



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, gropetto, tremoletto, slide and tirata. The largest body of these - the groppo and gropetto - 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:¹

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.

¹ Tinctoris, Terminorum, p. 5.



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

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:³

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.⁴ 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'.⁵ The first is termed a perfect cadence and the latter an imperfect cadence.⁶ The individual melodic movements of the voices may

² Dowland, Ornithoparcus, p.84.

³ 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.

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

⁵ Ibid.

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

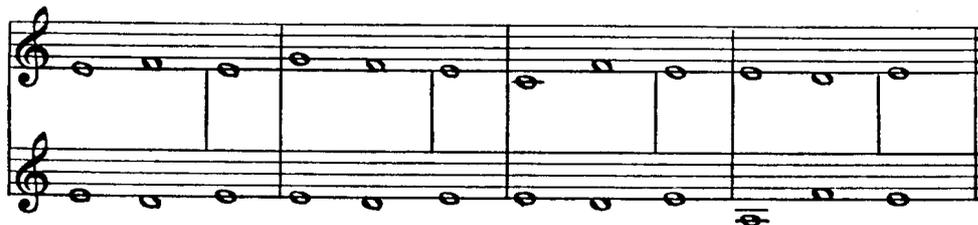
be either simple (simplex), when the movement of the voices consists of equal note values and is consonant; or diminished (diminuta), when a variety of note values is used and dissonance is introduced. Dowland employs the terms 'simple' and 'coloured'.⁷

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:⁸

... 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:⁹

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

⁷ Dowland, Ornithoparcus, p.78.

⁸ Zarlino, Counterpoint, p.144.

⁹ 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:¹⁰

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:¹¹

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:¹²

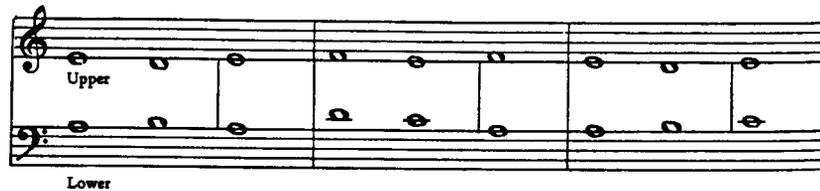
¹¹ Zarlino, Counterpoint, p. 43.

¹² Ibid., pp.145-146.

¹³ 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.'¹³

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

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.¹⁵ The interval of the penultimate chord varies. These imperfect or improper cadences are used for 'intermediate divisions in the harmony'. Zarlino continues:¹⁶

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

¹³ Zarlino, Counterpoint, p.150.

¹⁴ Ibid.

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

¹⁶ Zarlino, Counterpoint, p.151.



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

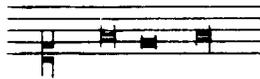
Zarlino finally illustrates ways of evading a cadence, 'when the voices give the impression of leading to a perfect cadence, and turn instead in a different direction'.¹⁷

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'.¹⁸ He goes on to explain the four 'closes':¹⁹

Ex.4.5

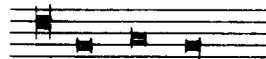
2. The Close of the Discantus made with three Notes, shall always have the last upward.

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 fift above.

Bassus



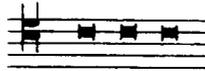
17 Zarlino, Counterpoint, p.151.

18 Dowland, Ornithoparcus, p.84.

19 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:²⁰

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.

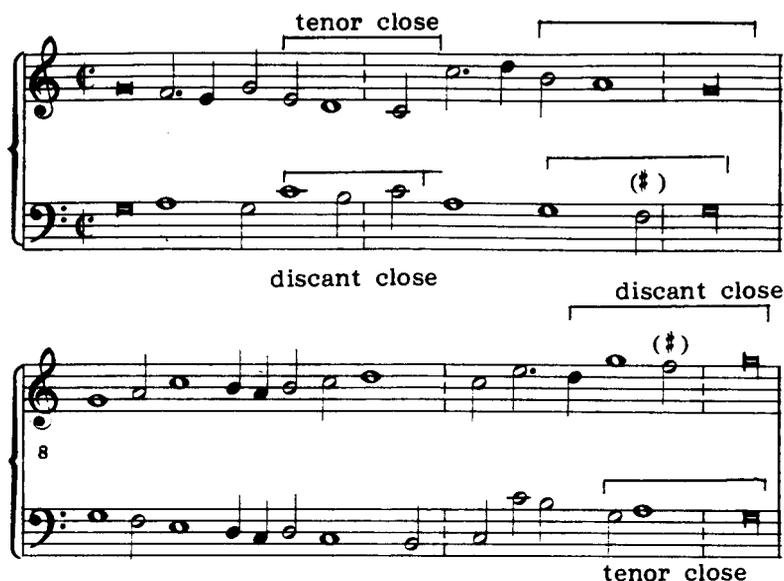
Ornithoparcus' sixth and seventh rules²¹ reveal that when these individual melodic cadences occur in parts of the harmony other than those in which they are normally found, they retain their individual names. Clearly, then, they are not named according to the part of the harmony in which they appear, but according to the specific progression peculiar to them. This is further

²⁰ Dowland, Ornithoparcus, p.78.

²¹ 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:²²

Ex.4.7



The image shows two systems of musical notation. Each system consists of two staves (soprano and bass). In the first system, the soprano staff has a bracket labeled 'tenor close' over the final two notes, and the bass staff has a bracket labeled 'discant close' under the final two notes. In the second system, the soprano staff has a bracket labeled 'discant close' under the final two notes, and the bass staff has a bracket labeled 'tenor close' under 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:²³

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 G major. The notes are G4, A4, B4, G4, F#4, E4, D4, C4, forming a cadence where the final two notes (G and F#) are bound together and the following note (E) descends.

or in any other key after the same manner.

