S. 8	
136:1:1	A. 1		310:2:1	T. 1	
158:2:3	T. 12		353:1:1-3	B. 1-9	
174:5:4	A. 1		360:1:4	S. 3	
175:1:1	A. 1		366:2:5	S. 7	
176:6:3	A. 1		369:4:1	A. 7	
6:3	T. 6		384:3:1	right-hand chord	
179:1:1	A. 1		386:1:1	T. 4	
4:4	S. 1, A. 1		388:3:3	A. 8	
198:2:1	S. 7		394:1:2	S. 1	
198:4:2	A. 4		400:1:5	S. 1	
199:3:1	A. 2		413:2:2	A. 1	
199:3:2	S. 3, A. 3		418:3:3	T. 2	
201:3:3	A. 1		419:4:1	S. 1	
207:1:2	S. 10		4:4	S. 1	
210:6:3	S. 1		430:3:3	A. 1	
221:3:1	A. 1		440:1:2	A. 3	
229:3:2	S. 1		483:1:2	T. 1	
245:4:3	S. 2		2:1	A. 1	
256:4:1	S. 4		486:1:2	T. 1	
270:2:4	A. 1	(e')	487:1:2	S. 1	
272:4:3	A. 3		2:1	S. 1	
280:4:4	S. 2		4:2	S. 1	
281:1:1	B. 1, 3				









TABLE 3.4

NOTATION IN A SINGLE METRIC DIMINUTION

Demisemiquavers Notated as Semi-demisemiquavers

FVB I

- 61:6:1
- 141:5:2
- 143:3:2,3; 4:1,2; 5:1
- 149:2:2
- 150, 151 (all groppi and gropetti)
- 189:1:1; 2:1; 3:1; 5:2,3; 6:2,3
- 190:2:1
- 191:6:2
- 193:1:3
- 194:2:1
- 195:2:2; 3:3; 4:3; 5:2,3; 6:1
- 198:6:2
- 238:5:3
- 239:1:1,2
- 240:2:2
- 242:6:2
- 243:2:2
- 246:2:1
- 256:4:1; 5:1
- 257:5:2
- 280-285 all  notated as 
- 287:5:1
- 288-295 all  notated as 

302, 305, 315, 316, 317-356 all  notated as 

360:5:2

362:2:1

363:6:1

367:3:2,3

368:3:1

373:4:2

374-377

385:3:2

386:1:2; 5:2

403:6:1

409:4:3

410:2:1, 6:1

415:3:1; 5:3

416:6:2

417:4:2, 6:3



419:1:2

FVB II

16:6:2

22:5:2 T.3 to T.14

24:5:1

25:4:2 right hand 10 , left hand 14 

30:4:2

32:6:1

33:1:2 T.10 - T.15

2:1 T.3 - T.6

3:1

6:1 S.5 and following bars



35:5:1; 5:3	103:4:1,2,3; 5:2
36:2:1; 2:3; 3:1,2,3; 4:1	104:1:1,2,3
40:2:1; 2:2	106:5:2 S.11 - 14
42:2:1; 2:2; 3:1,2,3	5:3 S.6 - 6
44:6:1	6:1 S.3 - 6, S.9 - 12
45:3:3; 6:2	119:1:1
45:6:3 T.14 - 21	121:2:1; 2:2
46:1:1	124:5:1,2; 6:1
51:3:2	127:2:2 T.4 - 11
52:1:2; 2:1,2; 3:1; 2:3; 5:1	145:4:2; 5:2
55:3:1,2; 4:1,2; 5:1; 6:3	149:4:1
56:1:2	158:2:1; 2:3; 4:2
58:1:3; 5:3	169:1:1
60:3:2; 5:1; 5:2; 6:3	170:4:2; 5:3
61:5:3	172:6:1
62:4:1; 5:1	174:1:1,2; 3:2; 4:3
63:1:2; 2:2; 3:2; 5:2	175:1:3
76:1:2; 2:1; 3:1; 3:2; 4:1	176:2:1,2,3; 5:1,2,3
77:3:2	197:3:1
78:6:1,2,3	205:1:1; 6:3
79:5:2	209:2:3; 3:1; 4:2
84:2:1	210:2:1; 3:1; 5:2; 6:1
93:1:1; 5:2; 6:1	211:2:1; 6:2
94:2:2	212:1:1
102:5:1 B.19 - 35	221:6:1
5:2; 6:1	238:5:1; 5:3



239:5:3		324:6:1	T.5 - 8
241:3:1; 6:1		329:3:3; 5:1; 6:2	
243:6:1		330:2:2; 3:1; 4:1	
244:3:2; 4:1; 5:1; 6:1,2		332:3:1; 3:2; 4:2; 5:1; 5:2; 6:2	
245:1:1; 3:1; 6:1; 6:2		333:2:1; 3:2; 4:4; 5:1	
247:1:2		334:1:1; 2:2; 3:1	
248:1:1,2; 2:1,4; 3:3		335:1:2; 6:2	
249:1:1		336:1:1; 5:1	
254:2:2		337:6:2	
255:1:1,2; 2:1; 6:2		340:1:3; 2:2; 2:3; 3:2; 4:2; 6:3	
259:5:1; 6:2		341:1:2,3; 2:1; 2:2; 3:2; 3:3; 5:4; 6:1; 6:3	
265:2:1; 6:2		342:1:2; 2:2; 2:4; 3:2; 3:3; 4:2; 4:3; 5:3	
269:6:3		345:5:1	
270:3:2; 3:4; 4:4; 5:2		349:4:4	
271:2:1; 2:2		351:4:1	
273:2:1; 2:3; 3:3; 5:2		352:5:1; 6:1	
274:4:1		358:4:3; 5:3	
276:5:1		372:2:3; 3:1; 4:1; 4:2; 5:2; 6:1; 6:2	
277:1:2; 2:3; 3:3		385:1:1	
278:3:2; 3:3; 4:1; 4:3; 5:2		386:4:3; 6:1	
301:6:2		390:3:3; 5:1	
303:6:1		391:3:2; 6:1	
304:5:2	T.14 - 17	394:3:3; 4:1; 5:1	
6:1	S.9 - 24	395:3:1; 5:1; 6:1; 6:2	
313:5:3		396:5:2; 5:3; 6:1	
316:1:3		397:2:4; 3:1; 6:1; 6:2	
323:5:2		403:6:1,2	





	Semiquavers Notated as Demisemiquavers
404:1:2; 5:3; 6:2	
411:5:4	<u>FVB I</u>
422:2:2; 2:4	
423:3:3	7:4:1
428:6:2	29:3:1
436:3:1	38:5:1
437:1:2; 6:5	39:2:3,4
438:1:3; 3:1; 5:3	40:3:2
439:5:3	59:4:2; 4:3; 5:2; 6:1
447:4:1	60:3:1,2; 4:1,2; 5:1; 6:2
450:4:2	61:3:1
452:4:2; 5:1	69:6:2
456:4:2; 5:1; 5:3	74:5:1
458:3:1; 4:3; 5:1,2	83:3:2
459:2:3; 4:1; 4:2; 5:1	83:4,5
460:4:1	84:1:1
461:3:1; 4:1,2; 5:1; 5:2;6:2	84:5:2
463:5:1	114:2:2; 3:1,2; 4:1,2; 5:1,2
468:5:2	128:2:3; 3:1,3; 4:2
469:5:2	158:1:1,2
478:4:3	171:1:1; 5:2
481:5:2	260:4:2; 5:1
484:6:2	271:1:3; 1:2
485:6:1,2	370:6:2
486:5:1	412:5:1,2; 6:1
489:3:3; 4:2	413:1:1,2; 3:1,2; 5:1
499:2:2	414:1:1; 2:1



FVB II

45:6:3	T.4 - 9	337:2:1
47:2:1; 3:1,2; 4:3		339:2:1; 2:3; 4:4
50:4:1		340:6:4
51:5:3		394:5:2
60:4:1		395:1:2,3; 2:1; 6:4
61:1:1		396:6:2
69:5:1,2		399:3:4; 4:2; 4:4; 5:3; 6:1
94:2:3; 3:2		401:2:3; 3:2
96:4:4		417:3:3; 4:1
97:6:1		484:2:3; 6:3
102:5:1	B.13 - 18	485:2:3; 5:1
161:2:2	S.6 - 9, 15 - 18	486:2:3
173:5:2	S.5 - 12	
5:3	S.6 - 13	Quavers Notated as Semiquavers
176:1:3		
199:1:2		<u>FVB I</u>
207:1:2		33:6:1
208:4:3; 6:2		206:2:2
212:3:1; 3:2		
323:4:1,2		
335:1:1		



TABLE 3.5

NOTATION IN A DOUBLE METRIC DIMINUTION

Semiquavers Notated as Semi-demisemiquavers

FVB I

154:4:2

193:6:1,2

195:3:3

FVB II

76:4:1 A.1 - 8

111:2:1 S.6 - 13

112:2:3; 6:3

158:6:2

452:6:1

NOTATION IN A SINGLE METRIC AUGMENTATION

Demisemiquavers Notated as Semiquavers, and Semiquavers as Quavers

FVB I

17:4:1

Tr



FVB



38:2:1



53:1:1

S.19, 20



S.21 - 26



78:4:2







83:3:1









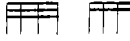


FVB II

108:1:2	S.5 - 8, A. 4 - 7		
1:3	S.5 - 8, T. 7 - 10		

INCORRECT REFERENCES IN THE FVB TO Tr

FVB II

76:4:1		in <u>Tr</u>
111:2:1		in <u>Tr</u>
112:2:3		in <u>Tr</u>
6:3		in <u>Tr</u>
127:2:2		in <u>Tr</u>
452:6:1		in <u>Tr</u>
459:4:2		in <u>Tr</u>



CHAPTER 4

4. THE ORNAMENTS WRITTEN OUT IN NOTES IN THE FITZWILLIAM VIRGINAL BOOK

The ornaments written out in notes in the FVB are, like their Continental counterparts, a stock of regularly occurring figures which form part of the written-out passaggi, as an evaluation of the treatment given them by the Virginalists will reveal. These ornaments written in notes may be seen as virtuoso decoration, for they add a highly virtuosic element to the ongoing diminution. They are integrated into the composed structure and are inseparably part of it. The written-out ornaments adhere to the same principle as the passaggi - that is, they are diminutions of basic note values inherent in the musical structure. The ornaments written out in notes in the FVB can be recognized by the names given to them by contemporary Continental music theoreticians : these are the groppo, groppetto, tremoletto, slide and tirata. The largest body of these - the groppo and groppetto - is the diminutio type, which is applied to the structure of one of the most important stylistic features of late Renaissance music, the cadence.

4.1 Clausula, Formal Close and Cadence in Renaissance Theoretical Sources

Before any meaningful discussion of the Virginalists' decoration of cadences can take place, some clarification of what Renaissance musicians understood by cadence is necessary. This is a subject more complicated than might be expected. Tinctoris defines a cadence thus:<sup>1</sup>

A clausula is a small part of some section of a piece, at the end of which there is found either a pause or else the end of the piece.

---

<sup>1</sup> Tinctoris, Terminorum, p. 5.



Tinctoris' definition appears once again in Dowland's translation of Ornithoparcus' Micrologus (Leipzig, 1519):<sup>2</sup>

Where 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 diversly) in perfect concords.

It should be mentioned that the term clausula (Latin: close, ending) was also used in the twelfth and thirteenth centuries to describe a polyphonic composition with a cantus firmus based upon a melismatic passage.

How then, may a Renaissance cadence be recognized? According to Zarlino:<sup>3</sup>

A cadence is a certain simultaneous progression of all the voices in a composition accompanying a repose in the harmony ...

His prerequisite for this phenomenon is that each of the voices participating in the cadence must consist of at least two voices which proceed in contrary motion.<sup>4</sup> In practice it is not quite this simple, as these are not the only features which make a Renaissance cadence recognizable; Morley's 'middle closes' have none of these features, for instance. The two voices in contrary motion may conclude either on the unison or the octave, or occasionally on the fifth, 'or even other consonances'.<sup>5</sup> The first is termed a perfect cadence and the latter an imperfect cadence.<sup>6</sup> The individual melodic movements of the voices may

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<sup>2</sup> Dowland, Ornithoparcus, p.84.

<sup>3</sup> Gioseffo Zarlino, The Art of Counterpoint, translated from Part III of Le Istitutioni Harmoniche (1588) by G. Marco and C. Palisca (New Haven : Yale University Press, 1968), p.141.

<sup>4</sup> Zarlino, Counterpoint, p.142. It must be remembered that Zarlino's rules are for strict counterpoint exercises.

<sup>5</sup> Ibid.

<sup>6</sup> The following discussion which draws on Zarlino is found in Counterpoint, pp.142-151.



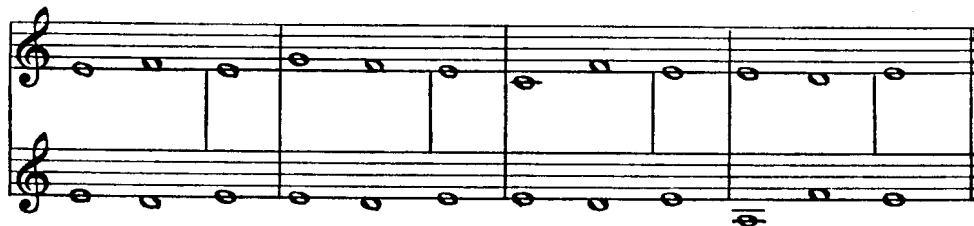
be either simple (simplex), when the movement of the voices consists of equal note values and is consonant; or diminished (diminuta), when a variety of note values is used and dissonance is introduced. Dowland employs the terms 'simple' and 'coloured'.<sup>7</sup>

In the clausula simplex closing on the unison, either the one voice ascends and descends or all three notes descend by step, whereas the other voice descends and then ascends by step. The interval between the two voices of the penultimate chord is a minor third:<sup>8</sup>

... for it is always the interval to precede the unison when two voices move into it by contrary motion, one by a whole tone, the other by a large semitone.

The approach to the last two chords of the cadence may vary, as long as the terminal chord and its antecedent always conform to the prescribed pattern:<sup>9</sup>

Ex.4.1 Simple cadences closing in the unison



The diminuta cadence on the unison is similar, except that a variety of note values is used, it introduces dissonance and a syncopation is involved. It is therefore a diminution of a

<sup>7</sup> Dowland, Ornithoparcus, p.78.

<sup>8</sup> Zarlino, Counterpoint, p.144.

<sup>9</sup> Ibid., p.143.

simple cadence in equal note values. In the diminuta cadence the syncopated note forms a dissonant interval of a second on the stroke of the tactus, which is followed by the minor third and the concluding unison:<sup>10</sup>

Ex.4.2 Diminuta cadence



Cadences (simplex and diminuta) ending on the octave behave according to the same principles : in the simple cadence the penultimate interval forms a major sixth and the final an octave, and in the diminuta cadence the syncopation forms a dissonant seventh on the stroke of the tactus, which is then resolved to the sixth; finally, both voices repose on a perfect consonance:<sup>11</sup>

Ex.4.3 Simplex Diminuta



Those cadences which do not end on the octave or unison, ending instead upon a fifth, third, or other consonance, are termed improper or imperfect cadences. The upper voice moves upward by step, and the second interval forms a third:<sup>12</sup>

<sup>11</sup> Zarlino, Counterpoint, p. 43.

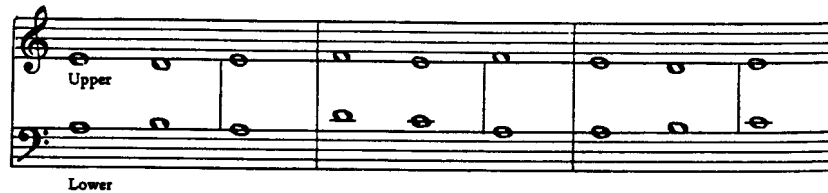
<sup>12</sup> Ibid., pp.145-146.

<sup>13</sup> Ibid., pp.148,151.



Ex.4.4

Imperfect cadence



Zarlino states that in this imperfect cadence the use of the semitone in one of the voices is not necessary. Further examples are then given, to show 'how diversely such cadences can be organised and used ... it would be very tedious for me to give examples of every possible proper and improper cadence, so infinite is their number.'<sup>13</sup>

The next statement is highly significant, indicating many possibilities for the establishment of a cadence:<sup>14</sup>

The contrapuntist must constantly seek new cadences and fresh procedures, at the same time avoiding errors.

Such cadences can be diversely organised, as they are difficult to recognize by the standards laid down earlier. The only characteristic features of the examples are the contrary motion of two voices, and the ending on the fifth, third, sixth or octave.<sup>15</sup> The interval of the penultimate chord varies. These imperfect or improper cadences are used for 'intermediate divisions in the harmony'. Zarlino continues:<sup>16</sup>

They are useful when a composer in the midst of a beautiful passage feels the need for

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<sup>13</sup> Zarlino, Counterpoint, p.150.

<sup>14</sup> Ibid.

<sup>15</sup> Zarlino is inconsistent; for an example of parallel movement, see Counterpoint, p.148, Ex.106.

<sup>16</sup> Zarlino, Counterpoint, p.151.

cadence ... any cadence not terminating on an octave or unison may be called imperfect because it evades the perfect ending.

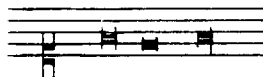
Zarlino finally illustrates ways of evading a cadence, 'when the voices give the impression of leading to a perfect cadence, and turn instead in a different direction'.<sup>17</sup>

The melodic progressions peculiar to each of the individual voices in a perfect cadence as described above are given names by Ornithoparcus. Like Zarlino, he claims that 'every Close consists of three Notes, the last, the last save one, and the last save two'.<sup>18</sup> He goes on to explain the four 'closes':<sup>19</sup>

Ex.4.5

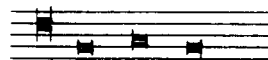
2. The Close of the Discantus made with three Notes, shall always have the last upward.

Discantus



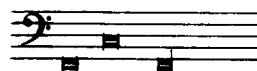
3. The Close of the Tenor, doth also consist of three Notes, the last always descending.

Tenor



4. The Close of the base requires the last Note sometime above, and sometime beneath the Tenor. Yet commonly it thrusts it an eight below, and sometimes raiseth it a fifth above.

Bassus



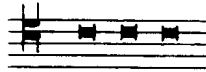
<sup>17</sup> Zarlino, Counterpoint, p.151.

<sup>18</sup> Dowland, Ornithoparcus, p.84.

<sup>19</sup> Ibid., pp.78,84.

5. The Close of a high Tenor, doth sometime rise, sometime fall with the last Note; sometime makes it an Unison with others. Which being it proceeds by divers motions, the sorting of it is at the pleasure of the Composers.

Altus

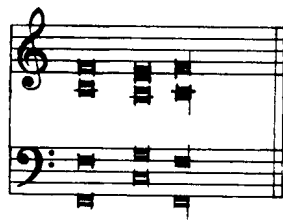


Ornithoparcus' rules are illustrated in the discussion Of the Divisions of the Counter-point:<sup>20</sup>

Ex.4.6

Simple

Coloured



From the above it is clear that Ornithoparcus applies the term 'close' not only to the horizontal movement of the individual voices, but also to the vertical conjunction of them. One may term them clausulae of the melody and of the harmony, the former being a clausula of one voice proceeding from the structure of the clausula of the harmony.

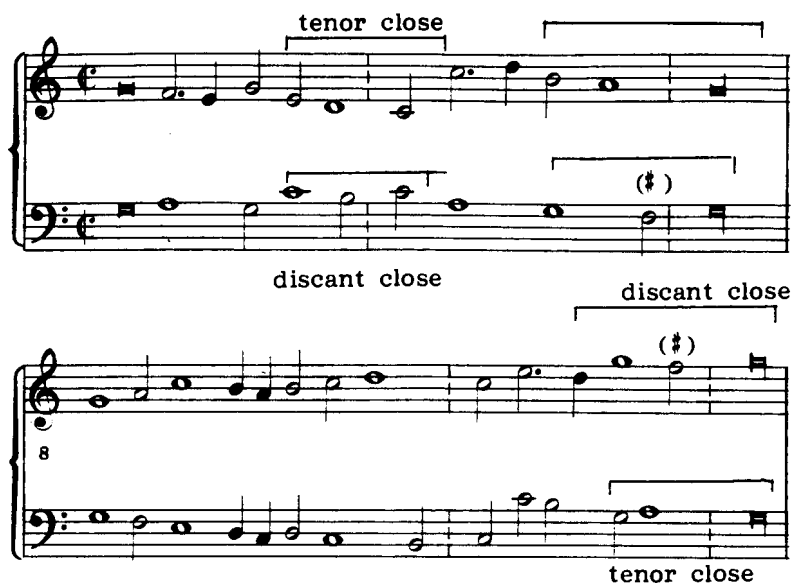
Ornithoparcus' sixth and seventh rules<sup>21</sup> reveal that when these individual melodic cadences occur in parts of the harmony other than those in which they are normally found, they retain their individual names. Clearly, then, they are not named according to the part of the harmony in which they appear, but according to the specific progression peculiar to them. This is further

<sup>20</sup> Dowland, Ornithoparcus, p.78.

<sup>21</sup> Ibid., p.84.

elaborated upon in the section 'Of the generall Rules of Counterpoint', which explains that, should the tenor form a discant cadence, the soprano will form a tenor cadence, and should the bass form a tenor cadence, the tenor will form a discant cadence and vice versa:<sup>22</sup>

Ex.4.7



The image shows two systems of musical notation. Each system consists of two staves (treble and bass clef). In the first system, the soprano staff has a 'tenor close' bracketed over the final two notes, and the bass staff has a 'discant close' bracketed over the final two notes. In the second system, the soprano staff has a 'discant close' bracketed over the final two notes, and the bass staff has a 'tenor close' bracketed over the final two notes. A sharp sign (#) is placed above the final note of the bass staff in the second system.

Morley does not discuss the individual closes, with the exception of the discant close, which he calls a cadence:<sup>23</sup>

A Cadence we call that when, coming to a close two notes are bound together and the following note descendeth thus:

Ex.4.8



The image shows a single staff of music in treble clef. It contains a sequence of notes: a half note G4, a quarter note F4, a quarter note E4, and a quarter note D4. A sharp sign (#) is placed above the E4 note, indicating a sharp sign in the key signature.

or in any other key after the same manner.

<sup>22</sup> Dowland, Ornithoparcus, p.81.

<sup>23</sup> Morley, Introduction, p.145.



Morley's employment of the terms 'close' and 'cadence' is ambiguous: they are often used interchangeably, in addition to the fact that the term 'cadence' is used to describe the discant close.<sup>24</sup> The discant close is regarded by Morley as the most important hall-mark of cadence:<sup>25</sup>

... for without a cadence in some of the parts, either with a discord or without it, it is impossible formally to close.

Once again Morley is inconsistent, for he nonetheless cites examples of 'formal closing without a Cadence' in the Introduction.<sup>26</sup> All these are examples of tenor closes, with no discant closes given. The tenor close has lost its earlier importance in the structure of the cadence, as it is sometimes left out or obscured in the examples given by Morley.

Nutting, in his thoroughly researched article on the phenomenon of Renaissance cadence, finds that a large percentage of Morley's cadences lack a tenor close. His 'middle closes' have no tenor or discant close features. Nutting considers the real value of the discant close to lie in the fact 'that it defines for us the cadence-note or degree of the mode which is being emphasized at the point of repose'.<sup>27</sup> Where no discant close is present, the bass note may be taken to be the cadence note. Zarlino similarly gives examples of 'perfect' cadences, where only the tenor and bass closes are present.<sup>28</sup> Campion, in A New Way of Making Fowre Parts (1613), leaves out the tenor close in his example of 'The maine and fundamental close'; the cadence consists of

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24 Morley, Introduction, pp.223,228.

25 Ibid., p.223.

26 Ibid., p.147.

27 G. Nutting, 'Cadence in Late-Renaissance Music', Miscellanea Musicologica, vol.8 (1975), p.43.

28 Zarlino, Counterpoint, p.147.

the conjunction of a discant and a bass close:<sup>29</sup>

Ex.4.9 'The maine and fundamentall close'



Morley's explanation of the different types of cadences reveals that the differentiation is not based upon the state of concord in the concentus alone, but also specifically upon the interval relationship of the other voices with the cadence note. He distinguishes between three types:<sup>30</sup>

- (i) Final closes (also called full closes)
- (ii) Passing closes (also called false closes)
- (iii) Middle closes

A final close is one in which the cadence note (i.e. the final note of a discant cadence) is duplicated in the bass, this interval being a perfect concord (octave). Where the bass is the actual cadence note (if the bass has the discant cadence), the bass is duplicated in another voice. Often, the major (Picardy) third is a regular feature in the final chord, where the tenor close tradition has given way to the desire for the fullness of the third in the chord. This means that no longer are only perfect concords heard at the point of repose, because the major third is an imperfect concord. However, this was apparently acceptable, as long as it was a major third from the bass.<sup>31</sup>

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<sup>29</sup> P. Vivian, Campion's Works (Oxford: Clarendon Press, 1909), p.214.

<sup>30</sup> Morley, Introduction, pp.223-225, 228-240.

<sup>31</sup> See Nutting, Cadence, pp.37-46, for an in-depth discussion of this.



In passing closes, imperfect concord is heard in the concentus on the final chord. They are used 'to shun a final end and go on with some other purpose'.<sup>32</sup> A passing close occurs when the bass forms a third or sixth below the cadence note, or if the discant cadence is in the bass, a part which forms a sixth above the cadence note:<sup>33</sup>

Ex.4.10

Passing close

The passing close is therefore termed 'false' for an essentially harmonic reason, and not a melodic one. Morley also mentions

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32 Morley, Introduction, p.223.

33 Ibid., pp.223-224.

a third above the bass, but this seems unjustified, as he furnishes no such example, and the major third is often heard in full cadence. Presumably he meant a minor third, but failed to clarify it. Not all of Morley's examples conform unambiguously to this doctrine. Nutting draws the conclusion that, regardless of what occurs in the bass, a sixth above, or a third or major sixth below the cadence note, will always cause a passing cadence. A major sixth will only bring about a passing cadence if the cadence note is the bottom note.<sup>34</sup>

The middle close, according to Morley's examples, demonstrates few of the features of a cadence as summarized before. His only comment is that 'middle closes ... are commonly taken at the end of the first part of a song'.<sup>35</sup> In all of these examples the discant close is absent. One draws the conclusion that the middle close is characterized by the bass which either leaps a fifth or jumps a fourth down to the final note (i.e. the cadence note), and also by the absence of the discant close:<sup>36</sup>

Ex.4.11

Middle close



In summary, Renaissance cadences can be said to be 'a more or less marked convergence of some or all voices into synchronously

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34 Nutting, Cadence, p.48.

35 Morley, Introduction, pp.228-229.

36 Ibid., p.229.





shared repose'.<sup>37</sup> The most typical cadences employ the syncopated discant close, which functions as an indicator of cadence and leads to the cadence note. Through the syncopation introduced by the syncopated discant close, there is a progressive rhythmic resolution until all the voices reach the point of repose, and a progressive reduction of dissonance : on the antepenultimate note the dissonant second or seventh is resolved to imperfect concord (third and sixth respectively), which proceeds again to perfect concord.

Renaissance cadences can be classified according to two procedures:

- (i) The melodic movement of the individual voices of a cadence which employs one or more of the regular closes, resulting in a classification of the cadence as either simple (simplex), i.e. equal note values and no dissonance, or coloured (diminuta), i.e. unequal note values with suspended dissonance.
- (ii) The harmonic relationship of the voices in the cadence, where the state of concord and relationship of the other voices to the cadence note determine the type of cadence, i.e. final (perfect) or passing (imperfect).

Cadences which are not easily classified because they do not exhibit any of the above features, are called middle closes. They do not employ the discant close, the only criterion being progression-to-repose. Morley sums up the diverse possibilities when he says:<sup>38</sup>

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<sup>37</sup> Nutting, Cadence, pp.49-50. Nutting arrives at this conclusion after having made an exhaustive study of the subject.

<sup>38</sup> Morley, Introduction, pp.241-242.

... for if a man would go about to set down every close he might compose infinite volumes without hitting the mark he shot at;

To avoid confusion and for ease of reference, the use of the term cadence will be restricted to the harmonic, multi-voice cadential idiom of progression-to-repose, while the individual, characteristic movement of the voices within the cadence will use the less familiar term close.

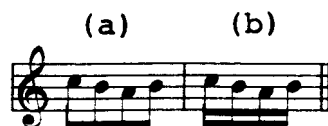
#### 4.2 The Groppo

In Chapter 1 it was observed that the groppo is prescribed in Continental treatises for use at (1) cadences, and (2) as virtuoso decoration in the form of passaggi, where it decorates or fills in an interval or intervals, the groppo being a diminution of the notes which comprise this interval(s). Examining the work of the composers contained in the FVB reveals an identical treatment accorded to the groppo.

