THE ROLE OF THE CADENCE AS DETERMINING FACTOR OF PHRASING OF THE ORGAN TOCCATAS, PRELUDES AND FANTASIAS OF JOHANN SEBASTIAN BACH

THESIS

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ABSTRACT

This study examines the phrasing of J.S. Bach's preludes, toccatas and fantasias for organ. Consequent upon Bach's silence on the subject and the inadequacy of available sources, the cadence has been used as a means to determine the phrasing of these works.

The goal of this thesis is to identify those characteristics of the cadence that can assist the performer in two ways: On the one hand, to select the appropriate type of break between phrases, and, the other hand, selecting the appropriate changes in tempo and articulation essential to the shaping of phrases. The term, 'cadence', therefore, applies not merely to an isolated entity of two chords, but rather to a broader formula including the progressions towards and away from it.

This investigation follows an eclectic approach. Accordingly, the exploration of various sources is combined with diverse methods of analyses. The first method is a detailed structural analysis of Bach's cadential progressions, and more specifically, the way in which he integrated the basic musical elements into them. This shows the points of tension and relaxation, two musico-psychological effects fundamental to any decision regarding phrasing. The second method puts Bach's cadences within the context of the larger musical structure, including the 'extra-musical' (i.e. grammatical, rhetorical and 'affective') forms. This method organises cadences according to their various punctuation functions, hence main and secondary cadences.

The cadences of twenty-eight works - those works of which the authenticity is more or less secure - are analysed. Descriptions cover a selection from these works considered to be the most representative. A significant number of examples, including performing suggestions, accompany and elaborate in detail on all descriptions of cadences.

An application of the findings is presented by an analysis and discussion that elaborates in detail on the suggested performance of two works, BWV 542 and 541. These two works epitomize, and simultaneously form the culmination of the two principal styles (i.e. the improvisatory and motorically-orientated) prevalent in Bach's free organ works.

Examination of the findings of this study and implications for further research conclude this thesis.

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INTRODUCTION

This study investigates the function of the cadence as the core-element in determining the phrasing of Bach's preludes, toccatas and fantasias.[1]

Strictly speaking, 'phrasing' refers to the application of breaks ('periods of silence' [Holtz, 1981:39]) or separations ('caesuras' [Walther, 1732:126]) of varying length between phrases. A more comprehensive definition follows:

> ...the making perceptible of the more or less complete points of rest and the separation of the phrases in such a manner that one feels in their inflection as well as in their cadences the beginning, fall, and greater or lesser connections just as one feels all of these with the help of punctuation in speech (Jean Jacques Rousseau [1712-1778] in Keller, 1973:19).

Stuifbergen and Schouten (1980:38) explain:

> Een compositie is geen aaneenrijging van tonen zonder onderling verband. Evenals een boek uit hoofdstukken en een hoofdstuk weer uit alinea's en zinnen bestaat, is ook een compositie in grotere en kleinere onderdelen te splitsen. Zoals de declamator zich bij de voordracht van proza of poëzie rekenschap moet geven van de interpunctie, zo dient de organist inzicht te hebben in de muzikale zinsbouw om te kunnen beoordelen welke zinnen, zinsdelen of motieven gescheiden moeten worden, welke een geheel dienen te vormen. Fraseren is het zodanig uitvoeren van een compositie, dat de bouw van de muzikale frasen of zinnen daardoor wordt verduidelijkt. Een gefundeerde opvatting omtrent de frasering kan eerst worden gevormd, nadat de gehele compositie op een verantwoorde wijze is geanalyseerd. Kortom, de organist moet de luisteraar de logische bouw van het werk dat hij speelt, duidelijk maken.

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1 Part of the *genre* known as the *free organ works*.

Translated:

> A composition is no mere concatenation of unrelated tones. Just as a book consists of chapters and a chapter again of paragraphs and sentences, accordingly, a composition could be divided into larger and smaller sections. Just as the orator's reciting of prose or poetry should reflect the punctuation, the organist, in a like manner, must show insight into the construction of musical sentences in order to determine which sentences, parts of sentences, or motifs should be separated from one another and which should form units. Phrasing implies a performance in which the construction of musical phrases or sentences is explained. A firmly based conception of the phrasing can only be formed after the whole composition had been analysed in a responsible way. In short, the organist must communicate to the listener the logical construction of the work that he performs.

However, 'phrasing' also implies '..the performer's ability to create a sense of purposeful motion toward and away from specific points of reference' (Barra, 1983:19). This means that progressions preceding and following breaks, and the way in which they are shaped or 'moulded' (Donington, 1975:470), are part of the phrasing process.

Two of these means by which phrases are shaped are deviations in tempo and articulation (varying the manner of connecting [*legato*, *staccato*, etc.] successive notes).[2]

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2 The remaining aspects of performance, registration changes, ornamentation, and changes in meter and rhythm (hemiola, syncopations) are integrated into discussions of tempo and articulation. Register and manual changes are generally executed within phrasing-breaks, and as such belong to the phrasing process. They do not determine phrasing, but are rather determined by phrasing. Accent, meter and rhythm are closely related to articulation. The finer details of ornamentation are irrelevant. Sufficient information exists in sources cited in the Bibliography. Ornamentation is therefore addressed only insofar it has relevance for one or more of the abovementioned aspects.

The cadence can be defined as 'a harmonic close ('Harmonie-Schluss') serving to partly or entirely close a musical composition...' (Walther, 1732:124: translated). It usually consists of 'the progression of the last two chords of a formal structure' (Ottman: 1983:23) and is classified according to:

(i) the degree of finality, produced by the chords it comprises. There are two types. Final cadences end on a 'tonic chord and have sufficient strength to bring a musical thought to a complete close' (Hutcheson, 1976:114). Non-final cadences end on a chord other than the tonic and 'therefore point forward to one or more phrases' that are to follow (ibid.) Accordingly, musico-psychological perceptions of final cadences are those of satisfaction/relaxation/fulfilment and those of nonfinal cadences expectation/tension.[3]

(ii) the length and/or importance of the structure it terminates. Here again, two types of cadences are evident. Structural[4] cadences terminate larger structures and are most frequently - yet, not always - perfect or plagal. Secondary cadences end shorter structures after which the music usually continues.[5]

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3 This idea is clear in Jean-Philippe Rameau's (1683-1764) perception of the perfect cadence: 'The perfect cadence is a certain way of ending a strain which is so satisfying that we desire nothing further after it' (Gossett, 1971:63). In a like manner, Sachs (1944:35) identifies psychological perceptions of non-final cadences as expectation, symbolised in primitive music by incomplete dancing actions.

4 While 'structural' denotes a certain type of cadence according to its function in punctuation, this term is also used to refer to the certain relevant structures in Bach's organ works. In order to avoid confusion, the term 'structural' cadence is henceforth replaced by **'main' cadence**.

Other terms for 'main' cadences are: full (Sachs, 1944:34 and Mattheson, 1739:14), final (Sachs, 1944:34 and Mattheson, 1739:14), formal (Judd, 1985:214, Gauldin, 1985:139, Mattheson, 1739:14) and closed cadences (Ratner, 1977:61).

5 Other terms for secondary cadences are: passing (Gibney, 1980:146), half (Sachs, 1944), progressive (Ottman, 1983:) and intermediate cadences.

Though frequently imperfect or interrupted, these cadences are often also plagal and perfect.

The concepts, 'cadence' and 'phrasing' are closely connected. The function of the cadence emanates from its placing at phrase-endings, i.e. to punctuate (Hutcheson, 1976:104), in this way it shows the phrase-structure of a work.

This study, then, seeks to determine the 'appropriate' phrasing of Bach's organ works by means of the possibilities offered by the manipulation of tempo and articulation. The attention is focussed on the interpretation and performance of four clearly discernible phases involved in the phrasing process:

(i) the progression leading up to a cadence,

(ii) the cadence,

(iii) the break after the cadence - and -

(iv) the beginning of the next phrase.

The intention to examine Bach's toccatas, preludes and fantasias was prompted by Donington's (1975:470) notion that 'old' music (including Bach's) is 'very commonly under-phrased', which he ascribed to a lacking realisation among performers of 'how extremely articulate much early phrasing needs to be...' (Donington, 1975:470).[6] Donington's words are particularly relevant to these three genres in two ways:

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6 Ferguson's (1975:52) reference to phrasing as 'the breath and life of music' hardly leaves any doubt as to the importance of this process.

On the one hand, the improvisatory origins of these works (Arnold, 1973:23) require liberal changes in tempo and articulation towards phrase-endings and ensuing breaks. Without these changes, these works remain nothing but mechanical exercises.

On the other hand, notwithstanding their improvisatory origin, the application of unbridled freedom, or 'over-phrasing'[7], will endanger the coherence of these works, causing them to 'fall into pieces' (Donington, 1975:433). The challenge in performing these works thus lies in the attainment of a fine, stylistically sound balance between free and strict approaches.

However, interpreting these works is problematic, because objectivity[8] - an essential component of a stylistically 'correct' interpretation - is eliminated by the following factors:

(i) the absence of written (Kirnberger 1782:4 in Kloppers 1965:25) or recorded sources (Noehren, 1984:36) by Bach himself.[9] Instrumental instruction in Bach's day was 'primarily oral and personal' (Sachs en Barry, 1981:3). As this tradition was lost through the ages (Kloppers, 1965:4), performing old music, in the words of Morgan (in Kenyon, 1990:69) is equitable to speaking Latin. He writes: 'We can pretend to speak the languages of the past as our own, but we cannot in fact do so' (idem:71).

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7 The term 'over-phrasing' is used - analogous to Donington's term, 'under-phrasing' - to denote 'exaggerated' phrasing.

8 which requires a meticulous adherence to the composer's wishes, leaving no room for re-creation.

9 Apart from Bach's *Applicatio* for Wilhelm Friedemann containing some fingering (Le Huray, 1990:8).

(ii) the unreliability of Bach's notation which 'has come down to us in a very indefinite state....' (Keller 1967:39), is extremely scarce in guidelines, so 'that there is infinite potential for argument over minutae....' (Hurford, 1990:72). As a result, interpreting[10] Bach's music becomes complicated and ambiguous and, therefore, can often vary remarkably.

(iii) the unreliability of available sources. The Bach-researcher inevitably has to rely on secondary sources (i.e. tutors and historical treatises by theorists like Bach's pupils, sons and acquaintances). The reliability of these sources is often dubious, because their applicability to Bach's works can not be indisputably verified. In this regard Neumann (1982:2) writes:

> We shall make a great step forward if we stop looking at the authors of old treatises as if they were prophets who reveal infallible verities, and if we start seeing and treating them as what they are at best: very human witnesses who left us an affidavit about certain things they knew, certain things they believed in, certain things they wished their readers to believe.

The question is how to deal with Bach-interpretation when objectivity is not possible. It seems that the term 'objective' will necessarily have to be redefined in terms of Bach-interpretation. Hurford (1990:69) provides such a definition. He writes:

> In seeking the 'best' interpretation, the performer is striving to re-create the *spirit* of the music as perhaps it was first conceived by the composer, and to project it to the listener in the most convincing manner of which he is capable. To this end, it is important for him to consider the techniques and spirit of the age in which the music was written.

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10 'Interpretation' refers to the way in which the notation is 'converted into an acoustic phenomenon' or sound (Lang, in Neumann, 1982: vii).

However, Hurford (ibid.) also recognises the indispensability of subjectivity[11] in the interpretative process. He writes:

> However, he (the performer) would be unwise to try slavishly to emulate a manner of performance *possibly* employed by the composer, to the exclusion of his (i.e. the performer's) own educated musical instinct.

A fusion between objective and subjective elements (Keller 1967:38-39) seems the best way in interpreting Bach's works. In attaining such a fusion any aspect should be taken into consideration that may possibly contribute to a better understanding of Bach's concept of phrasing. In approaching this study, an eclectic approach was thus followed which includes:

(i) a survey of the indications used by Bach that indicate phrasing.

(ii) a survey of the types of phrases he uses.

(iii) analyses of the two main structures of Bach's works: These include:

(a) the material (i.e. the objective, physical, anatomic or 'notational') structure, and

(b) the interpretative aesthetical structure, including the rhetorical, grammatical and 'affective' structures.[12]

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11 which, in its strictest sense, recognises the instinct and personal judgment of the performer as the sole criterion of interpretation.

12 The controversy surrounding the applicability of these structures to Bach's organ works is insignificant: Interpretative guidelines emerging from the various analyses [(iii) (a) and (b)] are not contradictory, but concur. The reader interested in this issue is referred to Williams (1986:72), Kloppers (1965:65 [Birnbaum-Scheibe dispute]), and David and Mendel (1946:312, 318, 330 [Forkel's statements]).

(iv) Statements by various theorists.

Finally, Donington (1982:126) has the following message to prospective performers of Baroque (and, of course, Bach's) music: 'For those who do not like cadences..., baroque music is not the scene'.

CHAPTER 1

THE VARIOUS FACTORS THAT INFLUENCE PHRASING

1. INTRODUCTION

Bach uses the four types of cadential formulae that were standard in his time: perfect, plagal, interrupted (deceptive) and imperfect (including Phrygian) (Baur, 1985:268). All cadential formulae he used already existed when he became active as a composer.

Bach's organ works are composed within the confines of a fully-established tonality. Consequently, modal formulae and practices typical of earlier, pre-tonal music are absent.[13] The bass serves as the basis from which chords are identified and figured. Chromaticism and modulation - typical features of tonal music - are fully integrated into his music.

2. BACH'S INDICATIONS

Bach uses three phrase marks: rests, fermatas and double bar-lines.

Rests appear after inner, as well as final cadences:

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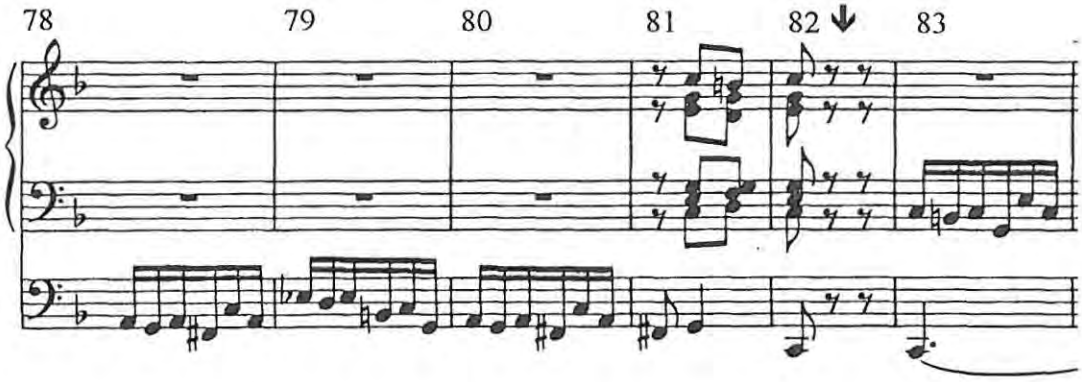
[13] These include the II-I, VII-I, III-I, double leading-note, Landini and the 'tonic' Phrygian cadences as well as the practice of *musica ficta*.

Example 1

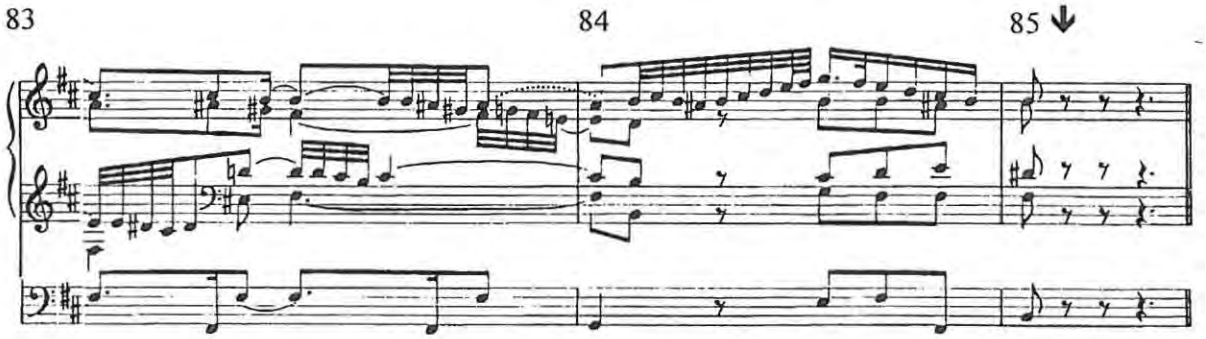
Rests at inner cadences.

BWV 540, bars 78-83 (NBA IV/5:114).[14]



Rests at final cadences:

BWV 544, bars 83-85 (NBA IV/5:205).



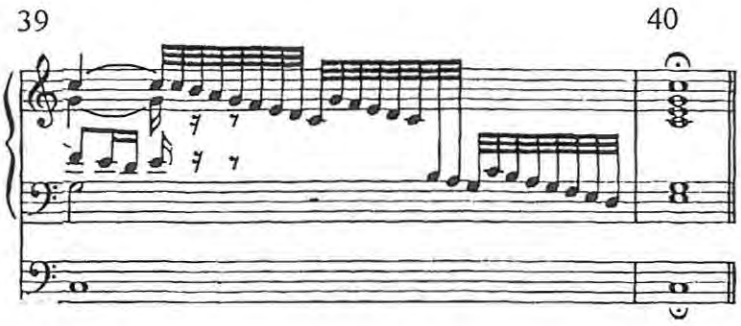
14 NBA is an abbreviation of J.S. Bach's Neue Ausgabe Sämtlicher Werke... and is henceforth used when referring to this edition.

Fermatas are used in three ways:

(i) over/under long note-values:

Example 2

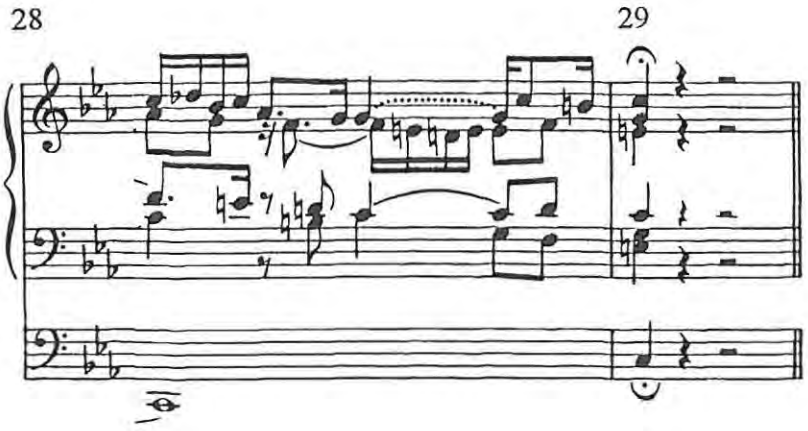
The *fermata*: BWV 531, bars 39-40 (NBA IV/5:5).



(ii) over/under a shorter note-value, followed by rests:

Example 3

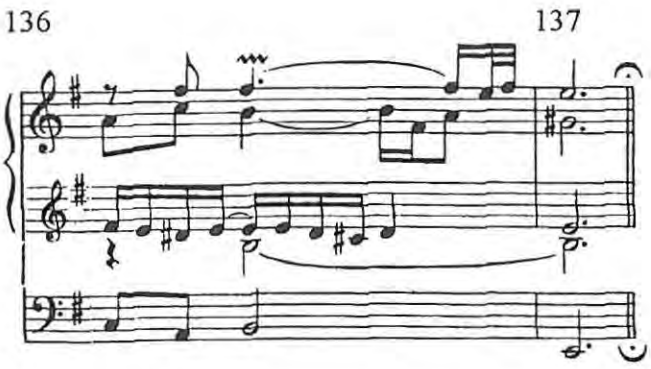
The *fermata*: BWV 549, bars 28-29 (NBA IV/5:31).



(iii) over/under a double barline:

Example 4

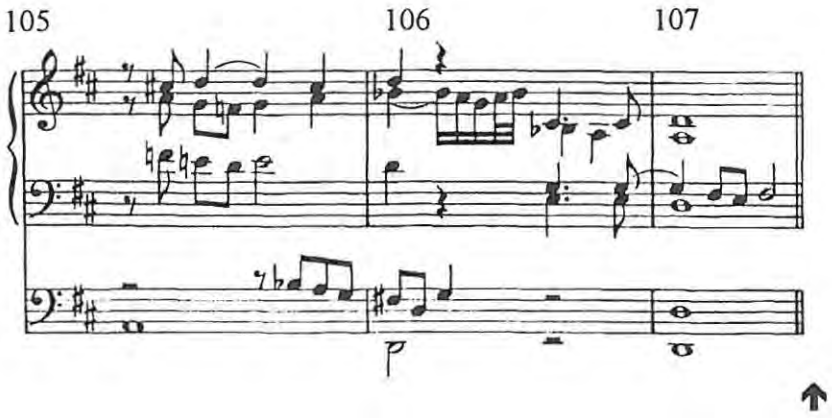
The *fermata*: BWV 548, bars 136-137 (NBA IV/5:101).



Double bar-lines are used to separate the preludes and fugues:[15]

Example 5

Double bar-lines: BWV 532, bars 105-107 (NBA IV/5:61).



15 Exceptions in this regard are BWV 550, 565 and 551 (see Chapter 2)

3. STRUCTURAL ASPECTS

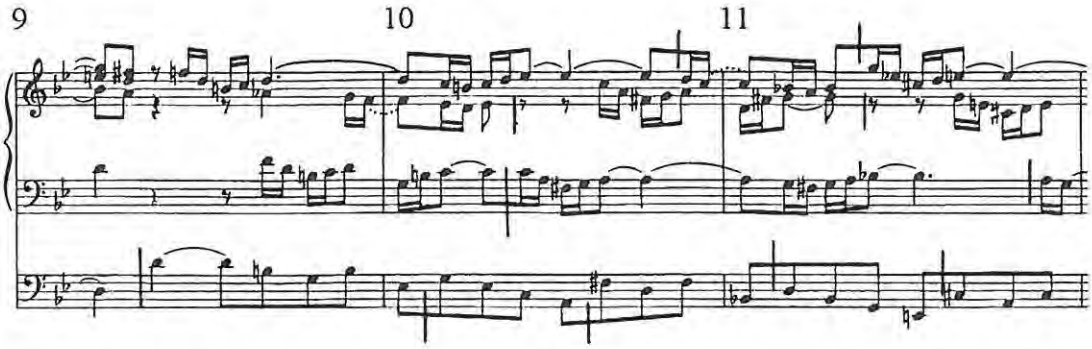
3.1 Types of Phrases

Bach uses three types of phrases:

(i) Overlapping phrases. These 'occur most frequently between different voices in contrapuntal textures' (Ferguson, 1975:55-56). In the following example, phrase-endings are indicated by vertical lines:

Example 6

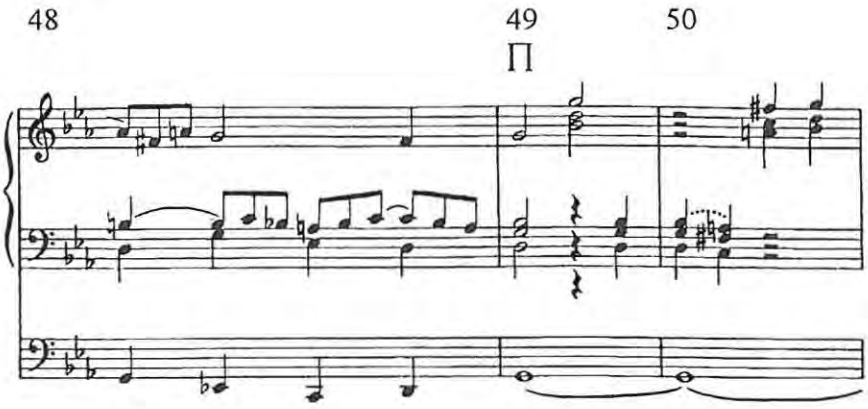
Overlapping phrases: BWV 542 bars 9-11 (NBA IV/5:168).



(ii) Dovetailed phrases. Here, 'a single note provides both the end of one phrase and the beginning of the next' (Ferguson, 1975:56) (indicated by ∏ above the 'g' in the following excerpt):

Example 7

Dovetailed phrases: BWV 546, bars 48-50 (NBA IV/5:37).



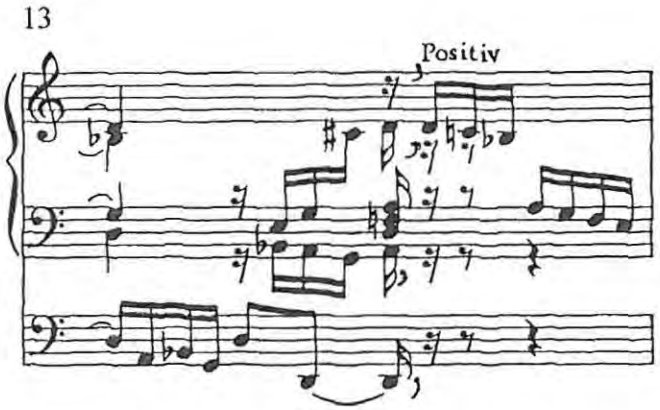
(iii) Clear-cut phrases. Breaks (indicated by commas [,]) mark the ends of all the parts:

Example 8

The clear-cut phrase-ending.

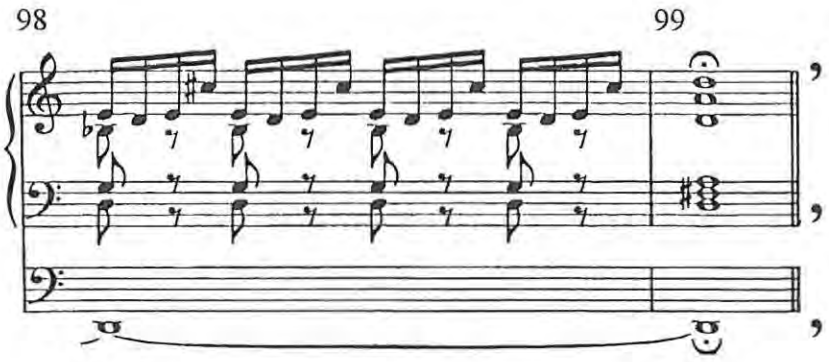
at an inner cadence:

BWV 538 bar 13 (NBA IV/5:77).



at a final cadence:

BWV 538 bars 98-99 (NBA IV/5:82).



3.2 Form

One of the major factors determining the overall form of Bach's works is the positioning of cadences within a work, that is, where they occur and the extent of the structures they terminate. These parts end with main or secondary cadences.

3.2.1 The Material Form

The structure of Bach's toccatas, preludes and fantasias can largely be classified into two groups. The first group comprises those structures 'characterized (sic) by an improvisatory style' (Felix, 1985:86) in which Bach 'could give his fantasy free rein' (ibid.). Within this type of structure, cadences, often 'dramatic' in nature, usually separate sharply contrasting and often highly complicated sectional structures. Works like BWV 532, 535, 542, 543 and 565 belong to this group.