²² Dowland, Ornithoparcus, p.81.

²³ 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.²⁴ The discant close is regarded by Morley as the most important hall-mark of cadence:²⁵

... 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.²⁶ 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'.²⁷ 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.²⁸ 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

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:²⁹

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:³⁰

- (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.³¹

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

³⁰ Morley, Introduction, pp.223-225, 228-240.

³¹ 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'.³² 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:³³

Ex.4.10

Passing close

The image displays three systems of musical notation, each consisting of three staves (treble, alto, and bass clefs). The first system shows two measures of music with annotations 'discant close' and 'discant close' pointing to specific intervals. The second system shows a similar structure with 'discant close' annotations. The third system shows a more complex arrangement with multiple staves and annotations, illustrating various forms of passing closes.

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

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.³⁴

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'.³⁵ 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:³⁶

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

34 Nutting, Cadence, p.48.

35 Morley, Introduction, pp.228-229.

36 Ibid., p.229.



shared repose'.³⁷ 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:³⁸

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

³⁸ 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.

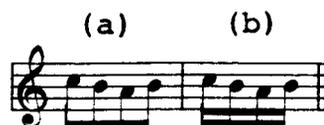
4.2 The Groppo

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:

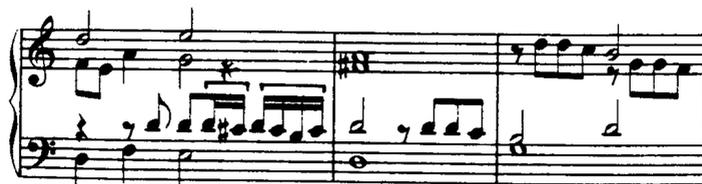
Ex.4.14 Byrd, Tregian's Ground (FVB I 231:3:1)

(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:

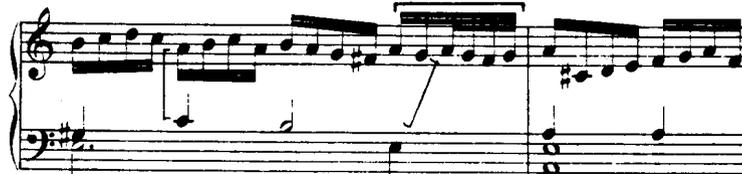
Ex.4.16 Philips, Pavana Doloroso (FVB I 322:4:1)

(a)



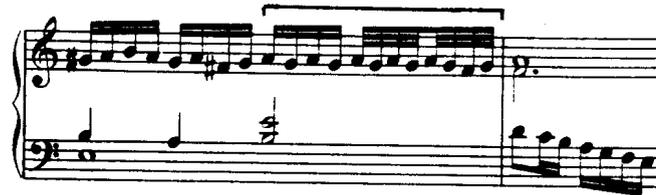
Richardson, Variatio (FVB I 30:3:1)

(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.³⁹ 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)

Byrd, The Bells (FVB I 278:5:1)

(b)

Byrd, Pavana Bray (FVB I 363:6:1)

(c)

Byrd: All in a Garden Green (FVB I 414:1:1)

(d)

³⁹ 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.⁴⁰ 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

⁴⁰ 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:

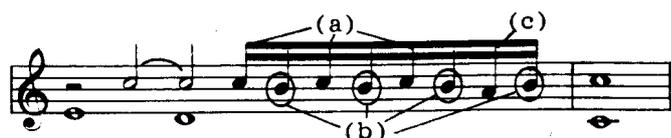
Ex.4.22

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 groppo 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 Groppo as Partial Decoration of the Note of Resolution

There are many instances in the FVB where the groppo 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 groppo.

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 groppo 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, arranged across three staves of musical notation on a treble clef. Each figure is a short melodic phrase that begins with a note followed by a series of eighth notes, ending with a final note. Figure i is a simple quarter note. Figure ii is a quarter note followed by two eighth notes. Figure iii is a quarter note followed by four eighth notes. Figure iv is a quarter note followed by six eighth notes. Figure v is a quarter note followed by eight eighth notes. Figure vi is a quarter note followed by ten eighth notes. Figure vii is a quarter note followed by twelve eighth notes. Figure viii is a quarter note followed by fourteen eighth notes. The figures are arranged in three rows: the first row contains figures i, ii, and iii; the second row contains figures iv, v, and vi; and the third row 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 in a single horizontal line on a musical staff. Each figure is a short melodic phrase, typically consisting of 8 to 12 notes, often ending with a resolution. The figures are numbered as follows: i, ii, iii, iv, v, vi, vii, viii, ix, x, xi, xii, xiii, xiv, xv, xvi, xvii, xviii, xix, xx, and xxi. The notation includes a treble clef, a key signature of one flat (B-flat), and a common time signature (C). The notes are mostly eighth and sixteenth notes, with some quarter notes. The figures are presented in a sequence that shows various rhythmic and melodic patterns used as ornaments.

include the grosso, mostly employ the note of resolution as its first and last note, as Tables 4.1 and 4.2 show.⁴¹ (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 4.2.⁴² 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 4.3.⁴³

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).