##### 4.2.1 Rhythmical Variants of the Groppo

The groppo, as encountered in the FVB, is of rhythmically variable shape : the note values - and therefore also the number of notes used - can differ, yet the basic melodic structure always remains the same. Ex.4.12 displays the most elemental rhythmical design of the groppo, which consists of four notes:

Ex.4.12



In Ex.4.12 (a) and (b) only the basic melodic framework of the groppo is preserved, without any reiteration of notes. This figure is seldom used in the FVB; examples are found in the following places: I 93:4:3; 212:4:1; 231:3:1; 320:1:1; 324:5:2; II 107:6:1,2,3; 108:1:1 and 291:5:4. The four-note groppo of



quavers (Ex.4.12(a)) occurs only once, as seen in Ex.4.13(a):

Ex.4.13 Philips, Pavana Doloroso. Treg. (FVB I 324:5:2)

(a)



Byrd, Galiardas Passamezzo (FVB I 212:4:1)

(b)



The other occurrences all employ semiquavers, as in Ex.4.13(b). Except for I 93:4:3; 212:4:1 and 324:5:2, the rest of the figures similar to Ex.4.12(b) create the impression of a six-note grosso:

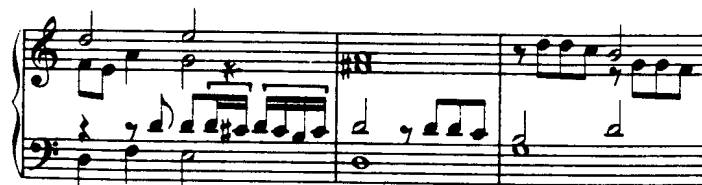
Ex.4.14 Byrd, Tregian's Ground (FVB I 231:3:1)

(a)



Philips: Bon Jour mō Cueur (FVB I 320:1:1)

(b)



Byrd: Quadran Paven (FVB II 107:6:1)



It is in fact not a characteristic six-note groppo which decorates the note of resolution in each instance, but only an impression created through the diminution of the note of resolution which anticipates the four-note groppo. The ornamented anticipation is marked in Ex.4.14(c) with an asterisk (\*). This phenomenon will be discussed later in greater detail when the ornamented anticipation of the note of resolution is treated.

The typical groppo in the FVB consists of six or eight notes, and occasionally twelve or sixteen. It can be constructed by means of equal or mixed note values. The six-note groppo of mixed note values always displays a progressive accelerando pattern, with the longer note values first, followed by the faster ones. They are made up either of quavers and semiquavers, or semiquavers and demisemiquavers:

Ex.4.15



In Ex.4.15(a) and (b) the relationship with the four-note groppo-figure discussed in Ex.4.12(b) is obvious: a simple reiteration added to the four-note figure results in the typical groppo design. Both types occur relatively infrequently in the FVB as regular decoration of the discant close; there are isolated examples in pieces by Byrd (II 55:5:1), Morley (I 58:3:2, 4:2, 5:1; 59:2:1, 3:2, 4:1), Philips (I 322:4:1; 323:3:1, 5:1; 325:1:4) and Richardson (I 28:5:2; 30:3:1; 31:2:1, 2:3; 33:3:3; 88:2:1, 3:1). Ex. 4.15(c) occurs even less often



(I 323:3:1, 5:1 and II 55:5:1). Ex.4.16(a)-(c) illustrate the use of each of these types in a discant close:

Ex.4.16 Philips, Pavana Doloroso (FVB I 322:4:1)

(a)



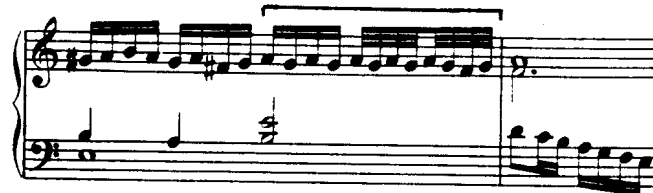
Richardson, Variatio (FVB I 30:3:1)

(b)



Philips, Pavana Doloroso (FVB I 323:3:1)

(c)



Morley, Nancie (FVB I 58)

(d) 3:2




(e) 4:2





(f) 5:1



In Morley's Nancie and Richardson's Pavana and Galiarda the semiquaver-demisemiquaver rhythm (  ) is expressly used to conform to the same rhythmic pattern which occurs in groppetti and other diminutions in these pieces. In Ex.4.16 (d)-(f) this is demonstrated: each bar contains at least one such rhythmic figure. In the case of Richardson's Pavana and Galiarda it occurs twenty-one times in the course of the work; here they often follow each other successively:

Ex.4.17

Richardson, Pavana (FVB I 28)

(a) 5:2



(b) 6:1



Richardson, Variatio (FVB I 31:2:3)

(c)





The typical grosso in the FVB is made up of equal note values of either semiquavers or demisemiquavers. In the majority of cases, however, semiquaver sextuplets are notated as demisemiquavers, and demisemiquaver eight-note groups are notated as semi-demisemiquavers.<sup>39</sup> In Ex.4.18(a) and (b) the correct note values occur thus in the FVB, although Ex.4.18 (c)-(e) is more typical:

Ex.4.18 Byrd, Alman (FVB I 245:3:2)

(a) Musical notation for Ex.4.18(a) showing a piano accompaniment for 'Alman' by Byrd. The piece is in 3/2 time. The right hand features a melodic line with a sextuplet of eighth notes, while the left hand provides a steady accompaniment of quarter notes.

Byrd, The Bells (FVB I 278:5:1)

(b) Musical notation for Ex.4.18(b) showing a piano accompaniment for 'The Bells' by Byrd. The piece is in 5/1 time. The right hand has a simple melodic line, and the left hand features a complex pattern of eighth notes.

Byrd, Pavana Bray (FVB I 363:6:1)

(c) Musical notation for Ex.4.18(c) showing a piano accompaniment for 'Pavana Bray' by Byrd. The piece is in 6/1 time. The right hand has a melodic line with a sextuplet of eighth notes, and the left hand has a simple accompaniment of quarter notes.

Byrd: All in a Garden Green (FVB I 414:1:1)

(d) Musical notation for Ex.4.18(d) showing a piano accompaniment for 'All in a Garden Green' by Byrd. The piece is in 1/1 time. The right hand has a melodic line with a sextuplet of eighth notes, and the left hand has a simple accompaniment of quarter notes.

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<sup>39</sup> This phenomenon is discussed in Chapter 3; see 3.8.

Byrd, Galiarda (FVB II 47:1:3)



In Ex.4.18(c) and (d), the eight-note group and sextuplet are notated in a single metric diminution. In Ex.4.18(e), the sextuplet is once written correctly, but in the next bar it appears in the form of demisemi-quavers, in a single metric diminution.

#### 4.2.2 The Gropo as Decoration of the Discant Close

The great majority of gropi in the FVB occur as decoration of one of the individual closes in either a perfect or imperfect cadence, whether it is a simple or diminuta cadence. The gropo features mainly as decoration of the penultimate note of the discant close, and in a few isolated cases it decorates the tenor close.

The discant close is the most richly ornamented of the individual closes, and it is here that the greatest variety of diminutions is found. In the FVB it is but one of a variety of stereotyped melodic figures which decorate the penultimate note of the discant close.<sup>40</sup> The gropo serves two functions in its role as decoration of the discant close: it ornamentally resolves the suspended dissonance, and through its appearance on the penultimate note of the close, it draws attention to the cadence event.

The gropo risks being considered merely as an ordinary melodic formula of upper-main note alternation. Yet, in practice, as decoration of the discant close it is a significant event. In a simple cadence the gropo consists of an alternation of the

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<sup>40</sup> A table of these appears in Schwandt, Clausula, p.40. Schwandt gives an exhaustive account of this phenomenon.



first note of the discant close with the penultimate note:

Ex.4.19



In a diminuta cadence, this alternation takes place between the suspended dissonance and the note of resolution:

Ex.4.20



The groppo formula is thus in fact a diminutio of the melodic progression of the discant close, in this case a semitone interval. (In Phrygian cadences this would be a whole tone.) The penultimate note or note of resolution in the formula is reached via the lower auxiliary, before it finally sounds and leads up to the cadence note. This way - albeit as a last attempt - attention is drawn to the penultimate note of the discant close, after having been 'sabotaged' or disguised by the alternating upper note.

In the discant close of a simple cadence, the penultimate note is prepared ornamentally via a groppo for its progression to the final cadence note. In this manner, attention is drawn to the fact that a cadence is going to take place, while also creating harmonic tension through the presence of the ante-penultimate note of the discant close in the groppo:

Ex.4.21

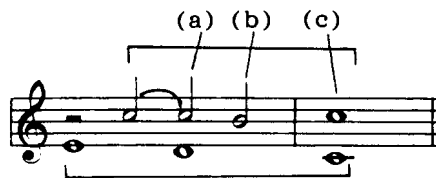


- (a) = discant close  
(b) = tenor close

In the discant close of a diminuta cadence, the penultimate note is the resolution of the suspended dissonance, and it is here that the discant close acquires both rhythmic and harmonic significance: it is distinctive rhythmically, through the resolution of the dislocated accent, and also harmonically, as it becomes discordant prior to the semitone fall of the suspension and imperfectly concordant at the point where the note of resolution sounds - just before the perfect concord of the final chord. The decoration of this penultimate note by way of a groppo or any other diminution, accentuates and draws attention to this occurrence which might otherwise have passed unnoticed. In the process, the feeling of release of harmonic tension is postponed by the groppo until the last moment through the presence of the alternating suspended dissonance in the groppo. This dissonance sounds precisely at the moment where one might have expected the note of resolution to occur, and the latter occupies a secondary position until attention is finally drawn to it, via the lower auxiliary, just before it leads to the cadence. All this happens without affecting the basic progression of the discant close:

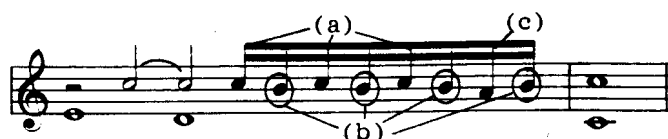
Ex.4.22

Unornamented:



- (a) = suspended dissonance  
(b) = note of resolution  
(c) = cadence note

Ornamented:



- (a) = alternating suspended dissonance
- (b) = note of resolution
- (c) = lower auxiliary introducing the note of resolution

The function of the grosso on the penultimate note in a diminuta discant close is therefore the ornamental resolution of dissonance. At the same time, the grosso prolongs the suspended dissonance by means of the alternation between the suspended dissonance and the note of resolution. The ornamental resolution thus created by the grosso results in attention being drawn to the cadence event, creating an additional function for the grosso. The grosso as ornamental resolution thus becomes a hallmark of cadence.

Ex.4.23 is an illustration from the FVB of a grosso decorating a discant close in a simple cadence:

Ex.4.23                      Byrd, Galiarda (FVB II 393:3:1)



The discant close is in this case in the soprano, and the individual closes can be thus reduced:

Ex.4.24



The tenor close consists of the notes c' - d' - c' and the bass close of the notes c - g - c, being in the tenor and bass respectively. The countertenor close is incomplete. The decorated discant close in a diminuta cadence, showing the ornamental

resolution of dissonance by the gropo, is shown in Ex.4.25:

Ex.4.25 Byrd, Galiarda (FVB I 365:5:1)



The dissonance between the first note of the discant close (c") and the second note of the tenor close (d'), with the gropo decorating the note of resolution (b') is clearly illustrated. The movement of the two last notes of the bass close causes it to make a passing cadence (e - f - g - a); the tenor close in the tenor is c' - d' - c', while the countertenor close is incomplete, being interrupted at the point where the gropo sounds. Philips' Pavana Doloroso demonstrates the use of the ornamented discant close in voice parts other than the soprano, as prescribed by Ornithoparcus in his Rules:

Ex.4.26 Philips, Pavana Doloroso (FVB I 321)

(a) 321:1:1



(b) 325:1:4



In Ex.4.26(a) the ornamented discant close appears in the bass in the first bar, in the tenor in the second bar, and in (b)

in the alto. In (b) a particularly good example occurs, illustrating the way in which the basic intervals of the individual closes are preserved, while they are subject to diminution. The basic intervals of the four closes in Ex.4.26(b) may be reduced to the following:

Ex.4.27



Soprano	:	countertenor close (incomplete)	g' - g'
Alto	:	discant close (syncopated)	c' - b - c'
Tenor	:	tenor close	e - d - c
Bass	:	bass close	C - G - C

The gropo ordinarily takes up the whole value of the decorated note of resolution, as shown by Ex.4.12 to Ex.4.26.

#### 4.2.2.1 The Gropo as Partial Decoration of the Note of Resolution

There are many instances in the FVB where the gropo takes only part of the value of the note of resolution in a discant close. A study of the different ornamental resolutions of the suspended dissonance reveals that these melodic figures usually include the note of resolution and the dissonance. These ornamental resolutions may consist of three to eight notes and may either take up the whole of the decorated note and can therefore be used on its own, or it may be used in conjunction with the gropo.

Tables 4.1, 4.2 and 4.3 demonstrate all the different diminutions that are found as decoration of the note of resolution in the FVB (excepting the gropo which takes the whole value of the note of resolution). The ornamental figures which do not



TABLE 4.1

ORNAMENTAL FIGURES DECORATING THE NOTE OF RESOLUTION

The image displays eight ornamental figures, labeled i through viii, on a treble clef staff. Each figure is a short melodic phrase that begins with a note and ends with a resolution. The figures are arranged in three lines of notation. The first line contains figures i, ii, and iii. The second line contains figures iv, v, and vi. The third line contains figures vii and viii. Each figure is a short melodic phrase that begins with a note and ends with a resolution. The figures are arranged in three lines of notation. The first line contains figures i, ii, and iii. The second line contains figures iv, v, and vi. The third line contains figures vii and viii.



TABLE 4.2

ORNAMENTAL FIGURES WHICH INCLUDE THE ELEMENTARY  
GROppo-FIGURE AS DECORATION OF THE NOTE  
OF RESOLUTION



TABLE 4.3

ORNAMENTAL FIGURES PLUS THE GROppo AS DECORATION  
OF THE NOTE OF RESOLUTION

The image displays 21 numbered ornamental figures, labeled i through xxi, arranged on a single musical staff. Each figure is a melodic phrase consisting of eighth and sixteenth notes, often with a final note that is decorated with a 'gropo' (a grace note or ornament). The figures are organized into rows: the first row contains i, ii, and iii; the second row contains iv, v, and vi; the third row contains vii, viii, and ix; the fourth row contains x and xi; the fifth row contains xii and xiii; the sixth row contains xiv and xv; the seventh row contains xvi and xvii; the eighth row contains vxiii and xix; and the final row contains xx and xxi. The notation is in a single treble clef with a common time signature.



include the grosso, mostly employ the note of resolution as its first and last note, as Tables 4.1 and 4.2 show.<sup>41</sup> (Fig. (v) from Table 4.1 is an exception.) The elementary four-note grosso may be used as an integrated part of the ornamental figure; it usually takes half the value of the decorated note. This is illustrated in Table 4.2.<sup>42</sup> When the habitual grosso occurs in conjunction with any preceding ornamental figure, it takes either three-quarters or half of the value of the decorated note, depending on the preceding note values. These are illustrated in Table 4.3.<sup>43</sup>

Figs. (i) to (iii) from Table 4.1 are extensively used by the composers of the FVB. Of the three tables presented, however, the ornamental figures in Table 4.3 occur most frequently. Figs. (vii), (viii) and (xiv) from Table 4.3 are often used as decoration of the penultimate note (= note of resolution in a diminuta cadence) of the discant close. A study of 69 occurrences from Table 4.3 has shown, for instance, the appearance of 26 examples of fig. (vii), as opposed to 7 of fig. (viii), and 10 of fig. (xiv).

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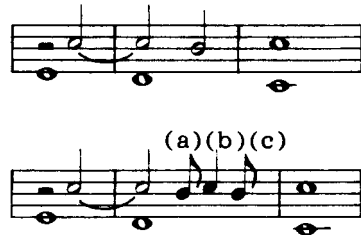
41 For examples from Table 4.1 in the FVB, see: (fig. i) I 42:1:1; 150:4:2; 360:1:1; 361:3:1; 362:4:3; 370:1:2; 420:2:1; II 25:1:3; 200:5:2; 201:4:2; 202:2:1; 205:6:2; 209:2:3; 277:1:2; (fig. ii) I 219:6:1; 345:5:2; II 42:3:3; 431:4:3; 298:2:2; (fig. iii) I 90:6:3; 95:3:3; 204:2:3; 288:1:3; 290:3:2; II 307:4:1; 246:6:2; 298:1:3; (fig. iv) I 329:1:2; 350:5:2; (fig. v) II 385:4:5; (fig. vi) I 357:4:1; (fig. vii) II 304:4:3; (fig. viii) I 333:1:3; II 26:5:3.


42 For examples in the FVB, see : (fig. i) I 87:5:1; (fig. ii) 327:1:1; (fig. iii) 290:3:2; (fig. iv) 205:5:3; (fig. v) 297:4:2.

43 For examples from Table 4.3 in the FVB, see : (fig. i) I 34:3:2; 95:4:3; 127:3:4; 289:4:3; 290:4:1; 323:3:2; 323:2:1; II 151:4:1; 244:3:2; (fig. ii) I 53:1:1; 266:1:2; II 206:1:2; 432:6:2; (fig. iv) II 248:2:1; (fig. v) I 415:5:3; (fig. vi) I 171:5:2; (fig. vii) I 31:2:1; 37:3:3; 59:3:2; 195:2:2; 257:5:2; 278:5:1; 290:3:2; 318:4:1; II 22:1:1; 45:6:2; 62:4:1; 63:3:2; 119:1:1; 172:6:1; 238:5:1; 241:6:1; 205:6:3; 278:4:1; 278:4:3; 386:4:3; (fig. viii) I 92:1:2; 403:6:1; 414:2:1; II 96:4:4; 439:5:3; (fig. xiv) I 330:2:1; 368:3:1; 415:3:1; 416:6:1; II 55:3:1; 205:1:1.

A closer look at these tables reveals that fig (i) from Table 4.1 is the vehicle upon which most of the other ornamental figures are based and is in fact the note of resolution broken up into a miniature discant cadence:

Ex.4.28



The diminution applied to the note of resolution in Ex.4.28 consists of the note of resolution (a), a new syncopated suspension (b), which in turn is resolved by another note of resolution (c). Except for figure (v) from Table 4.1 and figs. (vi), (xiv), (xv) and (xvi) from Table 4.3, all begin and end with the note of resolution and include the dissonance - they clearly are amplifications of  which begins and ends with the note of resolution.

The inter-relationship between all these figures is apparent on closer scrutiny: apart from the characteristics they share, as quoted above, they are frequently subject to further diminution or can be combined. In Table 4.1, fig. (iv) is a combination of the first part of (vi) with (iii); the second part of (vi) is a diminution of (ii), and (vii) is a further diminution of (ii). In Table 4.2 fig. (i), the elementary four-note gropo is combined with the first note of Table 4.1 fig. (i); the four-note gropo of Table 4.2 (iii) may be regarded as a further diminution of the second and third note of Table 4.1 (i) - hence Table 4.2 (i) is an amplification of Table 4.1 (i). Figs. (iii) and (v) from Table 4.2 consist of a combination of elements from (iii) and (iv) of Table 4.1 with the elementary gropo. Table 4.3 (i) is a further diminution of Table 4.1 (i). The relationship between Table 4.3 (i), (ii) and (iv) is evident, while (xix) is a combination of (ix) and (xiv). In the process of diminution the syncopated suspension of Table 4.1 (i) is

effectively disguised - this is especially apparent in Table 4.3 (ii), (iv), (v), (vi), (ix) - (xxi). In all cases the groppo does not begin on the note of resolution of the miniature discant close, but earlier, i.e. it takes a half or three quarters of the value of the decorated note instead of the last quarter, depending upon the foregoing ornamental figuration. When the ornamental figure takes half of the value of the decorated penultimate note in the discant close, the groppo is postponed and consequently shifted to a single metric diminution than if it had decorated the full value of this note.

These figures occur with such regularity together with the groppo, that the ornamental figure plus groppo can be seen as an entity or type. The latter occurs of course much less frequently than if the groppo had decorated the note on its own. The occurrence of a groppo preceded by the note of resolution or a diminution of it, (as decoration of the penultimate note of resolution in the discant close), has a dual result :

(1) it temporarily creates the impression that no ornamental decoration of the note of resolution is going to take place, and (2) the ornamental decoration is postponed. At the same time the harmonic tension is prolonged through this ornamental decoration. This is notably the case with Table 4.3 (i), where the note of resolution sounds relatively long when compared to figs. (vii) - (xxi). The illustrations below are examples of the practical implementation of this in the FVB:

Ex.4.29

Richardson, Variatio (FVB I 95:4:3)

(a)



The musical notation for Ex. 4.29 (a) consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The music shows a series of notes with a final note that is decorated with a complex ornamental figure. A groppo (a series of sixteenth notes) is shown starting before the resolution note, illustrating the postponement of the ornamental decoration.

Philips, Fece da voi (FVB I 289:4:3)

(b)



The musical notation for Ex. 4.29 (b) consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The music shows a series of notes with a final note that is decorated with a complex ornamental figure. A groppo (a series of sixteenth notes) is shown starting before the resolution note, illustrating the postponement of the ornamental decoration.



Bull, Variatio Ejusdem (FVB II 244:3:2)

(c)

Musical score for Bull, Variatio Ejusdem (FVB II 244:3:2). The score is written for two staves, treble and bass clef. It features a complex rhythmic pattern with many sixteenth and thirty-second notes, characteristic of a lute or keyboard piece. The key signature has one flat (B-flat).

Philips, Galiarda Dolorosa (FVB I 327:1:3,2:3)

(d)

Musical score for Philips, Galiarda Dolorosa (FVB I 327:1:3,2:3). The score is written for two staves, treble and bass clef. It features a complex rhythmic pattern with many sixteenth and thirty-second notes, characteristic of a lute or keyboard piece. The key signature has one flat (B-flat).

Galeazzo, Praeludium (FVB I 393:1:2)

(e)

Musical score for Galeazzo, Praeludium (FVB I 393:1:2). The score is written for two staves, treble and bass clef. It features a complex rhythmic pattern with many sixteenth and thirty-second notes, characteristic of a lute or keyboard piece. The key signature has one flat (B-flat).

Sweelinck, Ut re mi (FVB II 27 :5:2)

(f)

Musical score for Sweelinck, Ut re mi (FVB II 27 :5:2). The score is written for two staves, treble and bass clef. It features a complex rhythmic pattern with many sixteenth and thirty-second notes, characteristic of a lute or keyboard piece. The key signature has one flat (B-flat).

Byrd, All in a Garden Green (FVB I 413:1:1)

(g)

Musical score for Byrd, All in a Garden Green (FVB I 413:1:1). The score is written for two staves, treble and bass clef. It features a complex rhythmic pattern with many sixteenth and thirty-second notes, characteristic of a lute or keyboard piece. The key signature has one flat (B-flat).

Bull, Galliarda (FVB I 171:5:2)

(h)

Musical score for Bull, Galliarda (FVB I 171:5:2). The score is written for two staves, treble and bass clef. It features a complex rhythmic pattern with many sixteenth and thirty-second notes, characteristic of a lute or keyboard piece. The key signature has one flat (B-flat).

Byrd, Pavana Lachrymae (FVB II 45:3:3)



Philips, Le Rossignol (FVB I 348:4:3)



Ex 4.29 (a) - (f) are excellent examples of the unornamented note of resolution followed by the grosso : it is first seen as used in simple cadences ((a) - (c)) and in diminuta cadences ((d) - (f)), with very normal movement of the individual closes. Ex.2.49 (g) - (k) show the ornamented note of resolution before the grosso : in (g) as decoration of a simple cadence, and in (h) - (k) in diminuta cadences. In Ex.4.29 (h) a rest takes the place of the note of resolution. The ornamented note of resolution generally creates less harmonic tension as the grosso comes much later, and the first part centres around the note of resolution and not the dissonance, even though the latter may be present in the melodic figure.

The grosso anticipated by the unornamented note of resolution is used far more often in simple than in diminuta cadences : a survey of 75 occurrences of this phenomenon has revealed 8 diminuta as opposed to 36 simple cadences, with a further 31 which can be described as 'disguised' diminuta cadences.<sup>44</sup> This is not surprising, as there is no suspended dissonance which requires resolution in a simple cadence.

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<sup>44</sup> This phenomenon is discussed in 4.2.2.3.

#### 4.2.2.2 The Ornamented Anticipation of the Note of Resolution

The anticipation of the note of resolution in a discant close is the vehicle for a large number of ornamental figures, of which only a few are of interest for the purposes of this study.<sup>45</sup> These are illustrated in Table 4.4. In Table 4.4, fig. (i) shows an unornamented diminuta cadence, with the note of resolution anticipated in fig. (ii). In figs. (iv) and (v), the lower auxiliary is added and in fig. (viii) the upper. In figs. (vi), (vii) and (xiii) a rest takes the place of the suspension. Figs. (x) - (xiii) are all diminutions of two notes : the suspended dissonance and the anticipated note of resolution; fig. (x) and (xi) are diminutions of fig. (ii), and fig. (xiii) a diminution of fig. (vi). Fig. (viii) is one of the figurations regularly applied to the note of resolution, which also frequently occurs as decoration of the anticipation, especially in the shape of fig. (ix) which is, in fact, a diminution of figs. (ii) and (viii) combined. Fig. (xiv), a diminution of fig. (viii), is a groppetto.<sup>46</sup> Figs. (iv), (viii), (ix) and (xiv) are the most popular ornamental anticipations used in the FVB.

The abstract below from a Byrd Pavana (Ex.4.30) demonstrates the way in which a discant close is progressively ornamented; it is a typical illustration of how figs. (iv) and (ix) from Table 4.4 - ornamented anticipations - prepare for the motion of the ornamental resolution. The result is a smoothly-flowing discant close, with the groppe postponed until the last possible moment and the basic notes of the close clothed in elaborate diminution:

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<sup>45</sup> See Schwandt, Clausula, p.43, for a list of ornamented anticipations.

<sup>46</sup> The groppetto is treated separately; see 4.3.



TABLE 4.4

THE ORNAMENTED ANTICIPATION OF THE NOTE OF RESOLUTION

The image displays 14 musical examples, labeled i through xiv, illustrating the concept of ornamented anticipation of the note of resolution. Each example is presented on a single staff in treble clef, with a common time signature. The examples show various rhythmic and melodic patterns where a note or group of notes is played before the final note of a phrase, creating a sense of anticipation. The patterns range from simple eighth-note anticipations to more complex sixteenth-note runs.

- i**: A simple eighth-note anticipation of the final note.
- ii**: A quarter-note anticipation of the final note.
- iii**: A dotted quarter-note anticipation of the final note.
- iv**: An eighth-note anticipation of the final note.
- v**: A quarter-note anticipation of the final note.
- vi**: A dotted quarter-note anticipation of the final note.
- vii**: An eighth-note anticipation of the final note.
- viii**: A quarter-note anticipation of the final note.
- ix**: A dotted quarter-note anticipation of the final note.
- x**: An eighth-note anticipation of the final note.
- xi**: A quarter-note anticipation of the final note.
- xii**: A dotted quarter-note anticipation of the final note.
- xiii**: An eighth-note anticipation of the final note.
- xiv**: A quarter-note anticipation of the final note.

Ex.4.30 Byrd, Pavana (FVB II 205)

(a) 2:3



(b) 3:3



(c) 6:3



Bull, Walsingham (FVB I 17:4:1)

(d)



The three discant closes on the finalis G (Ex.4.30(a)-(c)) reveal firstly fig. (iv) from Table 4.4, and an unornamented note of resolution. Then the note of resolution is decorated with fig. (i) from Table 4.1, followed by the most elaborate discant close : the anticipation is ornamented with fig. (ix) from Table 4.4, and the note of resolution with a groppo preceded by one of the regular figures, fig. (vii) from Table 4.3. In Ex.4.30(d) the ornamented anticipation is a diminution of fig. (vi) from Table 4.4, where a rest has taken the place of the suspension.





The purpose of the ornamented anticipation is primarily to bring about a smoother transition between the suspended dissonance and the note of resolution, as there is a more continuous flow of notes. In the process it anticipates the motion that ornamental resolution will bring.<sup>47</sup> In an ornamented state, the basic notes of suspended dissonance and note of resolution are disguised, as they are heard in passing as part of the ongoing diminution. The ornamented anticipation may specifically create confusion as to where the proper note of resolution starts, especially in the case of Table 4.4, figs. (x) to (xii). Depending upon the type of diminution applied, the ornamented anticipation of the note of resolution may reduce the harmonic tension created by the dissonance considerably. This is the case in fig. (viii) from Table 4.4 which starts with a consonance (the octave, a perfect consonance) more perfect than that which the note of resolution makes with the tenor (a sixth, which is an imperfect consonance), or fig. (ix), where the anticipated note of resolution is the centre of melodic activity. Figs. (x) to (xiii) from Table 4.4 are the important diminutions here: the diminution is of such a nature that it becomes an extension of the grosso (on the note of resolution) and as such becomes an integrated part of it.

Ex.4.31

(a)



(b)



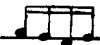
(c)



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<sup>47</sup> Schwandt, Clausula, p.42.



Ex.4.31(a) shows the unornamented discant and tenor close of a diminuta cadence. In (b) the simple anticipation of the note of resolution is shown, in (c) the groppo on the note of resolution, and in (d) the application of diminution to the anticipation creates a groppo of which the alternations start before the note of resolution. The diminution consists of the alternation of the suspended dissonance with the anticipated note of resolution. This type is not at all common in the FVB and often occurs jointly with the most elementary form of the groppo () discussed earlier (Ex.4.12).<sup>48</sup> Ex.4.32 shows examples of how the Virginalists anticipate the note of resolution ornamentally.<sup>49</sup>

Ex.4.32


Morley, Galliarda (FVB II 215:5:3)



Byrd, Quadran Paven (FVB II 107:6:1)



<sup>48</sup> This specific ornamented anticipation occurs in the FVB at I 29:3:1; 93:4:3; 209:2:1; 212:4:1; 231:3:1; 320:1:1; 376:6:3; II 107:6:1,2,3; 108:1:1; 215:5:3; 248:2:4; 281:3:4; 291:5:4.