The second group of works generally shows a more uniform structure, characterised by an uninterrupted motoric (often virtuosic) rhythmic flow. Generally, one mood is prevalent throughout these works. Here, cadences usually demarcate sections

occurring in close succession, evident in works like BWV 534, 536, 538, 541, 544, 548 and 569.

3.2.2 The Rhetorical Form

From a rhetorical perspective[16] phrasing depends on the distribution/occurrence of cadences within the *dispositio/elaboratio*. The *dispositio* consists of six successive parts (Mattheson, 1739:4,5, in Harriss, 1981:469-470):

(a) The introduction (*exordium*). In this part the 'goal and the entire purpose (i.e. of the musical 'speech') must be revealed, so that the listeners are prepared, and are stimulated to attentiveness' (Mattheson, 1739:7, in Harriss, 1981:470). It often appears as a *ritornello* at both the beginning and the end of a composition (idem:471).

(b) The narration (*narratio*) or report, 'through which the meaning and character of the ....discourse is pointed out. It occurs with the entrance of ... the most significant concerted part', and is connected to the preceding *exordium* (Mattheson, 1739:8, in Harriss, 1981:471).

(c) The actual discourse (*propositio*). This part contains 'the content or goal of the musical oration' (Mattheson, 1739:9, in Harriss, 1981:471).

(d) The *confirmatio*. This 'is an artistic corroboration of the discourse' which is 'commonly found in well-conceived repetitions which are used beyond expectations'. (Mattheson, 1739:10, in Harriss, 1981:471).

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16 as explained by the German contemporary of Bach's, Johann Mattheson (1681-1764) (1739:1-25, in Harriss, 1981:469-476).

(e) The *confutatio*. This part represents 'a dissolution of the exceptions' often expressed 'through quotation and refutation of foreign-appearing ideas'. Through 'such antitheses.... the hearing is strengthened in its joy, and everything which might run against it in dissonances and syncopations is smoothed and resolved' (Mattheson, 1739:11, in Harriss, 1981:471).

(f) The *peroratio* (conclusion) of the musical speech 'which must produce an especially emphatic impression' (Mattheson, 1739:12, in Harriss, 1981:472). The *peroratio* and *exordium* (*ritornello*) are often identical.

3.2.3 The Grammatical Form

In a grammatical analysis a parallel is drawn between various sections of a musical composition and the various divisions (chapters, paragraphs and sentences) discernible in the spoken and written language. Cadences marking the ends of these sections are equated with punctuation marks (full-stops, commas, dashes, exclamations, etc.) that equally punctuate the various divisions in language.

Main cadences generally represent (among others):

(a) periods (.) e.g. at the end of paragraphs (Gibney, 1980:146) and entire compositions.

(b) question and exclamation marks at unexpected closes (Mattheson (1739:16, in Harriss, 1981:383). Mattheson (1739:65) distinguishes three types of exclamations (represented by '!'), namely astonishment, a joyous acclamation, and a rousing command (in Harriss, 1981:399-400).

Secondary cadences are representative of (among others):

(a) 'commas or semi-colons ..' (Gibney, 1980:146). The comma (,) is 'the smallest caesura' (Mattheson, 1739:20, in Harriss, 1981:384).

(b) The colon (:) (Mattheson, 1739:39, in Harriss 1981:390).

(c) The parenthesis (()) i.e. a small interruption whereby some words are enclosed and thus separated from the rest (Mattheson, 1739:69).

3.2.4 The 'Affective' Form

In a structure based on the *Affekte*, feelings or moods of the human psyche, such as 'love, hate, anger, joy' (Wessel, 1955:2), serve as the criterion of division. Sections low in affective contrast are separated by secondary cadences, while sections that are in sharp contrast with one another are usually separated by main cadences.

In this regard Leopold Mozart (in Wessel, 1955:272) writes that 'the performer must throw himself into the affect to be expressed', and C.P.E. Bach (ibid.) writes:

> A musician cannot move others unless he too is moved. He must of necessity feel all of the affects that he hopes to arouse in his audience, for the revealing of his own humor will stimulate a like humor in the listener. In languishing, sad passages, the performer must languish and grow sad. Thus will the expression of the piece be more clearly perceived by the audience. Similarly, in lively, joyous passages, the executant must again put himself into the appropriate mood. And so, constantly varying the passions, he will barely quiet one before he rouses another..... Those who maintain that all of this can be accomplished without gesture will retract their words when, owing to their own insensibility, they find themselves obliged to sit like a statue before their instrument. Ugly grimaces are, of course, inappropriate and harmful; but

> fitting expressions help the listener to understand our meaning.

3.3 Cadences[17]

The construction of Bach's cadences shows a constant interplay of musico-psychological effects in the form of tension and relaxation (Toch: 1977:156).[18] The intensity by which a particular effect is perceived, depends on two factors. The first one concerns the way in which Bach integrates 'the basic musical elements' (Barra, 1983:47), i.e. harmony/counterpoint, texture, meter(rhythm) and melody (register), into his cadential structures. The second factor concerns the duration of a particular effect. Barra (idem:29) explains:

> According to the Psychological Theory of Emotions, tension and expectations must be sustained *for a sufficient period of time* if they are to become the basis of significant emotional reactions. It is not simply the development of tension, but the *prolongation* of tension, that is the basis of our deeply felt emotional experiences.

The performer's perception of tension and relaxation around cadences has a direct influence on his/her interpretation of phrasing. In order to establish usable criteria on which the performer can base decisions regarding phrasing, it is necessary to examine the way in which Bach embedded these effects in his structures.

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17 The term 'cadence' refers here specifically to the broader cadential structure comprising the progression leading up to the cadence, the cadence itself, and the continuation (wherever applicable). In its narrowest sense, 'cadence' refers to the formula consisting of two chords.

18 Other terms used bearing the same psychological meaning as 'tension/relaxation' are 'satisfaction' (Rameau, 1722, in Gossett, 1971:63), 'homeostasis' (Barra, 1983:4), instability-stability, discrepancy-clearness, expectation/frustration - fulfilment, pregnancy - termination/end, harmonic crescendo - decrescendo (Bent and Drabkin, 1987:53) and 'growing dynamics' (Kloppers, 1965:172-173), contrast between black and white, shade and light (Toch, 1977:156).

3.3.1 Harmony

Harmony 'provides a tonal skeleton against which melodies develop, and it also creates a pattern of motion that contains its own sequence of thrusts and resolutions' (Barra, 1983:51). 'Thrusts' and 'resolutions' in this sense, are synonyms for 'tension' and 'relaxation'.

Harmonically, two factors determine the degree of tension and relaxation at Bach's cadences. These are the consonant-dissonant and diatonic-chromatic relationships between chords. The use of dissonance and chromaticism creates tension, while the presence of consonance and diatonicism reduces tension.[19]

3.3.1.1 The Two Chords Comprising Cadences

The two cadential chords are of immense importance. As core elements of the phrase, they are the first to be dealt with. How that will be done, depends on the degree of tension and relaxation conveyed by them. This differs from cadence to cadence, because the factors 'demanding' resolution vary in strength.[20]

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19 'Consonance' and 'diatonicism' represent the 'stable' elements 'not requiring resolution', while 'dissonance' and 'chromaticism' represent the unstable elements creating 'an ongoing thrust' (i.e. tension) (Barra (1983:51, 52) that requires resolution unto consonant (Randel, 1986:197) or diatonic harmonies. Only major and minor triads are consonant. All chords requiring resolution, i.e. those containing dissonant intervals (seconds, augmented fourths, etc.) and non-chordal notes, are therefore dissonant. Chromaticism implies the use of elements outside the diatonic scale and reveals the same tendencies as those created by dissonance.

20 For example, tension is perceived as being higher in a dominant seventh chord than a dominant chord based on a triad. Although tension in both is created by the third (leading note of the key) demanding upward resolution, the dominant seventh is provided with an additional element increasing tension: the presence of a 7th demanding downward resolution.

To the performer, Bach's use of cadences is important in two respects:

(i) He uses purely consonant cadences[21] very sparsely. These include the perfect authentic (V-I/i), interrupted (V-vi/VI), imperfect (I/i-V), and Phrygian (iv6/-V) cadences.

(ii) He generally confines the cadences with a very high degree of dissonance[22] and chromaticism to structures in improvisatory style and only sporadically uses them in the 'motoric' works. Intense chromaticism extending over an entire work is limited to BWV 542. Chromaticism, dissonance and abrupt modulations permeate this work to an extent that has no equal in Bach's entire organ *oevre*. Without BWV 542 and the final parts of BWV 532, 534 and (to a lesser degree) 547, Bach's organ works would have been perceived as predominantly rooted in diatonicism.[23]

3.3.1.2 The Broader Cadential Structures

The degree of tension conveyed by a cadence does not depend solely on its two cadential chords. These two chords are not isolated entities, but function within a specific context represented by the progressions flanking them. The effect of cadential tension and relaxation is therefore the result of the proportion of consonance-dissonance and diatonicism-chromaticism present in the ***all*** the phases[24] comprising the broader cadential structures in Bach's organ works.

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21 i.e. those constructed from triads only.

22 The term 'dissonance' is used within the context of traditional theory. Accordingly, the seventh of a dominant seventh chord, for example, is dissonant.

23 These aspects are fully discussed under the broader cadential structures.

24 Please see p. 4 points (i) - (iv).

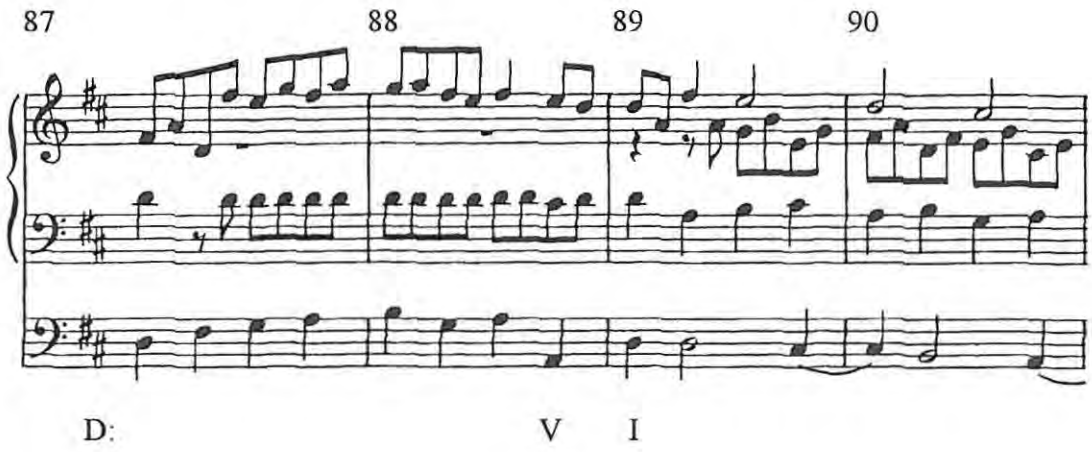
Three categories of cadences can be distinguished:

(i) Examples that show a prevalence of consonant elements and absence of chromaticism. In the following example dissonance is represented by a few non-chordal notes and seventh chords. Chromaticism is absent. The degree of tension, therefore, is low. The structure is characterised by a 'motoric' rhythm:

Example 9

Consonance and absence of chromaticism.

BWV 532, bars 87-90 (NBA IV/5:61).

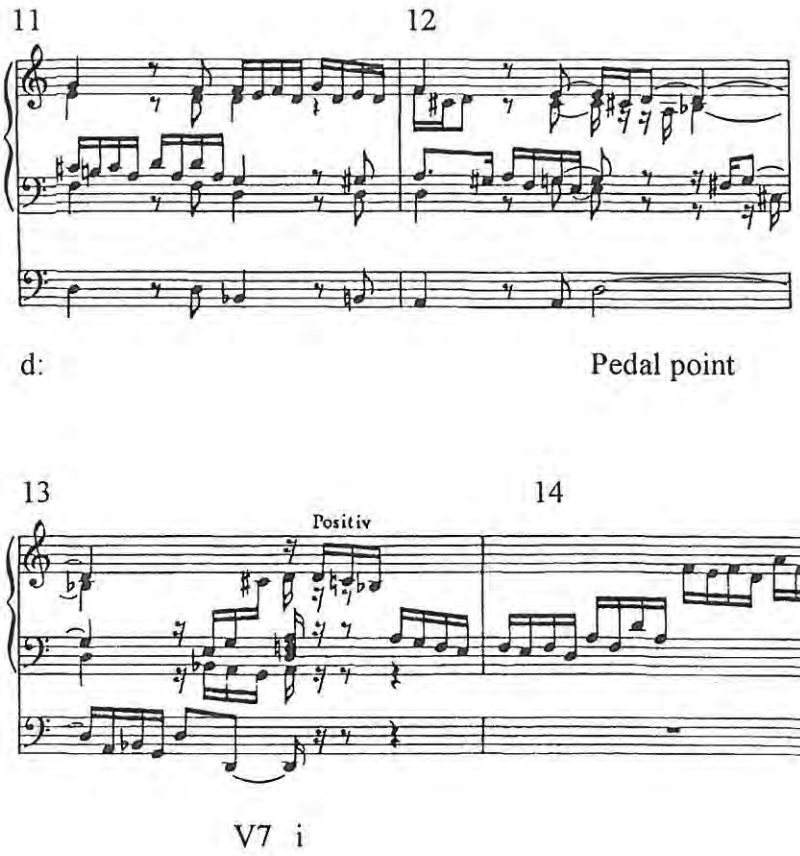


(ii) Examples that show a combination of diatonic and chromatic, and consonant and dissonant elements. Three subdivisions can be distinguished:

(a) Examples that show a free usage, without a definite recognizable underlying plan. This is illustrated in bars 11-14 of BWV 538 (NBA IV/5:76-77):

Example 10

BWV 538, bars 11-14 (NBA IV/5:76-77).



In the above example, tension is raised by:

- chromatic and diatonic non-chordal notes (especially suspensions);
- the tonic pedal point (bars 12^3-13^1);
- a superposition of a dominant (a-c#-e-g) and tonic (d-f-a) harmony (bar 11^1);
- secondary seventh (iv6/5, bar 11^3) and diminished seventh c#-e-g-b^b, bar 13^2) chords.
- a chromatic chord in the form of a secondary dominant seventh (i.e. V4/3 of V) in bar 11^4.

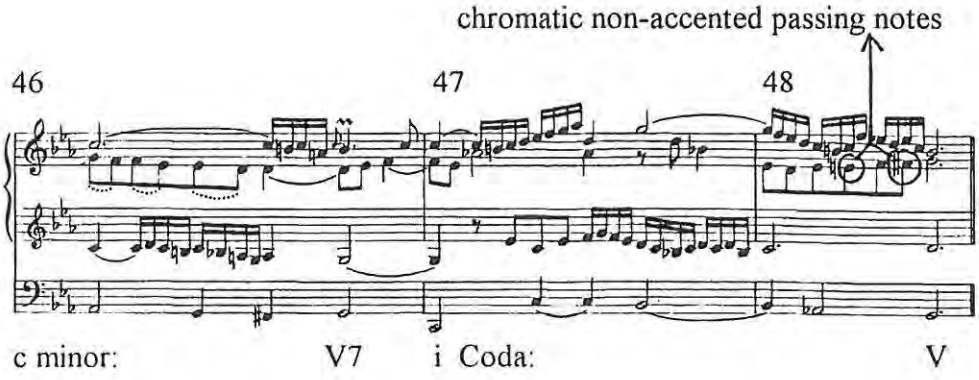
In the same example tension is reduced by:

- an introduction of the new phrase (bars 13^3-14 ff) which is entirely diatonic and consonant.
- the use of diatonic and consonant chords, such as i (bar 11^2), iv6 (bar 11^4), iv6 (bar 13^1) and i (tonic of cadence, bar 13^3):

In bar 47 of BWV 537 the perfect cadence introduces a short coda which ends in an imperfect cadence.[25] The coda, initially diatonic, becomes increasingly chromatic. This is caused by the introduction of two non-accented passing notes (e-natural and f#) in the 'alto' part in bar 48. The tension created by these chromatic notes reaches a climax on the dominant chord in bar 48:

Example 11

BWV 537, bars 46-48 (NBA IV/5:49).



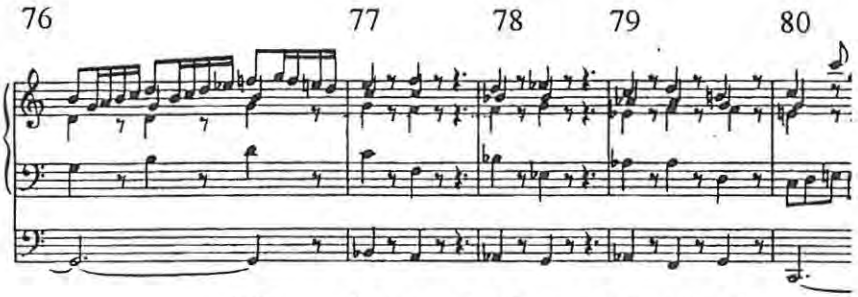
25 which, according to Williams (I, 1980:83), is 'unique' in Bach's organ works. It is one of only two imperfect cadences concluding an entire work. The other one concludes the Prelude in a, BWV 551 (bars 38-39).

(b) Examples showing the definite use of dramatic chords in the form of:

Sedondary dominants: Bars 76-79 of BWV 547 show an interrupted cadence (bars 76-77) that abruptly terminates the prevalent diatonic progression (bar 76) leading towards it. Tension is produced by a resolution into a secondary dominant. Chromaticism is prolonged and tension raised by the sequential secondary dominants in the continuation of the cadence:

Example 12

BWV 547, bars 76-80[1] (NBA IV/5:24).



diminished seventh chords: In bars 67-70 of BWV 534, the tension produced by the F major-f minor (f- *a*-natural - c, and f-a^{b}-c) interfusion (bars 68-69) above a dominant pedal point reaches a climax in bar 70. This is caused by an interrupted[26] resolution into a secondary diminished seventh chord. Tension is further raised and sustained by the extension of this chord (bar 71; also present in bars 73 and 74[3]) and interfusion with other chromatic harmonies. The perfect cadence in bars 75-76 eventually brings relief.

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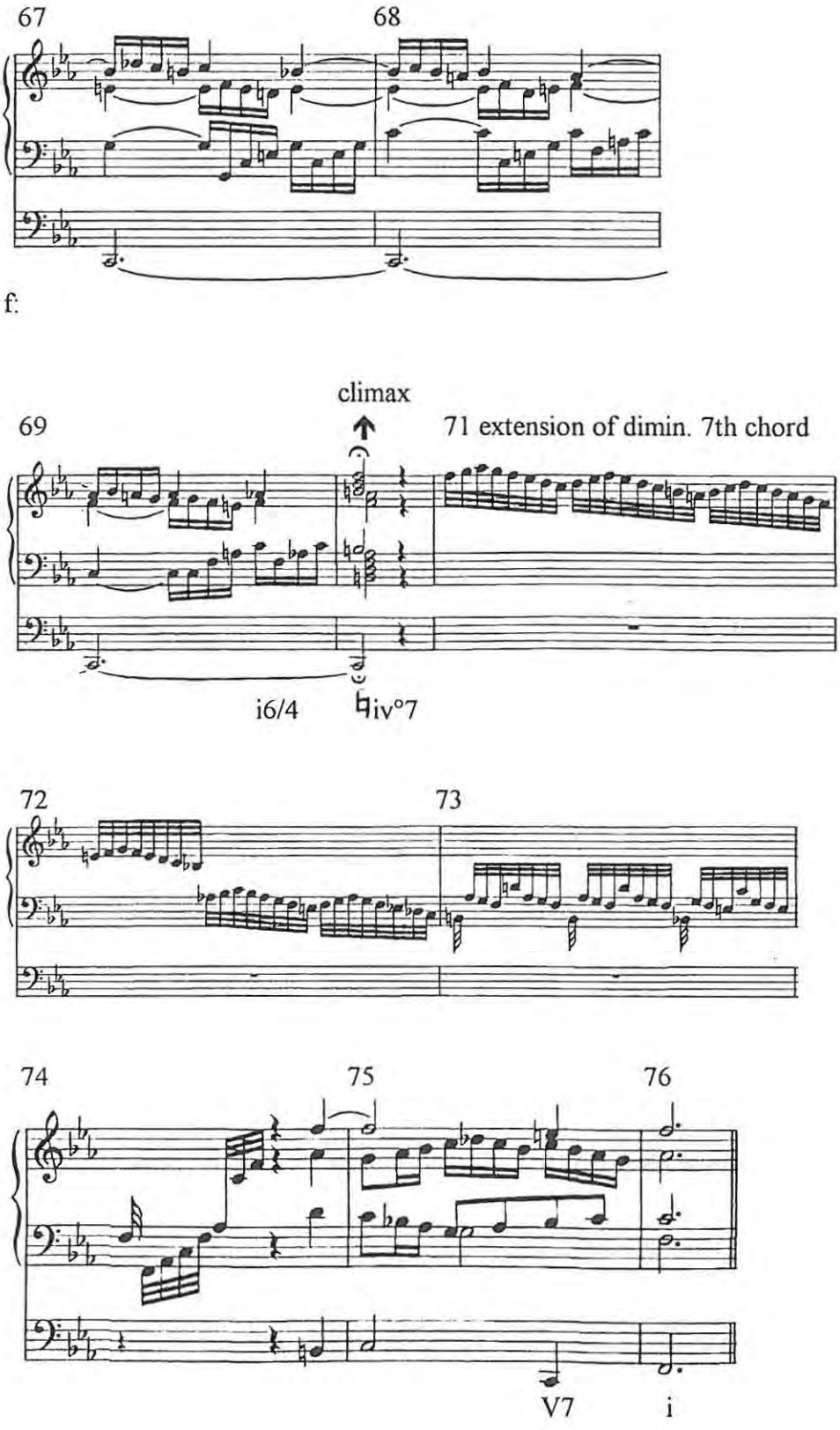
26 According to Hutcheson (1976:117), the interrupted (deceptive) cadence is not limited to the progressions dominant-VI/vi or dominant-IV6/iv6, but includes any progression where the 'final tonic is replaced by some other chord'. Although 'the most frequent substitution is the submediant,... any chord ....is possible' (ibid.).

Example 13

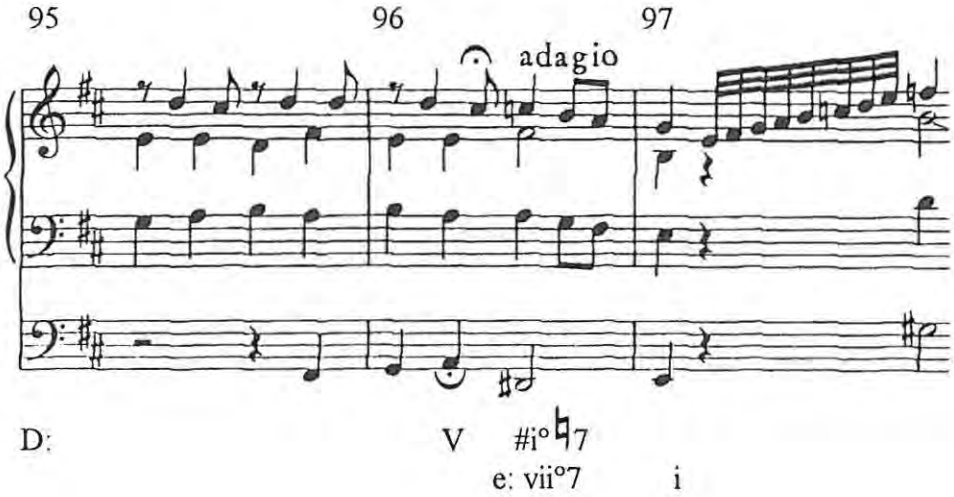
BWV 534, bars 67-76 (NBA IV/5:133).



In bar 96 of BWV 532, an interrupted cadence abruptly terminates a diatonic and consonant approach (bar 95). Tension created by chord V in bar 96 is prolonged by a *fermata*. Instead of resolving into chord I, tension is once again further raised by the sudden appearance of a secondary diminished chord on the raised tonic. The diminished seventh owes its dramatic effect to the expectation caused by the prolongation of chord V that precedes it. An effect of relaxation is conveyed by the continuation of this cadence (bars 96^3-97^2) with the resolution of the diminished chord onto chord i in e minor:

Example 14

BWV 532, bars 95-97 (NBA IV/5:61).



(c) Neapolitan sixths and diminished seventh chords in combination:[27]

In bars 30^2-32^3 of BWV 534 tension is generated in an otherwise diatonic progression (bars 29-30^1) by the combined use of a Neapolitan

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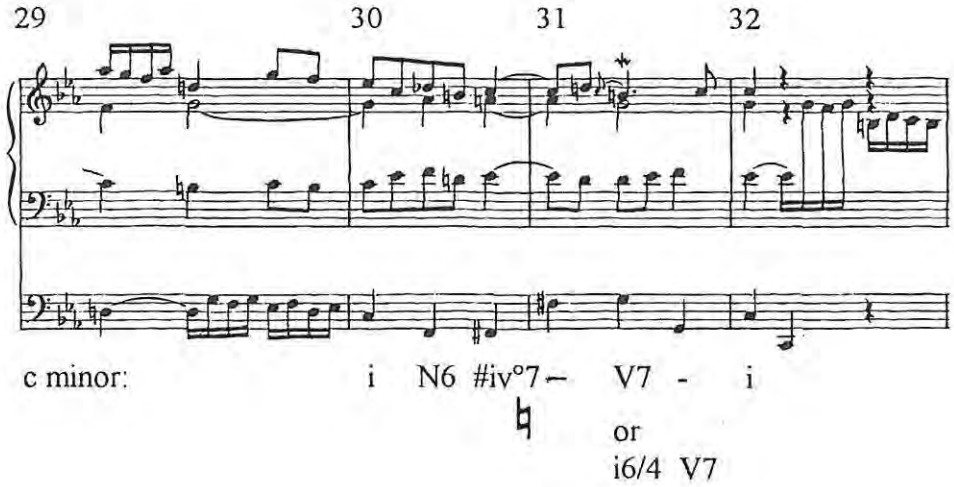
[27] The dramatic character of the N6 chord is evident from its use at the time of its origins (late 17th century). It was usually combined with affective words and served 'to reinforce the cadential drive of the harmony' (Bukofzer, 1983:122-123).

sixth, diminished seventh and dominant seventh chord. Relaxation is the result of the perfect cadence in bars 31-32, as well as the diatonic harmony by which it is followed:

Example 15

BWV 534, bars 29-32 (NBA IV/5:131).