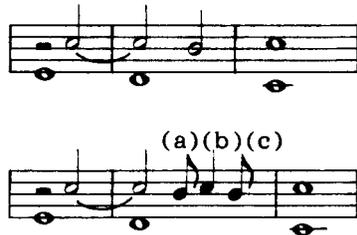
41 For examples from Table 4.1 in the FVB, see: (fig. i) I 42:1:1; 150:4:2; 360:1:1; 361:3:1; 362:4:3; 370:1:2; 420:2:1; II 25:1:3; 200:5:2; 201:4:2; 202:2:1; 205:6:2; 209:2:3; 277:1:2; (fig. ii) I 219:6:1; 345:5:2; II 42:3:3; 431:4:3; 298:2:2; (fig. iii) I 90:6:3; 95:3:3; 204:2:3; 288:1:3; 290:3:2; 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 piano in two staves. The right hand features a melodic line with eighth and sixteenth notes, while the left hand provides a rhythmic accompaniment with eighth notes and chords.

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 piano in two staves. The right hand has a melodic line with eighth notes and rests, while the left hand has a rhythmic accompaniment with eighth notes and chords.

Galeazzo, Praeludium (FVB I 393:1:2)

(e)

Musical score for Galeazzo, Praeludium (FVB I 393:1:2). The score is written for piano in two staves. The right hand has a melodic line with eighth notes and rests, while the left hand has a rhythmic accompaniment with eighth notes and chords.

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 piano in two staves. The right hand has a melodic line with eighth notes and rests, while the left hand has a rhythmic accompaniment with eighth notes and chords.

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 piano in two staves. The right hand has a melodic line with eighth notes and rests, while the left hand has a rhythmic accompaniment with eighth notes and chords.

Bull, Galliarda (FVB I 171:5:2)

(h)

Musical score for Bull, Galliarda (FVB I 171:5:2). The score is written for piano in two staves. The right hand has a melodic line with eighth notes and rests, while the left hand has a rhythmic accompaniment with eighth notes and chords.

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.⁴⁴ This is not surprising, as there is no suspended dissonance which requires resolution in a simple cadence.

⁴⁴ 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.⁴⁵ 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.⁴⁶ 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 gropo postponed until the last possible moment and the basic notes of the close clothed in elaborate diminution:

⁴⁵ See Schwandt, Clausula, p.43, for a list of ornamented anticipations.

⁴⁶ 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, arranged in five rows. Each example is written on a single staff in treble clef. The notes are primarily quarter and eighth notes, often beamed together. Examples i, ii, iii, iv, v, vi, vii, viii, ix, x, xi, and xiii show various rhythmic and melodic ornaments leading to a resolution note. Example xii features a more complex, multi-measure ornament. Example xiv shows a similar multi-measure ornament. The examples illustrate different ways in which a note can be ornamented before resolving to its final pitch.

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.⁴⁷ 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)



⁴⁷ 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).⁴⁸ Ex.4.32 shows examples of how the Virginalists anticipate the note of resolution ornamentally.⁴⁹

Ex.4.32 Morley, Galliarda (FVB II 215:5:3)



Byrd, Quadran Paven (FVB II 107:6:1)



⁴⁸ 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.

⁴⁹ 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)

Richardson, Variatio (FVB I 29:3:1)

(d)

Byrd, Galiardas Passamezzo (FVB I 212:4:1)

(e)

Picchi, Toccata (FVB I 376:6:2)

(f)

Bull, Ut, re, mi, fa, sol, la (FVB II 281:3:4)

(g)

Byrd, Tregian's Ground (FVB I 231:3:1)

(h)

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

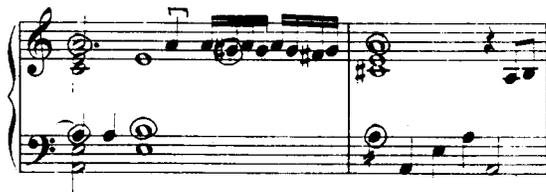
Farnaby, 23. (FVB II 324:4:2)

(a)



Byrd, Galliarda (FVB II 228)

(b) 2:1



(c) 4:1



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.⁵⁰ 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

⁵⁰ 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^b). The discant close here is incomplete, unless one regards the last note (b^b), 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 tenor close and a discant close. The notation is in two staves, with the upper staff in treble clef and the lower staff in bass clef. The upper staff contains a series of chords and notes, while the lower staff contains a more complex melodic line with many sixteenth notes.

Bull, Variatio Ejusdem (FVB II 244:4:2)

(b)

Musical notation for Ex. 4.41 (b) showing a tenor close and a discant close. The notation is in two staves, with the upper staff in treble clef and the lower staff in bass clef. The upper staff contains a series of chords and notes, while the lower staff contains a more complex melodic line with many sixteenth notes.

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)

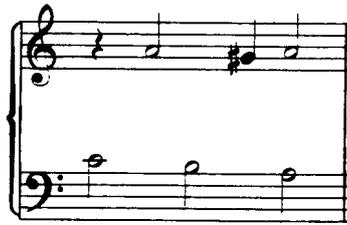


This combination of groppetto and gropo is identical to the ornament labelled 'double relish' by Mace and Simpson in the seventeenth century, who regarded it as an entity in itself.

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)



(c) 3:2



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:⁵¹

Ex.4.50 Fre., Heaven and Earth (FVB I 417:5:3)



⁵¹ 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.