<sup>49</sup> A bracket -  - indicates the anticipation, and the encircled notes the basic notes of the discant and tenor closes.

Richardson, Galiarda (FVB I 93:4:3)

(c)

A two-staff musical score for a lute or guitar. The right hand (treble clef) plays a melody with eighth and sixteenth notes, while the left hand (bass clef) provides a rhythmic accompaniment with chords and single notes.

Richardson, Variatio (FVB I 29:3:1)

(d)

A two-staff musical score. The right hand features a complex, fast-moving melodic line with many sixteenth notes. The left hand has a steady accompaniment of eighth notes.

Byrd, Galiardas Passamezzo (FVB I 212:4:1)

(e)

A two-staff musical score. The right hand has a melodic line with some grace notes and a final cadence. The left hand has a simple accompaniment of eighth notes.

Picchi, Toccata (FVB I 376:6:2)

(f)

A two-staff musical score. The right hand has a melodic line with a prominent sixteenth-note run. The left hand has a rhythmic accompaniment with chords and single notes.

Bull, Ut, re, mi, fa, sol, la (FVB II 281:3:4)

(g)

A two-staff musical score. The right hand has a simple melodic line with long notes. The left hand has a rhythmic accompaniment with chords and single notes.

Byrd, Tregian's Ground (FVB I 231:3:1)

(h)

A two-staff musical score. The right hand has a melodic line with some grace notes and a final cadence. The left hand has a simple accompaniment of eighth notes.


Bull, Praeludium (FVB II 248:2:4)

(j)



Philips, Pavana Doloroso (FVB I 321:3:2)

(k)



Bull, Ut, re, mi (FVB II 291:5:4)

(l)



Byrd, Galiardas Passamezzo (FVB I 209:2:1)

(m)



These examples reveal how the individual closes may be incomplete (Ex.4.32, (d) and (e)), and the note levels different or unequal (Ex.4.32, (b), (h), (j) and (k)). In Ex.4.32(a) and (b) the simple anticipation and ornamented anticipation in a simple cadence are given respectively. In (b) the impression of a 'normal' six-note groppo is created, whereas in fact, the groppo begins before the note of resolution because of the ornamented anticipation; the diminution applied consists of an alternation of the first note of the discant close with that of the anticipated note of resolution. Ex.4.32 (c) - (l) are all diminuta cadences. In (d) - (g) a simple anticipation of the note of resolution occurs after the dissonance which is formed



between the suspended dissonance and penultimate note of the tenor close. In (h) and (j) the diminution treatment causes the gropo to start on the anticipation; (j) particularly disguises both the suspension and anticipation effectively with its demisemiquaver alternations which start immediately after the suspended dissonance, actually taking up the time of both suspension and resolution. Ex.4.32 (k) can be viewed either as a simple or diminuta cadence, as the lack of a tie between the crotchet c' and the semiquaver c' creates doubt as to whether it be a diminuta cadence or not. The four-note figure c'-b-c'-b can be interpreted either as a diminution of the anticipation in the case of a diminuta cadence, so that the gropo takes up the place of both the suspension and resolution, or else as an ordinary gropo employing mixed note values. The relation of the first solution to (j) is clear : only the tie is missing and the note values differ. Ex.4.32 (l) and (m) are again diminutions of the simple anticipation in (c), where a rest has taken the place of the suspension. In Ex.4.32 (c) the absence of the suspended dissonance is thus compensated for by the introduction of the note of resolution after the rest, anticipating the real note of resolution c', and in an ornamented state ((l) and (m)) by the introduction of the suspended dissonance and anticipated note of resolution. In the latter examples two procedures are noticeable : a gropo is created beginning earlier than usual, and the suspended dissonance is introduced, even if not in its habitual place.

#### 4.2.2.3 The Ornamented Anticipation in-lieu-of the Suspended Dissonance

There are many instances in the FVB where the suspended dissonance is replaced by the anticipation of the note of resolution. In these cases the note of resolution is anticipated so far in advance that it actually takes the place of the suspension, and we will call this phenomenon the anticipation in-lieu-of the suspended dissonance. The following unornamented diminuta cadence demonstrates the way in which it influences the movement of the notes in a discant close:

## Ex.4.33



The anticipated note of resolution (marked  $\frown$ ) has taken the place of the suspension. What is evident here is, in fact, the resolution of a suspended dissonance which does not occur. This phenomenon creates confusion as to whether a cadence is simple or diminuta, simply because the suspended dissonance is either disguised, or is not present. The anticipation in-lieu-of the suspended dissonance may be termed a 'disguised' diminuta cadence, as the impression of a simple cadence is created, whereas it is in fact a diminuta cadence in disguise, as is evident from the illustration below:

## Ex.4.34

Byrd, Pavana Lachrymae (FVB II 45:6:1)Sweelinck, Psalm (FVB II 151:3:3)

In Ex.4.34 (a) it is clear that a rest has taken the place of the suspension, effectively disguising it. In (b) an ornamental anticipation of the note of resolution has taken the place of the suspension, which superficially viewed, may lead one to believe that it is a simple cadence. The following is an example of an unornamented anticipation which has taken the place of a suspension:

Ex.4.35

Richardson, Galiarda (FVB I 33:2:2)



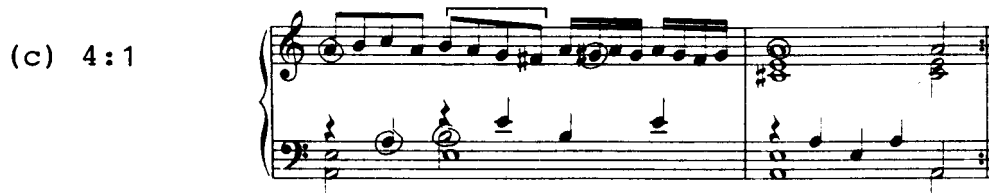
The anticipation may be ornamented with figures from Tables 4.3 and 4.4, and they are used singularly or in combination; in other words, any of the ornamental figurations which decorate the ornamented anticipation of the note of resolution, or which precede the groppo on the note of resolution, may be employed. Ex.4.36 shows the use of the ornamented anticipation in-lieu-of the suspended dissonance:

Ex.4.36

Farnaby, 23. (FVB II 324:4:2)



Byrd, Galliarda (FVB II 228)



Morley, Galliarda (FVB II 214:4:2)

(d)



Philips, Fece da voi (FVB I 288:3:2)

(e)



Philips, Passamezzo Pavana (FVB I 305:5:4)

(f)



In Ex.4.36 (a) a rest has taken the place of the suspension, this figure being fig. (i) from Table 4.4. In Ex.4.36 (c) and (d) it is fig. (viii) from Table 4.4 which replaces the suspension altogether. Ex.4.36 (c) is a more elaborate version of (b), which occurs eight bars earlier in the same piece. Ex.4.36(e) is a combination of figs. (vii) and (xi) from Table 4.4, and (f) a combination of figs. (xiv) and (vii) from Table 4.4.

In a 'disguised' diminuta cadence, the grosso either takes the full value of the note of resolution, or only half. Three basic note patterns - based on the anticipation in-lieu-of the suspended dissonance - emerge here. In the first pattern (Ex.4.37), the grosso always decorates the full value of the note of resolution, and the anticipated note of resolution is the centre around which the rest of the ornamental figuration revolves:



Ex. 4.37



Philips, Pavana (FVB I 326:6:1)



Philips, Fantasia (FVB I 356:5:1)



In the second and third patterns (Ex.4.38, 4.39), the gropo takes half the value of the note of resolution, for the dissonance is introduced at a certain point after the anticipated note of resolution, with the result that the gropo is postponed. In the second pattern (Ex.4.38), the dissonance is preceded and followed by the note of resolution:

Ex.4.38



Byrd, Pavana (FVB I 368:3:1)



Fre., Heaven and Earth (FVB I 417:4:1)



In the third pattern (Ex.4.39), the dissonance is introduced at the last moment, thus creating a miniature discant close:

Ex.4.39



Byrd, Pavana Bray (FVB I 361)

(a) 2:4

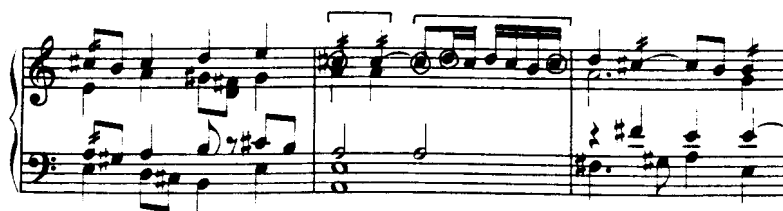


(b) 362:1:4



Bull, Pavana (FVB I 127:3:3)

(c)





Richardson, Galiarda (FVB I 33:2:3)

(d)

Tomkins, Pavana (FVB II 56:1:1)

(e)

Byrd, Pavana (FVB II 395:4:3)

(f)

In Ex.4.39, (a) and (b) are particularly illustrative as (b) is the varied repeat of (a). In Ex.4.39 (c) the anticipation in-lieu-of the suspension is decorated with a double-stroke ornament, and in (d) with the plain lower auxiliary. In (e) and (f) all of the basic note values of the third pattern are subject to diminution.

#### 4.2.3 The Groppo as Decoration of the Tenor Close

The groppo makes rare appearances as decoration of the tenor close.<sup>50</sup> As in the discant close, it is the penultimate note of the tenor close on which the groppo occurs, and the groppo consists of an alternation between the first two notes of the close. In contrast to the discant close, the function of the groppo is here purely decorative whilst drawing attention to

<sup>50</sup> E.g., FVB I 3:1:1; 89:2:1; 268:2:4; 273:1:2; 281:2:4; II 244:4:2; 273:3:3; 367:4:1,3.

the cadence, and no harmonic significance is attached to it. In Ex.4.40, (a) and (b) are simple cadences, whereas (c) is a diminuta cadence. The basic notes of the discant and tenor closes are encircled:

Ex.4.40 Byrd, Walsingham (FVB I 273:1:2)

(a)



Jhonson, Jhonson's Medley (FVB II 367:4:2)

(b)



Farnaby, A Maske (II FVB 273:3:3)

(c)



In Ex.4.40 (a) - (c) the tenor closes are in the soprano, with the discant closes in (a) and (c) in the tenor, and in (b) in the bass. In (a) the first note of the tenor close is broken up into even smaller note values. In (c) the groppo begins at the point where the penultimate note of the tenor close (c") forms a dissonance with the suspended first note of the discant close (b<sup>b</sup>). The discant close here is incomplete, unless one regards the last note (b<sup>b</sup>), which occurs only on the second pulse of the next bar, as the retarded last note of the discant close.

The ornamented tenor close in the FVB is associated with a specific location of the tenor and discant close: except for Ex.4.40 (b) and three exceptions to be referred to later, the



tenor close is always in the soprano, with the two closes moving downward in parallel thirds and closing on the unison through contrary motion. This can be observed in the three examples above. All the tenor closes which conform to this pattern are simple cadences (except Ex.4.40(b)). The three exceptions are all diminuta cadences, with the discant close above (in either the soprano or alto) and the tenor close below in the bass. In all three the gropo is preceded by the penultimate note of the tenor close, which first sounds against the corresponding note of the discant close:

Ex.4.41 Richardson, Pavane (FVB I 89:1:2)

(a)

Musical notation for Ex. 4.41 (a) showing a cadence in the tenor close. The notation is in G major, 3/4 time, and consists of two staves. The upper staff (soprano) contains a discant close with notes G4, A4, B4, A4, G4. The lower staff (tenor) contains a tenor close with notes G3, A3, B3, A3, G3. The gropo is indicated by a bracket under the final G3 note of the tenor close, which occurs at the same time as the final G4 note of the discant close.

Bull, Variatio Ejusdem (FVB II 244:4:2)

(b)

Musical notation for Ex. 4.41 (b) showing a cadence in the tenor close. The notation is in G major, 3/4 time, and consists of two staves. The upper staff (soprano) contains a discant close with notes G4, A4, B4, A4, G4. The lower staff (tenor) contains a tenor close with notes G3, A3, B3, A3, G3. The gropo is indicated by a bracket under the final G3 note of the tenor close, which occurs at the same time as the final G4 note of the discant close.

In Ex.4.41 (a) the gropo commences in the tenor close at the point where the discant close's note of resolution sounds (interval b - g'), but in (b) it starts at the moment that the dissonance is formed (interval f - e'). This is also the case in the other diminuta cadence where the tenor close is ornamented (FVB I 3:1:1).

#### 4.3 The Groppetto

The groppetto, together with the gropo, is the written-out ornament which occurs most often in the FVB. It is similar to the gropo, being employed both in cadences and as abstract decoration (as diminution of a note or interval) in the course of a piece, the latter being the more frequent use. As far as the rhythmic and melodic shape of the groppetto is concerned,

it is a variant of the gropo; only the last note is different, which descends instead of ascends:

Ex.4.42



The groppetto is employed in all instances of full or passing cadences, and occurs in all the closes except for the counter-tenor close. In each close it fulfills a different function. It also shares the rhythmic variants and notation in metric diminution of the gropo. The role that the groppetto plays in the discant, tenor and bass closes, however, differs from that of the gropo. The groppetto never replaces the gropo, but may occur in combination with it, where it precedes the gropo:

Ex.4.43

Bull, Walsingham (FVB I 14:1:1)

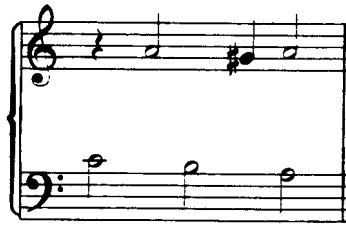


This combination of groppetto and gropo is identical to the ornament labelled 'double relish' by Mace and Simpson in the seventeenth century, who regarded it as an entity in itself.

#### 4.3.1 The Groppetto as Decoration of the Tenor Close

The groppetto is only employed in exceptional cases as decoration of the tenor close in the FVB, and then always in the diminution form of the first note of the close. This diminution consists of four different pitches - the diatonic note above the first note of the tenor close, the first note of the tenor close, and the two diatonic notes below:

Ex.4.44                      Unornamented discant and tenor close



Ornamented first note of tenor close



The groppetto in this case is a virtuoso diminution of one note only, and not of an interval. Although it appears to be nothing but virtuoso decoration of the tenor close, on closer examination an interesting phenomenon emerges: the decorated first note of the tenor close in the FVB consistently occurs (with one exception) against an unornamented first note of the discant close (Ex.4.45). As a result of the groppetto's occurrence against the unornamented first note of the tenor close, the groppetto therefore also serves to prepare for the motion that follows on the second note of either the tenor or discant close, as in Ex.4.45 (b) and (d). The exception, Ex.4.45 (g), features groppetti moving in parallel sixths in both the discant and tenor closes in a simple cadence.

Ex.4.45                      Bull, Walsingham (FVB I 2)

(a) 2:5:1





(b) 3:1:1



Bull, Piper's Galliard (FVB II 243)

(c) 4:1

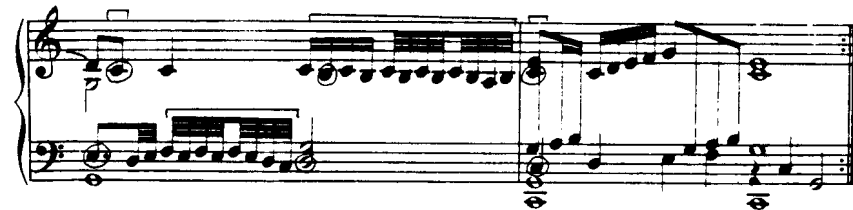


(d) 6:1



Philips, Pavana (FVB I 321:3:2)

(e)



Morley, Fantasia (FVB II 60:5:2)


(f)





Philips, Tirsi (FVB I 281:5:2)



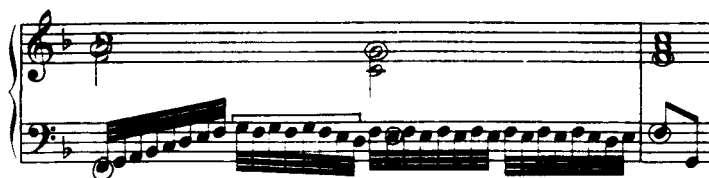
Ex.4.45 (a) and (c) display unadorned tenor closes with ornamented repeats in (b) and (d). The unadorned first note of the discant close can in each case be observed against the groppetto on the first note of the tenor close. The latter is clearly intended to provide movement against the static first note of the discant close. In Ex.4.45 (a), a diminuta cadence proceeds in simple note values; in (b), only the tenor close is broken up into smaller note values with a groppetto and groppo. In (c), the first note of the tenor close has already been treated with diminution and in (d) - its ornamented repeat - the groppetto is a diminution of the figure  in (c), except that it fills the whole value of the basic note. In (e), the second half of the first note of the tenor close displays a groppetto, while in (f), two groppetti precede the groppo. Only the second groppetto belongs to the tenor close, however, as the two closes move on different rhythmic levels: Ex.4.46



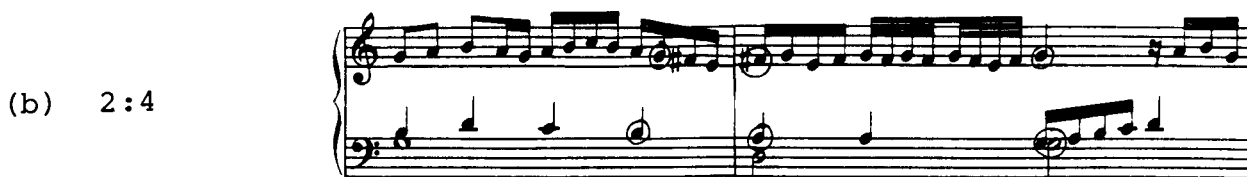
In this case, the tenor close causes the cadence to be simple, as there can be no suspension. Ex.4.45(b) and (f) are exceptional in that they feature groppi in the tenor closes; in the others, the discant closes are ornamented, commencing on the note of resolution, and continuing the movement initiated by the groppetto in the tenor close.

4.3.2 The Groppetto as Decoration of the Discant Close

Here the groppetto is employed as diminution of the first note of the discant close, or as diminution of the anticipated note of resolution where, prior to the groppo, it prepares for the motion that follows in an ornamented discant close. As such it serves to introduce the groppo. The groppetto as a diminution of the first note of the discant close can take the whole value of the note, or part of it, in either a simple or diminuta cadence. Ex.4.45 (g) is an illustration of a groppetto used in place of the first note of a discant close in a simple cadence, occupying the full value of this note. In the following simple cadence, the groppetto takes up half the value of the first note of the discant close, the diminution consisting of a tirata and a groppetto:

 Ex.4.47 Philips, Passamezzo Pavana (FVB I 302:5:3)


Illustrated below are three discant closes in diminuta cadences, which are accorded different treatments:

 Ex.4.48 Farnaby, 24. (FVB II 332)




In Ex.4.48 (a) the anticipated note of resolution appears in the discant close; in (b), the anticipation takes the place of the suspension and in (c), a gropetto also takes the place of the suspension, being a diminution of the anticipation in (b). Here, as in Ex.4.49, a simple cadence, the gropetto takes only part of the value of the first note of the discant close:

Ex.4.49 Bull, Walsingham (FVB I 3:4:1)



In Ex.4.49 the tenor and discant closes move on different metric levels: the tenor close only starts at the note of resolution in the discant close, due to the fact that it has half the note values of the discant close. While the gropetto as diminution of the first note in a discant close can take the whole value of this note in a simple cadence, this is not the case in a diminuta cadence. Here it will occupy half the value of the first note, and it replaces the suspension:<sup>51</sup>

Ex.4.50 Fre., Heaven and Earth (FVB I 417:5:3)



<sup>51</sup> Others occur at FVB I 295:6:2; II 170:2:3.



The groppetto in-lieu-of the suspension created here can be regarded as a further diminution of the ornamented anticipation in-lieu-of the suspended dissonance, indicated thus: ◡ in Ex.4.51:

Ex.4.51 Byrd, Galliard (FVB II 198:5:1)



Morley, Pavana (FVB II 211:2:3)



The relationship between the groppetto of Ex.4.50 and the ornamented anticipation in-lieu-of the suspended dissonance of Ex.4.51 is clear: the groppetto consists of an alternation between the first two notes, with the last two notes added at the end.

The groppetto also occurs as diminution of the ornamented anticipation of the note of resolution, where it precedes the gropo and precipitates the motion that follows, thus taking a quarter of the value of the suspended note. It is an embellishment of figs. (viii) and (ix) from Table 4.4:

Ex.4.52 Byrd, Pavana (FVB II 227:1:2)



Morley, Pavana (FVB II 211:3:2)

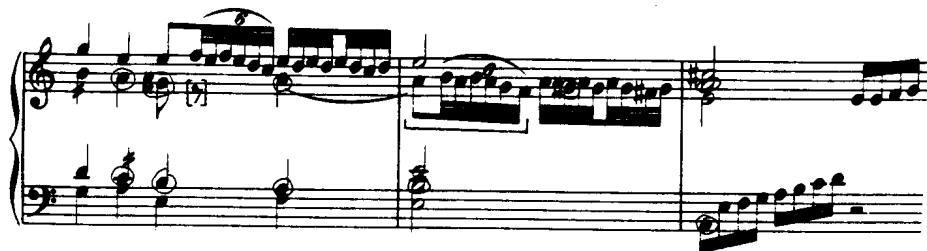
(b)



In Ex.4.52 (a) and (b), figs. (viii) and (ix) from Table 4.4 are seen as they are practised in the FVB. In the following extract, the groppetti are diminutions of these figures:

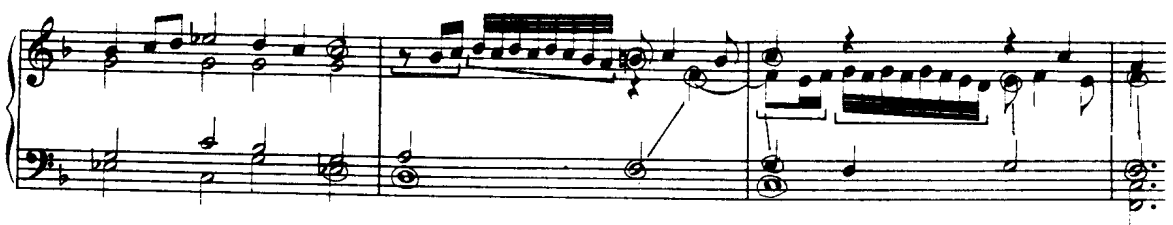
Ex.4.53 Tomkins, The Hunting Galliard (FVB II 102:1:1)

(a)



Morley, Pavana (FVB II 209:2:2)

(b)



In Ex.4.53 (a) the groppetto in the second bar is a diminution of the semiquaver figure in Ex.4.52 (a). In Ex.4.53 (b), the groppetti are based upon the figure in Ex.4.52 (b), except that in the first of the two a rest replaces the suspension. In Ex.4.53 (a) a remarkable superimposition of cadences occurs. In the first bar there is an unornamented discant and tenor close in a simple cadence:

Ex.4.54



On the third beat of this bar yet another simple cadence begins, the first note of which is embellished with a groppetto:

Ex.4.55




On the fourth crotchet of this bar a diminuta cadence commences in the alto, adorned with a groppetto which is a diminution of the anticipated note of resolution:

Ex.4.56



In Ex.4.53(b), a new diminuta cadence begins in the alto against the note of resolution of the first discant close.

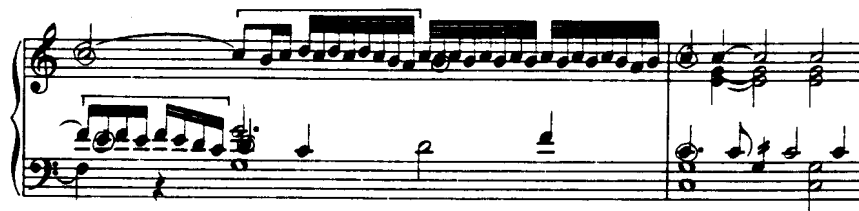
In the following example by Bull, the original and its variation in diminution are illustrated: the groppetto in the tenor close is a diminution of the four-note descending figure in the original, and the groppetto and ensuing groppo are based upon the figuration  of the discant close in FVB II 242:5:4:

Ex.4.57

Bull, Piper's Galliard (FVB II 242:5:4)



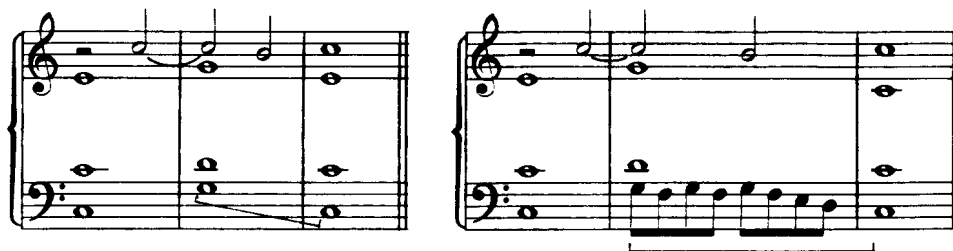
Bull, Variatio Ejusdem (FVB II 245:3:1)



4.3.3 The Groppetto as Decoration of the Bass Close

The descending interval of a fifth in a bass close is often subject to diminution, and a groppetto may be used to embellish this progression:

Ex.4.58



The groppetto differs here from its use in the discant and tenor closes: because it connects a disjunct interval it therefore fulfills the same function as a tirata. In this Galliarda by Bull, the use of a groppetto decorating the bass close (d - G) in the varied repeat is shown:

Ex.4.59 Bull, Galliarda (FVB I 170)

(a) 170:3:1



(b) 171:1:1



In the repeat (Ex.4.59(b)), the semibreve d in the bass becomes a dotted minim, and is further ornamented with a groppetto transposed an octave higher (d'), connecting it with the g, a fifth lower. The original G is reached again by an octave transposition. The fact that the groppetto acts as a tirata in the bass close can be demonstrated by examining the note of which this is a diminution. The groppetto begins on d, ends on a and connects it thus to g. The interval d-g is therefore the basis for diminution. This differs completely from the basis for the groppetto in the tenor and discant closes - here, the basic note for diminution is the second note of the groppetto, while the first and last two notes are ornamental. The groppetto in the bass close takes the first note as a basis for diminution. The ornamented discant close in Ex.4.60 (a) and (b) illustrates the point:

Ex.4.60 Tisdall, Galiarda (FVB II 487)

(a) 1:3



(b) 4:1



In Ex.4.60 the original progression is illustrated first (a rest has replaced the tie of the suspension in the discant close), with the groppetto decorating the suspension in the varied repeat (Ex.4.60(b)). Here the groppetto is doubled in the counter-tenor close in the tenor. The comparison demonstrates that the basis for diminution is e' in the alto, with f' as the ornamental note. This groppetto links the interval e' - d' of the discant close, but contrary to the groppetto in the bass close, this is only incidental. Although Bull and Byrd often employ the groppetto in the bass close in the FVB, it is Farnaby who uses it ex-



tensively as a diminution device. Farnaby employs it especially when the discant and tenor closes are left unornamented:<sup>52</sup>

Ex.4.61 Farnaby, 25. (FVB II 334)

(a) 1:1



(b) 2:2



(c) 335:1:2



The ornamented bass and unornamented tenor and discant closes in Ex.4.61 are indicated with brackets. In Ex.4.61(b) there is no tenor close present: the b in the tenor is broken up into an ascending semiquaver figure and a gropetto which precedes the gropetto of the bass close d' - g. Further on in the same piece gropetti occur which, in the absence of definite discant or tenor closes, may be viewed either as ornamentations of bass closes or as virtuoso decoration of the intervals d' - g and a - d (Ex.4.61(c)). In the first case, one may regard the alto f#' - g' and c#" - d" as unprepared discant closes.

In Ex.4.62 the diminution of the bass close interrupts and continues the virtuoso passaggi of the soprano. The penultimate note of the discant close is adorned with a double-stroke

<sup>52</sup>

E.g., FVB II 319:3:1; 330:4:1; 332:4:2, 5:1; 340:2:3; 349:4:4.

ornament and a chain of groppetti decorates the bass close which is extended to two and a half octaves from g' - C:

Ex.4.62 Bull, Variatio Ejusdem (FVB II 245)



The groppetto in the bass close also occurs at the end of a work (Ex.4.63(a)). In Ex.4.63(b) one sees that after the finalis of the mode has been reached via a proper cadence, another discant and bass close (in the soprano and bass respectively) briefly makes a cadence:

Ex.4.63 Farnaby, 23. (FVB II 329:6:1)

(a)



Farnaby, Walter Erle's Paven (FVB II 339:6:1)



4.4 Grosso and Groppetto as Virtuoso Decoration

The grosso and groppetto do not only occur at cadences, where they have a specific function as part of the cadence progression, but may frequently be encountered in the FVB as abstract decoration at any point in a piece as part of the written-out passaggi. Here they specifically add to the virtuoso character of the figuration, and can be considered as virtuoso decoration. The grosso and groppetto appear singly or in combination, and also together with other written-out ornaments such as the tirata. Indeed, some works in the FVB seem to be composed of nothing but tirate, groppi and groppetti. They always function in the framework of the other passaggi, as diminutions of an interval or intervals.