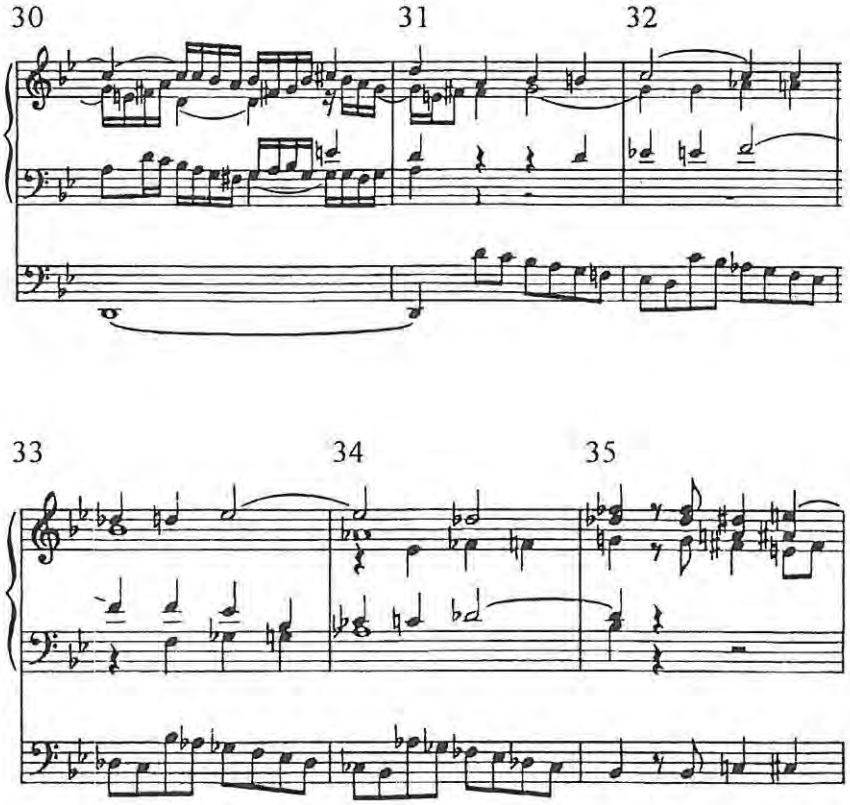
(iii) Examples in which intense chromaticism and/or dissonance completely dominate all phases of the cadence. Chromaticism and dissonance also extend over a significant period of time and 'chromatic inflection' is used as 'a means of modulation' (Keller, 1967:112), often to far-off keys. Relaxation, produced by perfect cadences, is usually delayed or even evaded to the extent that 'tonal anarchy' seems to dominate. Cadences of this type belong exclusively to BWV 542 and the final part of BWV 532.

(a) BWV 542[28]

After the imperfect cadence (bars 30-31^1) in g minor, tension continues in the ensuing modulatory sequences (bars 31^2-34^4) that progress within a cycle of fifths, and come to a surprising stop on a diminished seventh chord in bar 35^1:

Example 16

BWV 542, bars 30-35 (NBA IV/5:170).



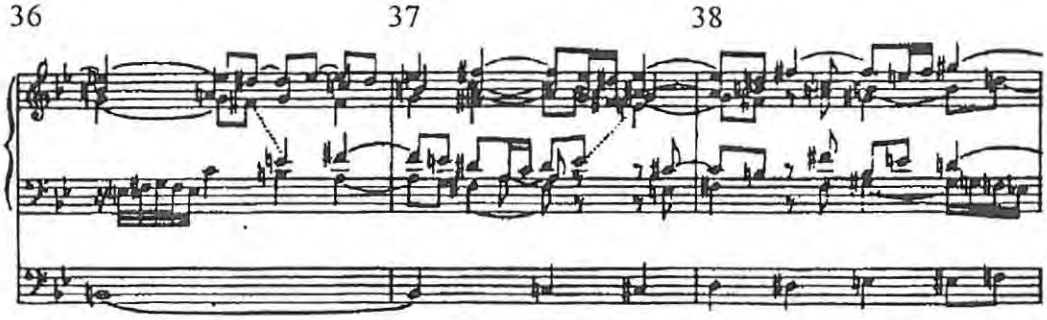
Cadential evasion underlies bars 36-39. In bar 35^4 an enharmonic change from f$^\flat$ to e-natural paves the way - via a diminished chord - for a modulation to e minor. However, instead of confirming this new key by means of the expected

28 The number of cadences in BWV 542 necessitated a selection. Except for two contrapuntal sections (bars 9-14 and 25-31), the work is almost entirely dominated by unconventional cadences. The final section (bars 31-49) has therefore been selected, because it sufficiently represents what is happening over the entire piece.

perfect cadence, harmonic progressions continue over a pedal point on the dominant (bars 36-37), including extensive use of suspensions. The already high degree of tension existing at this point increases even further (bars 37^3-38) on account of the highly chromatic progressions (including a 'passus duriusculus' in the pedal part):

Example 17

BWV 542, bars 36-38 (NBA IV/5:170).

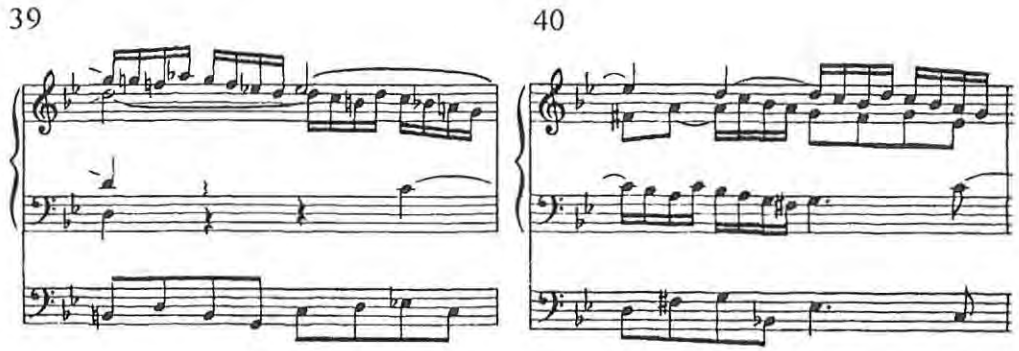


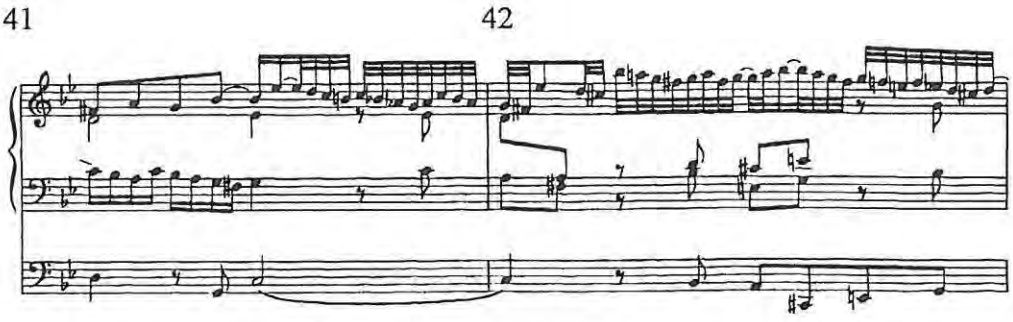
e:

Resolution is still delayed by a modulatory passage (bars 39-44) that includes a Neapolitan sixth chord in bar 41:

Example 18

BWV 542, bars 39-42 (NBA IV/5:171).



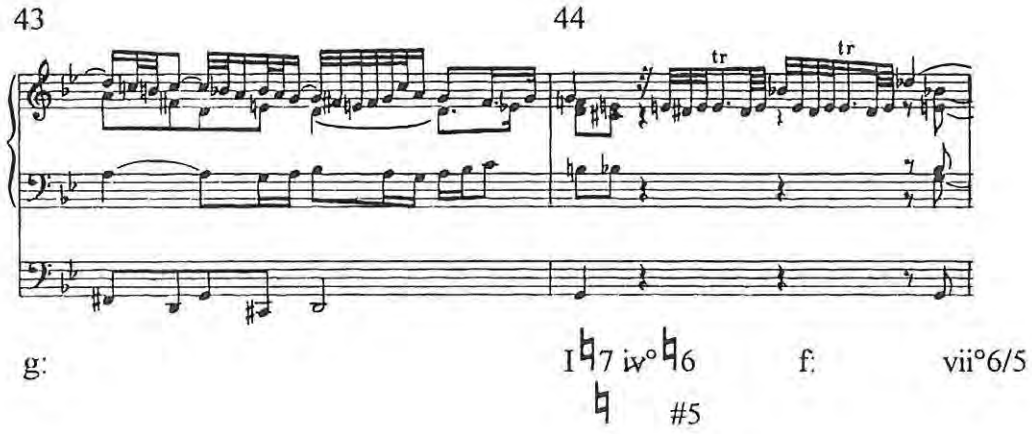


Neapolitan 6th

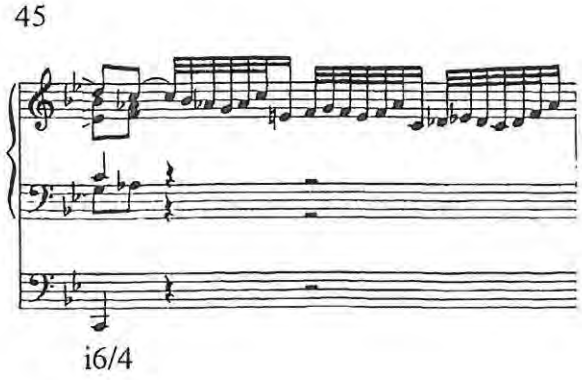
This section ends with a deceptive cadence (bar 43^4-44^1) in g showing a rather unusual succession of chords: the penultimate dominant ninth (rare in Bach's organ works) leading to a secondary dominant seventh (g-b-natural-d-f) of iv, is at once followed by a secondary diminished seventh in second inversion of chord V. The intense chromaticism characterising this cadence results in a pronounced turn into subdominant regions, a bias also affecting the subsequent bars 44-45 with yet another unconventional cadence again ending on a second-inversion chord:

Example 19

BWV 542, bars 43-45 (NBA IV/5:171).



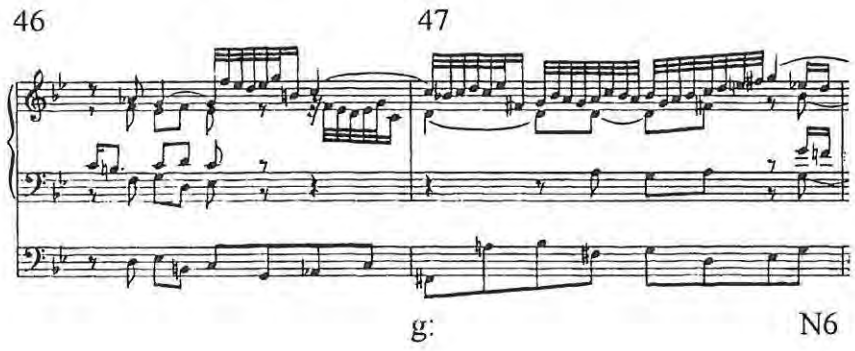
Example 19 (continued)

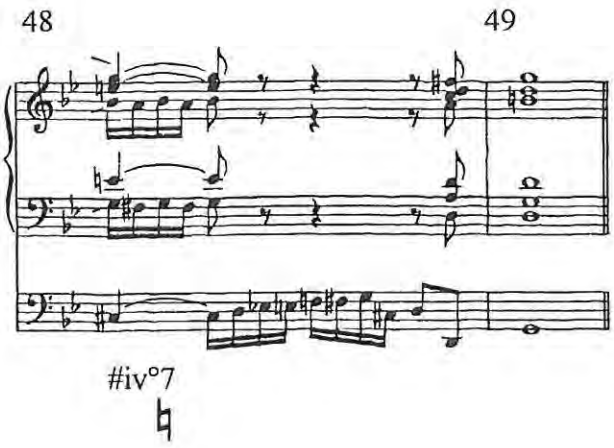


The typical monophonic passage following this chord at first merely figurates the prevalent f-minor harmony but then turns to D^{b} as Neapolitan sixth to C minor, a key that is briefly confirmed as an intermediate centre by a V-I cadence in bar 46. By introducing f# in the bass part of bar 47 the key finally returns to g-minor, the tonic of the work. However, before the ultimate cadence in bars 48/49 closes the movement, special emphasis is given to the all-important dominant harmony by a poignant and highly effective harmonic 'twist' in bars 47^{4}-48. A Neapolitan sixth on E^{b} and a diminished seventh chord on C# create the effect of a 'double leading note' that in turn produces a particularly powerful drive towards the long expected entry of 'd' as Dominant to G.

Example 20

BWV 542, bars 46-49 (NBA IV/5:171).





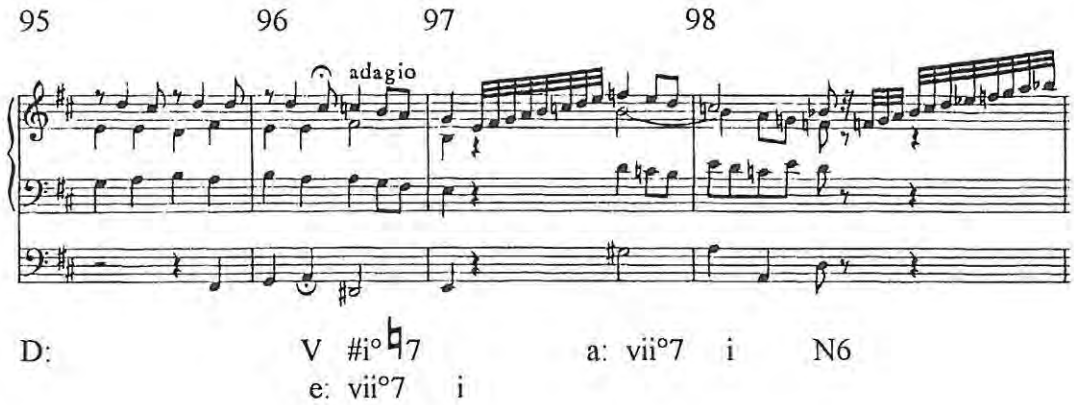
(b) BWV 532:

Continual cadential evasion also affects bars 96-107 of BWV 532 where tension is retained up to the closing bars as shown in the following examples:

In bar 96^{2-3} the expected cadence to D major is replaced by a turn to a diminished seventh into e minor. Similarly, a passing suggestion of 'a' minor gives way to a stop on the Neapolitan sixth in bar 98^{3}:

Example 21

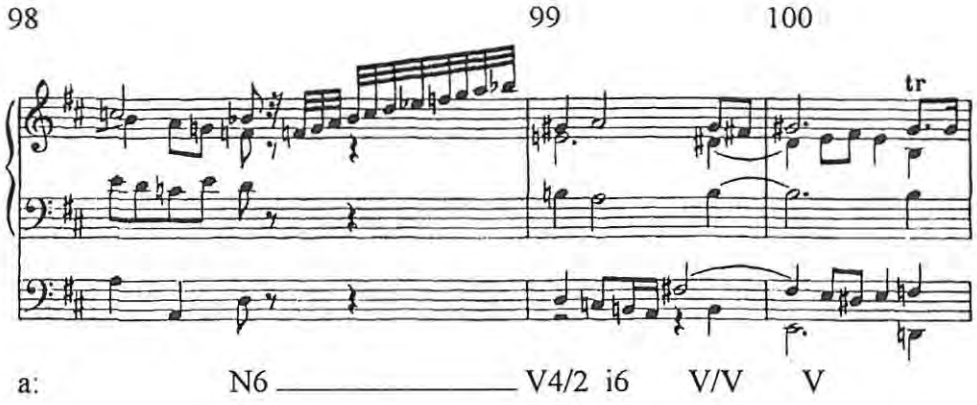
BWV 532, bars 95-98 (NBA IV/5:61).



Tension is further raised by prolonging this (N6) harmony with the ascending pseudo-recitativic scale (bar 98^{3-4}) and the imperfect cadence in bars 99^{3}-100^{2}. Here the harmonic tension finds further support by suspensions (bar 100^{1}) and a texture intensified by the introduction of a second pedal part:

Example 22

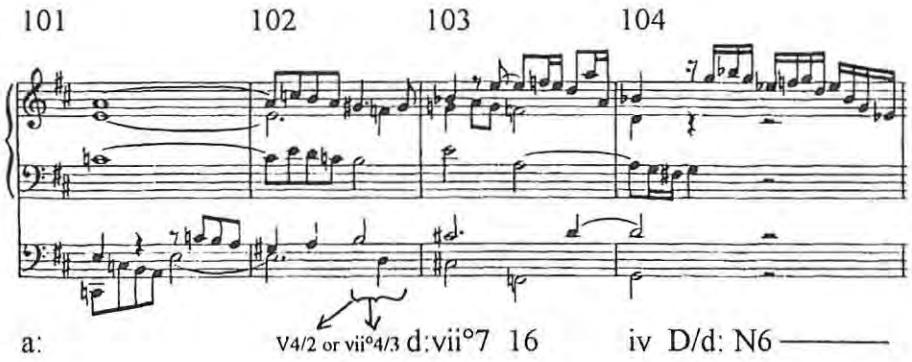
BWV 532, bars 98-100 (NBA IV/5:61)



Harmonic tension continues uninterruptedly in bars 100-103. Once again an expected resolution in 'a' minor turns onto another diminished chord, introducing a sudden modulation to d minor in bars 103^{3}-104^{1}:

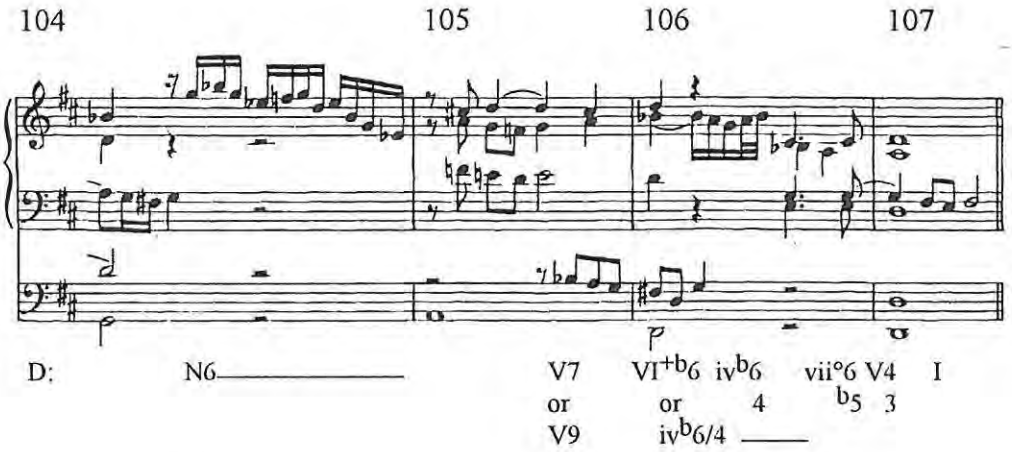
Example 23

BWV 532, bars 101-104 (NBA IV/5:61).



After a brief stop on subdominant level (bar 104), another recitativic figure, based on the Neapolitan sixth, indroduces the important dominant note (A) in the pedal. This eventually leads to the perfect cadence terminating the entire chain of progressions. However, even here accumulated tension is maintained right until the end when the diminished seventh chord (bar 106^3) following the augmented chord resolves to the final tonic harmony in bar 107:

Example 24
BWV 532, bars 104-107 (NBA IV/5:61).



3.3.2 Texture

Owing to the static tone quality of the organ, sensations of dynamic variation (including accents) can only be produced by register changes and/or by compositional means. One of these means comprises changes in texture. In this regard Kloppers (1965:172-173) writes:

> Die Orgelwerke Bachs enthalten unzählige Beispiele, in denen die 'inneren Kunstmittel' (Forkel) im Dienste der Dynamik stehen. So erzeugt z.B. a) die Vermehrung der Stimmpartien eine wachsende Dynamik oder b) die freistimmig-akkordische Verstärkung von einem ein- oder mehrstimmigen Motiv eine Akzent-Wirkung.

Translated:

> Bach's organ works contain innumerable examples where the 'inneren Kunstmittel' (i.e. internally used devices) assist the dynamics. An increase in the number of parts, for example, produces an increase in dynamic intensity. In a like manner, the sensation of an accent can be created by the sudden superposition of additional triadic or chordal notes upon a motif thus far restricted to one or more parts.

Elaborating further on the same point, Kloppers (1965:283) also states:

> Bei einer Betrachtung der Orgelwerke Bachs fällt auf, wie differenziert die Dynamik durch rein kompositorische Mittel dargestellt ist. Wird das Orgelwerk ohne Manualwechsel und mit gleichbleibender Registrierung ausgeführt, ist das Werk in dynamischer Hinsicht noch immer abwechslungsreich.

Translated:

> Carefully studying Bach's organ works one cannot fail to notice the high degree of dynamic differentiation that is achieved solely by compositional devices. Even a performance abstaining from any changes in manuals or stops still displays a surprising dynamic variety.

Kloppers (1965:173) mentions the following examples (among others) where increase of parts creates an effect of *crescendo* (or tension).[29]

In bars 2-3 of BWV 565 an increase in tension is produced by the note-by-note addition to a diminished seventh chord over a tonic pedal point until an eight-part texture is reached (bars 2^4 and 10^4). An effect of tension and relaxation is perceptible in bar 3 when the eight parts are reduced to five:

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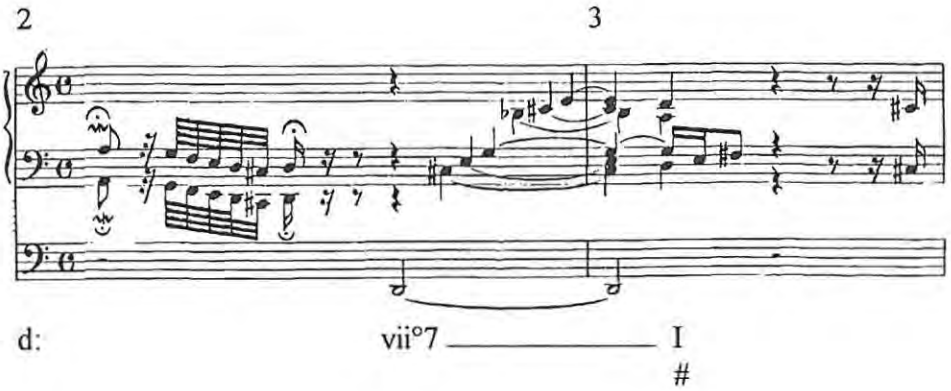
29 The terms '*crescendo*' and '*decrescendo*' are synonymous with 'tension' and 'relaxation', respectively. The examples only mentioned by Kloppers are provided here in notation.

Example 25

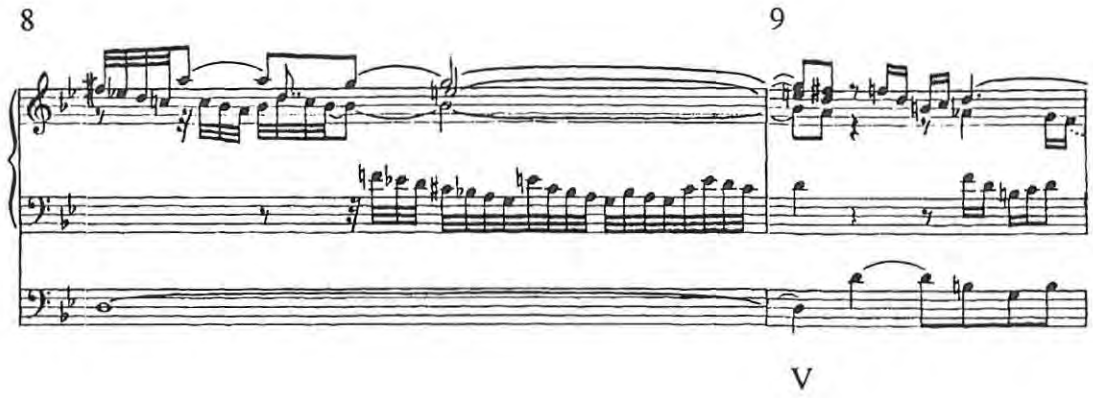
Changes in texture: BWV 565 bars 2-3 (NBA IV/6:31).



BWV 542, bars 8-9. In the progression towards the imperfect cadence in bars 8-9, the number of parts gradually increases from two to five:

Example 26

Changes in texture: BWV 542 bars 8-9 (NBA IV/5:168).



3.3.3 Meter and Rhythm

In the realm of meter (i.e. the number of beats per bar), fluctuations in tension are produced by:

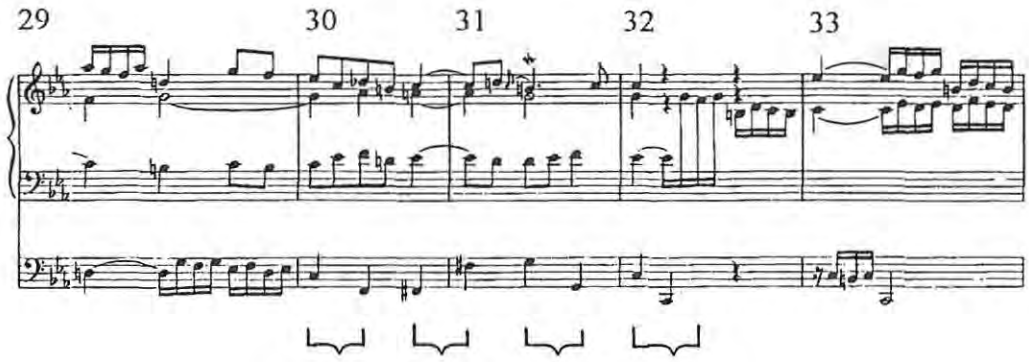
(i) A 'vacillation of metric grouping, as if shifting from a two-beat meter to a three-beat meter, or vice versa' often occurs at the cadence and is known as *hemiola* (Baur, 1985:242). The metric displacement caused by such a *hemiola* results in a corresponding shift of accents, a shift which, in turn also affects the tension of the specific musical passage. While a faster succession of accents increases tension and thereby conveys the effect of an *accelerando*, a slower succession creates a *ritardando*-effect and conveys a message of relaxation.