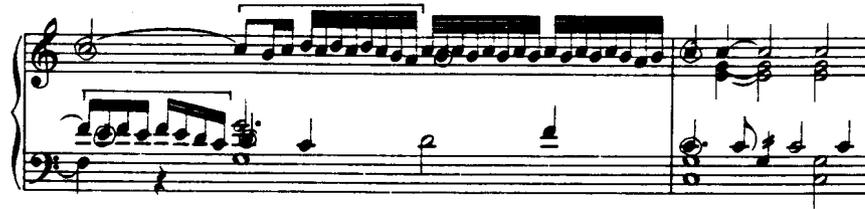
In the following example by Bull, the original and its variation in diminution are illustrated: the groppetto in the tenor close is a diminution of the four-note descending figure in the original, and the groppetto and ensuing groppo are based upon the figuration  of the discant close in FVB II 242:5:4:

Ex.4.57

Bull, Piper's Galliard (FVB II 242:5:4)



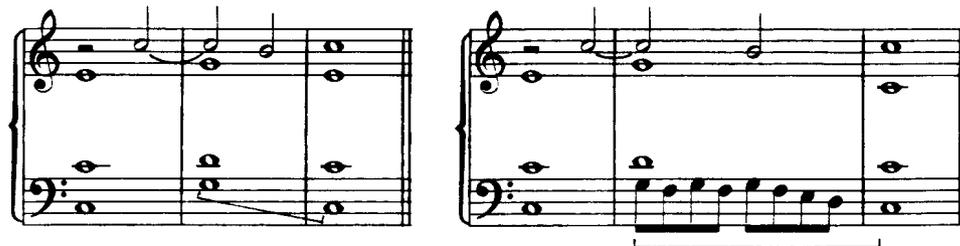
Bull, Variatio Ejusdem (FVB II 245:3:1)



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



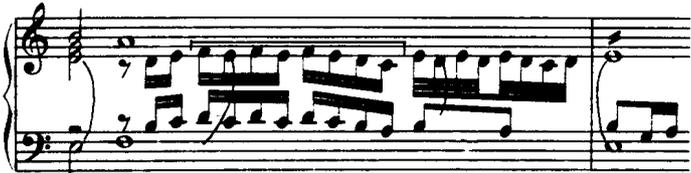
In the repeat (Ex.4.59(b)), the semibreve d in the bass becomes a dotted minim, and is further ornamented with a groppetto transposed an octave higher (d'), connecting it with the g, a fifth lower. The original G is reached again by an octave transposition. The fact that the groppetto acts as a tirata 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 grop-
petto 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:⁵²

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

⁵² 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 prelude by William Byrd, consisting of eight systems of music. Each system contains a grand staff with a treble and bass clef. The first system begins with a treble clef and a key signature of one sharp (F#). The music is written in a style characteristic of the English lute tablature tradition, with many notes beamed together in groups. The first system includes a treble staff with a whole note chord and a bass staff with a sixteenth-note pattern. The second system features a treble staff with a triplet of eighth notes and a bass staff with a similar pattern. The third system starts with a measure marked '5' and continues with complex sixteenth-note passages in both staves. The fourth system begins with a measure marked '7' and shows a transition in the bass line. The fifth system starts with a measure marked '9' and features a treble staff with a sixteenth-note run. The sixth system begins with a measure marked '11' and continues with intricate sixteenth-note figures. The seventh system starts with a measure marked '19' and includes a sixteenth-note pattern in the bass staff. The eighth system concludes the piece with a final chord in the treble staff and a sixteenth-note pattern in the bass staff.



Ex.4.65

Tomkins, Hunting Galliard (FVB II 101:3:1)

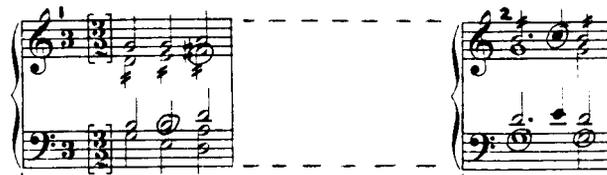
The image displays a musical score for the piece 'Hunting Galliard' by Henry Purcell, identified as Tomkins's version (FVB II 101:3:1). The score is presented in five systems, each consisting of a treble and bass clef staff. The first system begins at measure 17, marked with a '17' above the treble staff. The second system starts at measure 20, the third at measure 23, the fourth at measure 26, and the fifth at measure 29. The music is written in a 3/4 time signature and features a complex, rhythmic melody in the treble part, often characterized by sixteenth-note patterns. The bass part provides a steady accompaniment with chords and moving lines. 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)

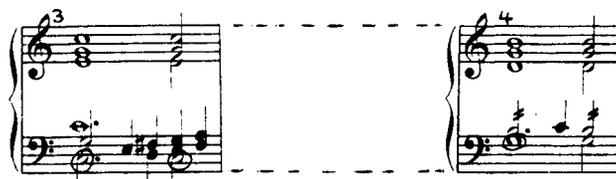
(a) 131:1:1



(b) 133:1:1



(c) 131:1:3





(d) 133:2:1

Musical score for (d) 133:2:1. It consists of two staves, treble and bass. The treble staff starts at measure 50 and ends at measure 51. The bass staff contains a continuous eighth-note accompaniment.

(e) 131:1:5

Musical score for (e) 131:1:5. It consists of two staves, treble and bass. The treble staff starts at measure 5 and ends at measure 6. The bass staff contains a continuous eighth-note accompaniment. A dashed line indicates a continuation of the piece.

(f) 133:3:1

Musical score for (f) 133:3:1. It consists of two staves, treble and bass. The treble staff starts at measure 52 and ends at measure 53. The bass staff contains a continuous eighth-note accompaniment.

(g) 131:2:1

Musical score for (g) 131:2:1. It consists of two staves, treble and bass. The treble staff starts at measure 7 and ends at measure 10. The bass staff contains a continuous eighth-note accompaniment.

Musical score for (g) 131:2:1 (continued). It consists of two staves, treble and bass. The treble staff starts at measure 12. The bass staff contains a continuous eighth-note accompaniment.

(h) 133:4:1

Musical score for (h) 133:4:1. It consists of two staves, treble and bass. The treble staff starts at measure 54 and ends at measure 55. The bass staff contains a continuous eighth-note accompaniment.

Musical score for (h) 133:4:1 (continued). It consists of two staves, treble and bass. The treble staff starts at measure 56. The bass staff contains a continuous eighth-note accompaniment.