In the Praeludium which follows (Ex.4.64), the passaggi consist almost exclusively of groppi, groppetti and tirate; it constitutes a mixture of virtuoso decoration and cadence ornaments. The groppetti are consistently employed in descending intervals and the groppi in ascending intervals. In b. 1 and 2 the chain of groppetti connects c' to d, and in b. 3 and 4 it connects d' to c. This is a device particularly favoured by composers in the FVB. In b. 6 to 7 the groppi are diminutions of the ascending scale g - a - b - c' - d' - e' - f' - g', which is continued in the soprano in b.8. In b.9 the left hand starts an unornamented suspension cadence which is interrupted by the groppetti in the same hand, leading it to the finalis G instead of the expected C. In b.11 a groppetto and grosso occur on the first and second notes of a simple discant close. The piece finally cadences with a grosso in the tenor close.



Ex.4.64

Byrd, Praeludium (FVB I 83)

The image displays a musical score for a piece by William Byrd, titled 'Praeludium' (FVB I 83). The score is presented in a system of eight staves, each consisting of a grand staff (treble and bass clefs) and a single bass clef staff. The music is written in a single system, with measures 1 through 19 indicated by measure numbers at the beginning of each system. The notation includes various rhythmic values, accidentals, and articulation marks. The piece is in a common time signature (C) and a key signature of one sharp (F#). The score shows a complex texture with multiple voices, including a prominent treble voice and a more active bass voice. The piece concludes with a final cadence in the last measure.



Ex.4.65

Tomkins, Hunting Galliard (FVB II 101:3:1)

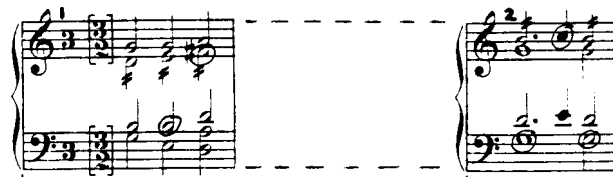
The image displays a musical score for the piece 'Hunting Galliard' by William Byrd, identified as 'Tomkins, Hunting Galliard (FVB II 101:3:1)'. The score is presented in five systems, each consisting of a grand staff with a treble and bass clef. The measures are numbered 17, 20, 23, 26, and 29 at the beginning of each system. The music is written in a 3/4 time signature and features a complex, rhythmic melody in the treble clef, often with sixteenth-note patterns. The bass clef provides a steady accompaniment with chords and moving lines. The notation includes various ornaments, such as mordents and grace notes, and dynamic markings like 'f' (forte). The piece concludes with a double bar line at the end of the fifth system.

Tomkins' Hunting Galliard (Ex.4.65) likewise demonstrates the frequent use of groppi as virtuoso decoration; here they all appear on ascending intervals of the second. Bars 23 to 28 are sequences constructed almost entirely of groppi. Only in b.29-30 are the groppetti and groppi used in two succeeding discant closes.

A study of various occurrences of the groppetto as virtuoso decoration reveals that there is no consistency regarding the melodic design as far as the identification of the basic note affecting the diminution is concerned. The first or the second note of the groppetto is used interchangeably as the main note, whereas, with the groppo, the first note is always the auxiliary note. The ambiguity which exists for cadences is thus applied here as well. The following extract illustrates this point; it constitutes a comparison between the first and fourth sections of a piece, the latter being a variation of the first section:

Ex.4.66                      Bull, Saint Thomas Wake (FVB I 131)

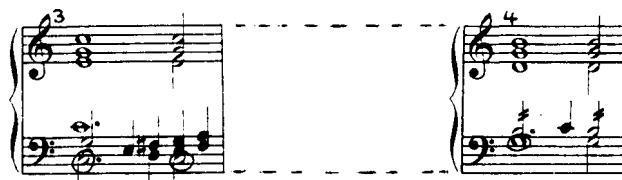
(a) 131:1:1



(b) 133:1:1



(c) 131:1:3





(d) 133:2:1

Musical score for (d) 133:2:1. It consists of two systems of a grand staff (treble and bass clefs). The first system starts at measure 50 and ends at measure 51. The second system starts at measure 51 and ends at measure 52. The bass line features a continuous eighth-note pattern, while the treble line has sparse chords.

(e) 131:1:5

Musical score for (e) 131:1:5. It consists of two systems of a grand staff. The first system starts at measure 5 and ends at measure 6. The second system starts at measure 6 and ends at measure 7. The bass line has a steady eighth-note accompaniment, and the treble line contains chords and single notes.

(f) 133:3:1

Musical score for (f) 133:3:1. It consists of two systems of a grand staff. The first system starts at measure 52 and ends at measure 53. The second system starts at measure 53 and ends at measure 54. The bass line has a continuous eighth-note pattern, and the treble line has sparse chords.

(g) 131:2:1

Musical score for (g) 131:2:1. It consists of two systems of a grand staff. The first system starts at measure 7 and ends at measure 10. The second system starts at measure 10 and ends at measure 13. The bass line has a steady eighth-note accompaniment, and the treble line contains chords and single notes.

Musical score for (g) 131:2:1 (continued). It consists of two systems of a grand staff. The first system starts at measure 12 and ends at measure 15. The second system starts at measure 15 and ends at measure 18. The bass line has a steady eighth-note accompaniment, and the treble line contains chords and single notes.

(h) 133:4:1

Musical score for (h) 133:4:1. It consists of two systems of a grand staff. The first system starts at measure 54 and ends at measure 55. The second system starts at measure 55 and ends at measure 56. The bass line has a continuous eighth-note pattern, and the treble line has sparse chords.

Musical score for (h) 133:4:1 (continued). It consists of two systems of a grand staff. The first system starts at measure 56 and ends at measure 57. The second system starts at measure 57 and ends at measure 58. The bass line has a continuous eighth-note pattern, and the treble line has sparse chords.



The fourth section (Ex.4.66 (b), (d), (f) and (h)) consists of the melody, with groppi and groppetti accompanying it in the left hand. A comparison with the first section (Ex.4.66 (a), (c), (e) and (g)) clarifies the notes upon which the diminution is based. From this, it is evident that the groppetto in b.48 of Ex.4.66(b) is based on the second b in the tenor of b.1 of Ex.4.66(a). The c' of the groppetto is therefore the auxiliary note. The first groppetto of b.49 in the fourth section (Ex.4.66(b)), is however, based upon the g (first note of b.2, first section, Ex.4.66(a)), so that the second note of the groppetto is now the auxiliary note. The encircled notes clarify the remaining notes, with their diminutions. It shows how the auxiliary note can be either the first or the second note of the groppetto.

The descending intervals of a second and a fifth form the basis for most groppetti in the FVB. In Ex.4.67 the outlines of the basic intervals are not obscured, as the groppetti clearly embellish the intervals of a fifth and a second. In (a) these intervals are g-c, e-A, f"-b', c"-f#", a - d, d'-g:

Ex.4.67                      Byrd, O Mistris Myne (FVB I 260:4:2)

(a)







Tomkins, Pavana (FVB II 52:1:1)

(b)

In Ex.4.67 (b) the groppetto is employed sequentially to embellish a descending interval of the second.

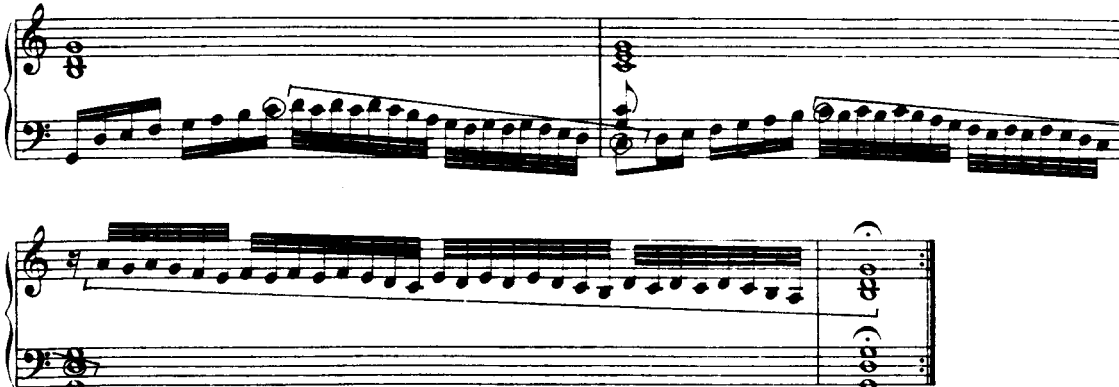
The groppetto also functions independently from an interval as an ornament, i.e. it need not of necessity be based upon an intervallic diminution. These excerpts show that the groppetti can act as optional decoration to fill the space between intervals:

Ex.4.68 Bull, Variatio (FVB I 174:5:1)

(a)

Bull, Salvator mundi (FVB I 169:5:1)

(b)



Farnaby, Pavana (FVB I 143:5:2)

(c)



In Ex.4.68 (a) the basic notes are g - f<sup>#</sup> - e. The groppetti link these notes without being a diminution thereof. They are employed as independent entities and function as tirate, connecting intervals. Similarly, in (b) and (c) they function as tirate connecting large disjunct intervals.

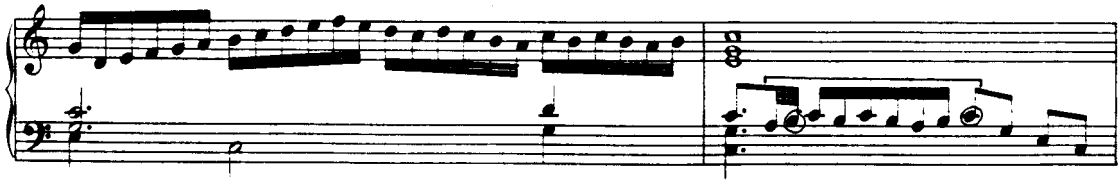
A stereotyped figure - a groppo preceded by two ornamental notes - is regularly employed as virtuoso decoration. This occurs most-ly, although not always, at the end of a section, after the finalis has been reached. It acts as a mini cadence, for the last two notes of the discant close are present, the first of the two being ornamented by this figure:

Ex.4.69 Morley, Goe from my window (FVB I 43:4:2)

(a)



Morley, Nancie (FVB I 60:3:1)



Bull, Galiarda (FVB I 70:5:1)



Byrd, Variatio (FVB I 238:1:1)



This figure is also employed to provide movement within the framework of static chords (Ex.4.69(b)).

#### 4.5 The Tirata

The tirata is intrinsically different from other written-out ornaments employed by sixteenth- and seventeenth-century musicians: it is, in fact, a passaggio, isolated and given a name. It is different from the other written-out ornaments, as it does not involve any kind of alternation between notes. Neither does it conform to the non-alternating type, as these typically employ very few notes. The tirata usually consists of eight or more notes. While the groppo, tremolo, tremoletto and slide became standardized and in time were indicated by ornament symbols, the tirata ceased to be classified in the same manner during the later seventeenth century.

The tirata is also the one ornament which can serve as a structure upon which further ornaments can be constructed, for instance, the tremoletti. As the tirata so closely resembles the

ordinary diminution employed by composers - it is the least distinguishable from the passaggi of all the written-out ornaments - it can only be classified as such when it fulfills a function associated with the tirata. It would otherwise be possible to view any passaggio which involves some kind of stepwise melodic movement as a tirata.

This ambiguity is already illustrated in the very first two pieces that appear in the FVB, Bull's Walsingham and Munday's Fantasia (Ex.4.70 and 4.71). In Ex.4.70, the encircled notes clarify the harmonic structure of the variations of the piece, while the brackets identify the tirate. The tirata at fig. 2 is clearly an expansion of the a' at fig. 1. At fig. 3, however, the left hand is clearly occupied with passaggi, even though the stepwise descending passage e' - e could be seen as a tirata. At fig. 4, a tirata fills the interval a - d and in the process expands it to one and a half octave. Tirate and passaggi are featured at figs. 5, 6, 7 and 8 - all of them expanding close intervals, except fig. 8, in which the expansion covers the octave, commencing at a'. Variations 22 to 24 of Walsingham (b. 169 - 192) seem to consist exclusively of tirate, which obscure the original note values to an almost unrecognizable extent.

Munday's Fantasia (Ex.4.71) displays a number of tirate fitting Praetorius' description of them as 'rapid little runs up and down the keyboard.'<sup>53</sup> In this case they serve to connect the disjunct intervals whilst providing a sweeping virtuoso movement. In Ex.4.71 the notes of the intervals connected are encircled.

The principal functions of the tirata in the FVB are the filling up of a disjunct, and the expansion of a conjunct interval. These functions, however, may be combined with an additional purpose, that of connecting phrases. Ex.4.72, a Galliarda by Morley, provides an excellent illustration of this.

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<sup>53</sup> See 1.4.6.



Ex.4.70 Bull, Walsingham (FVB I 1)

1:2:3,  
2:6:3

4:4:1

6:2:1

13:3:1

14:1:1

14:5:1

Ex.4.71

Munday, Fantasia (FVB I 20:6:1)

Musical score for Ex. 4.71, Munday's Fantasia (FVB I 20:6:1). The score is written for piano in two staves (treble and bass clef) and consists of three systems of music. The first system shows a complex melodic line in the treble clef with many beamed notes, while the bass clef provides a steady accompaniment. The second system continues the melodic development with some rests in the treble. The third system features a more active bass line with some chromatic movement.

Ex.4.72

Morley, Galliarda (FVB II 213)

(a) 1:2

Musical score for Ex. 4.72(a), Morley's Galliarda (FVB II 213). This is a two-measure excerpt in 1:2 time. The treble clef contains a simple melodic line, and the bass clef provides a harmonic accompaniment with chords and moving lines.

(b) 4:3

Musical score for Ex. 4.72(b), Morley's Galliarda (FVB II 213). This is a three-measure excerpt in 4:3 time. The treble clef features a melodic line with some grace notes, while the bass clef has a more active accompaniment with many beamed notes.



In the varied repeat of the first section (Ex.4.72(b)), the tirata fills the octave  $f' - f''$  (unornamented in Ex.4.72(a)), and therefore also connects the second section of the repeat with its first part.

Bull's Variatio illustrates the expansion of a stepwise descending passage,  $g - f^\sharp - e$  in the bass, over two octaves by means of tirate:

Ex.4.73

Bull, Variatio (FVB I 174)

(a) 3:2

(b) 5:2

In the varied repeat of the second strain (Ex.4.73(b)), the tirata begins on  $g$  - being an extension of the groppetto preceding it, which in turn is a diminution of the  $d'$  in the tenor which has been shifted to the third crotchet of the bar - and expands it to  $F^\sharp$  two octaves lower, and finally leads it back to  $e$ , a seventh higher. The first part of the minim  $e$  is in turn adorned with a groppetto.

A study of Morley's Nancie (Ex.4.74) provides a fruitful study of how tirate can be used in differing ways. At fig. 5 of Ex.4.74, a tirata breaks up the long note value of  $c'$  at fig. 1, and at the same time connects the end of the three-bar phrase of the second section with the next. At fig. 6, a descending tirata expands the interval  $e'' - d''$  in the soprano at fig. 4 to a ninth, and at fig. 7 an ascending tirata connects the  $b - f''$  at fig. 2. At fig. 8 the tirata serves to connect the two phrases. At figs. 9 - 10, two tirate expand the notes  $a' - g' - f'$  of fig. 3. At first,  $a' - g'$  is expanded via a descending tira-



Morley, Nancie (FVB I 57)

Ex. 4.74

The image displays a musical score for the piece 'Morley, Nancie' by F. V. B. I. 57. The score is presented in two columns of systems, each containing two staves (treble and bass clef). The first system on the left is numbered 1, and the second system on the right is numbered 7. The score includes various musical notations such as notes, rests, and dynamic markings. The piece is in a 2/4 time signature and features a melody in the right hand and a supporting accompaniment in the left hand. The score is divided into measures, with measure numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, and 34 indicated. The score is written in a clear, legible font, and the notation is precise and detailed.





Musical score for piano, measures 9-18. The score is written for two staves (treble and bass clef) and includes measure numbers 9, 10, 11, 12, 13, 14, 15, 16, 17, and 18. The notation includes various rhythmic values, accidentals, and dynamic markings.

ta to a' - g, then a new tirata commences at e'' expanding it to f'. At figs. 11,12 and 13, the minim c is repeatedly broken up into seven-note tirate. At figs. 14,15 and 17, the tirate, by means of virtuoso movement, prepare for the motion of the groppi in the discant closes. At fig. 16, d' and c are linked by way of a tirata, as is the case in figs. 17 and 18 where a single note is broken up and spread over an octave.

Morley's Nancie thus offers an excellent example for illustration of the various functions a tirata can fulfill. All this occurs unobtrusively, however, due to the fact that the tirata is inseparably part of the passaggi.

#### 4.6 The Accento

The accento is a rare occurrence in the FVB, and when it does occur, it is similar to the type which Diruta and Rogniono describe, as consisting of one ornamental note falling between strong beats. The single-note, onbeat accento of Bovicelli and Zacconi - which resembles the English lute backfall - is not in evidence in the FVB. The accenti in the FVB occur on four step-wise descending crotchets, and in each case an ornamental semi-quaver, falling between the crotchets, is introduced. A similar pattern occurs twice, but only on two descending crotchets:

Ex.4.75

Johnson, Alman (FVB II 158:4:1)



The other examples are diminutions of a four-note tirata:<sup>54</sup>

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<sup>54</sup> E.g., FVB II 27:1:1; 266:1:2; 384:4:2.

Ex.4.76 Sweelinck, Ut, re, mi, fa, sol, la (FVB II 27:1:1)



In this Byrd Pavana, both the original and the accento in the repeat are shown:

Ex.4.77 Byrd, Pavana (FVB II 384)

1:4



4:1



The accento occurs only as abstract decoration of intervals and not in cadences.

#### 4.7 The Tremolo

There are only two occurrences of the written-out tremolo in the FVB. Both of these are found in cadences, which is not in accordance with any prescription given by the Continental counterparts of the Virginalists. They occur as decoration of the anticipated note of resolution in a discant close:



Ex.4.78

Philips, Margott Laborez (FVB I 333:1:2)

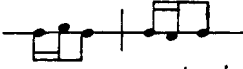
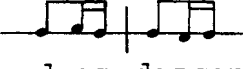


Sweelinck, Ut, re, mi (FVB II 26:5:3)



Interestingly enough, the tremolo never occurs as decoration of the note of resolution in the FVB. As a diminution of the anticipated note of resolution, it consists of the alternation between the anticipation and the suspended dissonance. As is the case in descriptions of the tremolo in Continental sources, it typically occurs within a stepwise descending interval. There are no occurrences in the FVB of a written-out tremolo employing the lower auxiliary.

#### 4.8 The Tremoletto

Like the tremoletto described in Chapter 1, the tremoletto in the FVB has a dual nature : that employing the upper auxiliary (ascendens) and the other which employs the lower auxiliary (descendens). It occurs in two rhythmical variants : anapestic  and dactylic . The anapestic arrangement is exceptionally used as descendens, while the two variants occur with the same frequency as ascendens.

In the FVB the tremoletto occurs only on crotchets and is typically used as a diminution of stepwise ascending and descending tirate. They can therefore be seen as an additional decoration of an existing diminution, and is thus a further diminution of a diminution. In descending chains of notes, the dactylic tremo-

letto which employs the upper auxiliary, is used to adorn the crotchets:

Ex.4.79 Bull, Praeludium (FVB I 419:2:1)

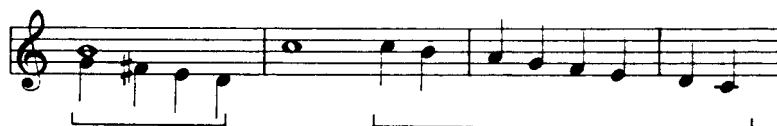


Byrd, Quadran Paven (FVB II 105:1:1)



It is evident that the tremoletti above are diminutions of the following tirate:<sup>55</sup>

Ex.4.80



In Ex.4.81(a), the crotchets of a stepwise ascending tirata are ornamented with dactylic tremoletti which employ the lower auxiliary:<sup>56</sup>

Ex.4.81 Sweelinck, Praeludium Toccate (FVB I 380:5:2)

(a)



<sup>55</sup> For similar occurrences, see FVB II 100:2:3; 105:1:1; 238:2:4; 240:6:4; 248:4:2; 304:2:2.

<sup>56</sup> For other examples, see FVB I 140:4:1; 176:5:2; II 100:2:2; 303:6:3.

Tomkins, The Hunting Galliard (FVB II 100:2:2)

(b)



Tremoletti on descending tirate occur less often than on ascending tirate in the FVB. Ex.4.81(b) is an illustration in which tremoletti form a diminution of an ascending and descending tirata. The tremoletti are used here in the traditional fashion, as described by Praetorius, Ammerbach and Sancta Maria; that is, employing the lower auxiliary ascending and the upper auxiliary descending.

The tremoletto may also embellish two or three ascending or descending crotchets, which can be seen as a mini tirata. In all these examples the dactylic rhythm is used:<sup>57</sup>

Ex.4.82

Bull, Walsingham (FVB I 17:3:1)

Ascending



Bull, Variatio (FVB I 176:5:2)



<sup>57</sup>

For other examples in the FVB, see I 11:3:1, 19:2:2; 27:4:4; 333:2:2; 347:2:1; II 196:4:2; 258:3:3; 288:2:3; 303:6:3; 434:4:3.



Descending

Sweelinck, Fantasia (FVB II 304:2:1)



Byrd, Pavana (FVB II 397:3:3)



Another context in which the tremoletto is used in the FVB is as an embellishment of a single crotchet; in fact, the majority of tremoletti are used in this manner. They occur in both step-wise ascending and descending melodic lines:

Ex. 4.83

Richardson, Pavana (FVB I 27:2:1)



Byrd, Alman (FVB II 196:3:2)



Bull, Variatio (FVB I 176:2:1)



Byrd, O Mistris Myne (FVB I 258:3:3)



The two types of tremoletti are, however, not always applied in the context of ascendens on stepwise descending notes and descendens on stepwise ascending notes, but can be used vice versa. In the FVB this is the exception. Ex.4.84(a) illustrates a tremoletto descendens which appears on a descending tirata, and Ex.4.84(b) a tremoletto ascendens which ornaments an ascending melodic line:

Ex.4.84

Bull, Variatio (FVB I 176)

(a) 6:1



(b) 1:2



Philips, Margott Laborez (FVB I 333)

(c) 2:2



(d) 5:3





In Philips' intabulation Margott Laborez the tremoletti ascendens and descendens are used alternatively on stepwise descending crotchets (Ex.4.84(c)) and then on stepwise ascending crotchets (Ex.4.84(d)).

Finally, the tremoletto can occur in contexts other than stepwise ascent or descent. The contexts differ widely : the ornament may be approached and quit by an ascending or descending interval, or be approached or quit by a combination of stepwise movement - ornament - interval, or interval - ornament - stepwise movement. They are sometimes used sequentially, but more often occur isolated on single crotchets. The tremoletto descendens is also found more often in this context than the ascendens.

The most popular context is that of stepwise descent - stepwise ascent, and only the descendens type of tremoletto is used, as in Ex.4.85:

Ex.4.85                      Morley, Goe from my window (FVB I 43:1:1)



Other contexts include stepwise ascent - stepwise descent (e.g. I 51:1:3), ascending interval - stepwise ascent (e.g. I 11:3:2), stepwise ascent - descending interval (e.g. I 176:1:1) stepwise ascent - ascending interval (e.g. I 51:3:1), ascending interval - stepwise descent (e.g. II 304:2:3), ascending interval - descending interval (e.g. I 85:3:2), ascending interval - ascending interval (e.g. I 11:3:2), descending interval - stepwise ascent (e.g. II 100:3:1) and stepwise descent - descending interval (e.g. I 343:4:2).

These tremoletti are often used sequentially as a motive, and may occur in any of the contexts mentioned above:

Ex.4.86 Byrd, Jhon come kisse me now (FVB I 51:1:3)

(a)




Byrd, Pescod Time (FVB II 434:4:3)

(b)




Bull, Variatio (FVB I 176:1:1)

(c)



Anon., Praeludium (FVB I 85:3:1)

(d)



In Ex.4.86(a) one sees four different contexts: stepwise ascending - descending interval; stepwise ascent and descent; then five descending intervals (f" - c" - a' - f' - d'); and finally stepwise ascent - ascending interval and stepwise ascent - descending interval. In (b), the melodic line consistently ascends stepwise after the tremoletto. In (c) and (d) the interval structure before and after the tremoletto remains the same,

due to the melodic design of the sequence.

A certain characteristic behaviour emerges on closer examination of the contexts other than stepwise ascent or descent in which the tremoletto is used in the FVB: all save one of the tremoletti ascendens are followed by a descending interval or a stepwise descending note, while the majority of tremoletti descendens are followed by an ascending stepwise note or interval. The melodic context preceding the tremoletto, however, is more confusing. Both ascending and descending stepwise notes and intervals occur in almost equal number here; it is therefore difficult to ascertain whether or not any specific pattern exists for the use of the tremoletto in a context other than only stepwise ascent or stepwise descent.

#### 4.9 The Slide

The slide in the FVB does not occur frequently as a written-out ornament, although when it does, it conforms largely with the descriptions as given by the Continental treatises. It is used both on or before the beat, and the first two notes of the ornament can be dotted or consist of equal note values. In all cases the last note of the slide is at least double the value of the preceding ones, so that there is a characteristic progression-to-repose:

Ex.4.87

Munday, Fantasia (FVB I 19:2:1, 4:2)



Sweelinck, Fantasia (FVB II 304:4:3)



With a few exceptions, all the written-out slides in the FVB occur on crotchets. Only one written-out slide occurs on a quaver before the beat (Ex.4.88(a)) and only six instances are found in which the slide takes the value of a minim (Ex.4.88(b)):<sup>58</sup>

Ex.4.88 Bull, Variatio Ejusdem (FVB II 245:5:1)

(a)



Farnaby, Mal Sims (FVB II 447:4:3)

(b)



The dotted slide is a rare phenomenon, making appearances at three places only.<sup>59</sup> The onbeat slide greatly outnumbers those occurring before the beat; the latter always employ equal note values.<sup>60</sup>

<sup>58</sup> This occurs at FVB I 69:1:1; 217:4:3,4; II 422:4:1; 423:4:2; 449:4:4.

<sup>59</sup> These are, FVB II 304:4:2; 447:4:3; 449:4:4.

<sup>60</sup> E.g., FVB I 19:1:2, 2:1, 3:2; 65:4:2; 93:6:2; 101:2:3, 3:1; 258:3:1; II 161:1:2, 3:2; 240:6:2; 245:5:1.



It is not always possible to ascertain whether the slide should be interpreted as a simple melodic motive which is part of the diminution, or whether it is meant specifically to be seen as an ornament, as the following prebeat slides indicate:

Ex.4.89 Bull, Quadran Pavan (FVB I 101:2:3)

(a)

Musical notation for Ex.4.89 (a) showing a prebeat slide in the treble clef. The notation consists of two staves: a treble clef staff and a bass clef staff. The treble staff shows a melodic line with a prebeat slide (a grace note) before the first beat. The bass staff shows a rhythmic accompaniment.

Farnaby, The Flatt Pavan (FVB II 454:5:3)

(b)

Musical notation for Ex.4.89 (b) showing a prebeat slide in the treble clef. The notation consists of two staves: a treble clef staff and a bass clef staff. The treble staff shows a melodic line with a prebeat slide (a grace note) on the beat. The bass staff shows a rhythmic accompaniment.

In Ex.4.89 the 'slides' are only incidental, in (a) appearing before the beat and in (b) on the beat. In both cases they are simply part of an imitated motive, as may be seen in Ex.4.90(a):

Ex.4.90 Peerson, Pipers Paven (FVB II 240)

(a) 2:1

Musical notation for Ex.4.90 (a) in 2:1 time. The notation consists of two staves: a treble clef staff and a bass clef staff. The treble staff shows a melodic line with a prebeat slide (a grace note) before the first beat. The bass staff shows a rhythmic accompaniment.

(b) 2:4

Musical notation for Ex.4.90 (b) in 2:4 time. The notation consists of two staves: a treble clef staff and a bass clef staff. The treble staff shows a melodic line with a prebeat slide (a grace note) before the first beat. The bass staff shows a rhythmic accompaniment.

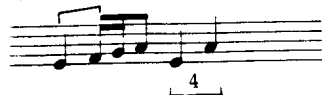


Anon., Praeludium (FVB I 86:3:2)



The imitation may lead to slides which occur simultaneously (Ex.4.90(b)). In Ex.4.90(c) the slide is inherent in a five-note motive which is given sequential treatment.<sup>61</sup>

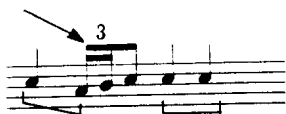
A study of 139 appearances of the slide in the FVB has revealed certain characteristics in the melodic contexts in which the ornament is used: six contexts are consistently used more frequently than the rest. The most favoured melodic passage upon which the slide is found, is the stepwise approach from below (30 times), in effect being a diminution of the interval of a fourth:



The others appear in the following manner:

- approached by a descending third, diminution of two repeated

notes (24 times):



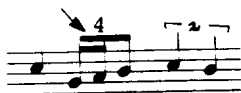
- approached by a descending fifth, diminution of a descending third (18 times):



- approached stepwise descending, diminution of an ascending second (15 times):



- descending fourth, diminution of a descending second (14 times):



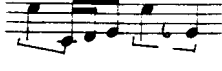
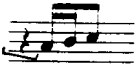
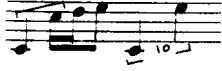


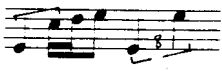

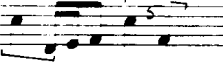


- preceded by the same note, diminution of an ascending third (12 times):



<sup>61</sup> See also, FVB I 104:4:4, 6:1; II 154:3:3.