The following example shows the use of a *hemiola* at a cadence:

Example 27

Meter: *Hemiola.*

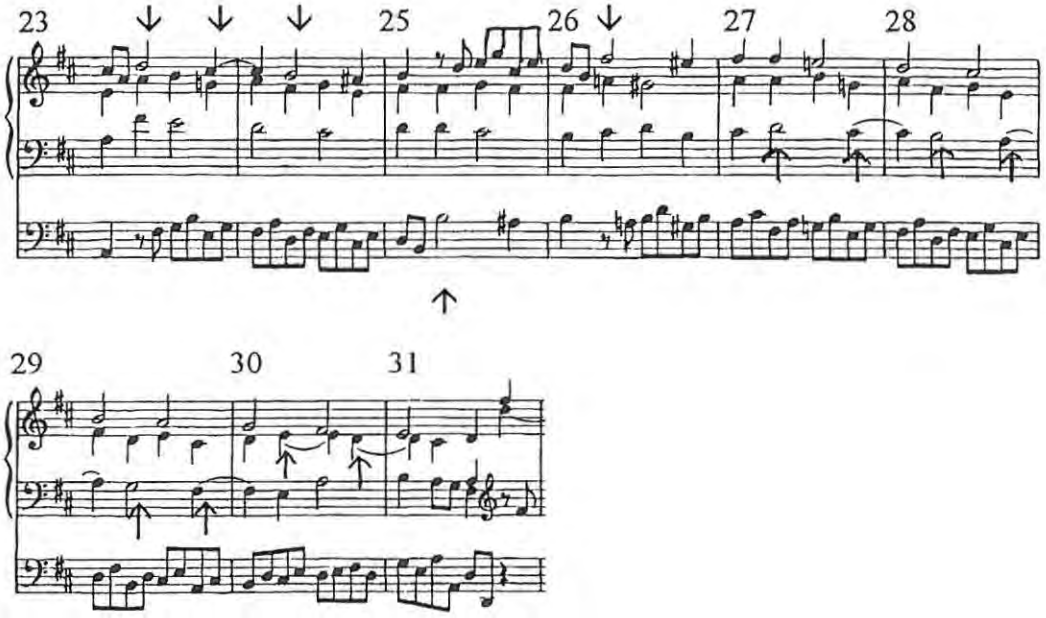
BWV 534, bars 29-33 (NBA IV/5:131).



(ii) Displacement of meter in the form of syncopation which implies 'the shifting of the natural accent to another beat or to another part of the beat' (Baur, 1985:97). According to Baur (ibid.) 'greater tension' is created by a syncopation that is 'more extended or quicker in its motion' thus 'resulting in a stronger forward push to the line'. The middle section of BWV 532 shows numerous examples:

Example 28

Meter: Syncopation in BWV 532 bars 23-31 (NBA IV/5:59).



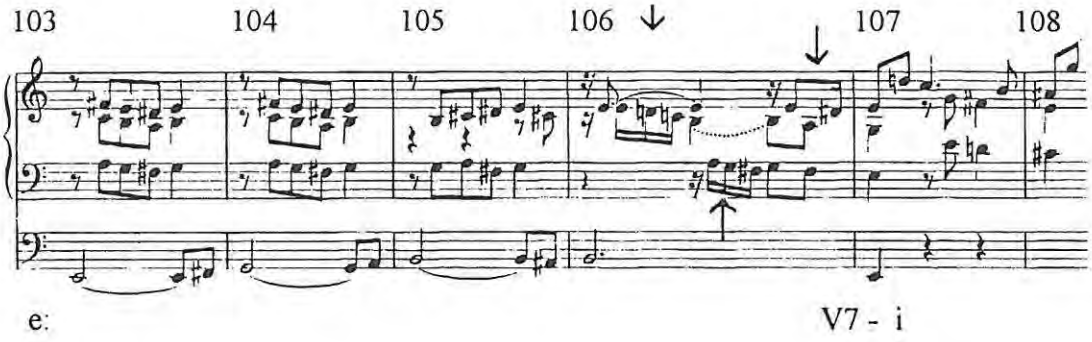
A 'stronger forward push' (i.e. increase in tension) toward cadences in the above example is the result of syncopation in various parts: in bars 23-25 (top part; bar 26 (top part); 27-31 ('alto' and 'tenor' parts).

Regarding rhythm, the relationship of tension and relaxation depends on the number of notes used within a metric unit (beat), and the way these notes are arranged. A high number of notes per beat (rhythmic contraction), as well as complex, incongruous rhythmic patterns produce a 'snowballing' effect (Gauldin, 1985:23), or tension. The reason, according to Barra (1983:66), is that complex, incongruous patterns create a strong desire for a return to more balanced patterns of motion. In a like manner, punctillious, regular, congruent patterns consisting of a small number of notes per beat produce the opposite, an effect of relaxation. The following are examples of rhythmic variation at Bach's cadences:

In bars 103-107 of BWV 569 the even flow of quavers (bars 103-105) is interrupted near the cadence in bar 106. Tension is raised by the introduction of semiquavers in bar 106. The cadence (bar 106^{3}-107^{1}) shows a syncopated rhythm in the top voice while the actual number of pulses still retains the underlying semiquaver motion. An even rhythmic flow is restored only in bar 107 after the cadence:

Example 29

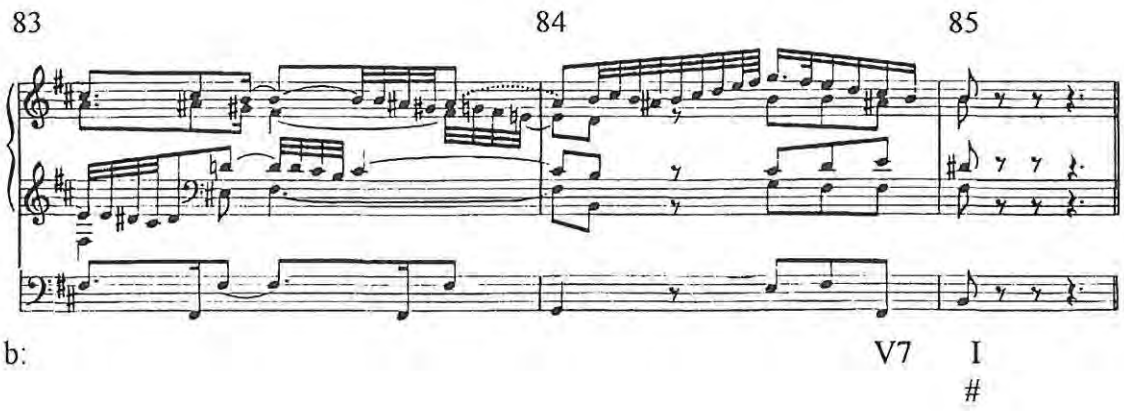
Rhythm: BWV 569, bars $103\text{-}108^{1}$ (NBA IV/6:61).



The final cadence of BWV 544 (bar 84) shows an expansion of rhythm (relaxation), produced by the changes from demi-semiquavers to semiquavers, and semiquavers to quavers towards the final chord of the cadence:

Example 30

Rhythm: BWV 544 bars 83-85 (NBA IV/5:205).



3.3.4 Melody

Melody i.e. 'a definite succession of various pitches in a definite succession of rhythms' (Toch, 1977:69), plays an important role in determining the dynamic form of a phrase. Our perception of tension or relaxation is determined by movement away from and towards an 'obligatory' pitch, referred to by Schenker (Oster, in Yeston, 1977:55) as an *obligate Lage*. According to this concept, compositions show the prevalence of a fundamental register throughout, regardless of temporary excursions to higher or lower levels (ibid.). The obligatory level, in this sense, serves as a stabilising factor. By 'restoring' it, an effect of relaxation is produced. By moving away from it, tension is produced.

In moving to other levels, the degree of tension produced is proportionate to two factors:

(i) The distance from the obligatory register. The bigger the distance, the higher the tension created by the excursion.

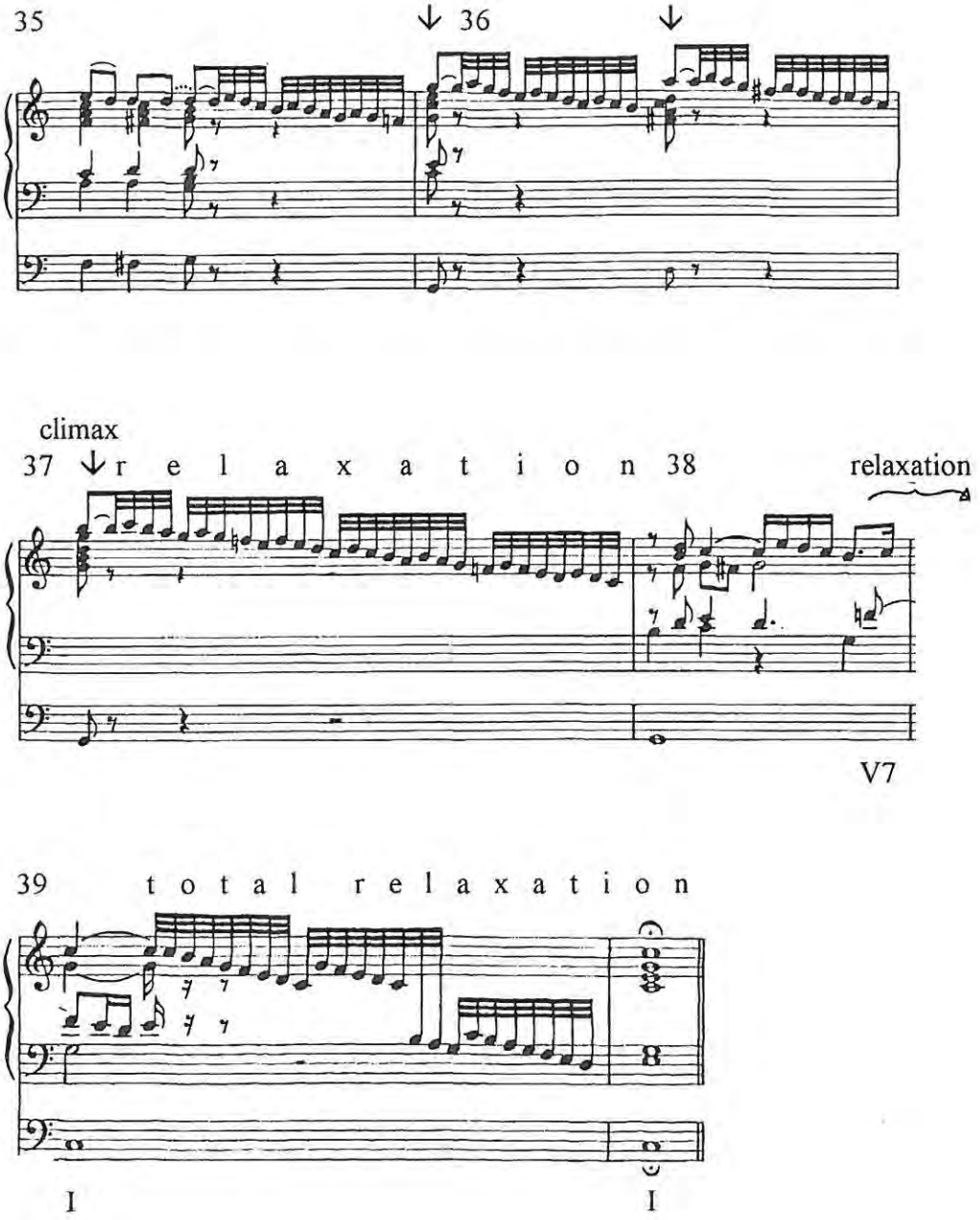
(ii) The duration of remaining in the new register. The longer the duration away from the obligatory register, the higher the tension.

The following examples illustrate this concept:

In BWV 531, the obligatory register could be regarded as being represented by the notes (C - c'). Starting at the imperfect cadence in bar 35^3, the melody ascends in 'smaller partial waves' (Toch, 1977:79) via their respective top notes towards the climax of the entire progression at which point the wave 'breaks' (bar 37^1). Once the climax is reached the melody returns to the obligatory level, thereby gradually reducing tension:

Example 31

Melody: Register. BWV 531 bars 35-40 (NBA IV/5:5).



4. INTERACTION OF ALL THE ELEMENTS

The basic musical elements function interactively. The degree of tension and relaxation depends on the quantity of the various elements and the way in which they

are combined. The higher the quantity, and the longer the duration of tension-creating elements, the higher the degree of tension , and *vice versa*.

The previously discussed passage in BWV 531 (bars 36-37) illustrates Bach's method of combining various elements to achieve a particularly high degree of tension. In addition to the melodic aspect the following factors come into consideration:

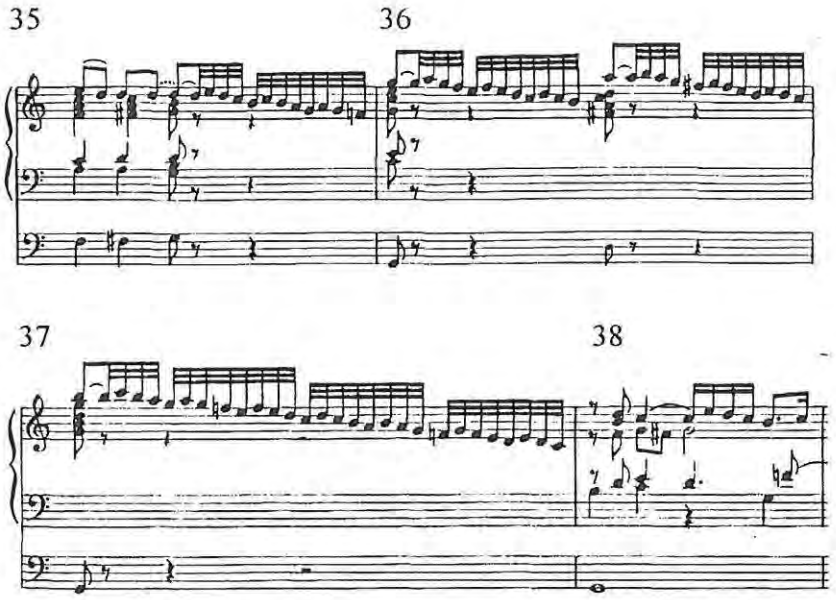
(i) The use of chord V preceded by its secondary dominant - the only chromatically altered chord in an otherwise diatonic surrounding.

(ii) The textural strengthening of the ascending progression in bar 36 by the full chords that accentuate the important melodic notes.

(iii) The rhythmic change from quavers to demisemiquavers that produces a strong forward drive which adds further emphasis to the melodic ascent.

Example 32

BWV 531, bars 35-38 (NBA IV/5:5)

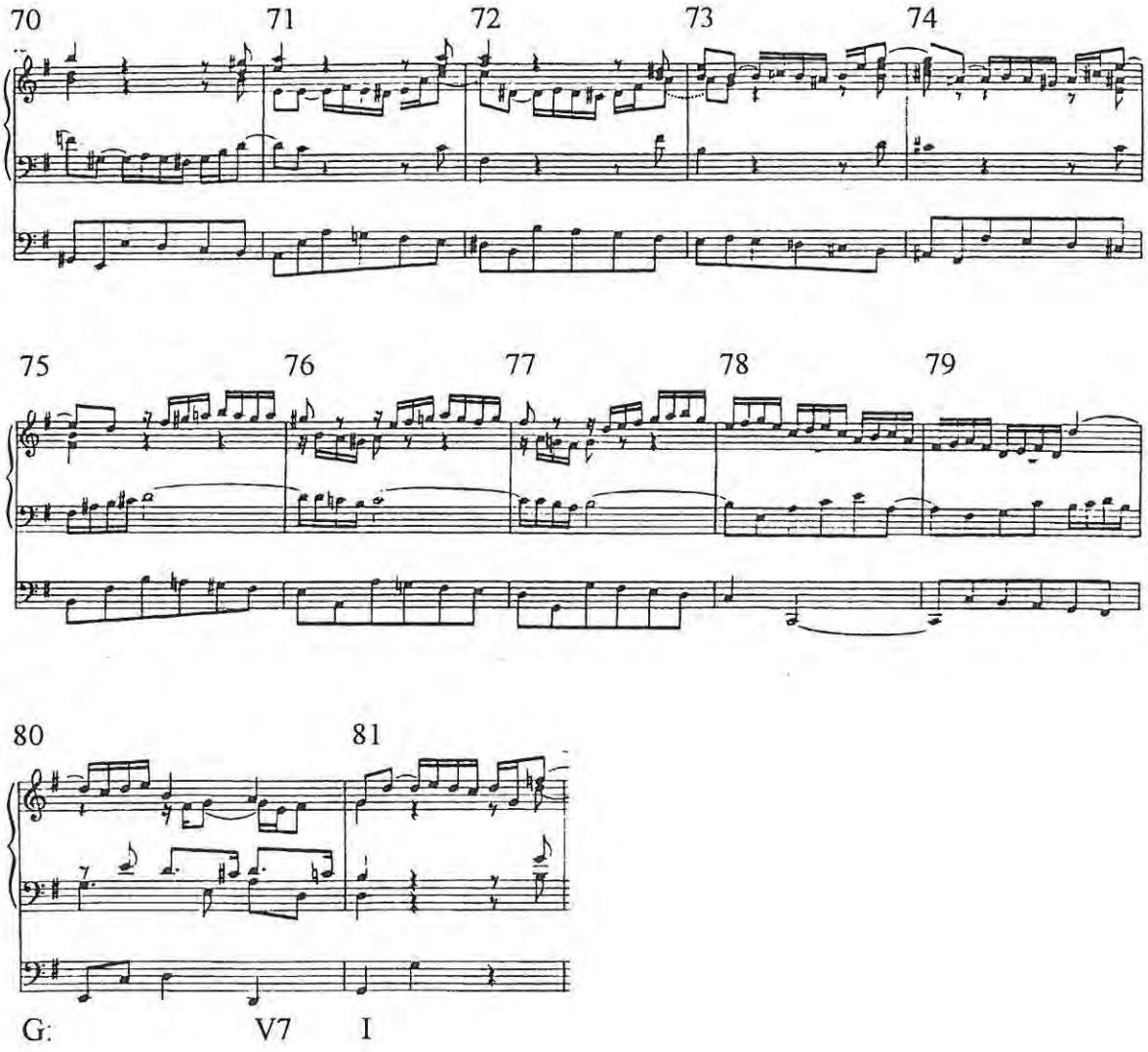


Tension-creating forces permeate the g-minor Fantasia BWV 542 to an extent that has no equal in Bach's entire organ *oevre*. Here, quantity and duration of these elements converge in stretches of extraordinary length resulting in a corresponding 'piling up' of tension. The work will be fully analysed and discussed in Chapter 5.

By contrast, musical elements are also combined in a manner as to produce a feeling of relaxation as in bars 78-81 of BWV 548.

Example 33

BWV 548, bars 70-81 (NBA IV/5:98).

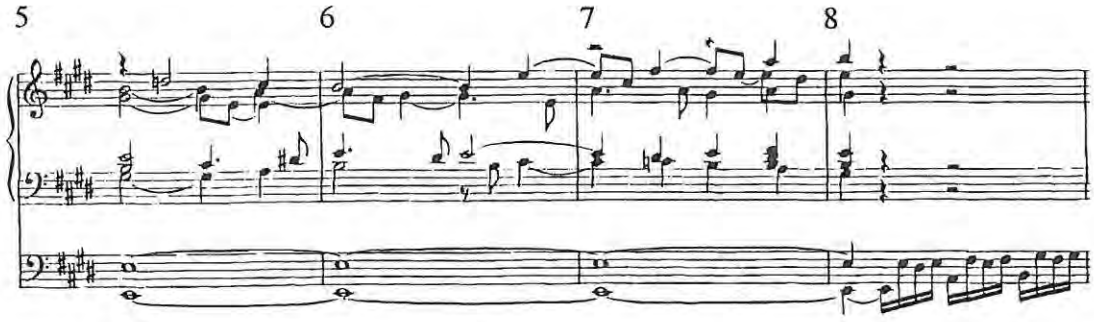


Tension produced by modulations, dissonance (suspensions), accents, large melodic leaps and diversity in rhythm in bars 70-75[1] is reduced from bars 75ff by the use of descending melodic sequences, a change to diatonicism and consonance, flowing rhythm (semiquavers) and a three-part texture (except at the cadence in bars 80-81).

At other times, the co-existence of conflicting musical elements creates an interesting ambiguity in the perception of fluctuating tensions. In BWV 566 bars 5-8, both the melodic ascent and the concurrent textural intensification result in a pronounced increase in tension that reaches its climax in the E major chord of bar 8. Harmonically, a similar process is initiated by the use of dissonances and suspensions. However, the increased harmonic tension is abruptly released at that very point which marks the climax of melodic and textural tension:

Example 34

BWV 566, bars 5-8 (NBA IV/6:40).



5. THE PERFORMER

How does Bach's integration of the basic musical elements affect interpretation? The role of the performer is defined by the extent to which he/she is able to partake in the effect-generating process. This participation is subject to the condition that the factors producing effects - the presence and duration of effects - be 'manipulable'. With

regard to the first factor, the performer is restricted. Bach's embedded effects cannot be changed, be it by omitting, changing, or adding notes at free will. However, with regard to the duration component, the performer has an enormous role to play.[30]

In the sphere of tempo, the intensity of an effect will depend on the time spent on an element giving rise to it. Accordingly, delaying the movement away from such an element will raise the effect produced by it, and likewise, expediting the movement away from it will result in a reduction of its effect. For example, we are all aware of the psychological impact when the movement away from an element producing tension is delayed. A dominant seventh chord that is elongated far beyond its limits can produce unbearable tension. When a resolution eventually takes place, the effect of such a relaxation is far more pronounced.

In the sphere of articulation the degree of an effect can be raised or reduced by the way in which the effect-producing elements are acknowledged. Such acknowledgements range from:

(i) isolating - and thus emphasizing - a single element (note, chord) by the application of a break before and after it, -to-

(ii) emphasizing or highlighting a number of elements within larger units. Here, an effect is made prominent by a contrast in articulation - be it more *legato* or more detached - to separate a section from progressions by which it is preceded and followed.

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30 The duration component is manipulable and is dealt with in the next four chapters.

In combination, variation of tempo and articulation provides the performer with a powerful means to communicate his individual interpretation of psychological perceptions.

However, it is inconceivable that dealing with the psychological effects within the phrase is entirely a matter of personal taste. Yet, it is equally inconceivable that Bach would deny any personal taste in the matter. It is a question of acquiring the skill to judge whether manipulating an effect is appropriate or whether leaving it as written is the better option. One of the methods in acquiring such a skill is to view Bach's structures from every possible perspective. This implies that an analysis of the material structures[31] of Bach's works is unfortunately not adequate. A complete overview is only possible when material analysis is complemented by interpretative aesthetical analyses. If findings from the various analytical perspectives concur, and in turn seem to correspond to statements by theorists, then the prospective performer of Bach's organ works can be confident of a more 'authentic' interpretation.

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31 Material structure refers to the objective, physical, anatomic, 'notational' structure, while the interpretative aesthetical structures refer to those arising from the applications of rhetorical, grammatical and affective principles.

CHAPTER 2

PHRASING

1. INTRODUCTION

One of the first steps in arriving at a clear interpretation of the underlying phrase-structure is to select the type of break appropriate to a specific situation. Depending on their actual duration, such breaks can vary from minute, nearly inaudible breaks to large extended ones.

2. SHORT BREAKS

2.1 Short Breaks at Secondary Cadences

Breaks of this category merely aid to clarify articulation. They are conditioned by one or more of the following circumstances:

(i) The 'ephemeral' nature of a cadence.

(ii) The grammatical connotations attributable to a cadence: According to 18th century thought, they represent incomplete periods (full-stops) at the ends of sentences 'within a paragraph', or commas (Wessel, 1955:255). The 'line of thought is not interrupted' by these cadences (ibid.).

(iii) The rhetorical connotations of a cadence which does not end any part of the musical *dispositio*. The short break following on the cadence represents nothing more than a quick 'breath' (referred to by Hurford in point vi) taken by an orator while presenting his/her speech.

(iv) The 'Homogenität der Struktur und Thematik' (Klinda, 1987:136): i.e. uninterrupted continuity of rhythmic flow and musical texture before and after a cadence which therefore does not separate contrasting sections.

(v) A harmony that is largely diatonic with a low degree in tension.

(vi) the presence of the *suspirans*[32] figure. According to Hurford (1990:96), 'In shortening such cadence notes, the player produces the sensation of a quick breath (*silence d'articulation*) which clarifies the following motif, and gives the line air and space'. It also 'lends impetus to a Bach line' and 'the little cadence point is at once the end of one phrase and a springboard into the next' (idem:98).

The following excerpts illustrate the applicability of short breaks at secondary cadences. These breaks in no way interfere with the continuity of the music but are produced by a shortening of the final cadential notes. Their suggested positions are indicated by vertical lines (|):

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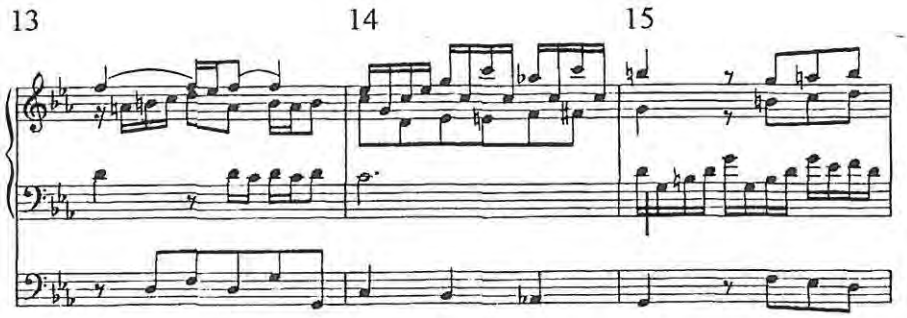
32 Hurford (1990: 96) defines it as a ' "breathing" figure,....so called because it starts with the sensation of a quick breath. Sometimes the "breath" is literal, taking the form of a rest, though most commonly it is felt as a cadence note in the context of a line of running semiquavers'.

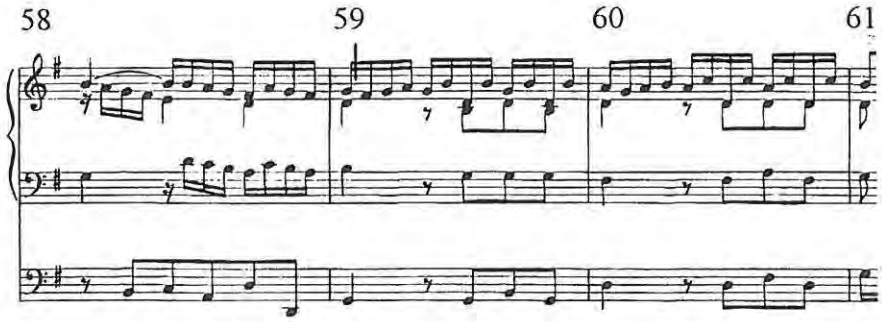
Example 35

Short breaks at secondary cadences.

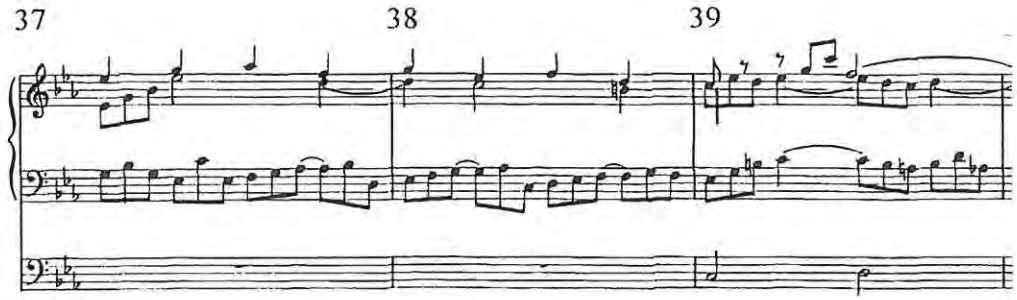
BWV 534 bars 13-15 (NBA IV/5:130).