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.

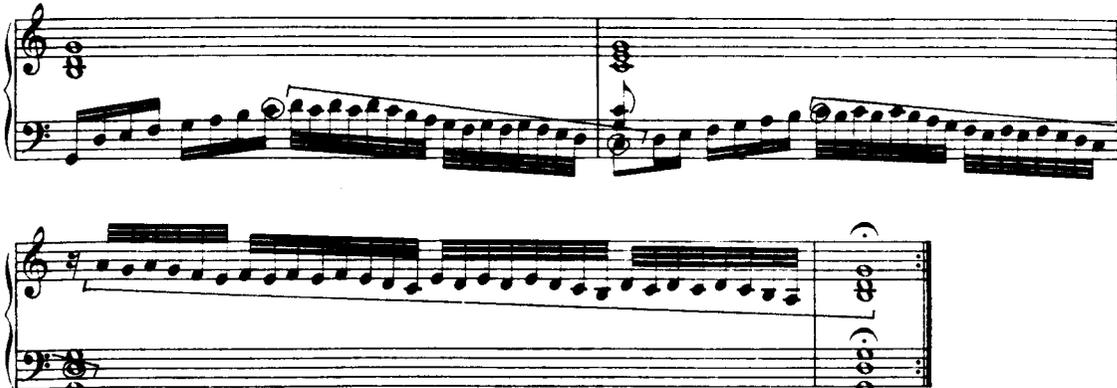
The groppetto also functions independently from an interval as an ornament, i.e. it need not of necessity be based upon an intervallic diminution. These excerpts show that the groppetti can act as optional decoration to fill the space between intervals:

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[#] - 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.

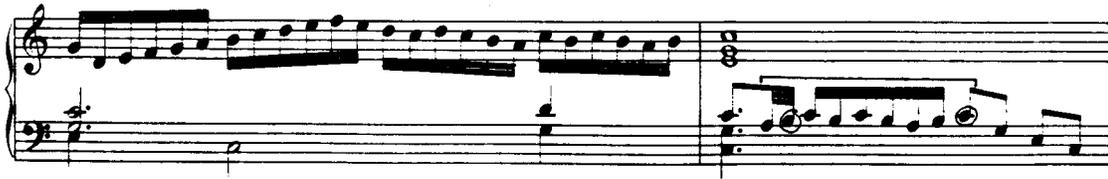
A stereotyped figure - a groppo preceded by two ornamental notes - is regularly employed as virtuoso decoration. This occurs most-ly, although not always, at the end of a section, after the finalis has been reached. It acts as a mini cadence, for the last two notes of the discant close are present, the 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.'⁵³ 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.

⁵³ 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

169

14:1:1

177

14:5:1

185

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. The first system shows a complex, fast-moving melodic line in the right hand and a more rhythmic accompaniment in the left hand. The second system continues the melodic development with some chromaticism. The third system concludes the piece with a final cadence.

Ex.4.72 Morley, Galliarda (FVB II 213)

(a) 1:2

Musical score for Ex. 4.72(a), Morley's Galliarda (FVB II 213). The score is written for piano in two staves (treble and bass clef) and consists of two systems. The first system shows a simple, rhythmic melody in the right hand and a bass line in the left hand. The second system continues the melody and accompaniment.

(b) 4:3

Musical score for Ex. 4.72(b), Morley's Galliarda (FVB II 213). The score is written for piano in two staves (treble and bass clef) and consists of two systems. The first system shows a simple, rhythmic melody in the right hand and a bass line in the left hand. The second system continues the melody and accompaniment.



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[#] - 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[#] 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-



Ex. 4.74

Morley, Nancie (FVB I 57)

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 staves, each containing six systems of music. The left column begins at measure 1 and ends at measure 17, with measure numbers 5, 4, 2, 13, and 6 indicated. The right column begins at measure 20 and ends at measure 37, with measure numbers 20, 15, 28, 31, 33, and 27 indicated. The notation includes treble and bass clefs, a key signature of one flat (B-flat), and a 2/4 time signature. The music features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. Dynamic markings such as 'p' (piano) and 'f' (forte) are present throughout the score. The piece concludes with a final cadence in the right column.



Musical score for piano, measures 9 through 18. The score is written for two staves (treble and bass clef) and includes various musical notations such as notes, rests, and dynamic markings. Measure numbers 9, 10, 11, 12, 13, 14, 15, 16, 17, and 18 are clearly marked at the beginning of their respective measures. The notation includes sixteenth and thirty-second notes, as well as rests and dynamic markings like 'p' (piano) and 'f' (forte).

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:⁵⁴

⁵⁴ 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

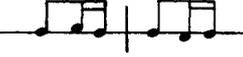
There are only two occurrences of the written-out tremolo in the FVB. Both of these are found in cadences, which is not in accordance with any prescription given by the Continental counterparts of the Virginalists. They occur as decoration of the anticipated note of resolution in a discant close:

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:⁵⁵

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:⁵⁶

Ex.4.81 Sweelinck, Praeludium Toccate (FVB I 380:5:2)

(a)



⁵⁵ For similar occurrences, see FVB II 100:2:3; 105:1:1; 238:2:4; 240:6:4; 248:4:2; 304:2:2.