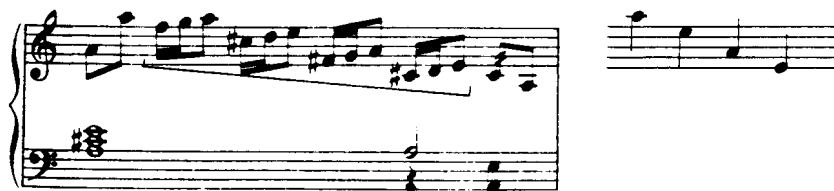
Half of the above cases are in ascending contexts, if the basic intervals are taken into account. The rest are in descending contexts. The other melodic patterns prefer the ascending context:

- ascending third (7 times): 
- descending sixth (4 times): 
- descending octave (4 times): 
- rest (twice): 
- ascending octave (twice): 
- ascending fifth (twice): 
- ascending fourth (twice): 
- ascending sixth (once): 
- ascending seventh (once): 
- descending seventh (once): 

Even though a variety of contexts is employed, it is clear that ascending melodic contexts - both by step and by skip - are more typical in the use of the slide. The slides often appear consecutively, especially in descending and ascending intervals:

Ex.4.91

Bull, Variatio (FVB I 175:5:2)





Sweelinck, Psalme (FVB II 154:3:3)



Peerson, Pipers Paven (FVB II 241:6:3)



Sweelinck, Fantasia (FVB II 304:4:2)



Two descending crotchets are often the vehicle for diminution upon which the slide is made:<sup>62</sup>

Ex.4.92

Byrd, Pavana Lachrymae (FVB II 43:5:1)



Farnaby, Mal Sims (FVB II 447:5:1)



<sup>62</sup> For other examples, see FVB I 59:1:2; 69:1:1; II 347:2:5; 449:4:4.



The slide can, of course, also occur alone in any of the melodic contexts mentioned above:

Ex.4.93 Morley, Nancie (FVB I 57)

59:1:1



58:5:3



59:5:3



There are two examples in the FVB which resemble Diruta's illustration of the clamazione, in that the left hand consists of chords changing harmony with the slide:

Ex.4.94 Peerson, The Primerose (FVB II 422:4:1)



Peerson, The Fall of the Leafe (FVB II 423:5:2)





In accordance with Diruta's prescription that the slide be used to commence a piece, one can often find a repeat or new section of a piece in the FVB which begins with a slide:

Ex.4.95                      Morley, Nancie (FVB I 58:5:3; 59:1:2)



M.S., Pavana (FVB I 69:1:1)



Tisdall, Galiarda (FVB II 486:3:2)





CHAPTER 5

5. THE ORNAMENTS INDICATED BY SIGN IN THE FITZWILLIAM VIRGINAL BOOK

5.1 The Purpose and Use of the Single- and Double-Stroke Signs

Two ornament signs, the single and double stroke, feature in the FVB. At first glance it would seem that the ornament signs are scattered without purpose over the music, for there is virtually not a page without any of these. Their frequency and indication by symbol are unique in sixteenth-century keyboard music, when compared with Continental practice. This leads inevitably to the question of whether these ornaments should be regarded as abstract, optional decoration, or as indispensable to the structure of the music. Another question which arises, is whether they were added at the composer's fancy, without concern for their exact placement. The latter certainly was the view held earlier this century. Margaret Glyn comments thus:<sup>1</sup>

But the ornaments of this music, scattered throughout the virginal books, have no expressive character, and are not essential to the text.

Van den Borren holds the same view:<sup>2</sup>

... we have, in fact, a conviction that the graces are purely superficial ornaments only, the presence of which has no determining influence on the stylistic physiognomy of virginal compositions ... It suffices to read just as they are - that is to say, deprived of their

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<sup>1</sup> M.H. Glyn, Elizabethan Virginal Music and its Composers (London: Wm. Reeves, 1934), p.57.

<sup>2</sup> C. van den Borren, The Sources of Keyboard Music in England (London: Novello, 1914), p.148.



ornaments - the pieces contained in the modern reprint of Parthenia, to come to the conclusion that these compositions are wholly sufficient in themselves, and that the mordents and shakes add nothing to their beauty.

It is certainly true that virginal music can function without the ornaments, for they do not influence its structure. However, it would be doing the music a great injustice to rob it of one of those elements which is so characteristic of it and which plays such a prominent role in its beautification. The music historians mentioned above wrote at a time when this music was performed on the piano, and they might well have reconsidered their opinions had they heard these ornaments played on the instrument for which the music was intended. One argument favouring the viewpoints of Glyn and van den Borren is, of course, the existence of differences in placement and the frequency in which they appear in copies of the same piece. However, as has been shown in Chapter 3, this may often be traced to scribal error or to the whims of an independent scribe. The latter is certainly true of Cosyn (in Co), who virtually rewrote most of the music he copied.

On the other hand, how, then, does one explain the fact that these composers took such care in the addition of stenographic symbols, especially in the light of their profusion? Certainly, it would have been more expedient to have left the ornamentation to the discretion of the individual performer, who might place the ornaments wherever they best suited his purpose, as was the case on the Continent, where treatises were written instructing players where and how to add ornaments. In England, however, such instruction manuals are conspicuous by their absence: instead, composers preferred to indicate where ornaments ought to be played, thus expressing their intentions clearly.

It is, of course, possible to view the ornaments, as Ferguson does, merely as 'pleasing embellishment to be added or omitted



according to taste ... they will add a delightful sparkle and zest to the performance'.<sup>3</sup> This is a one-sided view of the issue, however, for it cannot be denied that composers spent considerable time and effort in the indication of ornaments. Ferguson's remarks do at least recognize the fact that the ornaments are essential to the performance of virginal music, if only at the discretion of the player. It is essential for a performer to consult all source copies of a particular piece before performing it, and only after having considered the merits and demerits of each source and having collated these, to decide which ornaments should be played and where.

After having conceded that the performer/interpreter has relative freedom in his choice of ornaments, the question nevertheless arises as to whether the ornament signs are used in a specific manner or pattern and for a particular reason other than adding grace and elegance to the music. Research into their use reveals many characteristics as to where and how they are employed, and, in fact, disproves Glyn's remark that it is well nigh impossible to comprehend the composers' use of the signs.<sup>4</sup> How else does one explain their careful notation in chords through the top, middle or lower note, or their identical positioning in imitative passages, to cite but two examples?

The ornament symbols in the FVB can, and must be viewed as abstract, decorative elements which serve to enliven the melodic line, giving 'grace and elegance' to the music, to borrow Diruta's remark. There are instances in which the ornaments serve no particular function other than the ornamentation and beautification of the music. Consider this excerpt from Byrd's La Volta:

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<sup>3</sup> H. Ferguson, ed., Early English Keyboard Music: An Anthology, 2 vols. (London: Oxford University Press, 1971), 2:12.

<sup>4</sup> Glyn, Elizabethan, pp.57f.



Ex.5.1

Byrd, La Volta (FVB II 180:1:1)

The image shows two systems of musical notation for a piece by William Byrd. Each system consists of two staves, a treble clef on top and a bass clef on the bottom. The music is in a 3/4 time signature and has a key signature of one sharp (F#). The first system shows a melodic line in the treble staff and a bass line in the bass staff. The second system is identical to the first but includes the word 'Rep.' in the first measure of the treble staff, indicating a repeat.

An examination of the passage in Ex.5.1 played, initially, without graces and then, subsequently, with graces added, will reveal that the second version provides an altogether richer and more meaningful experience. The aural effect thus obtained is exactly that which the term 'ornamentation' implies, namely, that which ornaments, adds grace. The nature of the ornament symbols in virginal music supports this: they are additional decoration to the basic structure of the music. In this they differ from the written-out ornamentation, which is part of the musical structure.

Upon closer scrutiny, if the ornaments are considered in terms of the knowledge gained from contemporary Continental treatises, such as where they appear, in what melodic context and on what note values, one discovers that they exhibit certain characteristics peculiar to them. Employed in this fashion, they have a function other than that of being mere abstract decorative elements in the music. The single- and double-stroke signs often differ in their mode of application through characteristic behaviour, confirming their individuality and providing clues to the interpretation of the ornament symbols. In the following pages these characteristics are examined.



### 5.1.1 Places of Occurrence

The double- and single-stroke ornaments in the FVB can be found in virtually every place imaginable in the music: the profusion of occurrence attests to that. This conforms with the practice of Diruta and other sixteenth-century writers: they may be added anywhere or in any place; as Piccinini says, 'places where tremoli should be made are infinite'.<sup>5</sup> This is indicative of the nature of ornamentation: it should be spontaneous and not easily bound by hard and fast rules.

A closer look at the ornaments reveals that they are often employed at certain structural points in the music, such as at cadence points, at the beginning of a work or as additional decoration of a written-out ornament. This is in accordance with prescriptions encountered in Continental treatises, namely that ornaments should be applied in cadences, or at the beginning of a *ricercare* or *canzona*. In the FVB, only the double stroke is used in cadences, and it is specifically applied to the *discant close* in a simple or *diminuta* cadence. Significantly, nowhere in the FVB is a single stroke found in cadences in this context. All the Continental treatises which describe cadence ornamentation refer to the *grosso* for this purpose, with the exception of Valente, who advises that the sign 't' be used in cadences.<sup>6</sup> In this respect, the use of the double stroke in cadences in the FVB and in other collections of virginal music is unique.

In the following examples, the note of resolution in a *discant close* is ornamented with a double stroke, and not with a *grosso* or one of the other more characteristic diminutions:

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<sup>5</sup> Dodge, *Ornamentation*, p.322.

<sup>6</sup> See 1.4.1.

Ex.5.2

Anon., Allemanda (FVB II 425:2:2)



Byrd, Variatio (FVB I 239:4:4)



Morley, Goe from my window (FVB I 43:4:1)



Anon., Alman (FVB II 312:2:1)



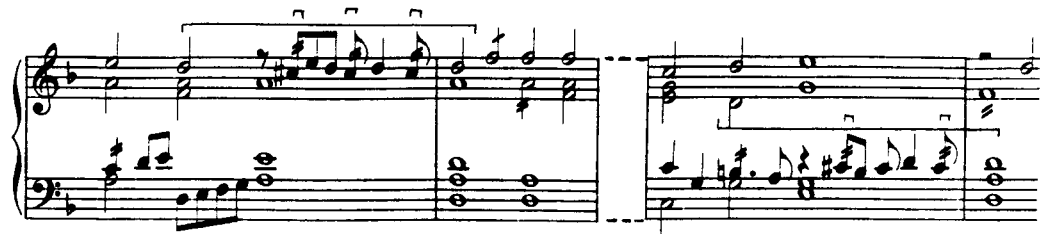
Frequently, a typical diminution of the discant close is ornamented - in this case the anticipation of the note of resolution and the note of resolution itself. It thus becomes a further diminution of a diminution. The latter is the vehicle for the additional ornamentation, indicated by symbol in Ex.5.3:





Ex.5.3

Parsons, In Nomine (FVB II 135:4:3, 5:4)



Bull, Pavana (FVB II 122:5:3)



Farnaby, Groûde (FVB II 354:2:3)



Byrd, Alman (FVB I 245:3:1)



Similarly, one finds that other written-out ornaments such as the tirata and tremoletto are vehicles for ornamentation:

Ex.5.4 Philips, Fantasia (FVB I 336:2:3, 3:4)



Byrd, Jhon come kisse me now (FVB I 51:2:3)



Below are some of the typical figures occurring repeatedly on the finalis of cadences, which are vehicles for ornamentation:

Ex.5.5

Right hand



Left hand



In the ensuing Pavana by Byrd, all the sections and repeats, save the first, receive this treatment:

Ex.5.6 Byrd, Pavana (FVB II 389:5:4)





The right-hand figure is often ornamented  $\text{♯} \text{♩}$ , whereas the left hand may have ornaments on the first or second pulse unit of the figure, or on both:

Ex.5.7 Byrd, Variatio (FVB I 239:6:3)



Farnaby, Alman (FVB II 160:2:3)



Bull, Piper's Galliard (FVB II 243:6:2)

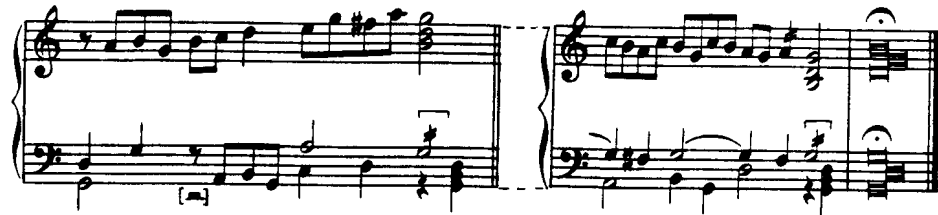


Another ornamented figure employed in cadences is an arpeggiated chord in the left hand; here the top note is ornamented with a double stroke:

Ex.5.8 Tisdall, Pavana (FVB II 307:5:3)



Farnaby, Tower Hill (FVB II 371:2:1, 4:3)



The single stroke makes isolated appearances in this context, as in this Galiarda:

Ex.5.9 Byrd, Galiarda (FVB II 48:4:2; 49:3:2)



The advice contained in the treatises that ornaments be added at the beginning of a ricercare or canzona, is applied to their English counterpart, the Fantasia (sometimes also called by note names, e.g. Ut re mi), in the FVB:

Ex.5.10 Byrd, Ut, mi, re (FVB I 401:1:1)



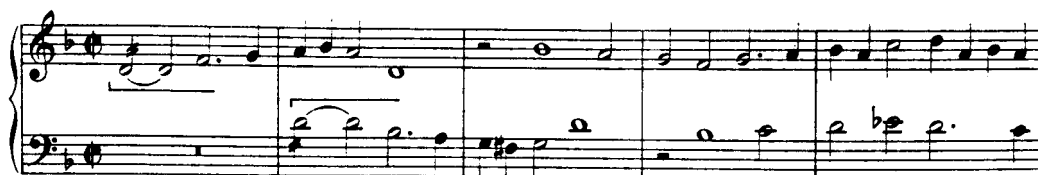
Byrd, Fantasia (FVB I 406:1:1)



Curiously, in none of the two pieces in Ex.5.10 is the second or consequent entries ornamented in a similar manner; this is apparently deliberate, for the rest of the entries are all ornamented differently, or not at all. This is also demonstrated in the Fantasias of other composers in the FVB, e.g. Byrd (I p.395), Bull (I p.423), Morley (II p.57) and Farnaby (II p.270). In these Fantasias there are far fewer ornaments in the subsequent entries. They appear to be used on the first entry as pure melodic decoration, hence their abundance there and the subsequent lack of consistency in the other voices.

In two Fantasias in the FVB the first two or three entries are similarly ornamented; in Sweelinck, the first two voices, and in Farnaby, the first three:

Ex.5.11                      Sweelinck, Fantasia (FVB II 297:1:1)



Farnaby, Fantasia (FVB II 313:2:1)



In both cases, only one ornament occurs in the theme, which is in contrast to those mentioned earlier. The rest of the entries are unornamented, save one in the Sweelinck (II 297:4:3).

5.1.2 Melodic Contexts

The instructions from Continental treatises do not throw much light upon this aspect, and the only information available comes from Diruta, Praetorius, Ammerbach and Sancta Maria. The only

melodic context explicitly mentioned by them is that of step-wise ascending and descending notes, where the tremolo or tremoletto must be employed, depending upon the note value used. The melodic ascent or descent also determines which auxiliary note should be used.

In a study of the melodic contexts in which the single- and double-stroke ornaments appear in the FVB, it was discovered that they occur in a variety of these. A list of them are given in Tables 5.1 and 5.2; they show the intervals which precede and follow an ornament.<sup>7</sup> The incidence with which particular intervals precede the single stroke from below, follows here; they are taken from Table 5.1:

Interval:	rest	same	2	3	4	5	6	7	8	9	10	11	12	13
Composer: Bull	3	11	25	8	4	-	3	-	17	3	-	1	-	-
Byrd	9	9	77	41	27	7	2	2	4	1	1	1	1	-
Farnaby	-	1	28	20	9	3	2	3	4	-	2	-	1	-
Others	2	7	60	20	23	4	6	-	10	-	1	-	-	1

It is evident from the table above that the majority of single strokes are approached from below by the interval of a second, third and fourth, and in the case of Bull, by the octave. Although almost any conceivable preceding - following interval combination is possible, a few tend to be repeatedly encountered and are typically associated with the single stroke. The most typical is that of the single stroke approached from below by a

<sup>7</sup> The following pieces were studied. Table 5:1 : FVB I pp.196, 202, 25, 65, 72-77, 87, 154, 291, 296, 331, 335, 336, 351, 358, 359, 427, 432, 436, 203, 204, 210, 215, 218, 226, 235, 242, 245, 248, 254, 258, 267, 363, 365, 371, 394, 395, 401, 406; 43, 57, 12, 54, 63, 107, 124, 131, 138, 149, 170, 178; II pp. 15, 17, 19, 72, 75, 77, 160, 161, 261, 265, 270, 273, 340, 350, 371, 416, 421, 1, 25, 135, 158, 234, 236, 240, 256, 258, 278, 307, 308, 309, 310, 311, 312, 366, 370, 381, 413, 414, 418, 412, 424, 487, 44, 47, 48, 68, 104, 112, 193, 200, 203, 208, 217, 384, 389, 390, 394, 429, 436, 440, 171, 173, 387, 179, 209, 51, 94, 100, 269, 116, 121, 125, 146, 258. Table 5.2 : FVB I pp.57, 65, 72, 74, 89, 54, 62, 70, 124, 129, 141, 199, 203, 209, 218, 234, 245; II pp.51, 87.

second, third or fourth, and followed by the descending interval of a second. In the works of Byrd examined, 83 out of 138 single strokes fall into this category.

Most single strokes occur upon notes which are approached from below or by the same note, and are followed by the same note or one which is lower, by a rest, or a tied note (including suspensions) followed by a descending interval: of a total of 561 single-stroke ornaments researched, 431 fall in this category. This indicates that the single stroke often occurs on the highest note of a melodic curve. The following section from an Alman by Farnaby demonstrates this admirably:

Ex.5.12 Farnaby, Alman (FVB II 160:1:2)



Each melodic contour in this example contains a single-stroke ornament at the highest points. In Treg Ground (I p.226) Byrd employs the single stroke continuously in this fashion.

The single stroke is only occasionally preceded and followed by a higher note in the FVB. In this study only 96 are approached from a higher note, of which the highest incidence occurs in Farnaby's works - 29 in all. Only 44 are followed by a note higher than that upon which the single stroke occurs (see Table 5.1).

The single stroke on a tied note, followed by a note the interval of a second lower, is also very common. A large interval preceding the ornament from below occurs less often, except for the interval of the octave, which is a regular feature in Farnaby's and Bull's use of the single stroke. (Bull frequently employs the progression : ascending octave - single-stroke ornament - descending octave, for instance.) Farnaby, on many occasions, emphasizes a high note by adding a single stroke. These are invariably preceded by a large interval which is lower:

Ex.5.13                      Farnaby, Pawles Wharfe (FVB II 17:5:2)



The absence of the frequent use of the single stroke in a step-wise ascending or descending context is also remarkable, and is a specific characteristic of the single stroke. The only exception is Farnaby, who employs it noticeably more often than the other composers in the FVB.

Due to its limited appearance, and the specific manner in which it is employed in the melodic context, one can conclude that the single stroke fulfills a more specific role than the double stroke, when compared with the latter's melodic use.

Studying the melodic contexts of 634 double-stroke ornaments in a similar fashion, it was found that these contexts vary greatly.<sup>8</sup> This is not surprising, for it is the ornament most frequently encountered in the FVB. Because of its profusion, it is logical that it should appear in a greater variety of melodic contexts. With one exception, the double stroke does not evidence a preference for certain melodic contexts to the same extent as the

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<sup>8</sup> These are given in Table 5.2.



single stroke. The only context used extensively with any consistency, is that of stepwise ascending and descending notes. Just under a third of the double-stroke ornaments tested are employed in this manner - 205 out of a total of 634.

Consider Bull's Quadran Pavan, where all the ornaments in the first section are either in a stepwise ascending or descending context:

Ex.5.14 Bull, Quadran Pavan (FVB I 99:1:1)

The image displays a musical score for a section of Bull's Quadran Pavan. It consists of four systems of piano music, each with a treble and bass staff. The music is characterized by the use of various ornaments, such as mordents and grace notes, which are highlighted in the original image. The key signature has one sharp (F#) and the time signature is 3/4. The first system shows a series of ornaments on the treble staff, with the bass staff providing harmonic support. The second system continues with similar ornamentation. The third system shows a more complex ornamentation pattern. The fourth system concludes the excerpt with a final ornamented note.

The ornamented stepwise descending line is also far more typical than the stepwise ascending line : 158 incidences, compared to 47. It is significant that this melodic context is the only one also mentioned by the Continental treatises. The incidence of intervals preceding or following the double stroke is also not such that a preference for a specific context can be isolated, as is the case with the single stroke. Both ornaments are frequently employed as integrated components of the melodic context, and as such are intrinsic elements in the character of the melody. The fact that they are used consistently wherever this melody recurs, proves that they are not mere optional decoration, as in Ex.5.15:

Ex.5.15                      Farnaby, Put up thy Dagger, Jemy (FVB II 72)

1:1



3:1



Anon., Praeludium (FVB II 25:2:1)



Farnaby, A Toye (FVB II 421:1:1)



Short melodic motives employed in imitative counterpoint make abundant use of ornaments, again with such consistency that they must be regarded as part of the motive. In Ex.5.16 they are set against a plainsong theme:

Ex.5.16 Tallis, Felix Namque (FVB II 3:4:1)



Parsons, In Nomine (FVB II 137:4:1)



This motivic interplay is an important device used by the Virginalists as a method of melodic development; the fact that the notes are ornamented thus may be a means of attracting attention to their identity:

Ex.5.17 Bull, Pavana (FVB II 121:4:1)



Byrd uses the device for the whole of a section, either unornamented in the sequence, or ornamented in exactly the same manner:

Ex.5.18 Byrd, Pescod Time (FVB II 431)

2:3



5:2



5.1.3 Texture

The use of the single and double stroke also differs as far as the texture of the music is concerned. The following occurrences in different textures were counted of the ornaments studied in the FVB:

RH 1 voice LH 1 voice RH 2 voices LH 2 voices RH-chord LH-chord

Single stroke:

351	60	115	30	7	2
-----	----	-----	----	---	---

Double stroke:

260	46	226	110	19	6
-----	----	-----	-----	----	---

The single stroke occurs mostly in the right hand on a single note, followed by two voices in the same hand. The number of occurrences in a chord is virtually negligible, and only occasionally does it appear in the left hand, with the preference once again for a single note. The use of the double stroke shows a preference for a single note in the right hand as well, and its occurrence in two voices in the right hand is only slightly less. The double stroke is also encountered far more frequently in the left hand, especially in two voices. One may conclude from the above that the interpretation of the single stroke may involve the use of more than two fingers, hence the preference for use on a single note or two notes.

An interesting phenomenon in the FVB is the change of texture which occasionally takes place when the single stroke is employed. In the following example, the single stroke occurs in the right hand in one voice, whereas the preceding texture was multivoiced:<sup>9</sup>

Ex.5.19 Morley, Pavana (FVB II 173:1:1; 2:3)



The repeat of the section in Ex.5.19 provides an effective demonstration of the fact that this is not accidental, for in the second bar of Ex.5.20, the double-stroke ornament is not placed

<sup>9</sup> See also FVB II pp.240,131; I p.254.

on a single note, but on two notes:

Ex.5.20 Morley, Pavana (FVB II 173:5:2)



In Ex.5.21, the single strokes are all preceded - and then followed - by two or more voices; the texture changes only momentarily on the single stroke to one voice:

Ex.5.21 Byrd, Variatio (FVB I 244:5:3)



Byrd, Tregian's Ground (FVB I 227)

227:6:1



233:5:4



This behaviour is in accordance with the fact that most single strokes occur on single notes in the right hand. It would seem that this change of texture is not only deliberate, but typically associated with the single stroke, as similar behaviour for

the double stroke is not encountered.

When the texture is predominantly that of a single voice in the treble with chordal accompaniment, the single voice receives almost all of the ornamentation, which is in agreement with Diruta's directions.<sup>10</sup> This is illustrated in Byrd's La Volta, in Ex.5.22. Here, the accompaniment features only one double stroke in the entire work (at II 189:1:2), and for the rest all the double strokes occur in the right hand, which is predominantly single-voiced.

#### 5.1.4 Note Values

The note values on which ornament symbols appear, show clear preferences for certain values. The single and double strokes studied in the FVB reveal the following number of occurrences:

	o.	o	♪	♩	♪	♫	♬	♭	♮
Single stroke	-	-	29	112	33	310	7	48	-
Double stroke	1	17	24	131	64	262	10	153	3

In both cases, the majority of ornaments appear on crotchets and minims, with none on semibreves or longer values. In the case of the single stroke, they appear almost three times more on crotchets than on minims. There is little use of ornaments on semiquavers, which accords, once again, with the advice of the Continental treatises. The double stroke occurs sporadically on semiquavers in the FVB (e.g. I pp.401,403,406; II pp.44,53), and in one case, as part of a melodic motive:

#### Ex.5.23 Farnaby, Daphne (FVB II 14:3:2)



<sup>10</sup> Soehnlein, Transilvano, p.159.

Ex. 5.22

Byrd, La Volta (FVB II 188)

The image displays two systems of musical notation for the piece 'La Volta' by William Byrd. Each system consists of two staves (treble and bass clef) joined by a brace. The first system includes a downward-pointing arrow above the first measure of the upper staff. The second system features a '2' above the first measure of the upper staff. Both systems contain 'Rep.' (Repeat) markings. The notation includes various rhythmic values, accidentals, and dynamic markings such as 'p' (piano) and 'f' (forte).



It is interesting to note that the single stroke does not occur on note values larger than a dotted minim, or on semiquavers. The latter may of course be indicative of the nature of the single stroke, i.e., that the notes involved in its execution are of such a nature as to preclude its use upon such a note value.

#### 5.1.5 Metric Use

The most remarkable characteristic of the single and double stroke is the consistency of its usage as far as the metric design of a work is concerned. The rhythmic impetus created by it seems to be a primary function of these strokes in the music. This is a peculiarity encountered in English virginal music only - for nowhere in any Continental treatise do instructions to this effect appear.

In a study of 154 pieces from the FVB, it was found that the majority of the ornaments coincided with the pulse unit of the time signature of the piece concerned. The pieces studied include 32 Pavanes, 28 Galliards, 26 dance pieces (e.g. Coranto, Gigge) and variations on folk tunes in  $\frac{6}{4}$ , 11 variations on folk tunes in  $\frac{3}{2}$ , 29 variations in  $\mathcal{C}$ , 18 Almans, and 12 Fantasias (including Ut re mi's) in  $\mathcal{C}$ , with a total of 7427 double-stroke ornaments.<sup>11</sup> The corresponding total of single-stroke ornaments

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<sup>11</sup> The following pieces were used: Pavanes ( $\mathcal{C}$ ) FVB I pp.27, 62,68,87,99,107,124,141,149,361,384,367; II pp.42, 51, 103,121,173,200,204,209,238,278,306,307,384,389,336; Galliards: I pp.32,54,70,77,93,117,129,170,177,209,365,371; II pp.111,125,177,198,202,207,213,228,242,244,258,387,405,419,440,486,369; Dances in  $\frac{6}{4}$ : I pp.66,72,87,214,248,263; II pp.17,72,77,87,94,186,188,234,236,257,292,305,310,311,312,412,414,415; Variations in  $\frac{3}{2}$ : I pp.1,131,218,226,258,267,274; II pp.67,166,418,430; Variations ( $\mathcal{C}$ ): I pp.42,47,57,153,196,199,254; II pp.19,116,148,161,190,192,193,220,262,263,265,269,273,350,366,371,402,413,416,421,422,423; Almans ( $\mathcal{C}$ ): I pp.65,75,234,245,359; II pp.158,159,160,171,182,196,217,253,276,309,312,424; Fantasias ( $\mathcal{C}$ ): I pp.19,23,37,335,357,395,401,406,423; II pp.57,270,297.

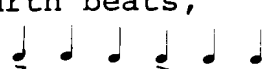


in the same works is 479, which points to the fact that the single stroke represents only 6,05% of the total amount of ornaments.

The findings of the survey as to the ornaments' metric use are given in Table 5.3. The strong beats - according to the pulse unit per bar - are underlined as follows: 1, 2 etc. The numbers underneath represent the number of times the ornaments appear on that specific beat in pieces with the indicated time signature. The arrows indicate ornaments which fall between the main beats.

The conclusions drawn from the evidence in Table 5.3 are summarized here.

- The majority of single- and double-stroke ornaments are used on the beat, especially in the dance forms in  $\frac{6}{4}$  and  $\frac{3}{2}$  metre.
- Comparatively few ornaments occur between the beats in  $\frac{6}{4}$  and  $\frac{3}{2}$  metre.
- Pieces in  $\phi$  metre employ a much greater proportion of ornaments on the off-beat, even though the majority still fall on the strong beats.
- In  $\frac{6}{4}$  the first and fourth beats carry proportionally more double-stroke ornaments, and for the same time signature, the single stroke appears most on the third beat. (The latter finding is due to two compositions by Farnaby (II pp.72,77), and can as such not be considered a general trait; in these two works, the single stroke is used as part of the theme which is frequently repeated.)
- There is no significant difference between the use of the single and double stroke on the strong beats of a specific time signature.