BWV 541, bars 58-61[1] (NBA IV/5:149).



BWV 546, bars 37-39 (NBA IV/5:37).



2.2 Short Breaks at Main Cadences

As a general rule, main cadences ought to be followed by a break which clearly separates the final notes of the cadence from the 'new' musical unit entering immediately after the point of the cadence. Normally this break will be of longer duration.[33]

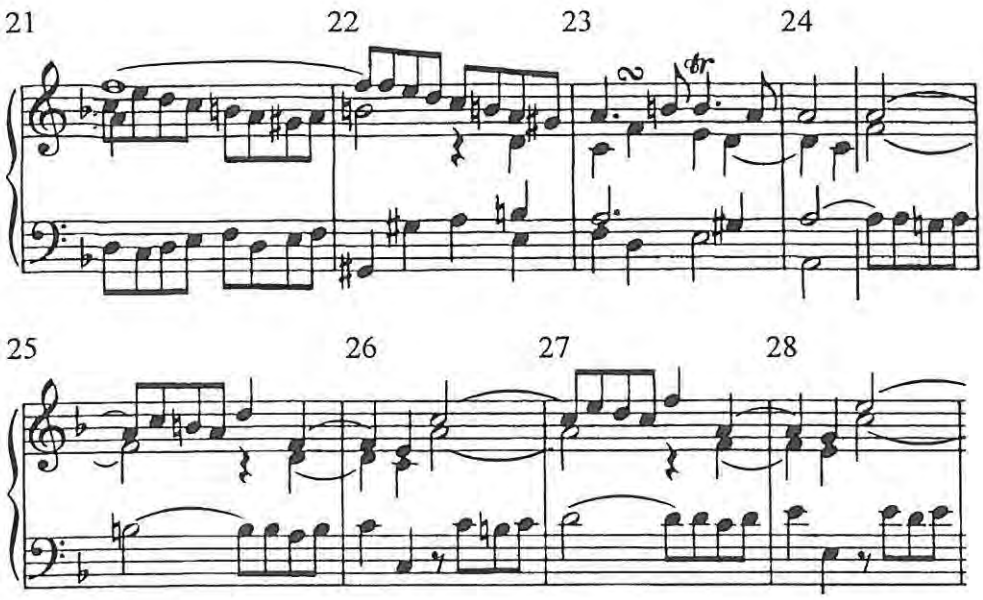
2.2.1 Short Breaks at Inner Main Cadences

An inner main cadence should be followed by a short break if it appears within a 'motoric' structure that demands uninterrupted rhythmic continuity.

In bars 23-24 of BWV 539, the cadence separates the two main sections of the piece. However, any longer break would inevitably disturb the flow of the rhythm.

Example 36

Short breaks at inner main cadences: BWV 539, bars 21-28 (NBA IV/5:70).

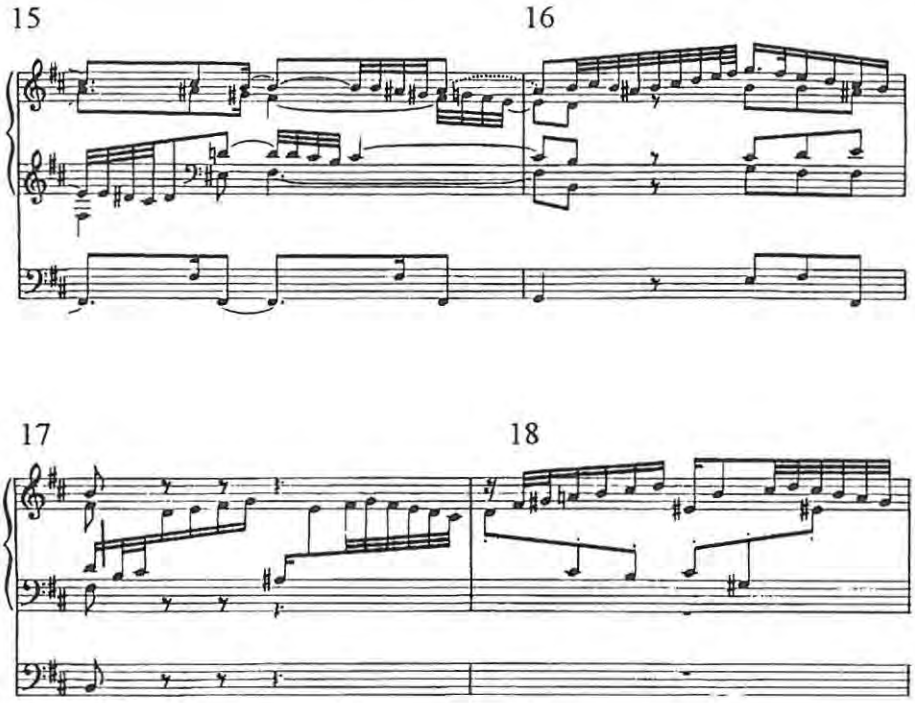


33 See later under 3. Longer Breaks.

The demands of 'motoric' continuity also prohibit the insertion of any longer break at the cadence in bar 17 of BWV 544 even though it separates two strongly contrasting textures.

Example 37

Short breaks at inner main cadences: BWV 544, bars 15-18 (NBA IV/5:199).



2.2.2 Short Breaks at Final Cadences

According to common practice, preludes and fugues are separated by long breaks.[34] However, in BWV 550 and BWV 551 prelude and fugue are interlocked in a manner which makes any such break impossible and allows only for a break of short duration. This particular connection is caused by:

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34 See later under 4. Long breaks.

(i) The harmonic-acoustic relationship: Both fugues start with dominant notes also contained in the final chord of the fugue. This secures a consonant relationship between the closing chord of the final cadence and the underlying harmonic progression of the fugue theme.

(ii) Metrical relationship: Both cadences end sections in '*Grave* style' and are followed by fugue entries in a direct metrical relationship to the preceding speed. In BWV 550 the theme enters *alla breve* resulting in a 1:2 relationship between the two sections. In BWV 551 the faster speed emerges naturally by reason of the different notation.

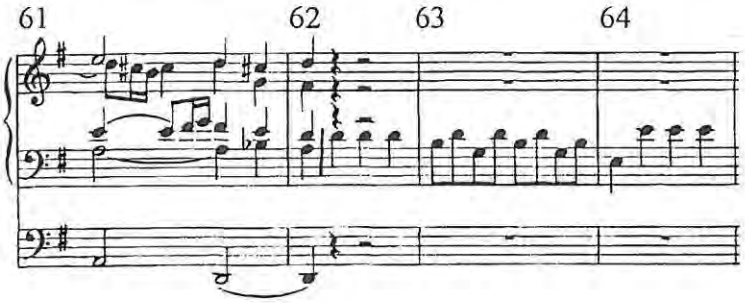
(iii) Formal relationship: The *Grave* sections do not end the preludes but serve as dramatic transitions to the fugues. Prelude-*Grave*-Fugue thus forms a unity naturally divided by notational changes which make any further divisions unnecessary.

The following example shows the respective connections from *Grave* to Fugue. Suggested short breaks are marked by vertical lines (|).

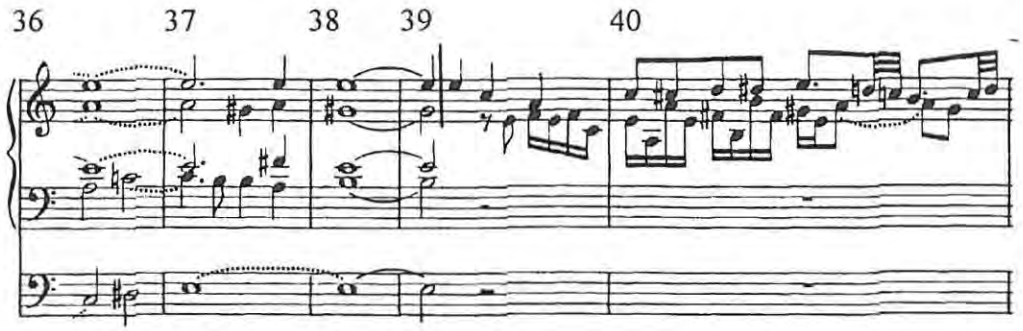
Example 38

Short breaks at final cadences.

BWV 550, bars 61- 64 (NBA IV/5:140).



BWV 551, bars 36-40 (NBA IV/6:65).



3. MODERATE BREAKS

Breaks of this category hold a medium position between short and long breaks, their exact duration depending on varying circumstances as well as on personal taste. They should follow on cadences that show some or all of the following characteristics:

(i) They terminate units of considerable length or even a complete part of a musical structure. Their use is therefore restricted to main cadences.

(ii) They separate sections sharply contrasting in texture.

(iii) They correspond grammatically to:

(a) 'whole periods' (full-stop) at the end of a paragraph (Wessel, 1955:255).

(b) exclamation marks (ibid.).

(c) question marks (ibid.).

(iv) They are not marked by fermatas, and rests are not used extensively.

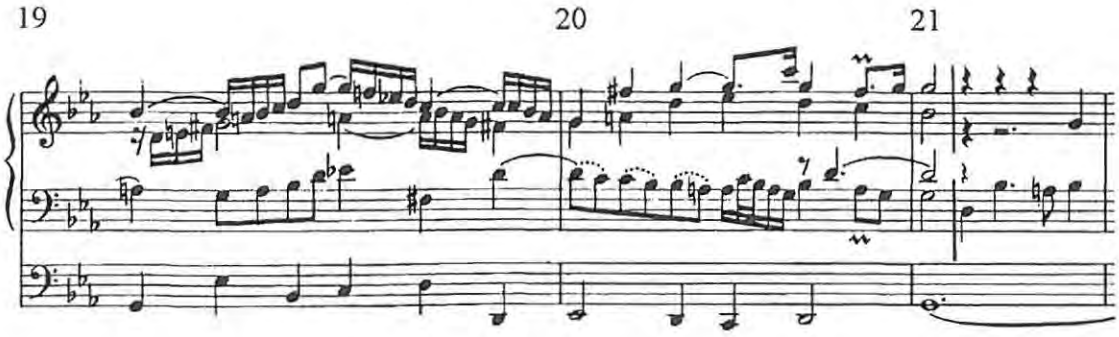
(v) Phrase-endings are predominantly clear-cut.

The following examples show main cadences that should be followed by breaks of 'moderate' duration (indicated by commas and/or vertical lines [|]):

Bars 20-21 of BWV 537 shows a perfect cadence that terminates the first part of a binary structure.

Example 39

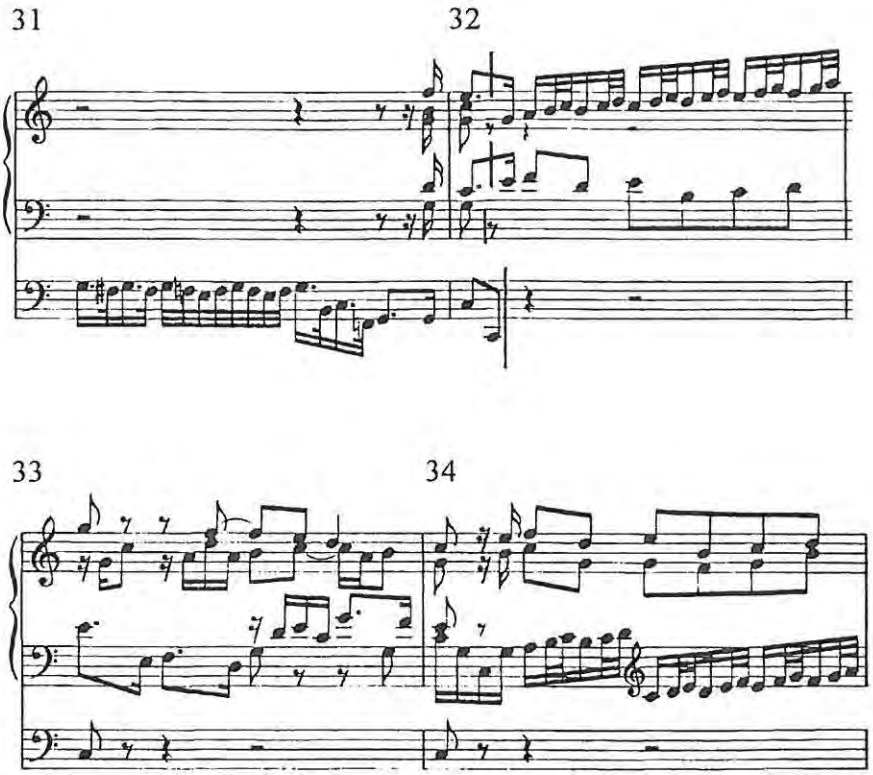
Moderate breaks at main cadences: BWV 537, bars 19-21 (NBA IV/5:48).



In BWV 564 the cadence in bar 32 separates an extended monophonic pedal solo from a 'linear' and 'chordal' (Harmon, 1981:307) final part.

Example 40

Moderate breaks at main cadences: BWV 564, bars 31-34 (NBA IV/6:4)

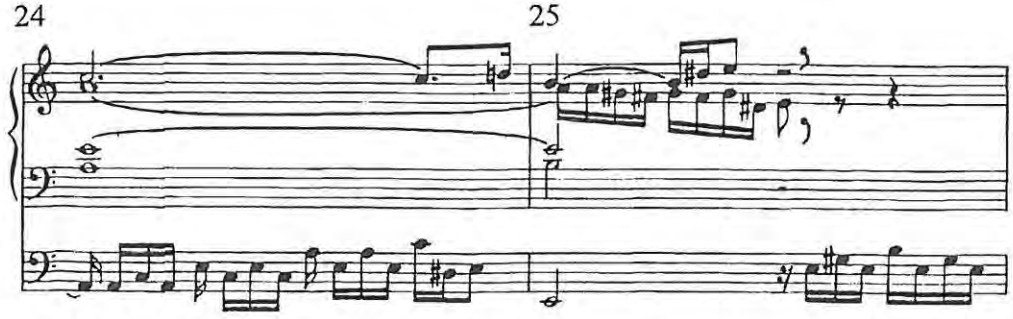


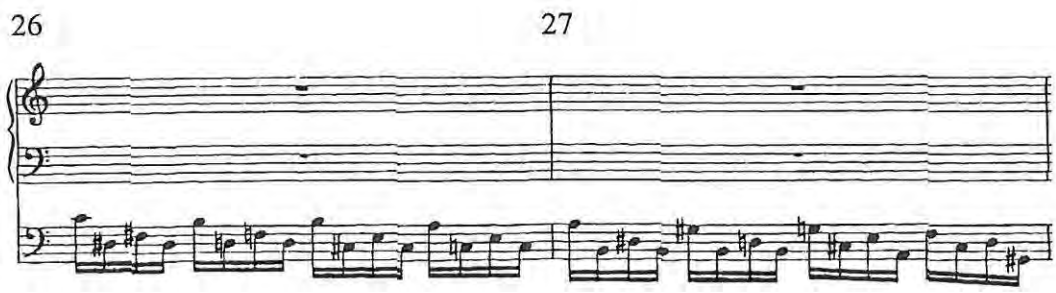
In BWV 543, on the other hand, the cadence in bar 25 separates a polyphonic section from a monophonic pedal solo.

Example 41

Moderate breaks at main cadences:

BWV 543, bars 24-27 (NBA IV/5:187).

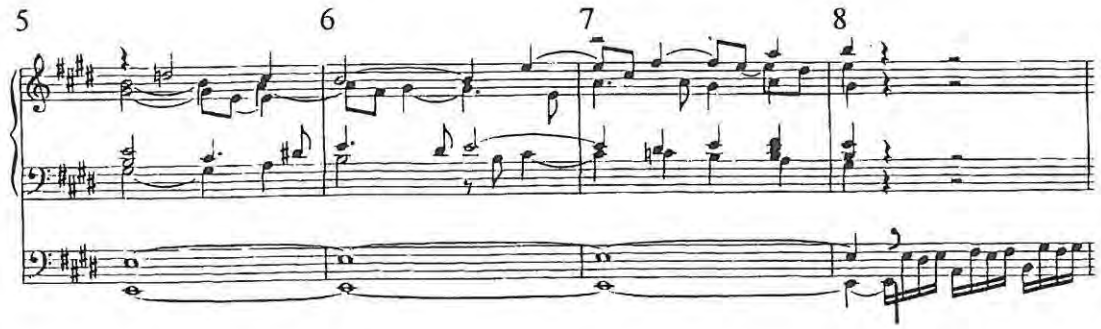




In BWV 566 the cadence in bars 7-8 represents an exclamation mark. According to Wessel (1955:255) an 'ascending skip of a fourth' - between 'e' and 'a' in the top part - symbolises a 'joyful outcry' or 'astonishment':

Example 42

Moderate breaks at main cadences: BWV 566, bars 5-8 (NBA IV/6:40).



4. Long Breaks

4.1 Long Breaks at Inner Cadences

Long breaks within works usually appear after or within (i.e. between the penultimate and ultimate chords of) 'dramatic' (interrupted) cadences at places where the rhythmic flow is suddenly brought to a halt. Common characteristics of such cadences are:

(i) They mostly appear at climaxes near the end of works, often coincidental with the melodic climax.

(ii) They mostly show final chords that avoid tonic harmony.

(iii) They usually show a sudden increase in texture.

(iv) They often introduce a *cadenza*.

(v) They often appear in combination with fermatas and rests.

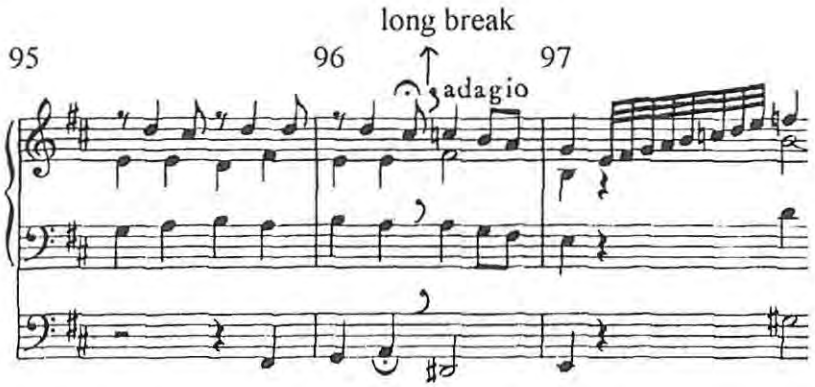
(vi) They often represent rhetorical *exclamationes*.

The following examples show inner cadences that should be followed by long breaks.

In bar 96^{2-3} of BWV 532 tonic harmony is avoided by a resolution into a diminished seventh chord. An extended break before the diminished seventh chord contributes to the surprise-effect produced by this resolution:

Example 43

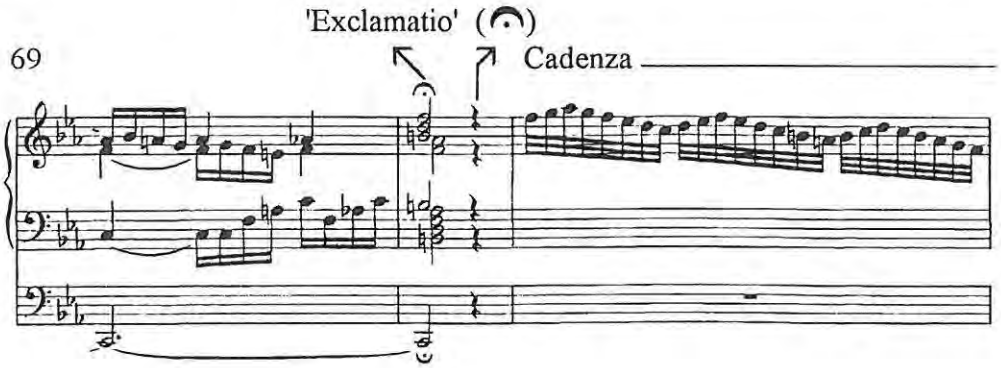
Long breaks at inner cadences: BWV 532, bars 95-97 (NBA IV/5:61).



The final chord of the interrupted cadence in bars 69-70 of BWV 534 that represents a rhetorical *exclamatio*, shows a sudden increase in texture, i.e. from five to eleven parts:

Example 44

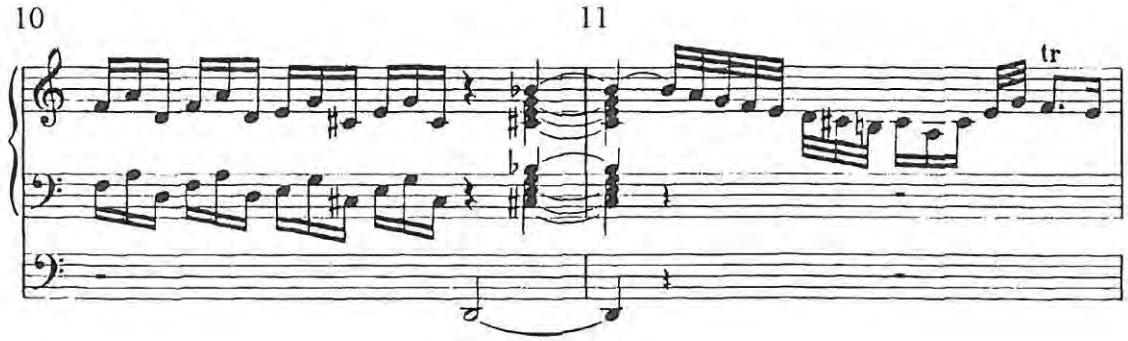
Long breaks at inner cadences: BWV 534, bars 69-71 (NBA IV/5:133).

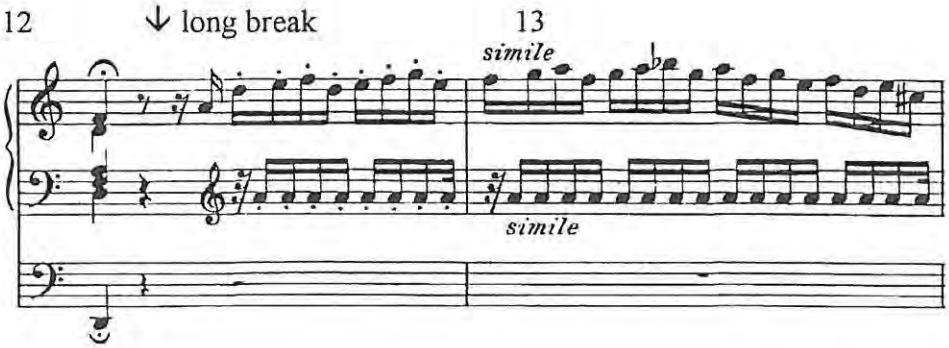


The demand for a long break is signified by the *fermata* on, and rests following the final chord of the cadence in bars 10-12 of BWV 565:

Example 45

Long breaks at inner cadences: BWV 565, bars 10-13 (NBA IV/6:32).

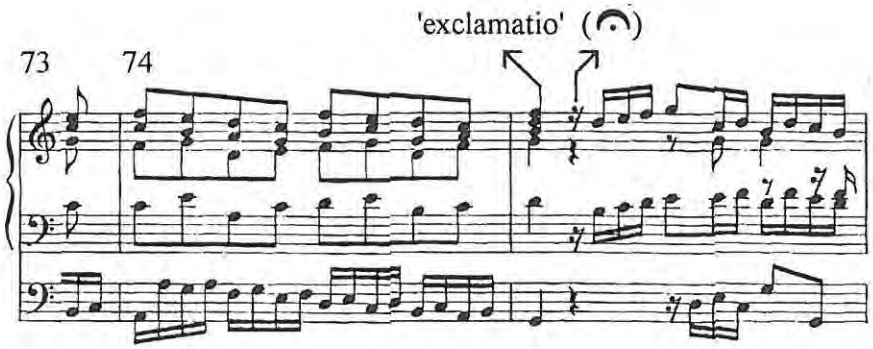




In BWV 564, a long break is justified by the dominant seventh chord in bar 75 which represents a rhetorical *exclamatio*.

Example 46

Long breaks at inner cadences: BWV 564, bars 73^{4}-75 (NBA IV/6:7).



4.2 Long Breaks between the Preludes and Fugues[35]

The long breaks normally observed in separating preludes and fugues are based on the following considerations:

(i) Bach's own indications: The end of preludes are normally marked by one or more of the following signs: fermatas, rests and double-barlines.

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35 First movements comprising 'preludes' dominate while nearly almost followed by 'fugues'. Hence the use of these terms to facilitate reference.

(ii) The simultaneous ending of all parts at the close of the prelude.

(iii) Structural considerations:

(a) Rhetorical considerations: The end of a prelude can be compared to the end of the first part of a speech. A long break is thus appropriate after the final 'impressive conclusions' (Mattheson, 1739:25, in Harriss, 1981:476) made in the *peroratio*.

(b) Grammatical considerations: Cadences ending preludes, represent periods (full-stops), exclamation or question marks (Wessel, 1955:255) at the end of concluding 'paragraphs'.

(c) Affective considerations: Long breaks provide the performer (and listener) with ample time to part with the previous 'affect' and to 'identify' (Kloppers, 1965:163) with the ensuing one.

(iv) Harmonic considerations: Except for BWV 537 and 551 all preludes end with a perfect cadence. Owing to the resulting absence of any harmonic tension there exists no need to proceed immediately with the fugue.

(v) Textural considerations: The strong textural contrast that exists between the polyphonic/homophonic end of a prelude and the monophonic opening of the fugue makes a long break highly desirable.

(vi) Acoustic considerations: Here the harmonic factor plays an important role. If the final chord of a prelude and the ensuing fugal theme are consonant to each other an overlong break will not be necessary. In all other cases, however, it is

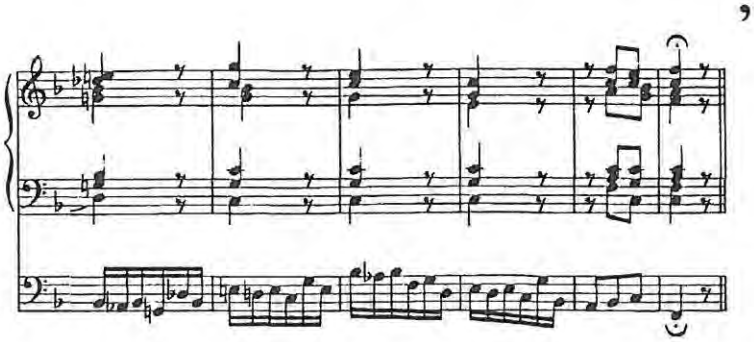
imperative to wait for the total cessation of sound before commencing with the fugue.