⁵⁶ 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:⁵⁷

Ex.4.82

Bull, Walsingham (FVB I 17:3:1)

Ascending



Bull, Variatio (FVB I 176:5:2)



57

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)



Byrd, Pescod Time (FVB II 434:4:3)



Bull, Variatio (FVB I 176:1:1)



Anon., Praeludium (FVB I 85:3:1)



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)):⁵⁸

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.⁵⁹ The onbeat slide greatly outnumbers those occurring before the beat; the latter always employ equal note values.⁶⁰

58 This occurs at FVB I 69:1:1; 217:4:3,4; II 422:4:1; 423:4:2; 449:4:4.

59 These are, FVB II 304:4:2; 447:4:3; 449:4:4.

60 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.⁶¹

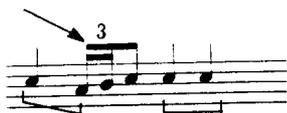
A study of 139 appearances of the slide in the FVB has revealed certain characteristics in the melodic contexts in which the ornament is used: six contexts are consistently used more frequently than the rest. The most favoured melodic passage upon which the slide is found, is the stepwise approach from 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):

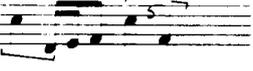


- preceded by the same note, diminution of an ascending third (12 times):



⁶¹ 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:⁶²

Ex.4.92 Byrd, Pavana Lachrymae (FVB II 43:5:1)



Farnaby, Mal Sims (FVB II 447:5:1)



⁶² 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:¹

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:²

... 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

¹ M.H. Glyn, Elizabethan Virginal Music and its Composers (London: Wm. Reeves, 1934), p.57.

² 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'.³ 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.⁴ 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:

³ H. Ferguson, ed., Early English Keyboard Music: An Anthology, 2 vols. (London: Oxford University Press, 1971), 2:12.

⁴ 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 staff on top and a bass clef staff on the bottom. The music is written in a style characteristic of the 16th-century lute or virginal. The first system shows a sequence of notes and rests. 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'.⁵ 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.⁶ 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:

⁵ Dodge, Ornamentation, p.322.

⁶ 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)

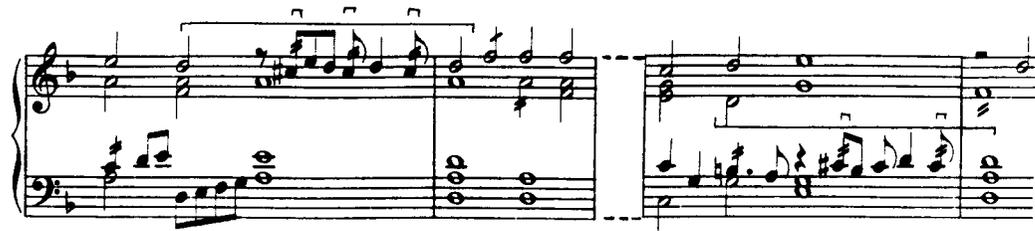


Frequently, a typical diminution of the discant close is ornamented - in this case the anticipation of the note of resolution and the note of resolution itself. It thus becomes a further diminution of a diminution. The latter is the vehicle for the additional ornamentation, indicated by symbol in Ex.5.3:



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)

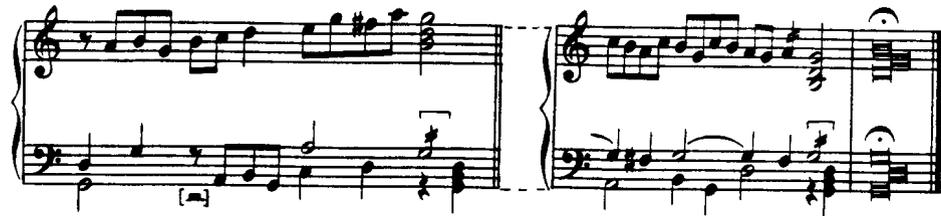


Another ornamented figure employed in cadences is an arpeggiated chord in the left hand; here the top note is ornamented with a double stroke:

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)



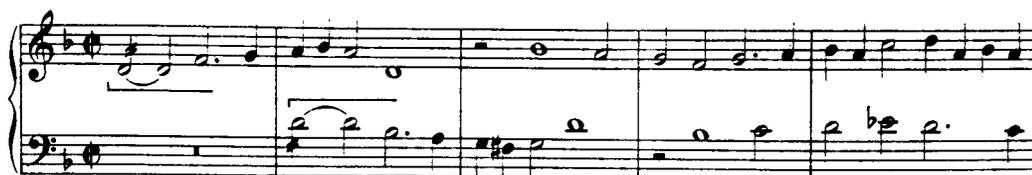
Byrd, Fantasia (FVB I 406:1:1)



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.⁷ 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

⁷ 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.⁸ 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

⁸ 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 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)

The musical score for 'A Toye' by John Farnaby is presented in three systems. Each system consists of a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The first system shows the initial four measures of the piece. The second system is marked 'Rep.' and contains four measures of a repeated section. The third system contains four measures, with a second ending bracket over the final two measures. The music is in a 3/4 time signature and features a mix of eighth and sixteenth notes, with some ornaments indicated by small 'z' marks above notes.

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)

The musical score for 'Felix Namque' by Thomas Tallis is shown in a single system. It features a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The upper staff contains a melodic line with frequent ornaments (marked with 'z') and rests, while the lower staff provides a steady accompaniment of eighth notes. The piece is in a 3/4 time signature.

Parsons, In Nomine (FVB II 137:4:1)

The musical score for 'In Nomine' by Thomas Parsons is shown in a single system. It features a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The upper staff contains a melodic line with frequent ornaments (marked with 'z') and rests, while the lower staff provides a steady accompaniment of eighth notes. The piece is in a 3/4 time signature.