Statistically, the pieces in  $\frac{6}{4}$  and  $\frac{3}{2}$  exhibit the greatest number of ornaments on the strong beats, in relation to the ornaments which fall between beats, particularly in the Galliards and  $\frac{6}{4}$  dance forms. In addition, the  $\frac{6}{4}$  dance forms reveal that the majority of ornaments occur on the first and fourth beats, thereby accenting the dance movement naturally: 

(In this case, 377 double strokes on the first beat, 418 on the fourth beat, as against 103 and 174 for the second and third beats, and 127 and 166 for the fifth and sixth beats.) It is also significant that the number of ornaments falling between beats here is almost negligible by comparison. The faster tempo of the dance forms certainly contributes to this phenomenon.

In Ex.5.24 the pieces in  $\frac{6}{4}$  time demonstrate the way in which ornaments emphasize the metric structure and pattern of accents. In The Woods so Wild there is one example of a double stroke (indicated ↓) which does not fall on either the first or fourth beat, and in A Gigge only three. The pieces in  $\frac{6}{4}$  also exhibit a preference for ornaments on the third and sixth beats, as can be gleaned from Table 5.3. This example by Farnaby illustrates the point:

Ex.5.25 Farnaby, Bony sweet Robin (FVB II 77:1:1)



The musical score for 'Bony sweet Robin' is presented in three systems. Each system consists of a treble and bass staff. The first system shows a melody in the treble staff with three ornaments marked by downward arrows (↓) on the first, third, and fifth beats. The bass staff provides a harmonic accompaniment. The second system continues the melody, with a second ornament on the third beat and a '2' marking below the bass staff. The third system concludes the piece with a final ornament on the third beat and a 'Rep.' marking above the treble staff.

Of the pieces which bear the  $\frac{6}{4}$  time signature, it is once again a dance form, the Alman, that has the significantly greater ratio of ornaments on the strong beats; the Pavaues, Fantasias and Variations on folk tunes have a large number of ornaments



Ex.5.24

Byrd, The Woods so Wild (FVB I 263:1:1)

Musical score for 'The Woods so Wild' by Thomas Byrd. The score is in G major and 3/4 time. It consists of four systems of piano accompaniment. The first system has a treble clef and a key signature of one sharp (F#). The second system has a treble clef and a key signature of one sharp. The third system has a treble clef and a key signature of one sharp. The fourth system has a treble clef and a key signature of one sharp. There are first, second, and third endings marked with '1', '2', and '3' respectively. A downward arrow points to a specific measure in the fourth system.

Bull, A Gigge (FVB II 257:1:1)

Musical score for 'A Gigge' by John Bull. The score is in G major and 3/4 time. It consists of three systems of piano accompaniment. The first system has a treble clef and a key signature of one sharp. The second system has a treble clef and a key signature of one sharp. The third system has a treble clef and a key signature of one sharp. There are first, second, and third endings marked with '1', '2', and '3' respectively. A 'Rep.' (Repeat) sign is present in the second system. Downward arrows point to specific measures in the second and third systems.

on the weak beats. In the case of the Pavanes, the off-beat use of the double stroke after the fourth beat even exceeds that of the onbeat use: 217 instances as opposed to 211. Another interesting aspect is that all the pieces in  $\text{♩}$  display more double-stroke ornaments on the off-beat after the second pulse unit.

In Ex.5.26 the consistent use of ornaments on the strong beats in  $\text{♩}$  is illustrated:

Ex.5.26 Farnaby, The New Sa-Hoo (FVB II 161:1:1)



The musical score for Ex.5.26 consists of two systems of piano accompaniment. Each system has a treble and bass clef staff. The first system shows a melody in the treble clef with several double strokes marked by downward arrows. The bass clef provides harmonic support with chords and moving lines. The second system is marked 'Rep.' and shows a more complex melodic line in the treble clef with many double strokes, while the bass clef continues with harmonic accompaniment.

Farnaby, A Gigge (FVB II 416:1:1)



The musical score for 'A Gigge' consists of two systems of piano accompaniment. The first system shows a treble clef staff with a melody featuring many double strokes, each indicated by a downward arrow. The bass clef staff provides a steady accompaniment. The second system continues the piece, with a treble clef staff showing a more rhythmic melody and a bass clef staff with chords and moving lines. A second ending bracket is visible in the second system.

Tisdall, Almand (FVB II 276:3:1)



In Ex.5.26 the ornaments occurring between the strong beats are in the minority (indicated by circles around the notes). As they appear on the exact subdivision of the pulse unit in  $\text{♩}$  (a minim), the aural effect of eight crotchets to the bar is created. This explains the high incidence of ornaments found after the strong beats of pieces in  $\text{♩}$  : since they are slow-moving in minims, it is relatively easy to subdivide the beat into crotchets, and to add ornaments simultaneously as shown in Ex.5.27:

Ex.5.27 Tomkins, Pavana (FVB II 51)

51:1:1





52:5:1

The result is one of ornaments which coincide either with the pulse unit or the subdivision thereof. As a micro pulse unit the latter enhances the rhythmic drive created by the coincidence of pulse unit and ornamented note.

The use of the double stroke on quavers indicates a preference for the strong beats, be it with the pulse unit or micro pulse unit:

Ex.5.28 Peerson, The Fall of the Leafe (FVB II 423:1:1)

Anon., Can shee (FVB II 256:4:2)

In this sense, the Virginalists differ entirely from Sancta Maria's preference for off-beat ornaments. Patterns employing off-beat ornaments, sometimes together with ornaments on the beat (e.g. ♯ ♯ ♯ ♯ ; ♯ ♯ ♯ ♯), are few and far between.<sup>12</sup>

<sup>12</sup> E.g., FVB I 27:1:1; 269:1:1, 3:3; II 5:5:2; 75:1:1; 192:4:3; 271:5:3; 387:3:2; 441:3:3.

The use of ornament symbols as rhythmic agents is further illustrated by their function of emphasizing a temporary shift in the metric pattern, in which all the voices participate. In the FVB, the composers frequently change a  $\frac{6}{4}$  time signature to  $\frac{3}{2}$ , and vice versa. This shift is often accompanied by a simultaneous use of ornaments agreeing with the new metric pattern, which, at the same time, clarifies and draws attention to it:

Ex.5.29 Byrd, Sellinger's Round (FVB I 250:6:5)



In Ex.5.29 we have a true hemiola, as a change from  $\frac{6}{4}$  into  $\frac{3}{2}$  has taken place; the double-stroke ornament on f#" in the second bar coincides with the new metre. In Ex.5.30 the change from  $\frac{3}{2}$  to  $\frac{6}{4}$  (which is far more common) is shown:

Ex.5.30 Byrd, Galiarda (FVB II 199:3:1)



Byrd, Galiarda (FVB II 387)







(c) 388:3:2

Musical score for (c) 388:3:2. It consists of two staves, treble and bass clef. The key signature has one sharp (F#). The time signature is 3/2. The score is divided into five measures, each with a circled number above it: (3/2), (6/4), (3/2), (6/4), and (3/2). The notation includes various rhythmic values and accidentals.

Anon., Can shee (FVB II 256)

(d)

Musical score for (d). It consists of two staves, treble and bass clef. The key signature has one sharp (F#). The time signature is 3/4. The score is divided into five systems, each with a circled number above it: (3/2), (6/4), (3/2), (6/4), and (6/4). The notation includes various rhythmic values, accidentals, and articulation marks.



Ex.5.30(a)-(d) show a temporary metric shift in juxtaposition with the prevailing metric scheme. In (a), (b) and (c), only a few ornaments are used on the changed rhythmic structure; in (d) the shift is clearly delineated through the use of many ornaments. Here, both single and double strokes are employed consistently on the strong beats. They largely follow the metric scheme, which is continuously changing from  $\frac{3}{2}$  to  $\frac{6}{4}$  and back to  $\frac{3}{2}$ . In the third section the metre changes to  $\frac{6}{4}$  for two bars, then changes back to  $\frac{3}{2}$  and briefly to  $\frac{6}{4}$  in the second last bar. The placing of ornaments on the strong beats of the prevailing metre is particularly consistent in these last five bars.

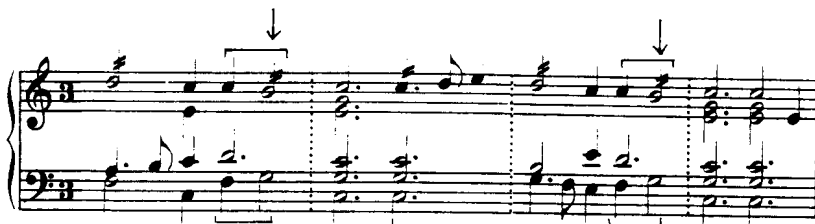
A change of metre does not necessarily have to take place when the established metre is momentarily interrupted. A curious syncopation, or shift in rhythmical emphasis in all the parts, is frequently accompanied by an ornament sign, similar to the use in the change of metre. In the FVB, composers frequently employ it in cadences, changing the long-short or equal note pattern to short-long, thereby drawing attention to the cadence. In each case, the longer note value is ornamented:

Ex.5.31

Byrd, The Carmans Whistle (FVB I 216:5:3)



Byrd, Coranto (FVB II 305:1:3)



Anon., Watkins Ale (FVB II 237:2:1)



In the following example, a syncopation in all the voices is established. The ornament signs are consistently used on the syncopation to enhance the effect:

Ex.5.32 Anon., Alman (FVB I 65:1:1)



Byrd, Fantasia (FVB I 406:4:2)




In Ex.5.33, the syncopation occurs in one voice.<sup>13</sup> Interestingly enough, the syncopated voice is left unornamented, with the accompanying part in the soprano ornamented instead.

<sup>13</sup> See also, FVB I 404:5:3-5.

Although this does not lead to a syncopated soprano, its unusual placement is certainly intended to enhance the syncopated bass:

Ex.5.33 Byrd, Pescod Time (FVB II 434:4:3)



Peerson's Alman (Ex.5.34) illustrates accented syncopations which are juxtaposed against a perfectly normal metric movement in the other voices. This can be seen in b.3,4,11,16 and 17 in the soprano, and in the bass in b.15:

Ex.5.34 Peerson, Alman (FVB I 359)



Cross rhythms occur frequently in the FVB, and similarly, ornament signs embellish one or more of the conflicting parts:

Ex.5.35 Byrd, All in a Garden Green (FVB I 411)

(a) 2:1



(b) 5:1



Byrd, Galiarda (FVB II 48:2:2)

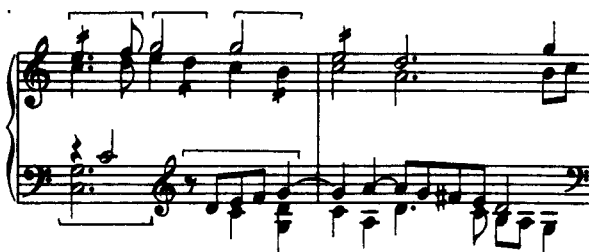
(c)



In Ex.5.35(a) the soprano continues in  $\frac{6}{4}$ , while the other parts change to  $\frac{3}{2}$ . In the second bar, all voices have been regularized to  $\frac{3}{2}$ . In the second section (Ex.5.35(b)), the varied repeat is consistently  $\frac{6}{4}$  in the soprano and alto, with the left hand in  $\frac{3}{2}$ . In both cases, the double stroke on d' enhances the  $\frac{6}{4}$  metre. In Ex.5.35(c), the  $\frac{6}{4}$  metre in the soprano and alto is again placed in conflict with  $\frac{3}{2}$  in the left hand. Here the double strokes embellish the first and fourth beat of the  $\frac{6}{4}$  time signature. Clearly, the placement of ornaments alone is not always sufficient to clarify the cross rhythms.

To return to Byrd's All in a Garden Green: it would appear that here the soprano is in  $\frac{3}{2}$  and the other voices in  $\frac{6}{4}$  - the latter suggested by the double-stroke ornaments in the alto. The soprano and alto might also be considered as being in  $\frac{3}{2}$ , despite the ornaments in the alto. Here, ornaments in the soprano would have clarified the matter:

Ex.5.36 Byrd, All in a Garden Green (FVB I 414:4:1)



Some excellent examples of cross rhythms, and metric and rhythmic shifts are found in Ex.5.37(a) - (c), once the piece has changed into  $\frac{6}{4}$  metre. In (a) and (b) the metric shifts and cross rhythms invariably involve the time signatures  $\frac{3}{2}$  and  $\frac{6}{4}$ . Cross rhythms found in the last section (Ex.5.37(c)), which has changed back to  $\frac{C}{4}$ , lend a playful character to the music. The ornaments coinciding with the conflicting parts here are indicated by an arrow ( $\downarrow$ ).

It is often impossible to separate the metric pattern from a characteristic melodic-rhythmic figure, as in the left hand of Ex.5.38:

Ex.5.38 Bull, Galiarda (FVB I 70:1:1)



Ex.5.37

Byrd, Ut, re, mi, fa, sol, la (FVB I 395)

(a) 398:5:1

(b) 399:4:1

(c) 400:4:1

In such cases the ornament sign recurs characteristically in the same place as part of this figure, thereby enhancing the rhythmic impetus already inherent in the melodic figure. It may occur throughout a whole section, as in Ex.5.38, or briefly for a special rhythmic effect:

Ex.5.39 Bull, Pavana (FVB I 127:1:1)



## 5.2 The Interpretation of the Single- and Double-Stroke Signs

It is generally accepted by contemporary performance practice musicologists that the signs employed by the Virginalists must be connected with musical ornamentation. While some regard the search for a meaning for these signs as 'futile in principle',<sup>14</sup> others think that they may not necessarily denote an ornament, being, rather, a means of indicating articulation,<sup>15</sup> i.e. indicating a slur or staccato, or even an accent.<sup>16</sup> While it is true that the solution to the interpretation of the ornament symbols will remain conjectural until a contemporary explanation for it is found, speculation regarding a possible interpretation is not a futile operation.

Certainly, many arguments can be marshalled against such a search for meaning: one might hold the view that the signs should be ignored because no explanation for them exists; that there is in-

<sup>14</sup> Schwandt, Clausula, p.117.

<sup>15</sup> R. Huestis, 'A musical approach to ornamentation in the music of the English Virginalists', Studies in Music, no.12 (1978), p.30.

<sup>16</sup> Cofone, Elizabeth Rogers, p.xxii.



consistent placement and discrepancies in notation between different sources of the same work; or that they appear in virtually every conceivable context and therefore are not an intrinsic part of the musical texture. These arguments pale before the evidence presented by the music itself as seen in this study - that is, that the ornament signs are as characteristic of this music as are any of the other elements which are part of the Virginalists' musical thinking.

### 5.2.1 Solutions Suggested by Contemporary Musicologists

The earliest attempt at an explanation for the single and double stroke was made by Dannreuther in his fundamental work Musical Ornamentation (1893). He interprets the single-stroke sign as an appoggiatura from below or above, or as a slide from a third below to the main note, and occasionally as a mordent.<sup>17</sup> The double-stroke sign is explained as a short shake (beginning on the main note, therefore referred to by him as a Prall-triller) or mordent, and possibly even occasionally as a vibrato, obtained by repeating the key several times. The basis for his conjecture rests upon the appearance of the single and double stroke in later sources, as well as the contemporary evidence of Diruta and the English lutenists. This sensible approach laid the foundation for much of what has been written on the subject ever since.

The contemporary evidence of Diruta, the English lutenists, and the appearance of the same sign in later sources points to an interpretation of the slanted double stroke as an ornament of the alternating type, involving the alternation of the main note with an auxiliary note. The double sign is termed a shake by Locke (1673) and Purcell (1696) - the latter interprets it as a shake beginning with the upper auxiliary. A vertical double stroke (#) is also found in the tablatures of the seventeenth-

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<sup>17</sup> E. Dannreuther, Musical Ornamentation (London : Novello, 1893), pp.17-32.



century North-German organists Reincken, Scheidemann and Tunder. In his 'Hortus Musicus' of 1687, Reincken explains it as 'tremulum qui superne tonum contingit'. Both Wolf and Dannreuther translate this as a shake commencing upon the main note, which is ambiguous, as Alan Curtis points out in his study of Sweelinck's keyboard music.<sup>18</sup> It is possible to translate Reincken's Latin either as 'to touch (strike) the note ... above', or '... from above', or '... upwards'. It may therefore signify a shake beginning either on the main note or on the upper auxiliary, all of which simply implies that it is an ornament of the alternating type, employing the upper auxiliary. The connection between Sweelinck and the seventeenth-century North-German organists is well-known (both Scheidt and Scheidemann were amongst his pupils), and the only logical explanation for the vertical double stroke in their works is that it must be a corruption of the Virginalists' slanted double stroke; the latter was used by Sweelinck.

If the vertical double stroke and Locke's slanted double stroke can be linked to the Virginalists' double stroke, Dannreuther is correct in assuming that the double stroke implies some kind of alternating ornament. From Diruta, Dannreuther deduces that the double-stroke sign may signify a short shake starting on the main note, basing his assumption upon Diruta's instruction that a tremolo takes up half the value of the note upon which it is made. Therefore, if the shakes occur on short note values, they must be short, for prolonged shakes are written out in full by the Virginalists. Dannreuther also maintains that the double sign might well indicate the reiteration of a note, i.e. a kind of vibrato, basing his assumption once again on the authority of Diruta. The English lute practice allows him to assume that it could also be a long or short mordent.

Dannreuther's interpretation of the slanted single stroke (♯) as a slide of a third upwards, or a short appoggiatura from below or above

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<sup>18</sup> A. Curtis, Sweelinck's Keyboard Music (Leiden University Press, 1972), p.209.

(and occasionally as a mordent), is based upon the fact that the single stroke signifies a forefall from below or above in later English keyboard and lute music. The slide is then, in fact, simply a double appoggiatura or forefall from below.

Dannreuther's study contains no details other than those presented above. Clearly he decided upon a cautious approach, being sensitive to the complexity of the issue in the light of so little available evidence.

Most authors since Dannreuther are in agreement that the single stroke stands for a slide or forefall (appoggiatura) from below (or at least an ornament involving the lower auxiliary in some or other way), and that the double-stroke sign stands for some form of short shake or mordent, i.e. an ornament of the alternating type (Fuller Maitland and Barclay Squire, Andrews, Beyschlag, Fellowes, Dart, Donington, Ferguson, Curtis).<sup>19</sup> They differ, however, as to whether the shake should start on the main note or the upper auxiliary. Huestis' contention that the single and double strokes imply articulation of some sort is a highly controversial one, for there is no precedent for it before or after the Virginalists' strokes. His failure to provide an explanation as to why two signs are used is the weakest link of his argument. On the other hand, Tuttle's view that the double stroke - the sign most commonly used - is an indication that an ornament 'of some kind should be played, the particular ornament being left to the performer's sense of style', is an eminently sensible approach.<sup>20</sup> This implies a more specific meaning for the single stroke which, appropriately enough, is less commonly employed.

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<sup>19</sup> See FVB I, p.xvi; A. Beyschlag, Die Ornamentik der Musik (Leipzig : Breitkopf & Härtel, 1908), p.51; MB XIV, p.xvi; Ferguson, Early English Keyboard Music, 2:12; R. Donington, 'The Virginalists' Strokes', The New Grove Dictionary of Music and Musicians, ed. by S. Sadie, 20 vols. (London : Macmillan, 1980), 13:857f.; and Schwandt, Clausula, pp.113-120.

<sup>20</sup> MB V, p.xv.

### 5.2.2 The Interpretation of the Double Stroke

As a basis for conjectural solutions, a safe approach would be to relate the contemporary evidence of ornamentation to the Virginalists' symbols. It is virtually impossible to determine exactly to what extent the English were influenced by the Continent, or vice versa. It is an established fact that Continental musicians resided in England, and also that English musicians worked on the Continent;<sup>21</sup> clearly, musical forms and general musical culture were assimilated on both sides. Seemingly, the most sensible approach to adopt would be to accept that cross influences took place, but at the same time, to realize that the situation is more complex than this : each country retained its individuality, after all. The fact that the single- and double-stroke signs are peculiar to the English Virginalists, attests to that. The latter is also in keeping with the view that English virginal music is of a pioneering nature.<sup>22</sup>

As the double-stroke sign is the ornament most frequently used by the Virginalists in the FVB, it is only logical to connect it with the commonest type of ornament encountered in the Continental sources, that of the alternating type, in which the main note and upper auxiliary alternate. In contemporary English lute sources, the double cross (#) is the sign most often employed, and frequently the only sign. In these sources, the double cross signifies a shake. The similarity between this sign and the Virginalists' double stroke leads one to believe that it might well indicate the meaning of the double stroke as well : it is often the only sign in a piece of virginal music, apart from being the sign most frequently employed.

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<sup>21</sup> See P.E. Mueller, The Influence and Activities of English Musicians on the Continent during the Late Sixteenth and Seventeenth Centuries (Ph.D. dissertation, Indiana University, 1954).

<sup>22</sup> G. Reese, Music in the Renaissance (New York : Norton, 1959), pp.853,860.



The question then arises as to which type of alternating ornament is applicable here: the groppo, which commences with the upper auxiliary and ends with a turn, the tremolo (quiebro, trillo), which begins on the main note, alternates with the upper auxiliary and ends on the main note, or a shake/trill which begins on the upper auxiliary and ends on the main note? As was seen in Chapter 1, the shake or trill beginning on the upper auxiliary was not in use in keyboard music in the sixteenth century, at least not from the evidence of the available treatises. The only exception is Sancta Maria's quiebro reyterado, which may start from above, but before the beat. It is therefore called 'the new kind', and is an alternative to the plain quiebro reyterado. It is important, however, to note that the upper-note attack here does not coincide with the harmony, as it is played before the beat, and this differs in essence from the upper-note shake which begins on the beat.

The lute and lyra viol sources are not helpful in this regard: from Robinson onwards, the shake is described as using the upper auxiliary, but nowhere is there a notated example to be found, not even a verbal description demonstrating explicitly that it begins upon the main note. The exception is Mace, whose shake is explained as beginning on the main note. The shake beginning with the upper note was most probably used in English lute music in the early seventeenth century in addition to the shake beginning with the main note, as the signs for the backfall and shake are found combined ( ' # ) in the Sampson Lute Book of c.1609. The placement of these signs together leads one to believe that when the double cross is used alone it will not begin with the upper, but with the main note. The combination of backfall-and-shake is also described by Vallet (1615), as a backfall repeated two or three times, by Playford (1654), who uses two commas ( >> ) to designate the 'backfall shake', and Simpson (1659), who calls it 'backfall shaken'; in reality these are shakes beginning with the upper note.

In keyboard music, the shake commencing with the upper note replaced the tremolo in the course of the seventeenth century;



precisely when this occurred is not always clear and it differed from country to country. In France it was described by Nivers in 1656, and all French ornament tables hereafter indicate the shake as having an upper-note attack. In Italy and Germany the main-note trill stayed in fashion until around 1700.<sup>23</sup> The French fashion spread to England, as Purcell's ornament table of 1696 shows, even though the stenographical symbols are rooted in the English tradition. The double stroke in late seventeenth-century keyboard music is known as a shake (Locke, 1673) and explained by Purcell in his ornament table (1696) as having an upper-note attack.

From this information one cannot assume that the double stroke of the Virginalists is an upper-note shake, as the fashion changed as shown above. It is important to note, however, that the double stroke in these later sources represents an alternating type ornament. Therefore, it is likely that the Virginalists' double stroke represents a similar type of ornament, in this case the tremolo which started on the main note, since that was the fashion in keyboard music until at least the end of the first quarter of the seventeenth century.<sup>24</sup> It is impossible to say with any certainty whether the 'backfall shaken' (upper-/main-note shake) of the early seventeenth-century English lute music can be applied to the double stroke, as the Virginalists did not invent any new signs - as the lute players did - to indicate it.


It is important to stress that the grosso (with its upper-note attack) and the tremolo of c.1600 are only related in as much as they are both of the alternating family of ornaments. In essence they are two different types, used with different functions and at different places in the music. This is a fact which few commentators mention in their discussions of the Virginalists' strokes. With a few exceptions, cadences in the FVB are orna-

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<sup>23</sup> Neumann, Ornamentation, pp.245,290,295,311.

<sup>24</sup> See Harley, Ornaments, for a thorough discussion of the development of the ornament signs from the Virginalists onwards, until the early eighteenth century.



mented with groppi which are not indicated by sign, but written out in note values; this is also true of most other sources of virginal music. Only occasionally is the double stroke followed by a written-out ending such as this: . For it was much later in the seventeenth century that it became customary to indicate cadence ornaments with a sign in English keyboard music. Significantly, the groppo is specifically singled out for use in cadences by Diruta; this is not the case with the tremolo. In Spanish sources, the groppo - or anything similar - is not even described as an ornament, but is found written out in cadences in the keyboard music of Cabezón and his contemporaries, showing that it was considered as part of the written-out figurations. This leaves the main-note / upper-note tremolo (quiebro) as the only solution for the double stroke : the double stroke is indicated by means of a sign, and the groppo in cadences is written out in note values. One cannot, therefore, agree with the interpretation of the double stroke as a shake with an upper-note attack, as suggested by Andrews, Dart, Ferguson, Donington and Curtis - it goes against the contemporary evidence and the function of the double-stroke ornament.


If one accepts Diruta's prescription that the ornament lasts for half of the value of the note, the double stroke can be interpreted thus:

Ex.5.40





Although Ferguson gives an example of a short tremolo as a possible solution to the double stroke, the long shakes he suggests as an interpretation on longer note values all begin with the upper auxiliary.<sup>25</sup> This ignores the fact that long tremoli commencing on the main note made on semibreves, minims and crotchets were the contemporary fashion; this was described by Praetorius as late as 1619 and before him by Sancta Maria, Diruta, Trabaci and Cavalieri.

Andrews,<sup>26</sup> Barnes<sup>27</sup> and Donington<sup>28</sup> all argue that the double stroke implies a shake commencing on the upper note for the reason that one source may indicate a sign with suffix, while others give a written-out version of a groppo in the identical place. At times the figure  occurs on the penultimate note of a discant close instead of a groppo, which provides another argument favouring the above view. The double stroke is thus equated with the first part of the groppo, the final two notes being written out in note values - hence a shake starting with the upper note. Andrews equates the double stroke with a shake plus suffix, the latter being, in fact, a groppo. Barnes and Donington see it as either with, or without a suffix. Andrews' supposition can be discounted, for it offers no explanation as to why the relevant 'shake with a turn' is found mostly written out in note values, and furthermore, as to how it could possibly be played on shorter note values. Barnes' and Donington's views have greater validity, but it remains a difficult issue to clarify.

The weakest part of their argument lies in the fact that discrepancies between different copies of the same work does not make

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25 H. Ferguson, Keyboard Interpretation from the 14th to the 19th Century : An Introduction (London : Oxford University Press, 1975), p.147.

26 William Byrd, My Ladye Nevells Booke of Virginal Music (1591), ed. by H. Andrews (New York : Dover, 1969), Historical note, p.xxxii.

27 N. Mould Barnes, Ornaments in English Virginal Music Between 1590 and 1620 (M.A. thesis, Columbia University, 1967), p.62.

28 Donington, Virginalists' Strokes, p.858.





collation a very reliable basis for conjecture. It is impossible to decide, for instance, whether the copyist of one source intended one and the same ornament when he replaced the gropo with a sign; it also remains mere speculation as to whether the original source contained a gropo in that particular place in the music. The same situation prevails where a double-stroke ornament in one source is replaced by a single stroke in another : Tregian's Ground by Byrd (FVB I p.226) is a good example of this, where four different source copies differ. The replacement of a written-out gropo in one source with a double-stroke sign in another occurs sporadically, and is peculiar to two sources especially, although not exclusive to them : Be and Wr. To complicate matters, there is little consistency, for a sign may replace a gropo in one bar and in the next, the gropo may appear again written out in note values.

In the following examples, extracts from the FVB are shown, together with the corresponding version in which a sign occurs:

Ex.5.41                      Byrd, Praeludium (FVB I 84:5:2)

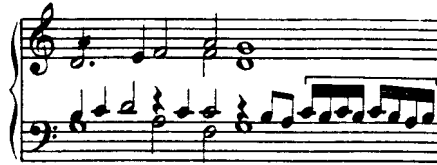
(a)

Byrde, Preludium (Pa, no.4, b.20)

(b)

Byrd, Pescodd Time (FVB II 430:2:4)

(c)



Byrd, The Huntes Upp (Ne, p.58, b.13)

(d)



Bull, Ut, re, mi, fa, sol, la (FVB II 281:3:4)


(e)



Bull, Ut Re my Fa Sol la (To, p.4, b.8)

(f)



Of the examples given, only the double strokes in Ex.5.41(b) and (f) appear, with any degree of certainty, to indicate a grosso. In Ex.5.41(c) and (d), the texts differ greatly in detail, so that the double stroke in Ne is possibly an ornament without a suffix, i.e. a tremolo. Ex.5.41(d) and (f) also pose a problem not presented by (b) : in both cases an ornamented note without suffix replaces the grosso. In (b), the figure with a suffix (  ) makes a grosso an acceptable interpretation, whereas in (d) and (f), the lack of a suffix could imply an ornament other than the grosso, such as a tremolo.



In Ex.5.42, the inconsistency with which signs replace the grop-  
po is shown:

Ex.5.42 Byrd, Pavana Lachrymae (FVB II 45)

3:3

Fo:

(a)

6:2

Fo:

Byrd, Galiard to the Quadran Paven (FVB II 111)

111:2:1

Wr:

(b)

112:6:3

Wr:

In Ex.5.42(a) the gropo is replaced by a double stroke on a crotchet in Fo, yet eight bars later, the groppi are written out (FVB II 45:6:2). In (b) the same phenomenon occurs, but with even more inconsistency: in Wr, five groppi are replaced by a double stroke on a minim, but four are retained as written-out groppi.