The following examples show final cadences that can be followed by long breaks (marked by commas: ❟):

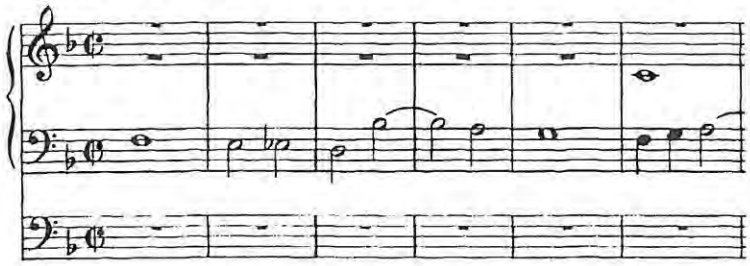
The final chord of BWV 540 has a *fermata*, is followed by rests, and all the parts end simultaneously:

Example 47

Long breaks between the preludes and fugues: BWV 540 (NBA IV/5:123, 124).



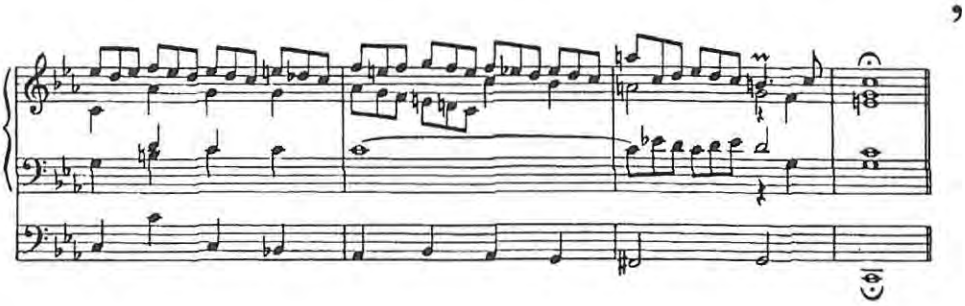
Fugue:



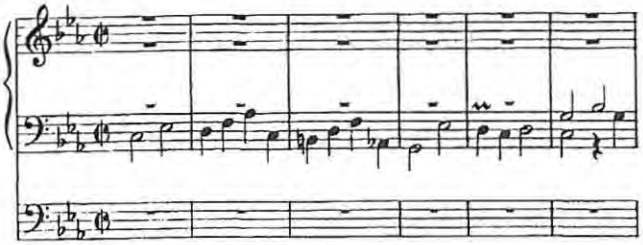
The final cadence of BWV 546 not only marks the end of the large *peroratio*, but the tonic harmony of the final chord also represents a period (full-stop) at the end of the musical 'speech':

Example 48

Long breaks between the preludes and fugues: BWV 546 (NBA IV/5:41, 42).



Fugue:

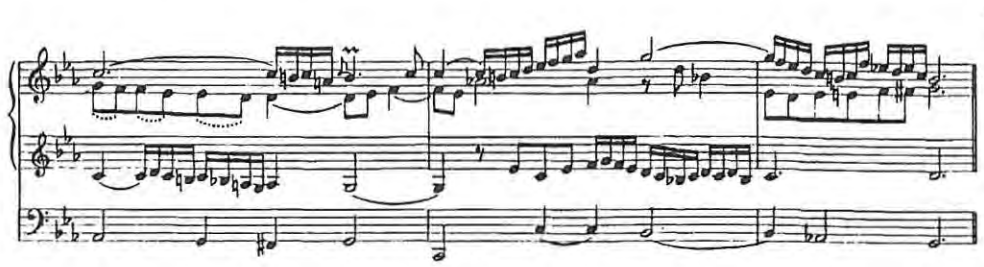


The half cadence at the end of BWV 537 represents a question mark:

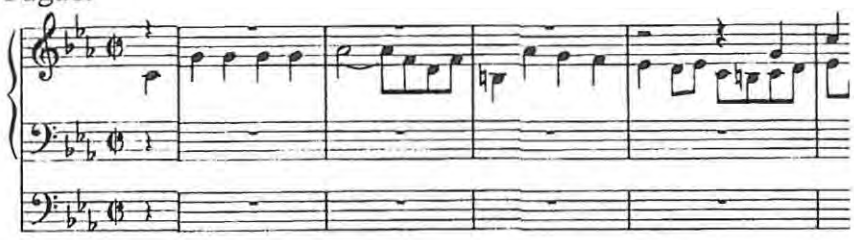
Example 49

Long breaks between the preludes and fugues:

BWV 537, bars 46-48 (NBA IV/5:49, 50).



Fugue:

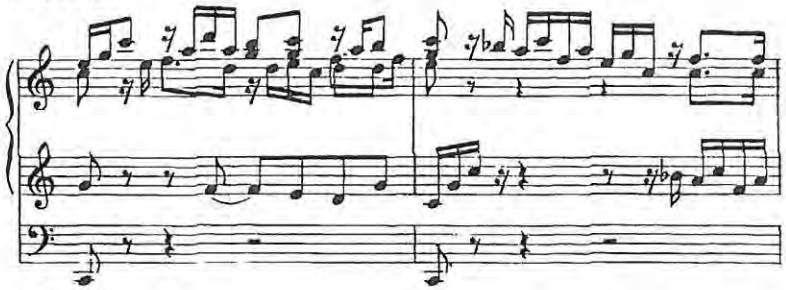


In BWV 564, the sharp contrast in affect that exists between the Toccata and *Adagio*[36] makes a long break essential:

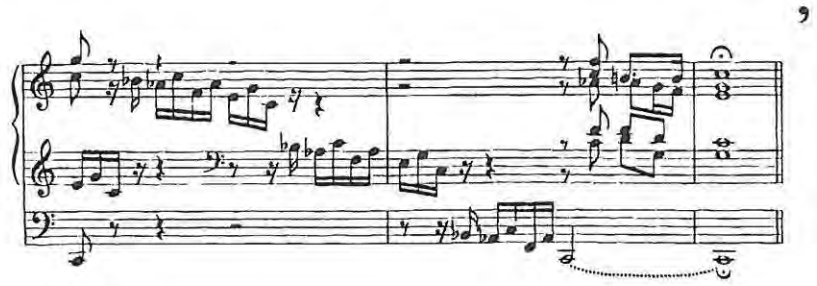
Example 50

Long breaks between the preludes and fugues: BWV 564 (NBA IV/6:7 and 8).

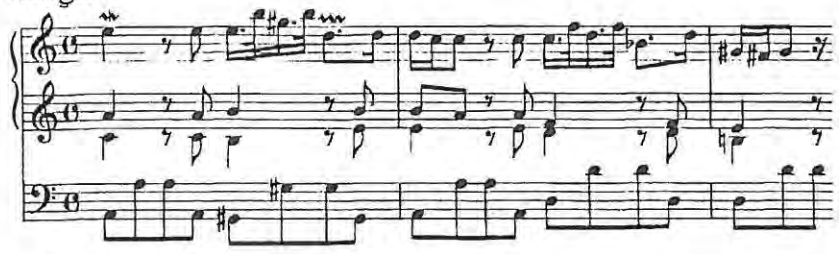
Toccata:



C major:



Adagio:



a:

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36 Although this work should be considered as a 'special case' - the *Toccata* is not followed by a *Fugue*, but by the *Adagio* which stands between Prelude and Fugue - the affective aspects necessitating an extensive break between the Toccata and *Adagio* also apply to breaks between the Preludes and Fugues. The *Adagio* is reminiscent of similar (*Grave*) sections between the preludes and fugues of BWV 550 and 551 (see 2.2.2. Short breaks at final cadences). However, contrary to these *Grave* sections serving as short dramatic transitions uniting Prelude and Fugue, the *Adagio* is an extensive, independent movement. The short break between Prelude and *Grave* has thus no applicability whatsoever for the break between the Toccata and *Adagio*.

The affect between the two movements differs on account of:

(1) The key: The Toccata is in C major which is 'Cheerful, merry, sprightly....' (Wessel, 1955:157). The *Adagio*, by contrast is in 'a' minor which expresses the 'sorrowful affects' (Quantz, in Wessel, 1955:152).

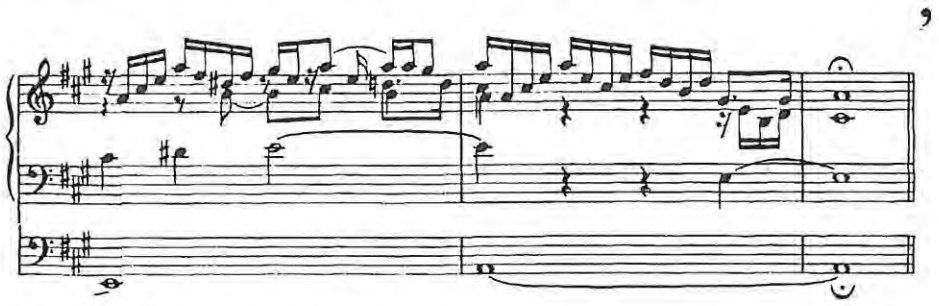
(2) The tempo: The Toccata conveys affects inherent to *allegro* ('Happiness, freshness, gaiety, joy') and/or *allegro assai* ('Exhuberant joy') (Wessel, 1955:189). The *Adagio*, which is in sharp contrast to the Toccata, conveys sorrow, love, compassion, quietness, meditation and tenderness (idem, 1955:174,189).

(3) The registration: The 'full and powerful' (translated) 'Ripieno' (Klinda, 1987:160) of the Toccata changes in the *Adagio* to a subdued solo stop plus accompaniment.

The absence of tension that exists at the perfect cadence that terminates BWV 536, renders the need to proceed immediately with the fugue, unnecessary:

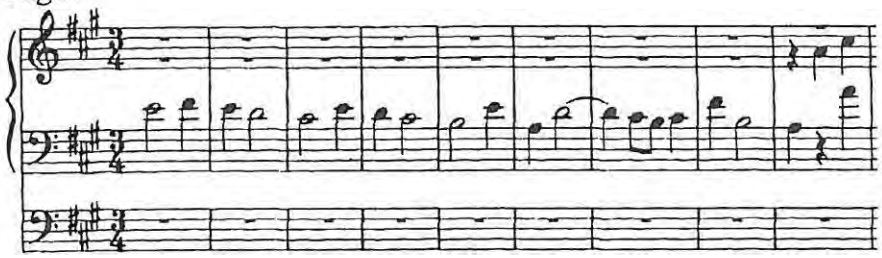
Example 51

Long breaks between the preludes and fugues: BWV 536 (NBA IV/5:181, 182).



(The Fugue follows on page 66/.....)

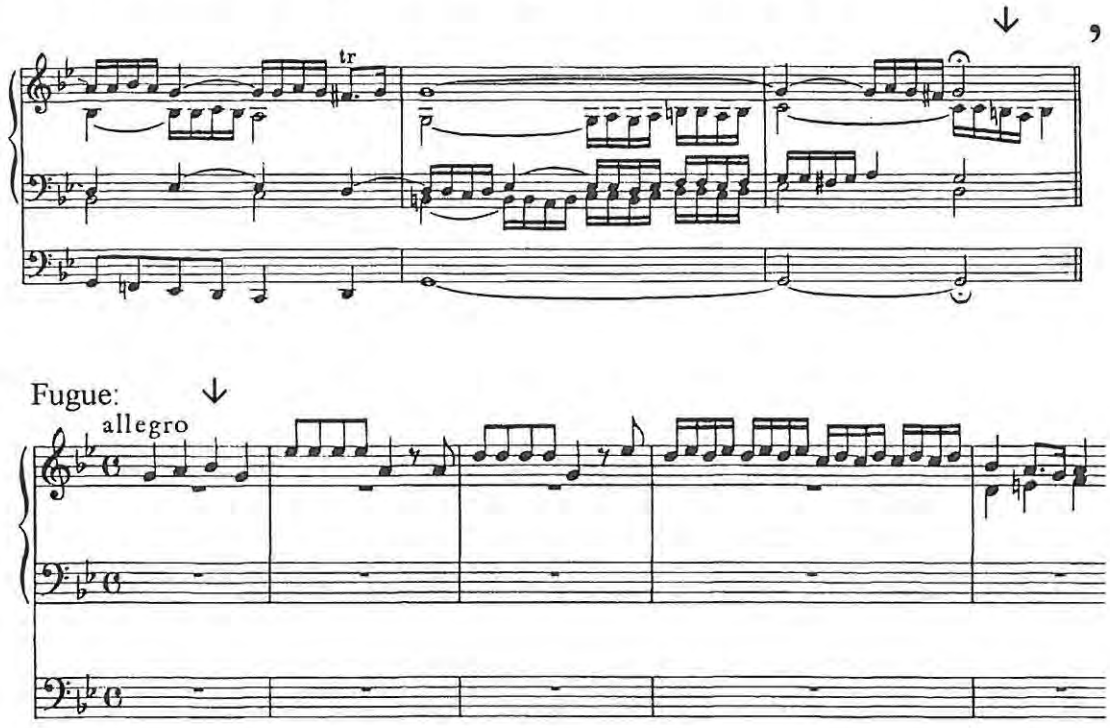
Fugue:



Dissonance produced by the b-natural[37] in the final chord of the Prelude, and b^{b} in the opening of the Fugue, BWV 535, necessitates a break in which the sound totally ceases, before commencing with the Fugue:

Example 52

Long breaks between the preludes and fugues: BWV 535 (NBA IV/5:160, 161).



37 According to Kilian (1979, 2:451), this *tierce de Picardie* is authentic.

CHAPTER 3

TEMPO

1. INTRODUCTION

The term 'tempo' refers to 'de snelheid waarmee een compositie wordt uitgevoerd' (Stuifbergen and Schouten, 1980:26) and is usually indicated by a technical term at the beginning of a composition (L. Mozart, 1755:1, in Knocker, 1986:64). Bach hardly ever specifies tempo, thus leaving the choice to the performer. Except for the following reference, nothing exists to convey his wishes in this regard[38] (Holtz, 1981:39):

> If the piece is to be played fast the composer expressly adds *Allegro* or *Presto* to it; if slowly, the pace is indicated by the word *Adagio* or *Lento*.

What the exact rate of 'fast' and 'slow' was supposed to be, is not clear.

However, establishing an appropriate tempo for a composition is essential, because the general tempo serves as the basis from which tempo deviations are executed. To this end it is imperative to determine first of all the specific *Affekt* the work aims to convey. In this process, the following points can serve as additional guidelines:

(i) Tempo indications and meter: Technical terms (e.g. *adagio*, *allegro*, etc.) do not exclusively refer to the tempo, but also (and even more so) to the affects

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38 in a manuscript in Johann Kellner's hand, entitled 'Instructions and rules for the playing of a Thorough Bass... by Master Johann Sebastian Bach, Royal Court Composer...., for the use of his scholars in Music, 1738' (Holtz, 1981:39).

(Kloppers, 1965:144) (Quantz in Wessel, 1955:47) to be portrayed.[39] This also applies to the choice of the meter: Kirnberger (in Kloppers, 1965:158), for example, describes a 2/2 meter as 'schwer und nachdrücklich' and a 2/4 meter as 'lebhaft und leicht'.

(ii) Acoustical conditions: Donington's (1975:382) statement that '...resonant acoustics imposes a slower tempo than one with little echo' has to be treated with great care, because 'modifications to *tempi* based upon acoustical premises ('Akustische Gründe') exclusively, would not necessarily be convincing if not also justified within the framework of the intended *Affekt* (Zacher,1984:205).

(iii) Contemporary reports: According to various reports, Bach took his *tempi* 'very lively' (C.P.E. Bach and Johann Agricola [in Holtz, 1981:39]) or 'very brisk' (Johann Nikolaus Forkel [in David and Mendel, 1946:313]).

Once the appropriate tempo has been established, certain tempo deviations can be imposed upon the underlying pulse. According to common performance practice such tempo deviations were meant 'to rouse the affects'. This is obvious from the following statements:

C.P.E. Bach (1753):

> On entering a *fermata* expressive of languidness, tenderness, or sadness, it is customary to broaden slightly (in Mitchell, 1985:161).

> At least it can be seen in accompanied recitatives that tempo and meter must be frequently changed in order to rouse and still the rapidly alternating affects (in Mitchell, 1985:153).

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[39] Hence L. Mozart's (1756, in Knocker, 1985:51) interpretation of *Grave* as 'sadly and seriously, and therefore very slowly'.

Frescobaldi (1616):

> This manner of playing must not be subject to a beat, as we see practiced in modern madrigals, which however difficult are facilitated by means of the beat, conducting it now slow, now rapid and even [*etiandio*] suspending it in the air, according to their *affetti*, or sense of the words (in Hammond, 1983:225).

Four categories of tempo deviation can be distinguished:[40]

(i) *Tempo variation*, which describes deviations in which the meter changes accordingly. A *rallentando* thus implies a concurrent expansion of the meter.

(ii) *Tempo rubato*, which, according to Neumann (1982:287) implies a 'rhythmic modeling (sic).....that takes place against the background of a steady beat in other voices', is 'usually limited to a measure' (idem:70).

(iii) *Agogic accentuation* which implies 'a slight lengthening of a single note for the sake of emphasis with a corresponding shortening of neighbor (sic) notes or note groups....' (Neumann, 1982:70), -and-

(iv) *Notes inégales*, which implies a rhythmical uneveness 'waarbij tonen een ongelijke lengte krijgen, ofschoon ze op papier even lang zijn. Het verschil in lengte kan in de notatie niet exact worden aangegeven' (Stuifbergen and Schouten, 1980:18).

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40 Please note that the usage of these terms differs from author to author. For example, Hurford's (1990:54) definition of *agogic accentuation* ('alterations of time within the pulse'), corresponds to Neumann's (ibid.) definition of *tempo rubato*, while Hurford's (ibid.) definition of *tempo rubato* ('when the alterations are within a musical phrase consisting of several pulses....'), corresponds to Neumann's description of *tempo variation*). Neumann's classification is preferable, because the different 'compartments' are clearly kept apart.

2. *TEMPO VARIATION*

Tempo variation is exclusively used at main cadences, especially those ending large sections (Donington, 1975:433). It consists of two subdivisions, *rallentandi* (a gradual decrease in tempo) and *accelerandi* (a gradual increase in tempo).

2.1 *Rallentandi*

Rallentandi are very often used and applied the way Frescobaldi[41] and Dom Bedos (1766) advise:

Frescobaldi:

> Begin deliberately; decrease the speed by degrees; semi-cadences poco ritardando; final cadences sostenuto e ritardando assai (From his preface [5] to his *Toccate* [Rome, 1615-1616] in Dannreuther, 1924:55).[42]

Dom Bedos (1766):

> The cadences, though written rapid, should be played very sustained; and, as you get nearer the end of the *passage* or *cadence*, you should retard the time more and more (in Dolmetsch, 1969:5).

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41 To authors on tempo variation in baroque music, Frescobaldi's statements are obviously important. They are quoted in every source on tempo consulted for this thesis.

42 According to Hammond (1983:226), Frescobaldi's advice 'was presumably general practice, since Trabaci also recommended broadening the tempo at cadences...'.

2.1.1 Final Cadences

Final cadences ought to be approached by a broad *rallentando*. Apart from the relevant statements by Frescobaldi and Dom Bedos, this suggestion can also be justified on account of the following structural perspectives:

(i) By their very nature, these cadences terminate large structures, in fact, entire forms. Except for BWV 537 and 551, all final cadences are perfect. Resolutions on tonic chords produce an effect of relaxation, an effect that can be enhanced by a *rallentando*.

(ii) Grammatically, the final chords of these cadences and breaks following them are equated with full-stops.

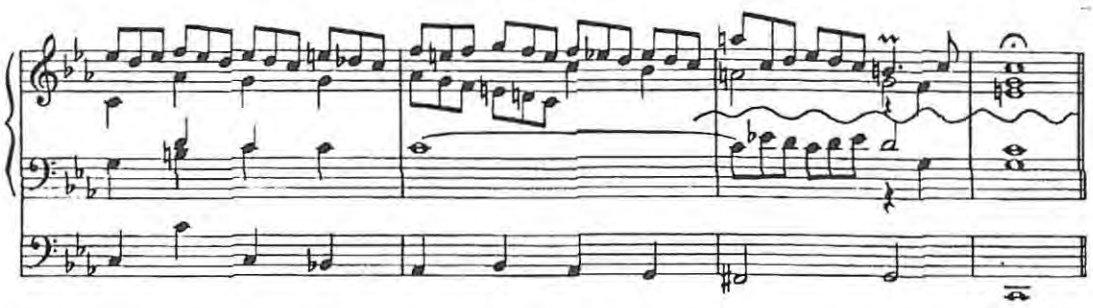
(iii) Rhetorically, these cadences terminate *perorationes* ('conclusions') which end a whole part of the speech.

The following are examples of such *rallentandi*:

Example 53

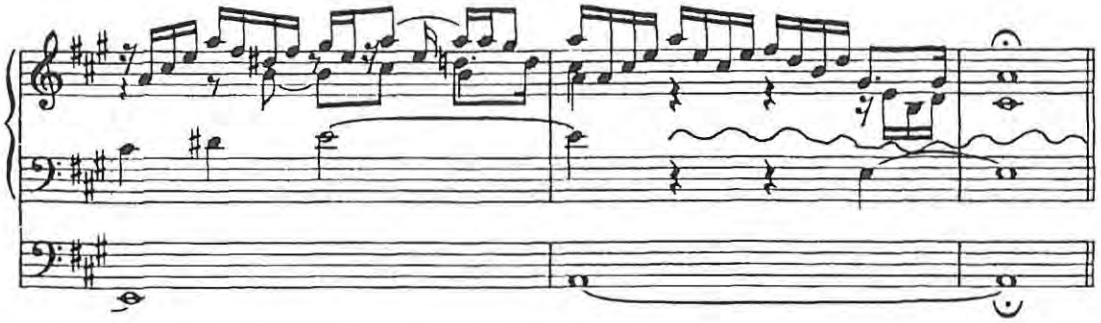
Broad *rallentandi* (~~~) towards final cadences.

BWV 546 (NBA IV/5:41)

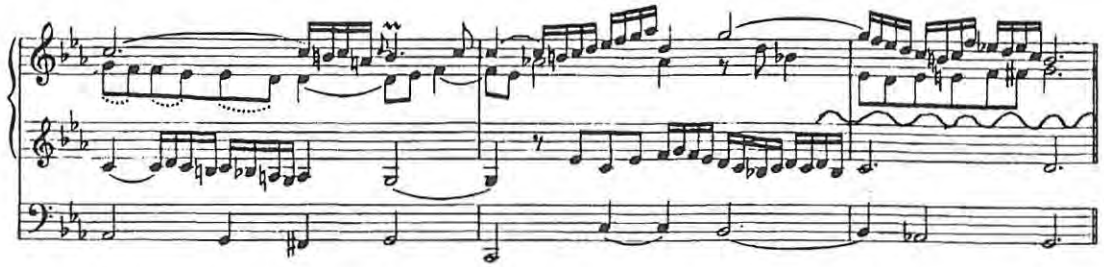


Example 53 (continued)

BWV 536 (NBA IV/5:181).



BWV 537 (NBA IV/5:49).



2.1.2 Inner Main Cadences

Bach's works show numerous examples of inner main cadences where broad *rallentandi* seem appropriate. These cadences mark prominent sections within large structures. Rhetorically, they terminate main parts of the *dispositio*. Grammatically, they represent full-stops, colons, question marks, exclamation marks, etc. at the ends of paragraphs, and they often separate large sections that are contrasting in affect.

Two types of cadences can be distinguished:

(i) Perfect cadences, often appearing in motoric-orientated structures that convey an effect of relaxation. They usually terminate main ABA or AB sections and

final *confutationes* (i.e. dissolutions 'of the exceptions' and 'refutation of foreign-appearing ideas') (Mattheson, 1739:11, in Harriss, 1981:471).

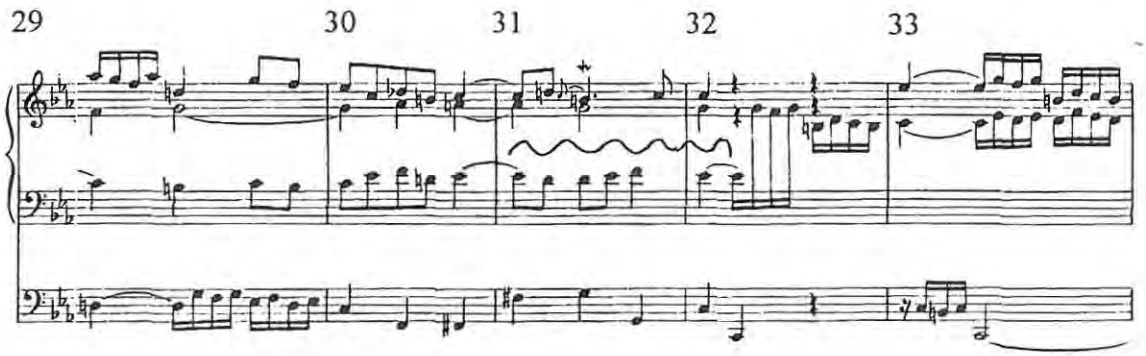
(ii) 'Dramatic' cadences, often appearing at unusual and unexpected places (climaxes, before cadenzas, interruptions, etc.) in works showing 'improvisatory' characteristics. The tension conveyed by these cadences are usually extremely high. They are often followed by long breaks and are frequently combined with fermatas and rests.

The following examples illustrate the applicability of broad *rallentandi* (~~~) at inner main cadences:

The perfect cadence in bars 31-32 of BWV 534 divides the work into two halves, A and B (Williams I, 1980:70). Grammatically, this cadence represents a full-stop separating two large chapters. Tension produced by the sudden use of chromaticism (N6 and secondary diminished seventh), meter displacement (*hemiola*) and rhythm (long notes) is enhanced by the *rallentando*:

Example 54

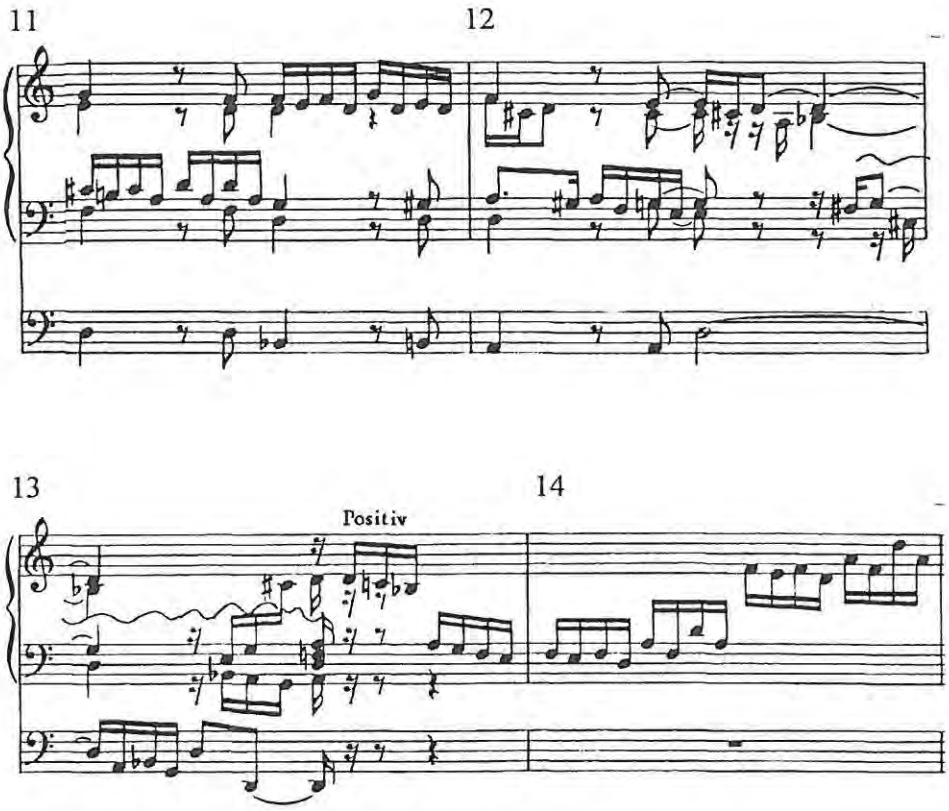
Rallentandi: BWV 534 bars 29-33 (NBA IV/5: 131).