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:⁹

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

⁹ 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.¹⁰ 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)



¹⁰ 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 a grand staff with a treble and bass clef. The first system includes a downward-pointing arrow above the first measure of the treble staff. The second system features a '2' above the first measure of the bass 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 Pavaues, 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.¹¹ The corresponding total of single-stroke ornaments

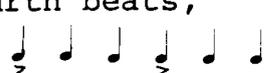
¹¹ The following pieces were used: Pavaues (\mathcal{C}) FVB I pp.27, 62,68,87,99,107,124,141,149,361,384,367; II pp.42, 51, 103,121,173,200,204,209,238,278,306,307,384,389,336; Galliards: I pp.32,54,70,77,93,117,129,170,177,209,365,371; II pp.111,125,177,198,202,207,213,228,242,244,258,387,405,419,440,486,369; 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 ϕ 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 consists of three systems of music, each with a treble and bass staff. The first system shows a melody in the treble staff and a bass line in the bass staff. Three downward arrows (↓) indicate ornaments on the first, third, and fifth beats of the first measure. The second system shows a more complex melody with a second ending marked '2' and a repeat sign 'Rep.' at the end. The third system shows a melody with a repeat sign 'Rep.' at the end. The key signature is one sharp (F#) and the time signature is 6/4.

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)

Bull, A Gigge (FVB II 257:1:1)

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 ♩ 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 ♩ 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 staff. The first system shows a melody in the treble staff with several double strokes marked by downward arrows. The bass staff provides harmonic support with chords and moving lines. The second system is marked 'Rep.' and shows a more complex rhythmic pattern in the treble staff, also with double strokes marked by arrows. The bass staff 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. Each system has a treble and bass staff. The first system features a melody in the treble staff with many double strokes marked by downward arrows. The bass staff has a steady accompaniment. The second system continues the piece, with a second ending marked '2' in the treble staff. The bass staff includes some circled notes, possibly indicating specific ornaments or techniques.

Tisdall, Almand (FVB II 276:3:1)



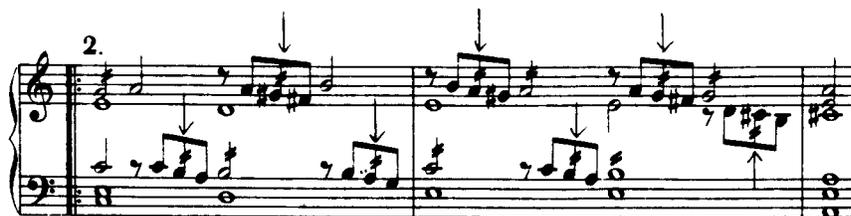
In Ex.5.26 the ornaments occurring between the strong beats are in the minority (indicated by circles around the notes). As they appear on the exact subdivision of the pulse unit in ♩ (a minim), the aural effect of eight crotchets to the bar is created. This explains the high incidence of ornaments found after the strong beats of pieces in ♩ : 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.¹²

¹² 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, Galliard (FVB II 199:3:1)

(a)



Byrd, Galiarda (FVB II 387)

(b) 1:1





(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.¹³ Interestingly enough, the syncopated voice is left unornamented, with the accompanying part in the soprano ornamented instead.

¹³ 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)

The first system of musical notation consists of a treble staff and a bass staff. The treble staff begins with a common time signature (C) and contains a series of eighth and sixteenth notes. The bass staff provides a harmonic accompaniment with chords and moving lines. There are several articulation marks, including slurs and accents, and some notes are marked with fingerings such as (3) and (4).

(a) 398:5:1

The second system of musical notation continues the piece. It features a treble staff with a 6/4 time signature and a bass staff. The treble staff has a complex rhythmic pattern with many sixteenth notes. The bass staff has a steady accompaniment. There are several articulation marks, including slurs and accents, and some notes are marked with fingerings such as (3) and (4).

(b) 399:4:1

The third system of musical notation shows a change in tempo and meter. The treble staff has a 6/4 time signature and a bass staff. The treble staff has a complex rhythmic pattern with many sixteenth notes. The bass staff has a steady accompaniment. There are several articulation marks, including slurs and accents, and some notes are marked with fingerings such as (3) and (4).

(c) 400:4:1

The fourth system of musical notation features a 6/8 time signature. The treble staff has a complex rhythmic pattern with many sixteenth notes. The bass staff has a steady accompaniment. There are several articulation marks, including slurs and accents, and some notes are marked with fingerings such as (3) and (4).



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',¹⁴ others think that they may not necessarily denote an ornament, being, rather, a means of indicating articulation,¹⁵ i.e. indicating a slur or staccato, or even an accent.¹⁶ 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-

¹⁴ Schwandt, Clausula, p.117.

¹⁵ R. Huestis, 'A musical approach to ornamentation in the music of the English Virginalists', Studies in Music, no.12 (1978), p.30.

¹⁶ 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.¹⁷ 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-

¹⁷ 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.¹⁸ 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

¹⁸ 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).¹⁹ 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.²⁰ This implies a more specific meaning for the single stroke which, appropriately enough, is less commonly employed.

¹⁹ 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.

²⁰ 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;²¹ 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.²²

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.

²¹ 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).

²² 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 grosso, 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 1700.²³ 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.²⁴ 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-

²³ Neumann, Ornamentation, pp.245,290,295,311.