In Wr, the sign  $\sim$  is sometimes used in conjunction with a double-stroke sign ( $\text{♯}$ ): this sign replaces the grosso in FVB I 238:1:1 and II 113:4:2. Similarly, the sign  $\text{♯}$  in Be replaces a grosso in FVB I 217:3:4. From Bevin's table of ornaments mentioned in Chapter 2, it is clear that this sign indicates a grosso. It is likely that in Wr the sign ' $\sim$ ', used in conjunction with the double stroke, is the scribe's manner of indicating a grosso. It is difficult to decide whether a grosso is intended when the double stroke is used alone in Wr, in order to differentiate it from  $\text{♯}$ . This is quite possible, however, as in all the examples mentioned, Wr does not write out the suffix  $\text{♯} \text{♪}$ , but only  $\text{♯}$ .

In the FVB, the double stroke plus two-note suffix is an extremely rare occurrence.<sup>29</sup> Apparently it gradually became the fashion to replace the grosso at cadences with a double stroke and suffix, for later virginal collections such as AC (1638), PB (c.1630) and Ro (1656) all use this method almost exclusively. The only two early sources to employ it regularly are Pa (1612/13) and PI (c.1625), the latter of which contains no written-out gropi at all. The following examples of such figures are from the FVB:

Ex.5.43 Philips, Chi fara fede al Cielo (FVB I 312:2:2)



Anon., Corranto (FVB II 310:3:4)



<sup>29</sup> See FVB I pp.263,312; II pp.99,310,414.

Byrd, The Woods so Wild (FVB I 263:2:1)




(c)



Farnaby, A Maske (FVB II 273:2:1)

(d)



In Ex.5.43(a) and (b), the interpretation of the figure  as a groppo is acceptable, for the double-stroke ornaments occur on the penultimate note of a discant close. Clearly, Ex.5.43(c) and (d) should be considered to be tremoli. In (c), the ornamented penultimate note falls to a third below, thus interrupting the discant close; a short tremolo would be suitable here, and likewise in the Farnaby (d). In the latter piece, the composer clearly differentiates between the written-out groppo and double stroke; the last two notes of the figure  are separated from the dotted quaver in Tr (  ), and clearly belong to the following groppo.

It is quite likely that the double stroke contains a dual meaning (besides the possibility of being either a tremolo, an up-per-note shake or even a groppo as discussed above): it might also signify a tremolo employing the lower auxiliary, the equivalent of the long mordent.<sup>30</sup> In the first chapter, the theoret-

30

See p.102, where Basset is quoted as saying that many people use only one sign to express different types of ornaments, and Piccinini that tremoli of 'one kind or another' may be used, which indicates that more than one kind existed for him.

tician's disapproval of this ornament was documented : Diruta condemns it altogether, and Praetorius describes and notates it (as tremulus descendens), but with a qualification : he explicitly states that it is not as good as the upper-note tremolo. In the Spanish sources Bermudo mentions a mordent, and Sancta Maria gives an example of the short mordent (for use in ascending passages) only, as does Ammerbach in Germany. It would therefore appear as if it was primarily the long mordent that was held in disfavour. Bermudo's remark to the effect that the mordent was regarded as ungraceful by some, is borne out by the evidence above.

It is impossible to know whether the English Virginalists shared this aversion for the mordent. From contemporary lute practice we know that the double cross, signifying a shake, is never mentioned as employing the lower auxiliary, not even occasionally. The sources which imply a mordent use a sign to differentiate it from the shake; there is therefore no evidence of such a dual nature from the lute sources themselves. What is certain, is that the mordent (tremolo descendens) was an ornament used less extensively in the sixteenth century than its inverted counterpart, the tremolo ascendens. The general lack of descriptions of the mordent in some treatises may also be related to the relative unimportance of the ornament. This is a tendency that can be followed right through to the eighteenth century : the mordent is encountered far less frequently than the upper-note shake/trill. This might be what the early writers intended to convey when they maintained that the mordent is not as effective as the tremolo.

None of the treatises is helpful with regard to the context in which the long mordent should be used. Diruta's instruction that the tremolo be used at the beginning of a ricercare or canzona might equally be applied to a mordent. (Merulo's canzona La Bovia, for instance, employs a written-out mordent at the beginning of the piece.) Praetorius' example of the tremulus descendens employs the lower semitone, and Simpson specifies it. One may suggest, therefore, that a mordent is more suitable

in contexts where the lower semitone is employed - this contention at least provides a means of identifying those situations in which the mordent should be used. The long mordent should, therefore, be suitable in ascending passages on longer note values, just as the short mordent is prescribed by Sancta Maria and Ammerbach for use in stepwise ascending passages on shorter note values.

One can reiterate here that Diruta's and Praetorius' examples of tremoli and tremoletti are predominantly demonstrated in descending contexts; Praetorius gives only one example of an ascending chain of tremoletti. The tremoli and tremoletti in Merulo's Canzoni d'Intavolatura are also used primarily in descending melodic passages. The frequent use of the double stroke in ascending contexts in the FVB and other virginal music therefore leaves the impression that they have a closer association with the ideas of Sancta Maria and Ammerbach, than with those of Diruta and Praetorius. The use of the short mordent in stepwise ascending passages - as interpretation of the double stroke in such situations - is a musically more satisfying solution than an upper-note tremoletto as well.

In ascending and descending crotchets and quavers, the double stroke can then be interpreted as follows:

Ex.5.44



If Diruta/Praetorius' advice is followed, the ascending double strokes should be played as tremoletti with the upper auxiliary.

Nevertheless, there is no available evidence to suggest that the tremolo or tremoletto cannot also be used ascending (as Diruta/Praetorius' examples show) and similarly, one can deduce that the mordent may at times be used in descending contexts. For Diruta's advice to the performer that the ornaments be used wherever desirable, should not be forgotten.

Finally, one must concede that personal taste and the judgement of the interpreter should prevail, as the treatises' information does not allow for a more specific standpoint. What seems certain, is that the long mordent should be applied with caution, or at least much less frequently than its upper-note counterpart. This is the message conveyed by all the sources, if not always directly.

The evidence produced by fingering in the FVB does not amount to much, for Tregian only sporadically indicated any.<sup>31</sup> There are nevertheless numerous virginal sources containing fingerings, the most comprehensive discussion of the subject to date being that of Le Huray.<sup>32</sup> In virginal music, most double-stroke ornaments are fingered 3 or 2 in the right hand, although not exclusively so. (In Bu the right-hand fingers 4 and 5 are used more than 3).<sup>33</sup> The right-hand fingering for the tremoli and quiebros of Diruta and Sancta Maria agree with this: both recommend 3 4 or 2 3. Indications of fingering for left-hand ornaments are few, as are left-hand ornaments; in eleven pieces with fingerings from all collated sources, 1, 2 and 3 in the left hand is used, which, with the exception of the thumb, is

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<sup>31</sup> See FVB I pp.19, 23, 37, 42, 70, 76, 81, 83, 124, 129, 196, 203, 214, 238, 335; FVB II pp.9, 192, 371, 462, 477.

<sup>32</sup> P. le Huray, 'English Keyboard Fingering in the 16th and early 17th Centuries', Source Materials and the Interpretation of Music, ed. by I. Bent (London: Stainer and Bell, 1981), pp.227-257.

<sup>33</sup> Ibid., p.256.



also in accordance with the fingering of Diruta and Sancta Maria: 3 2 and 2 1. This similarity strengthens the interpretation of the double-stroke ornament as an ornament of the alternating type:

Ex.5.45 Anon., Muscadin (FVB I 74:1:2)



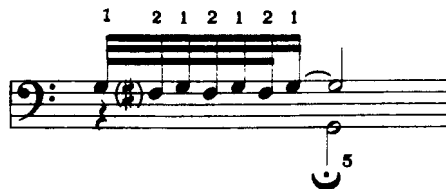
An important factor which emerges from the study of source-fingerings, is that it suggests an ornament employing the lower auxiliary as a possible interpretation for the double stroke in places - in all likelihood a mordent. The following example illustrates this admirably, the fingering being that of PB:<sup>34</sup>

Ex.5.46 Gibbons, Whoop, do me no harm good man (MB XX, p.70, b.24)



There can be little doubt that the fingering implies a mordent in the left hand on g:

Ex.5.47



<sup>34</sup> See also, P. le Huray, ed., The Fingering of Virginal Music (London : Stainer and Bell, 1981), pp.2,10,23.

This should also be the case in similar places where there is no fingering, as in Ex.5.48.<sup>35</sup> The octave jumps in the left hand will most conveniently be played 1 5, with the left-hand double-stroke ornaments as short mordents played 1 2.

In FVB I 70:4:1, 5:2, and 71:1:2, 1:4, 2:2, 2:3, the same applies, with the upper held note in the left hand allowing no other interpretation, unless the second finger crosses over the thumb thus:

Ex.5.49



This seems to be unlikely, however, as extant fingerings suggest a natural hand position. Le Huray provides further evidence of a mordent interpretation : double strokes are fingered right hand 5, left hand 1, which excludes an upper-note ornament.<sup>36</sup>

Where the double stroke appears at the top of a chord in the following manner, a mordent is the only possibility, and even then played only with difficulty:

Ex.5.50 Bull, Variation of the Quadran Pavan (FVB I 107:1:4)



<sup>35</sup> Fingering in brackets is my interpretation.

<sup>36</sup> Le Huray, English Keyboard Fingering, p.256.



Ex.5.48

Bull, Galiarda (FVB I 70)

The musical score is written for piano in 3/4 time with a key signature of one sharp (F#). It consists of six systems of two staves each. The notation includes various rhythmic patterns, including eighth and sixteenth notes, and rests. Fingerings are indicated by numbers 1-5. Dynamic markings include *p* and *f*. The score features several trills and grace notes. The first system begins with a trill in the bass clef marked with the fingering (121)5. The second system has a trill in the bass clef marked (121) and a grace note in the bass clef marked with the fingering (2/5). The third system has a trill in the bass clef marked (121 5) and includes fingering numbers 1, 2, 3, 4, 5, 2, 3, 4, 2, 5, 2, 3, 2 above the treble clef. The fourth system has a trill in the bass clef marked (121) and a grace note in the bass clef marked with the fingering (5). The fifth system has a trill in the bass clef marked (121) and a grace note in the bass clef marked with the fingering (5). The sixth system is marked with a '2.' and includes trills in the bass clef marked with the fingering (121 2 1 1) and grace notes in the bass clef marked with the fingering (5).

Similarly, the double stroke on the bottom note of this right-hand chord will more conveniently be performed as a mordent, due to fingering:

Ex.5.51

Byrd, Pavana (FVB II 386:1:1)



Where double-stroke ornaments occur simultaneously, their performance as tremoli moving in parallel motion presents no problem. (Bermudo's description of simultaneous redobles may be borne in mind here.) There are numerous instances where they move in parallel thirds and sixths, but in some cases parallel fourths, fifths or octaves may result.<sup>37</sup> This problem is solved by playing a tremolo with upper auxiliary and a mordent together:<sup>38</sup>

Ex.5.52

Byrd, Fantasia (FVB I 409:6:4)



There are two matters remaining which merit discussion: the speed with which the ornaments ought to be played, and their length. From Chapter 1 it is clear that Diruta, Cabezón and Venegas all recommend a light and crisp - implying 'fast' - performance. This is especially applicable to the Virginalists'

37

See FVB I 273:2:2,5:3; 56:1:2; II 52:6:1; 484:4:1; 135:1:3; 146:1:1.

38

See also, FVB I 273:5:3; II 256:4:3.

strokes, firstly because of the decaying nature of the sound of the virginal, and secondly because of the striking effect the fast performance has on any plucked keyboard instrument, be it a virginal, spinet or harpsichord : it enlivens the sound and adds sparkle to the music. Having once heard the ornaments played in this fashion on the proper instrument, it is hard to imagine the music without them. The profusion in which the signs appear is another factor indicating a crisp performance: in any case, a reasonable speed makes this inevitable.

As to the length of the ornament, one can place reliance upon the Continental prescription (especially that of Diruta) that it takes half of the value of the note upon which the ornament is made. There is some evidence of careful notation in the FVB, which is indicative of the length of the ornament. Consider for instance the following examples, which speak for themselves:

Ex.5.53            Bull, Ut, re, mi, fa, sol, la (FVB I 183:3:1)

(a)



Farnaby, Spagnioletta (FVB I 201:4:2)

(b)



Farnaby, Pawles Wharfe (FVB II 18:4:4)

(c)



In Ex.5.53(a), it is clear that the ornament should not begin until the bass note B sounds, while in (b), this careful notation is probably an indication that the ornament should last for the whole value of the note; in (c), the ornament must obviously sound only for the first part of the whole value of the tied notes. The evidence from the FVB suggests that long note values are not necessarily ornamented in order to compensate for the lack of a sustained sound on the virginal; there are countless pages where whole notes are not ornamented at all, despite a great amount of ornamentation on other, shorter note values.

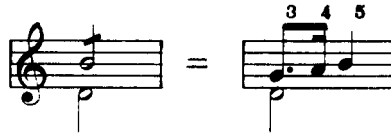
### 5.2.3 The Interpretation of the Single Stroke

Ever since Dannreuther, authors have agreed that the single-stroke ornament must imply some form of ornament employing the lower auxiliary. With the exception of Glyn, it is generally accepted that the slide from a third below to the main note, or an appoggiatura from below, are the most appropriate interpretations. The feeling of some writers (notably Dannreuther, Barclay Squire, Beyschlag, Andrews, Donington, Curtis) is that a mordent is a possibility at times, thus supporting the theory that a lower-auxiliary type ornament is involved. Others (Dart, Ferguson, Fellowes, for instance) again believe that the single stroke simply represents either a slide or an appoggiatura from below. The following evidence supports the theory of the slide as an historically accurate interpretation of the single stroke.

The single stroke is shown to be a dotted slide in the only existing ornament table from the seventeenth century that contains

a single stroke drawn through the tail of a note, the 'graces in play' attributed to Edward Bevin on fol.5 in Be:<sup>39</sup>

Ex.5.54



The single stroke here is identical to that used in the FVB. Even though Bevin's other signs do not appear in any other source, they are compound ornament signs related to the single and double stroke. Bevin's signs are an obvious attempt at creating specific signs for specific ornaments, something the lute sources had experimented with at a much earlier date. A statement by Prencourt, in Prencourt's 'Musical Rules', edited by Roger North, explains the single stroke as a slide:<sup>40</sup>

They make a short stroke thro' the tail of a note where this slurr is to be made.

In the source the 'slur' is explained thus:

Ex.5.55



Two other seventeenth-century sources, Simpson and Mace, refer to the slide as an obsolete ornament, which might well suggest that it was much in use earlier. There is also an analogy between their use of the sign + for the elevation and wholefall (= slide) respectively, and the single cross of the lutenists

<sup>39</sup> Bevin's table is given on p.70.


<sup>40</sup> GB - Lbm Add. 32531, fol.24; and in J. Wilson, ed., Roger North on Music (London: Novello, 1959), p.62.

and single stroke of the Virginalists. (The development of the changing use of the single stroke in the seventeenth century is discussed by Harley.)<sup>41</sup>

In Ro, solo songs with virginal accompaniment including both ornament signs and written-out ornamentation are found. The written-out ornaments are intended for the singer, and the signs for the virginal player. In several instances, parallel passages employ the single stroke in one place and a written-out slide in another; this affords further evidence of the single stroke interpreted as a slide. Here is one such example:

Ex.5.56 Lie still, my dear (Ro, fol.20b)

b. 1 Lie still my dear.      b. 8 it is my heart



The single stroke surely represents something different than the double stroke - it would have been senseless, otherwise, to have used it at all. As has been shown earlier in this chapter, the single stroke occurs much less frequently than the double stroke. From this one can surmise that the single stroke represents an ornament, or family of ornaments, which has a more limited application and which is used with a specific context and function in mind. This supposition is enhanced by the fact that the single stroke in the FVB clearly occurs in contexts far more specific than is the case with the double stroke, which may require the use of a more specific ornament.

From the evidence discussed above, it is certain that at least one of the possible meanings represented by the single stroke

<sup>41</sup> Harley, Ornaments, pp.180-181.



is the slide. This is a solution musically acceptable in many contexts, especially where the single stroke is approached from below by step or by skip. These melodic contexts are the same as those contexts in which slides are illustrated in the Continental treatises, and also in Continental collections of music such as the dances of Facoli and Radino. The written-out slides in Ro confirm this practice. Where the single-stroke ornament is placed on a relatively high note, which is often the case in the FVB, the slide is a sensible interpretation; one might argue that a mordent is just as appropriate here as well, though. Caccini, Bovicelli and Diruta's use of a slide for the commencement of a piece - especially if it is imitative in character - may well be applied to the use of the single stroke in an imitative work in the FVB, as in the example given below:

Ex.5.57                      Byrd, Ut, mi, re (FVB I 401:1:1)



Of course, speculation arises as to whether the single stroke contains another meaning as well, especially in view of the speculation that the double stroke might represent more than one ornament, and where the slide as interpretation of the single stroke sounds less suitable. The question of whether the single stroke acquired other possible meanings after c.1615, when evidence of diversified lute signs became known, must remain an enigma at present; it is especially difficult to establish this, for the single and double stroke remained the only signs to be employed by English keyboard players as late as the 1640's, as shown in the works of Tomkins and Luge. One wonders, however, why new signs were not invented for keyboard music, as was the case with lute music. With lute music, ornaments were thus clearly differentiated and composers were

able to be precise in indicating exactly the ornament they desired.

Either the Virginalists felt no need to invent new signs, regarding the type of ornament to be played as very arbitrary, or else the various ornaments popular on the lute (the variety of ornaments being the reason for the invention of new signs) were not used in the keyboard literature of the same period. The latter is an acceptable theory, for an ornament such as Simpson's 'shaked beat' (probably the same as Board's 'to beat down the finger with a shake') is found nowhere else in keyboard ornamentation of the same period. Moreover, the lute ornamentation seems to be closely linked to the particular technique of the instrument and as such is more individual.

It is possible that the single stroke might at times signify an appoggiatura from below, or as the lutenists term it, a forefall or half-fall. This was an ornament frequently used in lute music (as seen in Chapter 2), and the relationship between the single cross (x) and the upside down comma (˘) used to denote the forefall of the lutenists and the single-stroke ornament of the Virginalists, has already been commented upon. There is, however, no evidence at all that it was used as a keyboard ornament until the end of the first half of the seventeenth century. None of the Continental treatises mentions it as a keyboard ornament, although Praetorius discusses it as a vocal ornament.<sup>42</sup> Of course, the 'pioneer character' of the English Virginalists presents a valid reason for arguing for such an interpretation. The relationship between the forefall and the slide is clear: the slide is simply an extension of the forefall. The forefall and slide are aptly termed 'half-fall' and 'whole-fall' respectively, by Mace. This fact makes the attachment of a dual meaning to the single stroke even more feasible.

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
<sup>42</sup> See Neumann, Ornamentation, pp.47-178, for a discussion of the development of one-note graces.

The other possibility is that the single-stroke ornament represents a type of lower-auxiliary ornament, but this view is more debatable. The mordent may be added to the above interpretations if this be the case. The problem posed by such a possibility is that of distinguishing between them, of knowing when and in which context the one is meant and not the other. If such an interpretation is feasible, the most reasonable explanation for it would be that it does not really matter which specific ornament is denoted by the single stroke, as long as it employs the lower auxiliary. This would, however, go against the very nature of the specific contexts in which we have seen the single stroke used, unless the lower-auxiliary type ornament is regarded as specific enough.

If one classifies the single- and double-stroke ornaments according to the accenti e trilli principle, which seems feasible, the inclusion of the mordent as a possible meaning for the single stroke seems incorrect, for it is an ornament of the alternating type. According to this principle, one could add the backfall, double backfall and accento (springer) to the single stroke's possible interpretations, all of which would be suitable in a descending context. Conversely, if the single stroke stands for any ornament which is less often used, both the slide and mordent would qualify, according to Continental sources.

The main argument against the interpretation of the single stroke as a mordent, is the unacceptability of the fact of an ornament being represented by two signs : this has no precedent in any contemporary reference. The issue becomes extremely complicated if an ornament, such as the mordent, may be represented by both the single and the double stroke, making it difficult for a performer to discover whether a mordent is intended or not. This becomes all the more relevant in the light of the fact that no contemporary explanation of the signs exists; their meaning was in all probability transmitted from person to person. This argument would appear to favour the viewpoint that the signs stand for relatively few ornaments which represented a usage

both easy to understand and to apply in practice. Only if the Virginalists' strokes are considered to be arbitrary indications that some kind of ornament is to be played, without coupling the ornament to any specific context, can the view that they involve many different ornaments be substantiated. This still leaves the question unanswered as to why two signs are employed instead of one, if the latter were able to stand for any ornament. In view of the lack of any contemporary explanation of the signs, this appears to be a less probable solution.

The positioning of the single stroke on the stem of the note presents a particular problem in the FVB.<sup>43</sup> The majority of single-stroke signs in the FVB are drawn through the top of the stem (  ), although, occasionally, through the stem (  ).<sup>44</sup> In two pieces, the strokes are placed above the note head: FVB I p.196, FVB II p.117. Conclusive evidence as to a specific context of use for the single stroke when used other than through the top of the stem of the note, has been impossible to assemble. An explanation for this might be carelessness on the part of Tregian, the scribe. The prevalence of  in such a large body of music as the FVB, clearly shows his preference for indicating it in a specific manner, just as the single stroke occurs consistently at the top of the stem in Parthenia. Harley's comment on Cosyn's haphazard use of these placements on the stem may very well apply here:<sup>45</sup>

The impression I receive is that this depends on what he felt like when he was writing any given section of the manuscript; even so it is not easy to see what he was up to.

It is impossible to prove what such a differentiation might have meant, although possibly it could signify a difference between

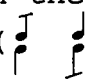


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43 See 2.2, where the positioning of signs in other sources is discussed.

44 A list of these is in Table 3.1.

45 Harley, Ornaments, p.179.

an ornament before or on the beat, between slower as opposed to faster, long as opposed to short, or the differentiation between two different ornaments.

In the FVB most of the placements through the stem of the note occur on crotchets and minims, and are often used in a chord or on two notes together, when the single stroke is drawn through the top or lower note.<sup>46</sup> Though this may be significant, it does not explain why other single strokes in the same context are placed at the top or bottom of the stem (  ).<sup>47</sup> Moreover, in the sources collated with Tr, the placement of the single stroke often disagrees; a single stroke drawn through the stem of the note in the FVB may be drawn through the top of a note in another source.<sup>48</sup> The impression gained is that each copy source has a preferred manner of writing a sign; in the works collated between Tr, Co, Bu, Wr and Fo, it is evident that Bu and Wr prefer , while Fo and Co mostly write . This complicates even further the issue of assigning a specific meaning to a specific placement of a sign on the stem of a note.

An interpretation of the 'normal' sign  as indicating a slide on the beat, and  as indicating one before the beat, is certainly appropriate in Ex.5.58 :






Ex.5.58 Byrd, O Mistris Myne (FVB I 258:2:2; 262:5:1)

(a)



<sup>46</sup> E.g., FVB I 75:1:3; 218:4:1; 231:5:3; 233:4:1; 262:3:1; II 51:1:1; 203:1:1; 208:5:2; 386:3:3.

<sup>47</sup> E.g., FVB I 72:6:3, 5:3; 249:2:5; II 386:1:2, 1:3.

<sup>48</sup> For instance: FVB I 54:1:1 ( in Co); 56:4:1 ( in Co); 233:4:1 ( in Fo,  in Wr,  in Ne).





(b) 262:3:1



(c) 262:3:3



A less dissonant harmony results from playing the slide before the beat in Ex.5.58(b); this is, however, not an issue in (c). Nevertheless, it is significant that in (a) both single strokes are drawn through the top of the stem. They are several pages apart, and point to consistency on the part of the scribe.

The placing of the single stroke at the top of the stem bears a closer resemblance to later seventeenth-century practice, where it is placed above the stem, thus: . Here, it signifies a forefall, so that it is possible to entertain the idea that the placement  might well indicate a forefall, in contrast to  as a slide. This is, once again, impossible to prove; indeed, the evidence from the FVB points to the contrary, as the majority of signs  occur in contexts in which a slide would be appropriate.

The positioning of signs should not be discarded altogether, though, as Hunter shows in an article on the positioning of ornament signs in sources of English virginal music. He finds that there are several instances in the literature where the placement of the double stroke above or below the note, especially in blackened notation, may be an indication of a specific

ornament.<sup>49</sup> The placement of signs in the whole of the Virginalist literature is an area warranting further research.

The fingering of the single-stroke ornament in sources of Virginal music suggests an ornament different from that intended by the double stroke : Le Huray found that the fingered examples of the single stroke invariably occur at the top of a phrase, and are mostly fingered 4 or 5, in the right hand, none bearing the fingering 1 or 2. In the left hand, 1, 2 and 3 are used, with none fingered 4 or 5.<sup>50</sup> In all cases, a slide would be appropriate. The overwhelming use of the single stroke in the FVB in the right hand alone, makes the slide even a more attractive proposition, as it leaves the right hand free to execute the ornament with three fingers.

There are some contexts in which the interpretation of the single stroke as a slide seems less desirable, such as where harmonic clashes and parallel octaves ensue, or where the practical implications of fingering make an onbeat interpretation impossible. In the example below, an onbeat slide in the right hand will result in parallel octaves with the bass:

Ex.5.59 W.B., Sr. Jhon Grayes Galiard (FVB II 259:2:2)



49 D. Hunter, 'The Position of Grace Signs in MS Sources of English Virginal Music', The English Harpsichord Magazine, vol.3, no.51 (1983), pp.82-91.

50 Le Huray, English Keyboard Fingering, p.254.

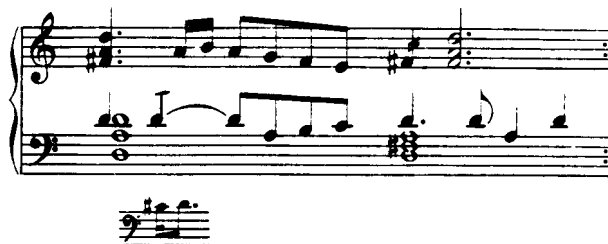
A slide before the beat provides a solution, although if the slide is played rapidly and on the beat, the parallel octaves will hardly be noticeable.<sup>51</sup> The slide is also impossible, or at least difficult to play, when a single stroke is part of a chord and where the single stroke occurs on the lowest note. One such example occurs in the FVB:<sup>52</sup>

Ex.5.60 Morley, Nancie (FVB I 60:2:1)



Harley correctly suggests that here a slide is an impossible interpretation, recommending instead a short forefall or arpeggio.<sup>53</sup> As has been observed earlier, the sign in question appears as a cancellation sign in Tr, and is wrongly reproduced in the FVB as a single-stroke ornament, which eliminates the problem.<sup>54</sup> In Ex.5.61, the single stroke interpreted as a slide presents a truly thorny problem, due to fingering : a slide would require the fourth finger on a, a feat possible only for an extremely large hand. A forefall provides a solution here:

Ex.5.61 Bull, Pavana (FVB I 63:2:2)



- 
- 51 Similar examples in Pa are given by A. Brown in 'Parthenia: some aspects of notation and performance', Consort, vol.32 (1976), p.181.
- 52 For two examples used in a left hand chord, see FVB I 63:2:2, II 146:4:2.
- 53 Harley, Ornaments, p.182.
- 54 See Chapter 3, p.117.





In other places, disagreeable harmonic clashes result in instances where the slide starts upon a non-harmonic note. On the other hand, the celerity with which the slide can be played, may make the clash less obvious; perhaps it is not even undesirable - the false relation was much in fashion in England at the time, according to Morley. Given below are two such instances, taken from the FVB:<sup>55</sup>

Ex.5.62 Anon., Barafostus' Dreame (FVB I 73:5:3)



Byrd, Tregian's Ground (FVB I 228:2:2)



The occasional interpretation of the single stroke as a double backfall, that is, a downward slide from above, is an idea that may also be entertained. It would certainly not be inappropriate here:<sup>56</sup>

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55 See also FVB I pp.248,218,229; FVB II p.68.

56 Also in J. Wright, ed., British Library Additional Manuscript 36661 (Leicester: The Longslade Singers, 1983), p.17.

Ex.5.63                    Gibbons, The Woods so wilde (Tu, fol.42<sup>V</sup>,b.78)



This interpretation would be a contentious one, however, for the only source which mentions such an ornament is Simpson.

There are two other occasions in the FVB where the slide would be problematic as a realization of the single stroke:

Ex.5.64                    Byrd, The Maydens Song (FVB II 68:2:1)


(a)



Bull, The King's Hunt (FVB II 117:1:1)

(b)



In both instances, the execution of a slide is impossible. In Ex.5.64(a), no fingers are available to play the slide from a third below, although it would be possible, and musically satisfying, to play a slide from d' to f#. In all probability the scribe was unable to indicate that the single stroke belonged to the f#, and therefore it was drawn through the stem below. In Ex.5.64(b), a slide will cancel out the tied g' over the barline. The single stroke is nevertheless clearly indicated in Tr through the top of a' : . A forefall has the same effect; might a backfall from above have been intended here? It is interesting to note that the single strokes in

question are absent in Ne in the first, and in Bu, in the second case.