In BWV 538, the perfect cadence in bars 12-13 terminating a large *exordium-narratio-propositio* section, represents a full-stop, and is high in tension on account of the use of chromaticism, a pedal point and suspensions. A *rallentando* prolongs the impact of these elements and at the same time makes the resolution into the final chord in bar 13 more pronounced:

Example 55

Rallentandi: BWV 538, bars 11-14 (NBA IV/5:76-77).



In many aspects, BWV 565 resembles an extended improvisation. A first cadence appears as early as bars 2-3. Its high tension is caused by the following factors:

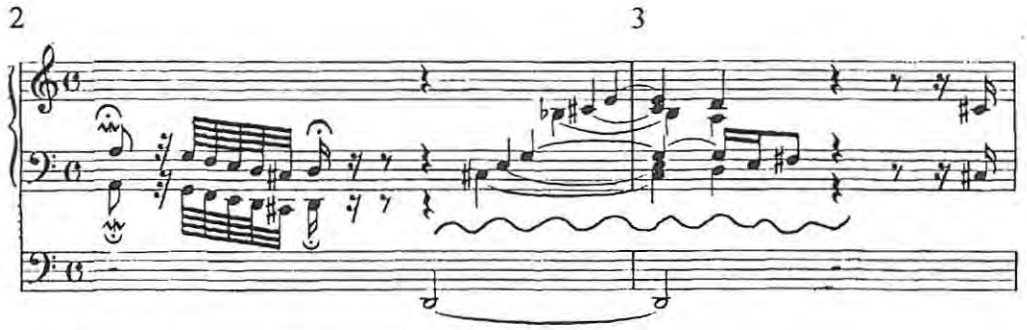
(a) the use of 'dissonance' represented by a fully suspended diminished seventh chord over a pedal point.

(b) a gradual textural increase audible in the note-by-note 'growth' of an arpeggio-chord.

(c) an ascent in the melody reaching a climax in bar 3^1.

Example 56

Rallentandi: BWV 565, bars 2-3 (NBA IV/6:31).



The effect of relaxation produced by the final chord in bar 3^2 is made more pronounced on account of:

(a) The prolongation of the suspension ('g') in the tenor part until the very last moment and its ornamented resolution.

(b) The resolution on a major chord (#I) instead of the tonic minor.

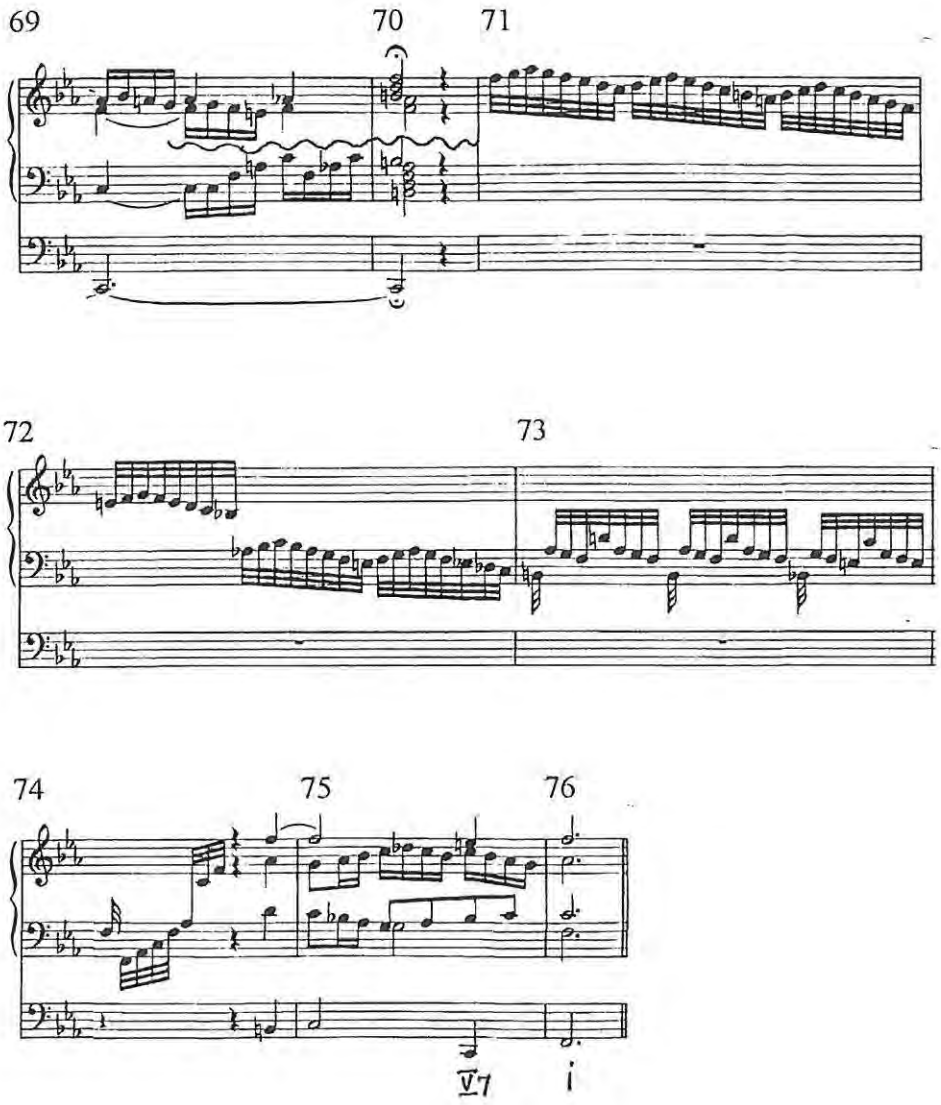
(c) The descent in the melody.

The impact of this cadence is the more poignant as it represents a harmonic block isolated by rests from the monophonic recitativic passages that precede and follow it. A very broad *rallentando* towards it will highlight its 'dramatic prominence' (Williams I, 1980:215).

In bar 70 of BWV 534 an interrupted cadence introduces a *cadenza* (bars 71-74). According to Soderlund (1985:101), 'the signal for the cadenza was a fermata, usually over an unstable sonority, such as a tonic six-four, a dominant with or without seventh, or sometimes a diminished seventh'. Bach's method thus represents the 'usual way' of introducing it. In grammatical and rhetorical terms, the diminished seventh chord in bar 70 represents an exclamation (possibly of astonishment), while the *cadenza* (bars 71-74) represents a parenthesis, preceded and followed by breaks (rests in bar 70 and 74):

Example 57

Rallentandi at inner main cadences: BWV 534, bars 69-76 (NBA IV/5:133).



The high degree of tension is caused by:

(a) 'unstable sonorities' in the form of the conflicting F major-f minor (f- *a* natural - c, and f-a^{b}-c) tonalities (bars 67-69) and the interrupted resolution into the diminished seventh chord above a dominant pedal point (bar 70). Tension is further raised and prolonged by extending this chord (in bar 71ff).

(b) a sudden leap to a high register at the diminished chord (bar 70)

(c) a sudden change of rhythm between bars 67-69 (semiquavers) and 70 (minim), and

(d) a sudden increase in texture in bar 70. If the diminished chord is represented in arpeggio-form like the one in BWV 565 (see Example 56), a *rallentando* would raise the tension to an extraordinary high degree.

2.2 *Accelerandi* [43]

Accelerandi are not as widely applicable as *rallentandi*. While a *rallentando* is an almost intuitively expected device to emphasise a main cadence, an *accelerando* is far less 'normal', especially if covering a large stretch of the music.[44]

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[43] For a historical foundation of this concept, see the quotations from Frescobaldi, Mattheson and (C.P.E.) Bach on page 81.

[44] In the context of Baroque music performance, an *accelerando* is most often realised by a *subtle* increase in tempo, thus creating nothing more than a perception of 'urgency' or a 'forward drive'.

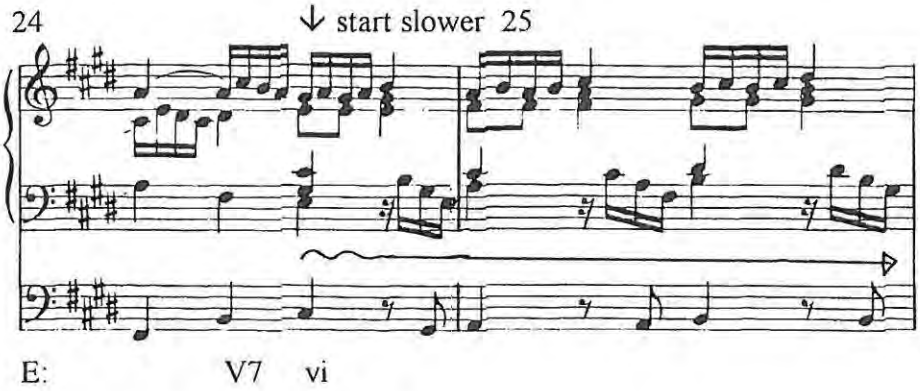
Accelerandi, therefore, seem to be more appropriate within the confines of a stable meter, characteristic of *tempo rubato*.[45]

Following are a few examples to illustrate this concept. *Accelerandi* are suggested by a long arrow (➔) and *rallentandi* at cadences by a wavy line (~~).

In BWV 566 bars 24^3-27^3 ascending sequences starting with an interrupted cadence in bar 24 increase tension. The perfect cadence in bar 27 is important, because it introduces the *peroratio* (coda). By executing an *accelerando* towards it, and *rallentando* just before its resolution, tension is further raised, thus giving this cadence prominence. The effectiveness of the *accelerando* can be enhanced by starting the sequential pattern with a slower tempo than the usual one:

Example 58

Accelerandi in progressions towards cadences: BWV 566, bars 24-27 (NBA IV/6:41).



Example 58 continues on Page 79/....

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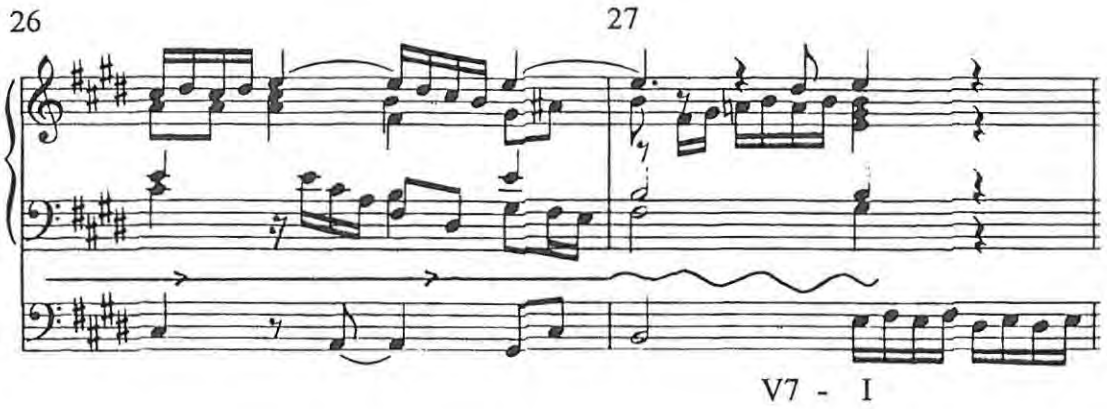
45 Matthay (1913:70-71) refers to this type of tempo variation as a 'push-on' or 'inverted rubato'. He, like Hurford (1990), includes *rallentandi* and *accelerandi* involving changes in pulse-rate over long progressions under 'rubato'. *Tempo rubato*, in the context of this study, refers to tempo deviations within a more or less stable meter.

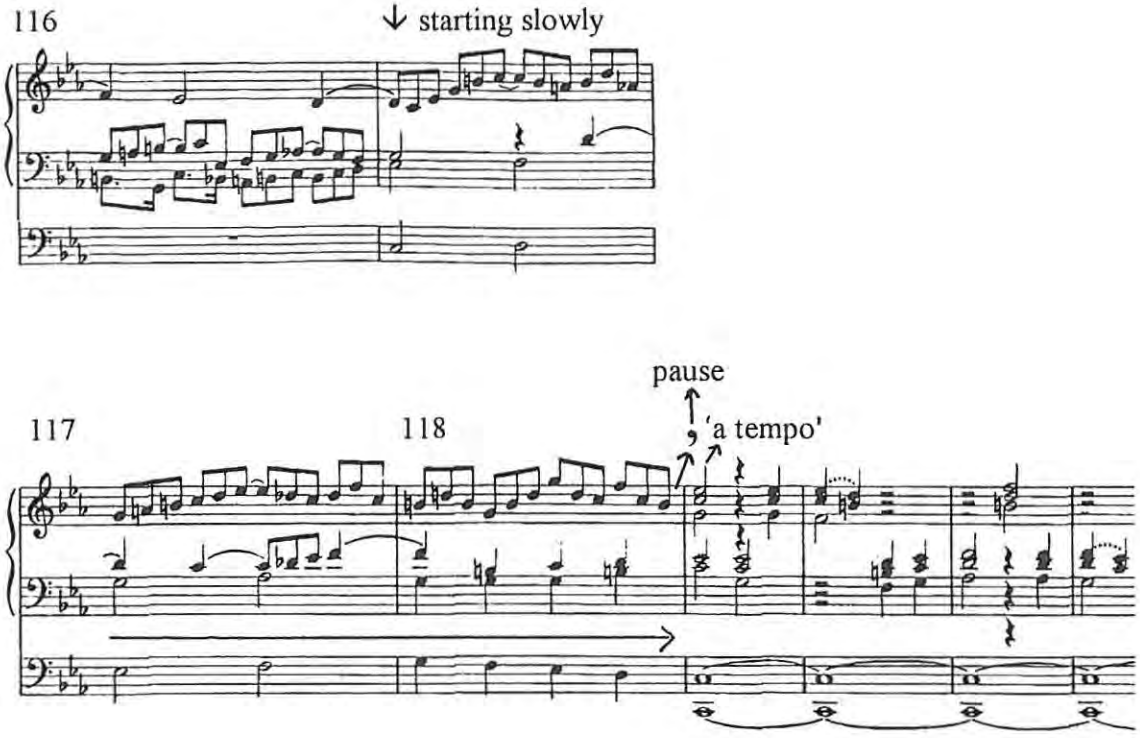
Example 58 (continued)



The *ritornello* (A) (bars 120 ff) of BWV 546 appears as an interruption of part B (up until bar 119) preceding it. A sharp contrast exists between *B* and *A*. *B* shows a contrapuntal texture and *A* a homophonic texture. The entry of *A* could be marked by a slight *rallentando* just before it, but this will hardly highlight the way in which the *ritornello* enters. Something more peculiar seems more appropriate. One way is to start bar 117 slower than the usual tempo, and to make an *accelerando* from bars 117 to 119. Between bars 119 and 120, the progression is suddenly halted and followed by a large break (suggested by 𝄐) to let the music, in the words of Frescobaldi (in Donington,1982:20), be 'held in the air'. The combination, '*accelerando*-delay' makes the *ritornello* entry much more effective:

Example 59

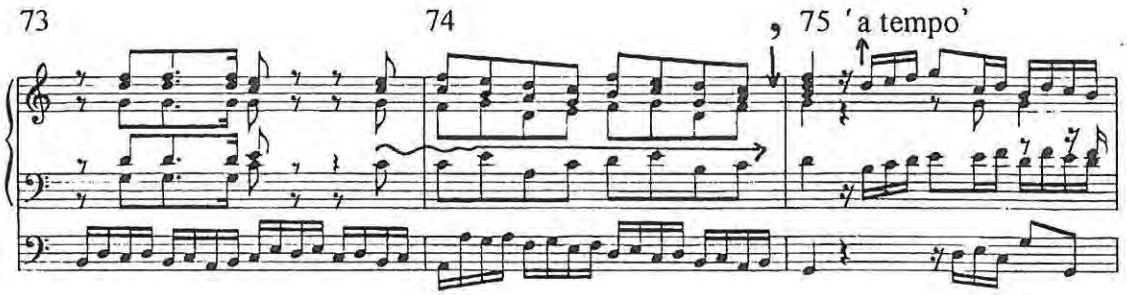
Accelerandi in progressions towards cadences: BWV 546, bars 116-123 (NBA IV/5:41).



In bar 75 of BWV 564 a dominant seventh chord interrupts the musical flow. According to eighteenth century thought, this chord represents an exclamation in the form of a joyful outcry (Wessel, 1955:255). By a slight hesitation in the form of a break (indicated by a comma) before it, and a gradual *accelerando* over the repetitive melodic patterns (bar 73^4-74) towards the break, the expressiveness of this chord can be enhanced:

Example 60

Accelerandi: BWV 564, bars 73-75 (NBA IV/6:7).



3. *TEMPO RUBATO*

We do not know what Bach's concept of *tempo rubato* (described as 'stolen' or 'robbed' time' [Yeston, 1977:94-95]) was (Cantrell, 1985:108). However, references (whether directly or by implication) are made to it by various prominent theorists.

Frescobaldi (69) (1615-16) probably refers to *tempo rubato* when he requires 'his Toccatas....to be taken 'now slowly, now quickly, and even held in the air, to match the expressive effects...' (in Donington, 1982:20).

Mattheson (1739) requires a performance 'without close observation of the beat and pitch, though these do occur on paper ... sometimes fast, sometimes slow; sometimes with one, sometimes with many voice parts; also sometimes a little behind the beat; without metre (sic), yet not without a view to pleasing (sic), to dazzling (sic), and to astonishing (sic)' (in Hurford, 1990:84).

C.P.E. Bach, who uses the term *rubato* (in Mitchell, 1985:162) indicates that 'each transposition can be effectively performed by gradually and gently accelerating and immediately thereafter retarding' (idem:161).

Hurford (1990:68) describes a 'good rubato' as one in which 'the listener should be conscious of time not lost or gained, but simply stretched and relaxed: time temporarily robbed, though with every intention of paying it back!'.

Barra (1983:100) defines *rubato* as a 'technique, which is based upon subtle readjustments in the timing of the rhythmic patterns'.

Donington (1982:20) refers to 'weighty' cadences that 'do not warrant a *rallentando*', but which are acknowledged by 'a momentary easing of tempo'.

Yeston (1977:105-106) as well as Stuifbergen and Schouten (1980:27-28) indicates that in terms of the 18th century *rubato*, the meter remained stable.

The fact that *tempo rubato* involves *rallentandi* and *accelerandi* over several notes, but not over several beats, places it somewhere between *tempo variation* and *agogic accentuation* In cadential terms *rubato* will be used where broad *rallentandi* and *accelerandi* (involving disturbance of the meter) sound exaggerated, and agogic accentuation (involving the stressing of a single note) rather feeble. From a grammatical perspective (Wessel, 1955, 255-256) the cadences suitable to be treated with *rubato* will be those representing more than a comma, but less than a full-stop, exclamation and a question marks. These include such marks as a semi-colon, a colon, and a parenthesis.

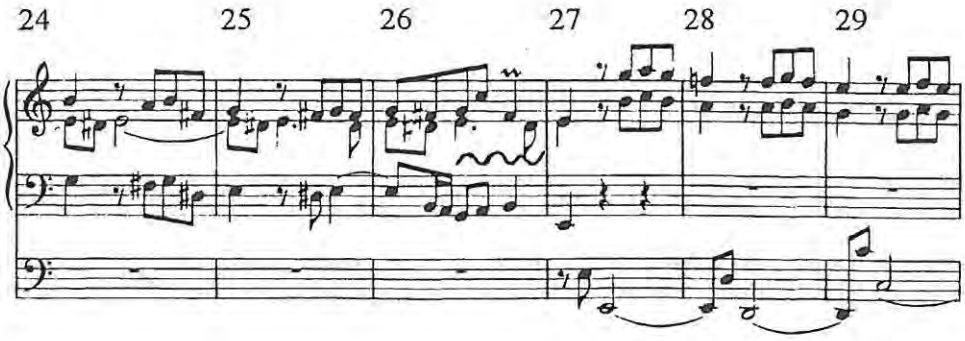
Tempo rubato can basically be applied in three ways:

(i) as a *rallentando* just before a cadence. Particularly suitable are the main cadences of works characterised by a *tour de force* in rhythm, that are, in the words of Donington (1982:21), 'more weighty'. The perfect cadence in bars 26-

27 of BWV 569 serves as an example.[46] This cadence is important in that it marks the end of a large section. From bar 27 onwards, the off-beat minims in the 'alto' voice of the preceding section without pedal are taken up by the pedal. However, as this work shows a continuity characteristic of the 'chaconne tradition' (Williams, I, 1980:229), a broad *rallentando*, on the one hand, will be excessive, while acknowledging the final chord in bar 27 only by an agogic accent, might sound weak. A *rallentando*, involving the last two beats in bar 26 (marked by ~~) seems preferable:

Example 61

BWV 569, bars 24-29 (NBA IV/6:59).



In bars 76-77 of BWV 547 an unexpected interrupted cadence (V7 to a secondary dominant in third inversion) introduces a parenthesis. One way to emphasise this chord would be to have a *rallentando* over the entire bar 76. However, this would openly indicate that something 'is going to happen' and thereby deprive the secondary dominant chord of its surprise effect. Under these circumstances *tempo rubato* over the last three beats seems a better option:

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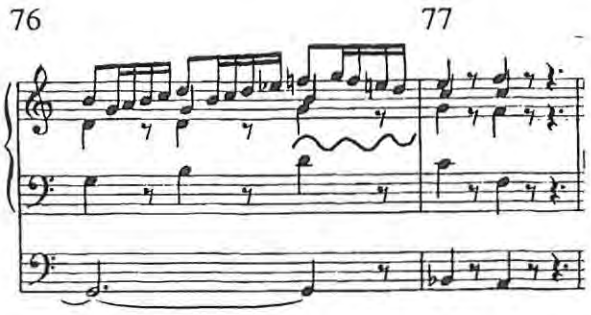
46 Other works revealing similar structures are BWV 541 (fully analysed and discussed in Chapter 5), BWV 564, and the middle sections of BWV 572 and 532.

Example 62

BWV 547, bars 76-77 (NBA IV/5:24).

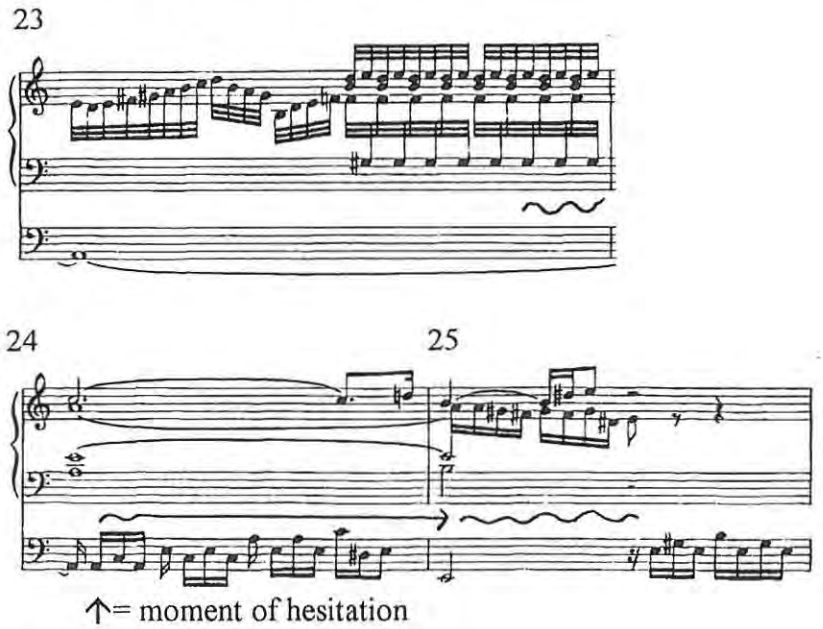


(ii) as a 'fleeting moment of hesitation' (Donington, 1982:21) at a new phrase after a cadence. This involves a few notes started in a slower tempo and accelerated until the original is restored. Here, the time taken, is compensated for by the short acceleration. The meter remains stable. In the following example a *rallentando* is indicated by ~~~ , and *accelerando* by → :

Example 63

Tempo rubato at a new phrase after *rallentando* at a cadence.

BWV 543, bars 23-25 (NBA IV/5:187).

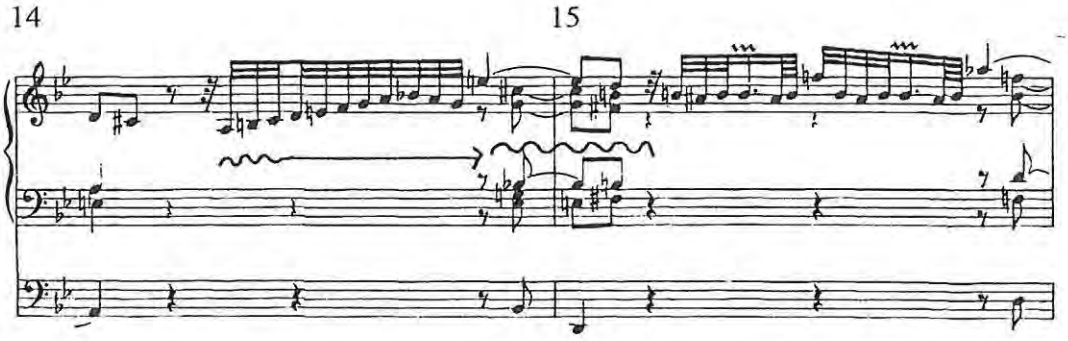


(iii) as a combination of time 'which is beaten now slowly, now quickly...' (Frescobaldi, in Hurford, 1990:83) or short *rallentandi* and *accelerandi* in progressions towards cadences. This, according to Hurford (1990:84), is most suitable in passages 'essentially extempore in character' lending 'an air of fantasy to the entire work', and sounding, in the words of Soderlund (1985:105), 'like being improvised'. BWV 542 is a typical example (Hurford, 1990:85). Here, recitativic monophonic sections often alternate with the densely textured interrupted cadences. In order to let these monophonic progressions sound like 'some older and contemporary Italian recitative' (Williams, 1980, I:123), they can be started slowly, then be accelerated before broad *rallentandi* round off the suspended cadential chords. In the following example from BWV 542, starting slower is indicated by ∧∧∧, the *accelerando* by →, and the broad *rallentando* by ∿∿:[47]

Example 64

Tempo rubato in the form of short *rallentandi* and *accelerandi*.