²⁴ 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.²⁵ 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,²⁶ Barnes²⁷ and Donington²⁸ 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

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) 

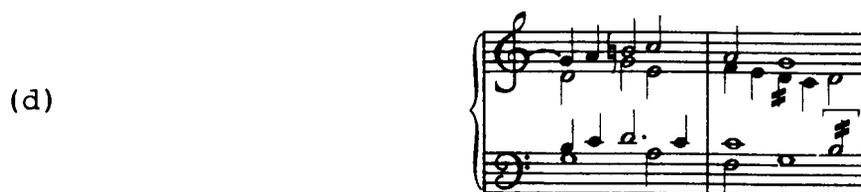
Byrde, Preludium (Pa, no.4, b.20)

(b) 

Byrd, Pescodd Time (FVB II 430:2:4)



Byrd, The Huntess Upp (Ne, p.58, b.13)



Bull, Ut, re, mi, fa, sol, la (FVB II 281:3:4)



Bull, Ut Re my Fa Sol la (To, p.4, b.8)



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 gropo 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 (♯): this sign replaces the grosso in FVB I 238:1:1 and II 113:4:2. Similarly, the sign ♯ 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 ♯ . This is quite possible, however, as in all the examples mentioned, Wr does not write out the suffix $\text{♯} \text{♪}$, but only ♯ .

In the FVB, the double stroke plus two-note suffix is an extremely rare occurrence.²⁹ 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 groppi 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)



²⁹ 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 upper-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.³⁰ 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.³¹ There are nevertheless numerous virginal sources containing fingerings, the most comprehensive discussion of the subject to date being that of Le Huray.³² 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).³³ 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

³¹ 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.

³² 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.

³³ 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:³⁴

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



³⁴ 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.5.48.³⁵ 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.³⁶

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)



³⁵ Fingering in brackets is my interpretation.

³⁶ Le Huray, English Keyboard Fingering, p.256.



Ex.5.48

Bull, Galiarda (FVB I 70)

The musical score consists of six systems of piano accompaniment, each with a treble and bass staff. The key signature is one sharp (F#) and the time signature is 3/4. The score includes various musical notations such as chords, eighth notes, and sixteenth notes. Fingerings are indicated by numbers 1-5. Dynamic markings include *p* and *f*. The score is divided into two parts by a double bar line with a '2.' above it. The first part contains five systems, and the second part contains one system. The notation includes several instances of the sequence '(121)' and '(5)', often with a '2' above the '5', indicating specific rhythmic or fingering patterns. The final system of the second part ends with a double bar line and repeat dots.

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.³⁷ This problem is solved by playing a tremolo with upper auxiliary and a mordent together:³⁸

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

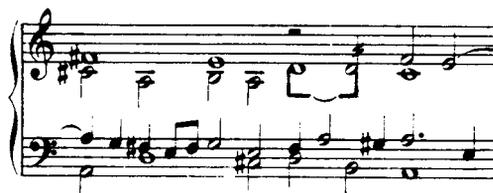
See also, FVB I 273:5:3; II 256:4:3.

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.

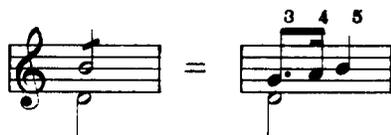
5.2.3 The Interpretation of the Single Stroke

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:³⁹

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:⁴⁰

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

³⁹ Bevin's table is given on p.70.

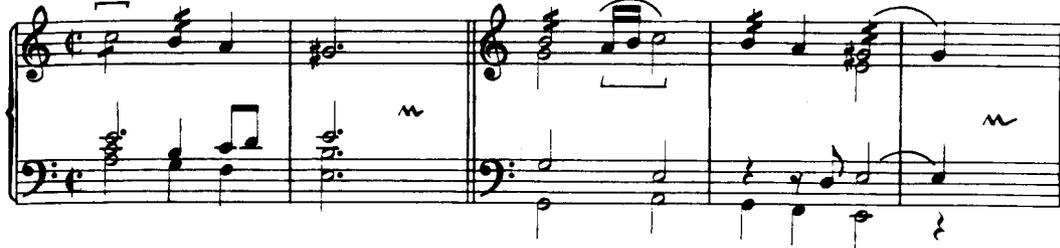
⁴⁰ GB - Lbm Add. 32531, fol.24; and in J. Wilson, ed., Roger North on Music (London: Novello, 1959), p.62.

and single stroke of the Virginalists. (The development of the changing use of the single stroke in the seventeenth century is discussed by Harley.)⁴¹

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

⁴¹ 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.⁴² 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.

⁴² 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.⁴³ The majority of single-stroke signs in the FVB are drawn through the top of the stem (), although, occasionally, through the stem ().⁴⁴ 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:⁴⁵

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

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.

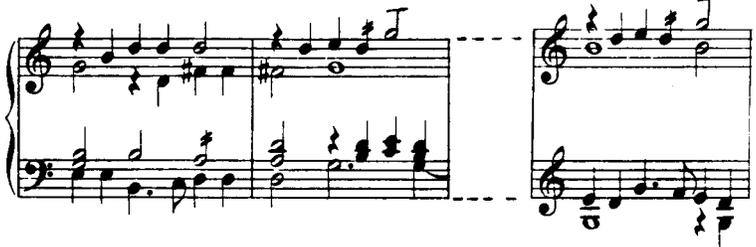
an ornament before or on the beat, between slower as opposed to faster, long as opposed to short, or the differentiation between two different ornaments.

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.⁴⁶ 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 ().⁴⁷ 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.⁴⁸ 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)



⁴⁶ 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.

⁴⁷ E.g., FVB I 72:6:3, 5:3; 249:2:5; II 386:1:2, 1:3.

⁴⁸ 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.⁴⁹ 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 5.⁵⁰ 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.⁵¹ 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:⁵²

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.⁵³ 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.⁵⁴ 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)



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- 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:⁵⁵

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:⁵⁶

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^V,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.⁵⁷ 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



The musical score consists of five systems of two staves each. Fingerings are indicated by numbers 1-5. Ornaments (trills) are marked with 'tr'. Specific techniques like 'S' (sordano) and 'M' (mordente) are also indicated. The notation includes various rhythmic values and accidentals.

T T T 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
Farnaby:				
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)				
Bull:				
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. & 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