The simultaneous occurrence of the single and double stroke remains to be considered.<sup>57</sup> In these, the combination of a slide and tremolo with upper auxiliary provides a satisfactory solution:

Ex.5.65 Tomkins, Pavana (FVB II 54:5:3)





The resulting harmonic clashes here are tolerable, if not in keeping with the strange modulation to a d-minor chord which follows. In the next example, a slide and mordent would be appropriate:







Ex.5.66 Farnaby, Alman (FVB II 160:2:1)


One may summarize, then, the possible interpretations of the single and double stroke thus:

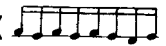
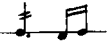
57

See FVB I 171:3:2; 132:5:4; 252:3:2; 56:1:1; 407:1:1; 335:3:4; 401:4:3; II 54:5:3; 75:3:1; 160:2:1; 200:1:2; 272:3:2. There is one instance of simultaneous single strokes: II 269:1:4.

(i) The single stroke (  or  ).

An ornament of the non-alternating type, usually a slide, played on the beat (  or  ); where harmonic considerations necessitate it, before the beat. Less often, a forefall, where fingering or harmonic considerations exclude a slide (  ). A backfall or double backfall (  or  ), and an accento ('springer') (  ) in a descending context are remote possibilities.

(ii) The double stroke (  ,  ).

An ornament of the alternating type, usually a tremolo with the upper auxiliary. On quavers a tremoletto with the upper auxiliary is especially suitable for stepwise and disjunct descending passages, and according to taste and fingering, also ascending. A tremoletto with the lower auxiliary (= a short mordent) is especially suitable for stepwise ascending passages, and mostly for disjunct ascending passages as well. The long mordent should be used less often, but is similarly suitable in ascending melodic contexts, or at the beginning of a phrase, or wherever fingering necessitates it. The tremolo and tremoletto may, however, also be used ascending, and the mordent descending. The double stroke may at times be interpreted as an alternation of upper-main note with a suffix (  ), but only in cadences, especially where the formula  is present.

In Ex.5.67 a possible realization of the two signs is given. The abbreviations are explained as follows:

T = tremolo starting on the main note and alternating with the upper auxiliary.

tr = tremoletto alternating with the upper auxiliary.

m = short mordent or tremoletto alternating with the lower auxiliary.

M = mordent (tremulus descendens) alternating with the lower auxiliary.

S = slide from a third below.



Ex.5.67

Philips, Fantasia (FVB I 335)

T T T S T M tr T

T T T T T tr tr tr tr tr T S

S S tr

tr T T S tr tr tr tr tr S tr tr tr

tr T M T T m m m m tr tr tr m

T S T T T T T S tr M M T S

T tr T tr T M S T

T T T T T M T T M

T T T T

T T S T M

tr T M S M tr T S tr T

TABLE 5.1 THE MELODIC CONTEXTS IN WHICH SINGLE-STROKE ORNAMENTS ARE USED

Lower-Lower	Lower-Higher	Higher-Lower	Higher-Higher	Other
<u>Byrd:</u>				
2 2 (35x)	2 3	2 2 (9x)	2 2 (2x)	same/same (2x)
2 3 (25x)	2 2 (5x)	2 4	5 3	" /3 higher
2 4	3 2	2 5	5 4	" /2 lower
2 8 (2x)		6 2		" /2 higher
3 2 (29x)		2 3		" /8 lower (2x)
5 4 (2x)		2 8		" /4 lower
4 2 (19x)				3 lower/tie + 2 lower
10 2				rest/tie + 2 lower
3 5				2 lower/rest
8 3 (2x)				rest/2 lower
2 5 (2x)				12 lower/tie + 2 lower
2 7				3 lower/tie + 2 lower
3 3 (2x)				5 lower/tie + 2 lower (2x)
11 2				rest/2 lower (5x)
2 8 (2x)				9 lower/tie + 2 lower
8 2 (2x)				4 lower/tie + 2 lower
5 2 (3x)				3 lower/tie + 2 lower (4x)
4 6				4 lower/rest
4 5				rest/tie + 2 lower
7 2				6 lower/tie + 2 lower
6 2				5 higher/same
4 8				4 lower/ "
7 3				2 lower/ "
4 3				4 higher/ "
3 4				2 higher/ " (2x)
				4 lower/rest
				2 lower/tie + same
				rest/3 lower



Lower-Lower		Lower-Higher		Higher-Lower		Higher-Higher		Other
<b>Farnaby:</b>								
2	2 (9x)	2	2 (4x)	2	2 (17x)	2	2	same/8 lower
10	2 (2x)	3	2	6	2			8 lower/same
2	5	2	4	2	3 (6x)			2 higher/same (2x)
7	6			3	2			2 lower/same (3x)
5	6			4	3			5 lower/same (2x)
3	2 (14x)							8 lower/rest
3	3 (3x)							3 lower/tie + same
7	3 (2x)							8 lower/rest
2	3 (2x)							2 lower/rest (2x)
4	4 (2x)							
2	4 (3x)							
2	6							
8	3							
4	2 (6x)							
<b>Bull:</b>								
6	4	2	6	2	2 (2x)	3	2	same/tie + 4 lower
2	4	2	2 (2x)	2	8	3	4	" /2 higher
2	2 (9x)	3	6 (2x)			4	4	" /8 lower (2x)
4	2							" /rest
3	2 (3x)							" /2 lower
2	3 (3x)							" /same (5x)
11	3							2 lower/same (5x)
4	2							2 higher/same (4x)
3	10 (2x)							2 higher/rest
3	5							
8	8 (16x)							
2	8 (2x)							
9	8 (3x)							
4	8							
7	4							
8	5							

Lower-Lower	Lower-Higher	Higher-Lower	Higher-Higher	Other
<u>Morley:</u> 2      2 (4x) 4      4 (2x) 10     2 5      3 4      2 (2x) 3      2 2      8 8      2	4      2 3      4	2      2 (2x)	4      4	6 lower/tie + 2 lower 3 lower/tie + 2 lower 2 higher/tie + 2 lower 4 lower/tie + 2 lower
<u>Tomkins:</u> 2      2 (4x) 2      3 (3x) 3      2 13     2		2      2 3      2		3 lower/tie + 2 lower
<u>Various composers:</u> 2      3 (9x) 3      2 (7x) 4      2 (10x) 3      3 (3x) 2      2 (19x) 4      3 3      4 5      2 8      2 (4x) 6      3 (2x) 6      4	8      2 (2x) 2      2 (5x) 2      4 4      2 (2x) 3      2	2      2 (12x) 2      3 (5x) 4      5	2      4 2      3 4      4	same/2 lower (3x) " /8 lower " /4 lower " /2 higher " /same 3 lower/same (2x) 8 lower/same (2x) 2 lower/ " (2x) 5 lower/ " (2x) 2 higher/" (3x) 3 lower/rest



Lower-Lower	Lower-Higher	Higher-Lower	Higher-Higher	Other
<u>Various</u> (cont)  2        4 (3x) 6        2 (2x) 2        8 2        5				rest/3 lower rest/tie + 2 lower 2 lower/tie + 4 lower 2 lower/tie + 3 lower 8 lower/tie + 2 lower 2 lower/tie + 2 lower (4x) 4 lower/tie + 2 lower (4x) 2 lower/rest 2 higher/rest

TABLE 5.2 THE MELODIC CONTEXTS IN WHICH DOUBLE-STROKE ORNAMENTS ARE USED

Lower-Lower	Higher-Lower	Lower-Higher	Higher-Higher	Other
<u>Byrd:</u>				
2      2 (5x)	2      2 (46x)	2      2 (13x)	2      2 (20x)	5 lower/same
2      3 (4x)	2      3 (6x)	5      2	3      4	2 lower/same (4x)
2      4	3      3 (5x)	2      6	2      3	4 lower/same
5      5	3      2	2      10	3      2 (2x)	same/2 lower (5x)
3      2		6      2	2      7	same/2 higher (5x)
4      4		3      2	4      4 (2x)	2 higher/same
		2      3		3 higher/same (2x)
				2 lower/tie + same
				2 higher/rest (5x)
				rest/2 higher
				3 higher/rest
				2 lower/rest (2x)
				rest/3 lower
				rest/2 lower (2x)
				rest/4 higher (3x)
				4 higher/same
				same/rest,
				same/3 higher
<u>Tomkins:</u>				
2      2	2      2 (9x)	2      2 (3x)	2      2	same/2 higher
2      3 (2x)	2      3 (2x)		3      3	same/2 lower
3      2	6      2 (2x)			2 higher/same
4      3	5      2			2 lower/tie + same
11     3	4      5			rest/2 lower
5      3				3 higher/rest

Lower-Lower	Higher-Lower	Lower-Higher	Higher-Higher	Other
<u>Bull:</u>				
2      2 (9x)	2      2 (46x)	2      2 (20x)	2      2 (26x)	same/rest
2      4	2      3	2      6	2      6 (3x)	same/2 higher (4x)
2      3 (4x)	4      5 (3x)	4      2 (2x)	5      2	same/same
7      3 (2x)	3      2 (2x)	2      4	2      3	same/2 lower (2x)
4      8 (2x)	3      3 (2x)		3      2 (3x)	2 lower/same (11x)
5      8	2      4 (6x)		2      4	2 higher/same
8      8 (4x)	2      8		4      4 (2x)	6 lower/same
11     8	6      3		4      2	3 higher/same (5x)
7      8	5      4		3      3	2 higher/rest (8x)
3      2				2 lower/rest
4      2				rest/rest (2x)
5      3				rest/tie + 2 lower
5      5				rest/4 higher
6      3				3 lower/tie + 2 lower
2      5				6 lower/tie + 4 lower
				2 higher/tie + 2 lower
				3 higher/tie + 4 lower
				4 higher/tie + 2 higher
				2 higher/tie + same (2x)
				same/tie + 2 higher
<u>Farnaby:</u>				
2      2	2      2 (38x)	2      2	2      2 (6x)	2 lower/same (3x)
2      3	3      3 (3x)		3      2 (3x)	4 lower/same
5      2	2      3 (4x)		2      3	2 higher/same (5x)
4      4	3      2		2      4 (2x)	same/rest
2      8			2      5	same/3 lower
8      5				same/8 lower
				same/3 higher
				2 lower/rest
				2 higher/rest

Lower-Lower	Higher-Lower	Lower-Higher	Higher-Higher	Other
<u>Morley:</u>				
2      2 (3x)	2      2 (8x)	3      4 (2x)	2      2 (8x)	same/same
2      4 (4x)	2      3 (8x)	2      3	4      4 (4x)	same/4 lower (3x)
2      3 (3x)	3      3 (3x)		2      3	same/3 lower (2x)
4      4	2      4		2      10	same/2 lower
6      2	4      2			same/rest
				2 lower/same
				2 higher/same (2x)
<u>Anon. &amp; Richardson:</u>				
2      2 (3x)	2      2 (11x)	2      2 (10x)	2      2 (8x)	same/2 lower
2      4 (4x)	2      3 (12x)	3      2 (3x)	3      2	same/2 higher
4      4 (3x)	3      3 (4x)	3      4	2      4 (2x)	same/4 higher
2      3 (3x)	2      4	4      2	4      3	2 lower/same (3x)
4      2	2      5	4      3	8      3	3 higher/rest
3      2	4      4			3 higher/tie + 3 higher
3      3	5      4			rest/3 higher (2x)
6      2				
4      8				
3      8				

TABLE 5.3 METRIC USE OF THE DOUBLE STROKE

6 4	Beat	<u>1</u>	↓	<u>2</u>	↓	<u>3</u>	↓	<u>4</u>	↓	<u>5</u>	↓	<u>6</u>	↓
Dance forms, variations		377	11	103	6	174	14	418	9	127	11	166	15

3 2	Beat	<u>1</u>	↓	<u>2</u>	↓	<u>3</u>	↓
Galliard		249	39	170	82	139	72
Variations		<u>270</u>	<u>38</u>	<u>173</u>	<u>71</u>	<u>277</u>	<u>102</u>
Total		<u>519</u>	<u>77</u>	<u>343</u>	<u>153</u>	<u>416</u>	<u>174</u>

¢	Beat	<u>1</u>	↓	<u>2</u>	↓	<u>3</u>	↓	<u>4</u>	↓
Pavane		270	129	162	174	260	140	211	217
Fantasia		136	65	98	100	123	66	119	99
Alman		106	42	76	81	114	55	93	52
Variations (in- cluding Grounds, Masks)		216	112	157	182	213	117	191	138
Total		<u>728</u>	<u>348</u>	<u>493</u>	<u>537</u>	<u>710</u>	<u>378</u>	<u>614</u>	<u>506</u>

METRIC USE OF THE SINGLE STROKE

¢	Beat	<u>1</u>	↓	<u>2</u>	↓	<u>3</u>	↓	<u>4</u>	↓
Pavane		10	9	8	4	10	5	11	6
Fantasia		5	1	16	6	14	7	7	2
Alman		9	10	5	4	5		4	4
Variations		25	14	31	11	26	8	18	9
		<u>49</u>	<u>34</u>	<u>60</u>	<u>25</u>	<u>55</u>	<u>20</u>	<u>40</u>	<u>21</u>

3 2	Beat	<u>1</u>	↓	<u>2</u>	↓	<u>3</u>	↓
Galliard		16	6	3	3	11	2
Variations		<u>22</u>	<u>7</u>	<u>24</u>	<u>3</u>	<u>21</u>	<u>5</u>
		<u>38</u>	<u>13</u>	<u>27</u>	<u>6</u>	<u>32</u>	<u>7</u>



6  
4

Beat    1   ↓   2   ↓   3   ↓   4   ↓   5   ↓   6

Dance forms,  
variations

12	6	1	21	5	1	6
12	6	1	21	5	1	6

## CONCLUSION

In conclusion, this study has revealed musical ornamentation to be exactly that which the name implies: it ornaments and beautifies. The decoration of music may manifest itself as an improvisatory art, where ornaments are added spontaneously by the performer at his own discretion. The ornamentation can also be written out in note values in the music as part of the compositional structure, or be indicated by sign, demanding interpretation by the performer.

In essence, the sixteenth- and early seventeenth-century concept of ornamentation can be viewed as an ars diminutionis. This constitutes the breaking up of a note value into many smaller values, the result of which is a more elegant expression of the plain notes of a composition. This art of diminution manifests itself in the period under discussion in three ways: (1) as passaggi, (2) as ornaments which are written out in the music, and (3) as ornaments indicated by sign. All of these are expressions of the same technique, the diminution of note values, and have in common the changing of a pre-existing musical event. They cannot readily be classified into separate categories, although such a distinction already existed in the sixteenth century, albeit not a very marked one.

In principle, the passaggi and specific ornaments may be equated with what Quantz called the wesentlichen and willkürlichen Manieren in the eighteenth century - the short ornaments indicated by sign and the written-out florid embellishments. Clearly, seventeenth- and eighteenth-century ornamentation developed from the sixteenth-century practice: ornaments in use in the sixteenth century, such as the written-out grosso and slide, were still in use in the eighteenth century where they are found indicated by means of ornament signs in the sources.

The sixteenth- and early seventeenth-century Continental treatises and music present the standardized ornaments in use during this time, and provide a terminology with which they can be described in terms of their functions and applications. It is clear that these writers concern themselves mostly with a description of ornamentation in terms of what notes are involved, where the ornament should be played, on which note values it should occur, the length of its duration, and, also, how it should be realized, indicating, for example, the speed of execution, or whether the ornament is to be played crisply or with expression.

The ornaments are also shown to have a functional use, besides that of pure decoration, as manifested in cadences or to compensate for the decaying sound of keyboard and other stringed instruments. Two main groups of ornaments emerge: the alternating and the non-alternating type (according to the accenti e trilli principle), which may provide an important clue to a possible realization of the ornament signs of the Virginalists. The Continental ornamentation is predominantly written out in note values, with few ornament signs used; also, the Spanish, Italian and German practices agree in broad terms, which is indicative of a general ornamentation practice. For the most part, a performer was expected to introduce his own ornaments in the course of a performance, hence the occurrence of Continental treatises with instructions to this effect.

English ornamentation of the sixteenth and early seventeenth century is similarly an expression of the ars diminutionis. Both written-out ornaments and ornament signs occur in the music of this period, and equivalents of the passaggi are found in the intabulations of Italian songs, especially those set by Philips and Farnaby. English usage of ornament signs - both in virginal and lute music - is also highly individualistic, due to the profusion of their occurrence.

No English treatise discussing any facet of virginal ornamentation (including an explanation for the meaning of the single and double stroke) has survived: either such treatises were never written, or have disappeared. Those treatises written



for lute and viol give little attention to the subject, which leads one to believe that the general attitude in England was that ornamentation had to be learned by imitating a knowledgeable musician, as, indeed, Dowland recommended in his Varietie of Lute Lessons in 1610. The absence of English treatises may also be linked to the fact that ornament signs were indicated in the music by English composers, thus leaving little scope for the interpreter to add his own ornaments, in contrast to Continental practice.

A degree of independence existed in virginal and lute ornamentation in England - the English lute treatises never mention the keyboard, in contrast with the Continental treatises which often direct their information at both keyboard and stringed instruments. It is thus not surprising that ornament signs used in English virginal and lute music differ, and appear to be idiomatically conceived, a fact influenced by playing technique. The variety of signs used in English lute and virginal music, together with their often haphazard placings in manuscripts, compound the already difficult issues of clarifying their use and continuing the search for a meaning for them. The fact that English lute and virginal ornamentation shows great individualism in comparison to the Continental practice, complicates the issue.

In addition, the period 1625-1660 in English music does not contribute greatly to an understanding of the earlier ornamentation, as it was a time marked by stylistic conflict. The placement of the single and double signs underwent a change in this period, and at the same time the emergence of a new ornamentation system - French influenced - took place. Yet here again, English individualism manifests itself once more, for the signs used were adopted from earlier English practice, as Purcell's ornament table proves.

Despite the many differences which have been documented in Continental sources themselves, and also in the English sources, there are general tendencies in the ornamentation

practice which cannot be ignored. All sixteenth- and early seventeenth-century ornamentation belongs to the art of diminution, and uses the same basic techniques and ornaments. The tremolo used in Italy is the same as the quiebro reyterado of the Spaniards, the passaggi are in essence the same as the glosas; nonetheless it is a fact that individuals and music traditions will always cause differences to exist. The documentation of these in Chapters 1 and 2 has been found to provide an indispensable background against which the ornamentation in the FVB can be understood, compared and judged.

Before the ornamentation in the FVB was studied, the printed edition was compared with a microfilm of the manuscript, as editions do not always reflect the original state of the manuscript. The comparison has revealed the only printed edition at present available - that of 1979-80 by Dover - to have numerous ornamentation errors, despite claims of the revised edition to the opposite. These are corrected in the Musica Britannica editions where Tr is the only source of a piece, yet the latter forms but a small part of the total output of the FVB. A detailed list has therefore been supplied, correcting the misprints. Editorial misjudgements which incorrectly interpret certain signs as ornaments have also been corrected. Various peculiarities in the FVB are also pointed out and explained: the alignment of the single stroke which is inconsistent, the ornamentation of coloured notes, the careful notation of certain note values upon which ornaments occur, and the note value ambiguities concerning the written-out groppi and groppetti.

The textual variants between various sources of the same piece demonstrate the near impossibility of establishing a definitive text of virginal music and its ornamentation. A collation of sources reveals, for instance, differences in matters such as note values, constituent notes of passages and chords, accidentals and distribution of voice parts. In these sources ornament signs often disagree completely as to placement, the type of sign used and its alignment on the note stem, either above or below the note head. To add to the confusion, a sign in one

piece may be replaced by a written-out ornament in another.

Tregian appears to have been a careful copyist, yet it is not always easy to explain the differences between Tr and the other sources : on the whole, the most logical explanation would appear to be that various copyists had access to different copies, which had either been reworked, or were textual variants of the original. The latter could have been made by either the composer himself, or by another scribe, such as Cosyn, who frequently rewrote the music he copied. It is, therefore, extremely difficult to evaluate the ornamentation in Tr from a point of view of how closely it approximates the original intentions of the composer. In the case of works for which Tr is the only source, it is an impossible task, as there are no other sources with which they can be compared. In pieces that can be collated - which is the case for most of the pieces by Bull and Byrd in the FVB - it is safe to follow those that are in general agreement. This study has shown that he who wishes to study or play the music under consideration should make a comparison of the various sources and then decide upon a preference for any one over the others, or whether to combine various elements from them. The fact that little virginal music is holograph, does not facilitate this task or bring it closer to the composer's original intentions.

The written-out ornamentation in the FVB has been identified as consisting of ornamental melodic figures which form part of the passaggi and which stem from the diminution of note values. As virtuoso decoration, the written-out ornaments can be classified as ornaments only because of their repeated use and the stable melodic design; in all other respects they are inseparably part of the ongoing passagework, whether this be an intabulation of a song or variations on a folk tune. There are pieces in the FVB almost exclusively made up of such written-out ornaments, especially groppi, gropetti and tirate. Only when those pieces are reduced to their essential notes does the simple structure which accommodates this elabo-

rate ornamentation become apparent.

The written-out ornamentation also fulfills another important function in its decoration of cadences where, besides being part of the passaggi, it is used systematically to draw attention to the cadence event. The closes of these cadences are popular vehicles for ornamentation, and have been shown to be treated as entities in themselves; each employs written-out ornaments and related ornamental figures peculiar to it as diminutions of the notes of the individual closes. For instance, as decoration of the discant close - the most ornamented of all the closes - the gropo ornamentally resolves the suspended dissonance and actually creates harmonic tension by repeating the dissonance, thus postponing the feeling of repose. This in turn draws attention to the cadence event. Similarly, the presence of written-out ornaments associated with the various closes furnishes hallmarks by which the cadence event can be identified; this serves as fascinating study material in the application of diminution to the structure of Renaissance cadences. The systematic use which characterizes written-out ornaments is further elucidated by the different functions they fulfill in various closes, a fact especially applicable to the gropetto.

The written-out ornaments used in the FVB are all present in Continental sources, whether in the music or in treatises - in fact, the Continental ornaments supply the terminology without which these ornaments cannot be named and identified. Although the English usage differs in detail from that of the Spanish, Italian or German (just as the Virginalistic figuration is individualistic in comparison with the Continental passaggi, coloratura or glosas), the fact that the same ornaments are found in both English and Continental sources suggests that a uniform stock of ornaments was in use.

The ornaments indicated by sign in the FVB - and for that matter in all virginal music of the Elizabethan period - have been proven unique phenomena in the history of sixteenth- and early

seventeenth-century music, due to the profusion with which they occur. The extent of their indication by sign is a progressive tendency, followed by composers from other countries only later in the seventeenth century. The evidence presented by the music itself proves these ornaments to be inseparably part of the Virginalists' musical modus operandi. The single and double strokes may be seen as mere optional embellishment added to the music - indeed, the fact that they are scattered across the pages may well create such an impression. However, the overwhelming impression gained from this study is that these ornaments are also used systematically and with a definite purpose in mind. It is otherwise difficult to explain why the composers should have gone to the trouble of indicating the ornaments at all in the music. Consequently, the theories and misconceptions of many writers who regard these ornaments as inessential to the performance of this music have been disproved, despite the fact that the differences in placement and frequency of appearance of these signs - revealed by a collation of sources - may lend credibility to their arguments.

The metric application of the single and double signs is the most important characteristic to emerge from their use. Coincidence plays no role here, as the use of ornaments with metric and rhythmic shifts has shown. The rhythmic drive created by the coincidence of the ornaments with the pulse unit, is certainly one of the important functions of the single and double stroke. Evidence of their functional use is also provided by their consistent employment in imitative passages on characteristic melodic figures. The single and double strokes are also employed in different ways, which are similarly intentional: the single stroke appears much less frequently than the double stroke; the melodic contexts in which they appear show characteristic preferences; the single stroke does not occur in cadences, whereas the double stroke is used there; and both show preferences for certain textures - for example, the single stroke occurs mostly on a single note which is the highest note in a phrase, an application not peculiar to the

double stroke.

Seen against the background of their rhythmic and melodic use, the single and double strokes emerge as ornaments with differing functions at different times, each assuming individual characteristics. This may, in turn, present clues which aid the performer in arriving at a historically authentic performance. It is also clear that the ornaments cannot be compartmentalized with any ease, for the same ornament that coincides with the metric structure may also draw attention to a particular note or rhythm, or be used simultaneously to articulate a cadence progression. In other words, the ornaments may serve more than one purpose at any given time.

The differences between the written-out ornaments and those indicated by sign have also been demonstrated. Although their functions overlap at times - for example, a sign may replace a groppo on the penultimate note of a cadence - the main difference between them stems from the fact that the written-out ornaments in the FVB were regarded by the Virginalists as part of the passaggi. Being part of the musical fabric, they are not optional decoration. As a result, ornament signs frequently decorate written-out ornaments - being therefore diminutions of a diminution - where they appear on tirate and tremoletti. Just as the ornament signs are employed both for simple decoration and systematically with other purposes in mind, the written-out ornaments are used both as virtuoso decoration and functionally, as in cadences or to connect phrases. This explains why some ornaments were written out by the Virginalists and others indicated by sign : although their purposes may overlap, each tends to be associated with a particular mode of use. It is interesting to note in this regard that a written-out ornament such as the groppo came to be indicated by sign alone in cadences only towards the end of the seventeenth century in England (as Purcell's 'shake turn'd'); in the second half of the seventeenth century it was indicated by a double stroke, but always with the two-note suffix added in written notes. Other written-out ornaments again, such as the tirata and groppetto,

ceased to be classified as ornaments in the later seventeenth century.

The single and double signs in the FVB also display many facets which accord with the instructions given by Continental treatises, such as where they occur, the note values upon which they are made and the melodic contexts in which they are used. However, their indication by symbol (to the extent to which the latter occurs), together with the fact that certain ornaments are written-out instead of being indicated by sign, makes for a thoroughly individual approach on the part of the Virginalists. One recalls that only the tremolo (sometimes termed trillo, e.g., by Valente) was indicated with any degree of consistency by Continental musicians during the period under consideration. Other ornaments were employed only by individuals (e.g., Diruta: c for clamatione, Cavalieri: g for groppolo) and the Neapolitan school in Italy. Since the English written-out ornaments are similar to those encountered on the Continent, one may logically conclude that the single- and double-stroke signs are also related to the ornaments commonly in use at that time on the Continent.

This study endeavours to contribute to greater clarity concerning the interpretation of the Virginalists' ornament signs. Although one has been unable to furnish a foolproof solution to the problem, it is possible to formulate hypotheses. The research to date is evaluated and placed in perspective, and as a result, some theories previously advanced are now disproved. The problems surrounding the search for a meaning do not facilitate the task in any way: some of these problems include the fact that no contemporary explanation of the signs exists, the differences in placement and the frequency of occurrence of the signs in various sources of the same piece, and not least, the validity of applying the ornamentation of one composer, or country, or instrument to that of another's.

The problem of interpreting the single and double stroke can be tackled by comparing the use of the single- and double-stroke signs - as presented in this study by the music itself - with the information available from contemporary English lute and viol practice, the contemporary keyboard practice on the Continent, and the later keyboard practice in England which employed both signs. The evidence produced by the original musical text, the written-out ornamentation, the ornament signs themselves and original fingerings in the sources, reveals particular behavioural characteristics which shed light on the interpretation of the relevant signs. The latter approach as used in this study - one which to date has been much neglected - has contributed to a greater understanding of both the use and interpretation of the Virginalists' signs.

The following conclusions were reached concerning the interpretation of the single and double stroke. The evidence assembled in this study points to a classification of the single and double stroke according to the accenti e trilli principle. The single stroke can then be interpreted as a slide, played mostly on the beat. A forefall is a less likely possibility, to be used only in problematic cases where a slide is impossible to play. It is unlikely to signify a mordent. The double stroke can be interpreted as a tremolo or tremoletto, depending on the note value upon which it appears, especially in descending passages. In all likelihood the double-stroke sign has a dual meaning, so that it can also represent the mirror image of the tremolo/ tremoletto, the long or short mordent. The latter is especially appropriate in ascending passages. Where the double stroke occurs in cadences together with a two-note suffix, a gropo seems desirable. Its specific use in cadences in this manner authorizes such an interpretation. Consequently, the reasoning behind the interpretation of all double strokes as beginning with the upper auxiliary, has been thoroughly discussed and criticized. A fast and crisp performance of these ornaments provides the most satisfactory musical realization of the signs, and it is borne out by the recommendations of Continental treatises.



As the spirit of ornamentation is by its very nature free, a specific manner or context in which an ornament sign is used should by no means be seen as the only possibility. As the research of the present study into the characteristic melodic contexts of the single and double strokes has shown, these ornaments occur in every conceivable melodic pattern; what is clear, however, is that ornaments attach themselves to general behaviour patterns.

Finally, the conclusions drawn from this study can be seen as representative of the Virginalist repertoire, due to the large scope of the FVB. There is, nevertheless, a large body of virginal music outside the FVB preserved in different source copies - some of which occur in texts more reliable than the FVB - awaiting research. Their textual differences and ornament-behaviour characteristics, as outlined in this study, need to be studied so that the evidence presented by the music can speak for itself. The subject of original fingering indications in the sources and the light these may shed on the interpretation of ornament signs, as well as the alignment of the ornaments on the note stems, also merits further investigation. Similarly, no major study concerned with English lute ornamentation has as yet been undertaken. What is needed, then, is a representative study dealing with the ornamentation of the total output of the Virginalist repertoire; this will of necessity involve all the known sources. The present study may contribute in some way towards forming the foundations for such factually grounded analyses - a formidable task indeed.

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