BWV 542, bars 14-15 (NBA, IV/5:169).



[47] These are only suggestions. 'Rhythmic freedom' does not imply 'rhythmic anarchy'; subtlety is still the keyword.

Other works (among others) in which the same method can be applied, are the 'Schlussrezitativ' (Frotscher, 1978:876) or *cadenza*, bars 71-74, of BWV 534, *cadenza* in the final section (bars 35-40) of BWV 531, the monophonic passages in BWV 533 and the improvisatory passages of BWV 543.

4. *AGOGIC ACCENTUATION*

The main purpose of agogic accentuation is to create 'fijnere en haast onmerkbare schakeringen' (Stuifbergen and Schouten, 1980:27-28) in the form of accents. According to Neumann (1982:70) this involves 'a slight lengthening of a single note, with a corresponding shortening of neighbor (sic) notes or note groups'.

Although it is not known whether Bach actually used agogic accentuation, its practice was well-known at the time, as emerges from the description of the term *caesura* given by Bach's cousin, J.G. Gottfried Walther (1732:126):

> Caesura .. bedeutet ... einen musicalischen Durchschnitt, oder kleinen Unterschied, vermittelt welches der Progressus Notarum gleichsam ein wenig gehemmet wird, und geschiehet entweder mit einer etwas längern Note; oder einer kleinen Pause....'. (Translated: '.... a musical incision or small separation by means of which the progression from one note to the next, as it were, is slightly delayed by a somewhat longer note; or a small pause...).

According to Neumann (1982:70) the main characteristic of the agogic accent is the fact that it 'is entirely free, not regulated by any convention and dependent only on the artistic judgment and instinct of the performer'. He (ibid.) proceeds: 'It can apply to any note without regard to its length, its relationship to the meter, to other notes, or to its place in the measure. Neumann (ibid.) concludes: 'It is timeless and omnipresent'.

Two basic options are open to the performer. These are emphasising 'arrival chords 'felt as 'good' notes' (Le Huray, 1990:21), as well as rests on strong beats, or notes and rests on weak beats.

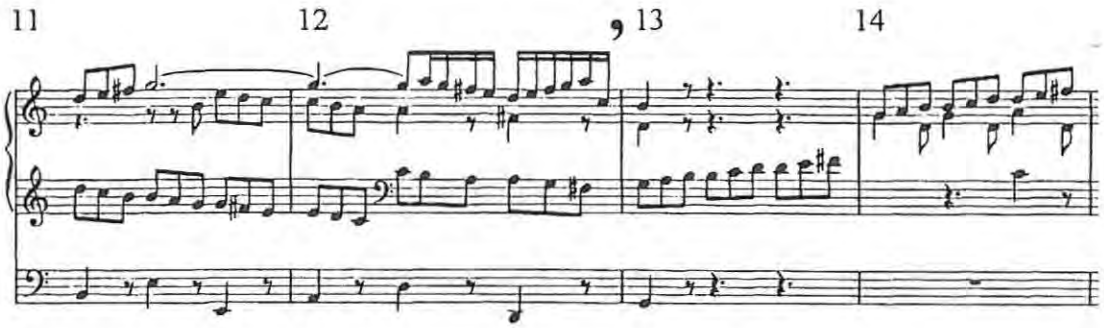
However, Le Huray (1990:21) warns that in this process of 'slight give and take, ... care should be taken not to interrupt the sense of forward movement'.

The very fleeting nature of this device makes it particularly useful where the stable rhythmic flow may not be interrupted, but some acknowledgement in the form of tempo deviation is required. This is achieved by what Hurford (1990:79) calls 'placing'. Accordingly, a chord is 'placed' in such a way that it sounds 'exactly on time, or apparently early, or apparently late' (ibid.). Placing is particularly effective between the penultimate and ultimate chords of inner cadences. By slightly elongating the penultimate chord or break following a penultimate chord, the final cadential chord is slightly delayed and thus emphasised. This is illustrated in the following inner secondary cadences (indicated by ›):

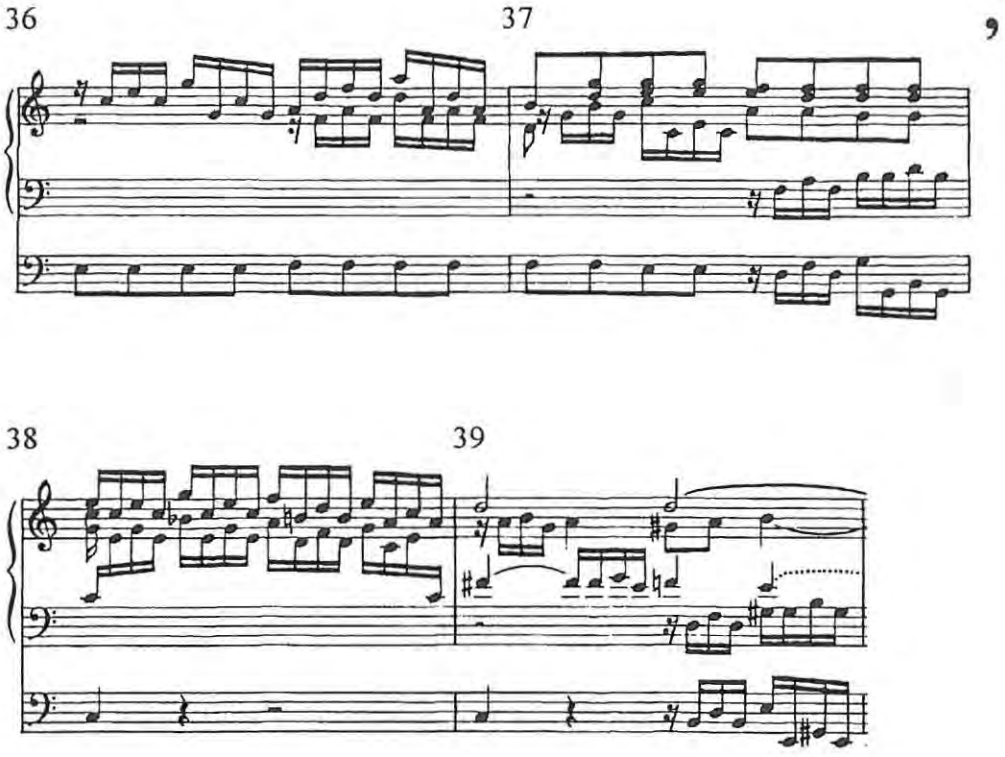
Example 65

Agogic accents on the final chords of cadences.

BWV 547, bars 11-14 (NBA IV/5:20).



BWV 543, bars 36-39 (NBA IV/5:188-189).

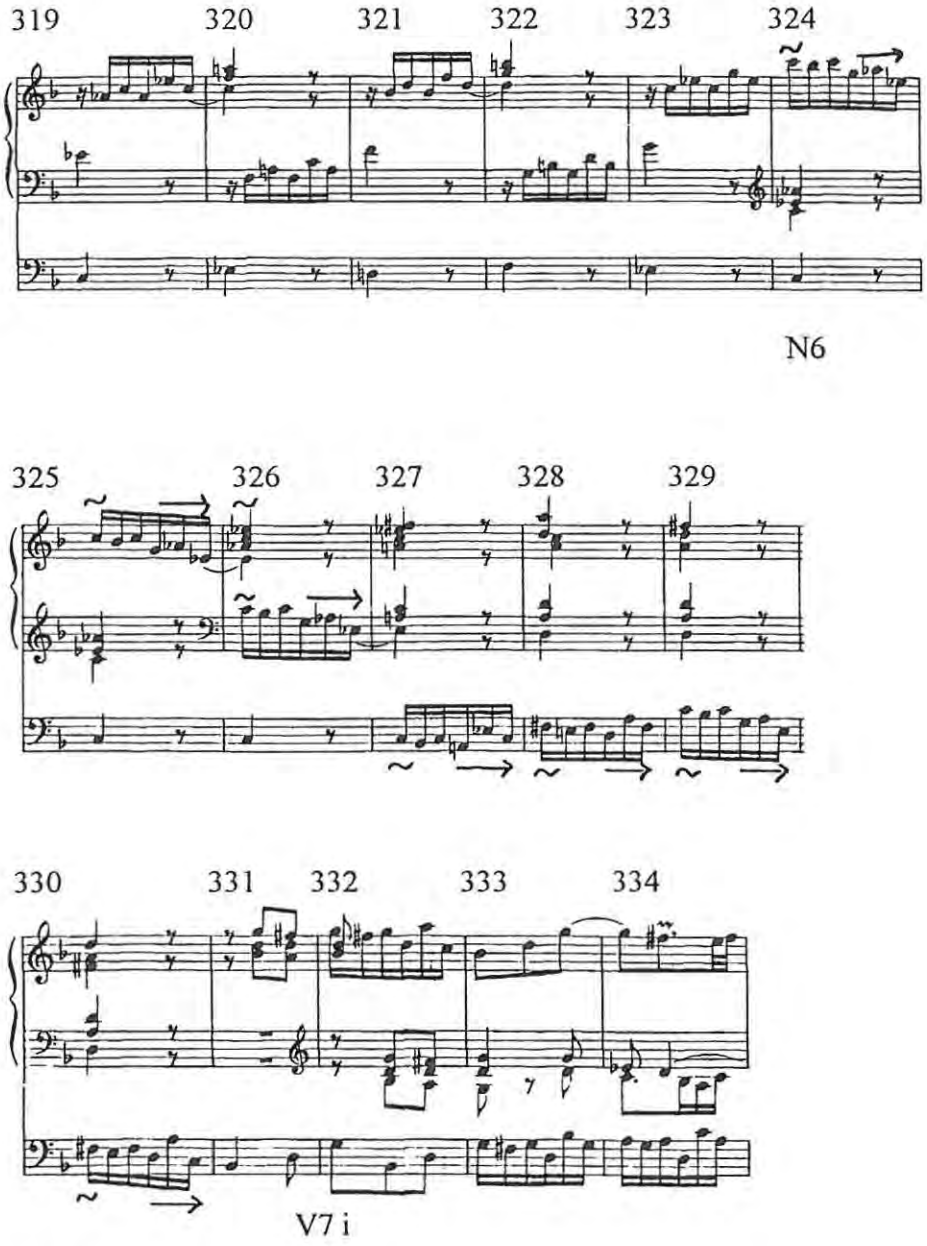


According to Hurford (1990:66) strong beats can be emphasised by elongating them. The time lost by doing this is made up for by preceding and following these elongated notes by slight *accelerandi*. In the following excerpt slight elongations (~) highlight the 'dramatic' *exclamationes* represented by the Neapolitan sixth chords dominant seventh chords. Slight *accelerandi* are indicated by arrows (→):

Example 66

Agogic accentuation on strong beats in progressions towards cadences.

BWV 540, bars 319-332 (NBA IV/5:120).



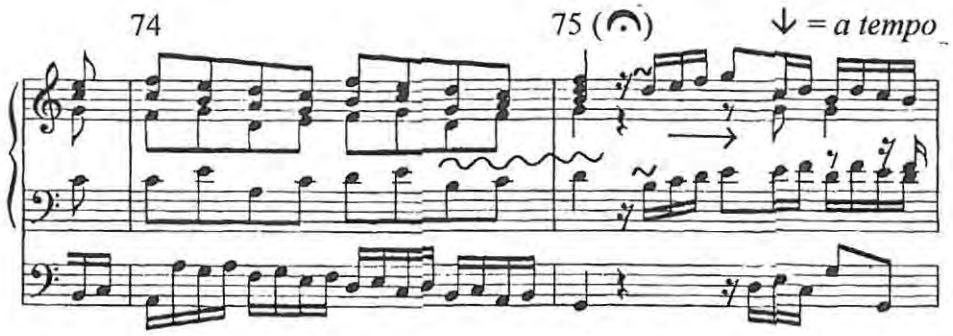
Agogic accents are also useful at the beginning of a new phrase succeeding a cadence. Here, Donington (1982:21) suggests 'an elongation by means of a fleeting moment of hesitation in the resumption of the tempo'. These hesitations apply to notes on both strong and weak beats. The note receiving the agogic accent is thus

more 'isolated' from those by which it is followed. After the elongated note, the other notes follow in time. The following exerpts illustrate this. Wavy lines (~~~) indicate *rallentandi* towards cadences, tildes (~) indicate accents (i.e. by elongating notes), arrows (→) indicate making up lost time, and '*a tempo*' indicates that the ordinary time is resumed:

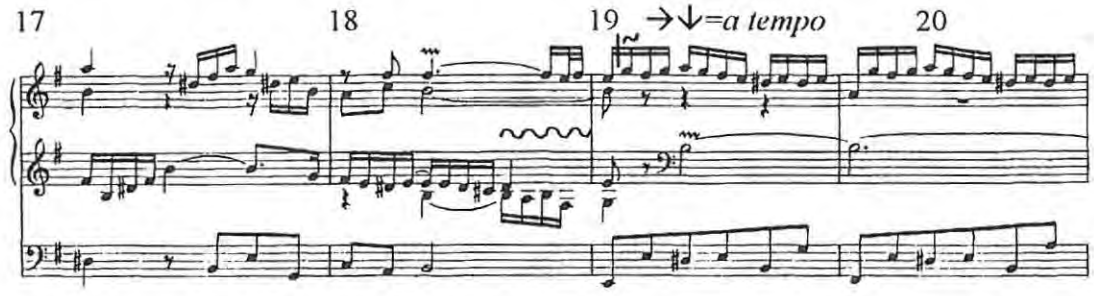
Example 67

Agogic accentuation at the introduction of new phrases.

BWV 564, bars 73^4-75 (NBA IV/6:7).



BWV 548, bars 17-20 (NBA IV/5:95).



5. *NOTES INÉGALES*

The use of *inégales*[48] in Bach's organ works is a controversial issue. Neumann (1982:20) regards it as an entirely 'French convention' and he is convinced it should apply 'to French music only' (idem:21). He (idem:54) therefore sees 'no reason why it should be applied to the music of J.S. Bach'.[49] Other theorists, like Dolmetsch, Babitz, Sachs and Donington are convinced that this practice does apply to Bach's works (idem:18-19). They base their views upon Quantz's (1752) statement (shortened) that

> the quickest notes in every piece of *moderate tempo* or even in the *Adagio*, (with) the same value, must be played a little unequally, so that the stressed notes of each figure, ...are held slightly longer than the passing, although ..not ...as much as if the notes were dotted. Among these ... I include ... the quaver in alla breve,... Excepted from this rule, however, is first, quick passage-work ....in which length and strength must be applied only to the first of every four notes (in Reilly, 1976:123-124).

However, endless arguments about what 'played a little unequally' exactly means, has no bearing on the subject. Moreover, from various viewpoints it becomes clear that *inégalité* has very limited application to Bach's *free organ works* as such. The reasons are as follows:

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48 formalised by L. Bourgeois in 1550 and 'advanced by Guillaume Nivers, leading to the codification of *inégalité* in the great classical French school' (Hurford, 1990:63).

49 Neumann debates this issue at length (over 30 pages). It is not possible to present all his arguments here. For a full account of these, the reader is referred to Neumann (1982: 17-54).

(i) *Notes inégales* is not a cadential practice *per se*. It 'should be used throughout' a piece or 'for a clearly defined section of it'. (Hurford, 1990:124).[50]

(ii) Although Bach was not a meticulous indicator of aspects regarding interpretation, his notation of the notes of his organ works was accurate. It can therefore be assumed that the notated rhythm (whether altered by double-dotting or not) reflects his intentions.

(iii) Giving the 'Frenchness' of the practice, only three works seem 'eligible' for *inégale* treatment. These are:

(a) BWV 539, a piece in french harpsichord style (Williams I, 1980:98). This work brings the 'the *plein jeu* or *petit plein jeu* pieces of classical French organ masses' to mind (Williams I, 1980:87)

(b) BWV 562 which alludes 'to melodies known from de Grigny's *Livre d'Orgue*, copied by J.S. Bach' (Williams I, 1980:204), and

(c) The middle section of BWV 572, with its 'five part *alla breve* or *plein jeu* harmonies' (Williams I, 1980:234).

However, and in spite of such clear French connections, *inégalité* could not be used on account of the following points:

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50 Hurford's recommendation that *inégalité* can be varied 'in the course of a piece, so also it may be sharpened at cadences', seems reasonable, but then it becomes a matter of variation of articulation or tempo that has nothing to do with the decision whether to apply it or not. However, the basis of Hurford's (ibid.) premise that *notes inégales* 'may even occur at cadences of pieces in which *inégalité* has not been employed', is not clear.

(a) BWV 539 for metrical reasons: its shortest note-values are quavers and not the semiquavers needed for *inégalité*.

(b) BWV 562 for reasons of speed: According to Hurford (1990:123), *inégalité* can only be applied to moderate or slow progressions. The semiquavers at the end of this work would therefore be too fast.

(c) BWV 572 (*Grave*) for textural reasons. the 5-part polyphonic texture of this work is unsuitable for the use of *inégalité*, a fact also confirmed by Neumann (1982:29-30) who considers such a complex texture as 'not conducive to the use of inequality'.

An important aspect that emanates from Neumann's discussion is that agogic articulation and *notes inégales* are not the same. Performers might be under the impression they alter some rhythms in 'the form of (quasi-) dotting a series of undotted notes', or apply 'agogic-dynamic emphasis on the first note under a slur.....', inherent in a flexible performance', that they are busy to apply *Inégales* (Neumann, 1982:41-42). They are not. *Inégalité* is a highly prescriptive practice and is not to be confused with the 'agogisch freie Spiel...' (Albrecht, 1981:117).

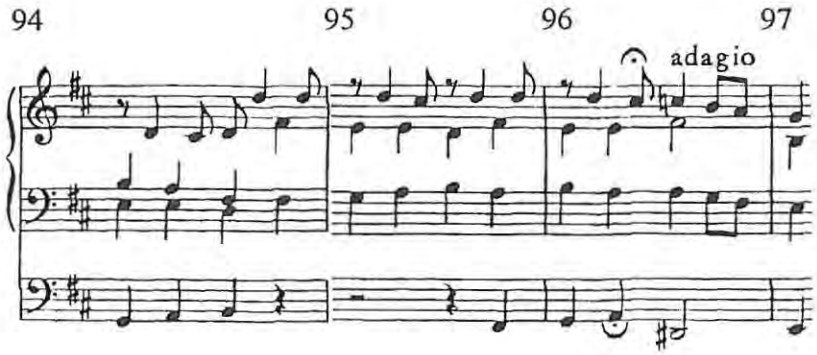
6. INTERACTION OF THE FORMS OF TEMPO DEVIATION

The actual shaping of a phrase normally depends on the interaction of various categories of tempo deviation. Examples taken from two works in contrasting style should suffice to illustrate this important point. The first extract - from BWV 532 - is in a free, improvisatory style, while the second - from BWV 548 - shows a uniform, uninterrupted ('motoric') rhythm.

Bars 94^4-98 of BWV 532 contain two interrupted (bars 96^{2-3} and 98^{2-3}) and two perfect cadences (bars 96-97 and 97-98). Three options are possible from the progression in bars 94^4-96^2:

Example 68

BWV 532, bars 94-97^1 (NBA IV/5:61).



These are:

(i) a broad *rallentando*, on account of: the tension created by the elongated *fermata*-chord (V) and the long break that may probably follow it. The *rallentando* will then be proportionate to this extended chord and break.

(ii) an *accelerando*, for the same reason as in (i). The *fermata* chord now becomes a surprising element, and the progression towards it makes it more pronounced.

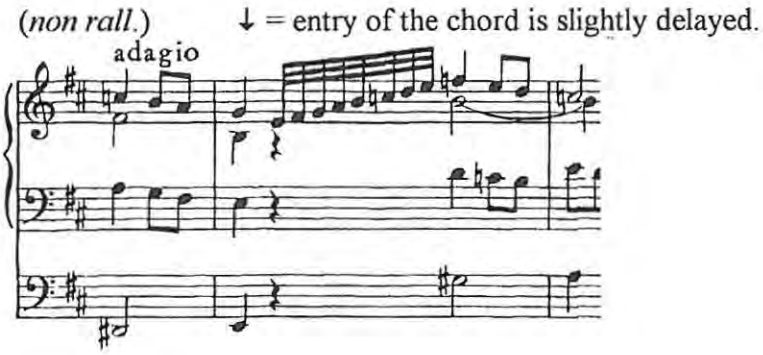
(iii) remaining '*a tempo*'. A 'built-in' rhythmic *accelerando* is created by the sudden appearance of syncopations in the form of repeated d's in bar 94 in the top voice.

After a long break in which the tension reaches a climax, the first perfect cadence follows in bars 96^3-97^1. Here, a *rallentando* seems unnecessary, because the *adagio*

creates an effect of slowing down. However, to further itensify the tension created by the diminished seventh chord, and to make the effect of relaxation more pronounced, an agogic accent can be made at the final chord, by slightly delaying it:

Example 69

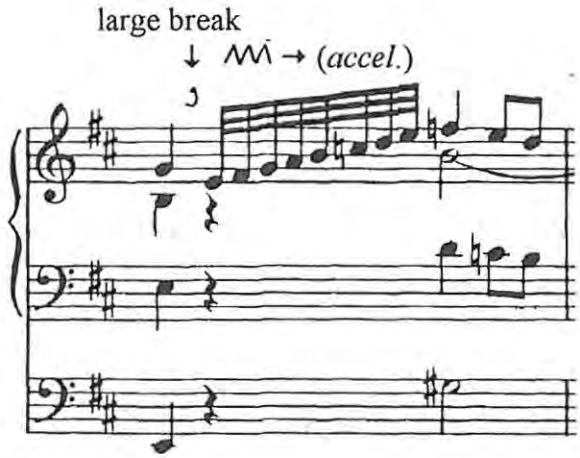
BWV 532, bars 96^{3}-98^{1} (NBA IV/5:61).



The monophonic passage that follows (bar 97^{1}) can be played with *tempo rubato* on account of it's recitativic 'nature' (already discussed in BWV 542). Accordingly, it can be started slowly (∧∧∧), followed by an *accelerando* (→):

Example 70

BWV 532, bar 97 (NBA IV/5:61).



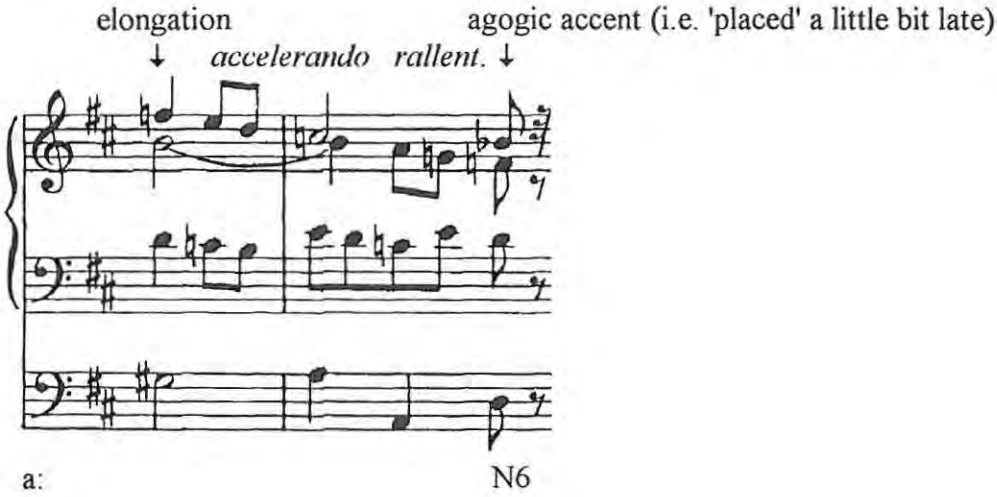
The next cadence (bars 97^3-98^3) can be acknowledged by:

(i) a *rallentando*, on account of its surprising extension into an interrupted cadence. By this, the prevailing tension will be raised.

(ii) *tempo rubato*. The top 'f' of the climax gets an agogic accent by elongating it. The descending progression (f-e-d-c) is accelerated to create an effect of relaxation. From bar 98^2, the preceding *accelerando* is counterpoised by a *rallentando* creating tension. The climax reached in bar 98^3 is acknowledged by an agogic accent on the Neapolitan sixth chord:

Example 71

BWV 532, bars 97^3-98^3 (NBA IV/5:61).



The uninterrupted flow of BWV 548 requires an approach that differs substantially from the rhythmic freedom permissible in BWV 532.

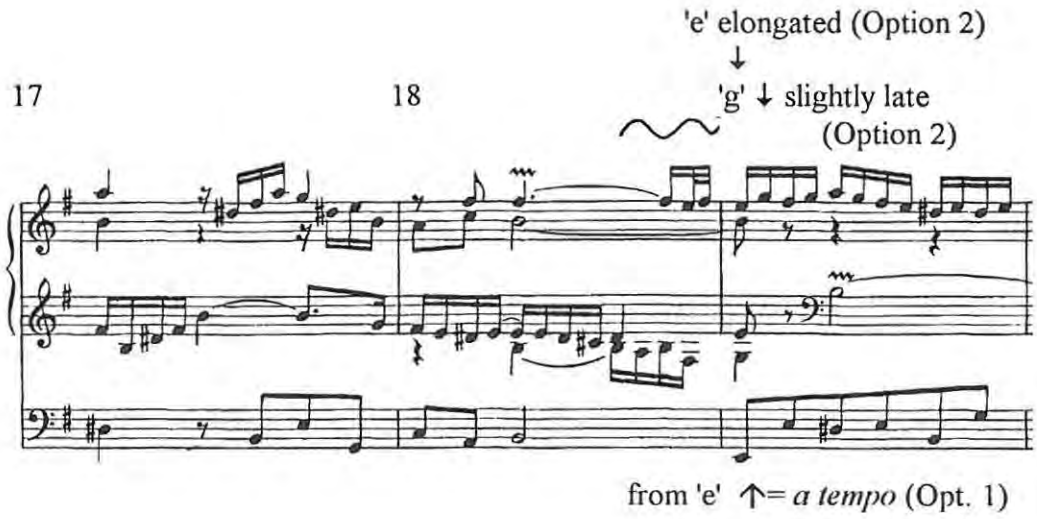
In order to emphasise the formally important main cadence in bars 18^2-19^1, a degree of tempo deviation is advisable. However, care must be taken, not to interfere with the uninterrupted rhythmic flow, the more so as a 'natural' *rallentando* is already

provided for by the long notes in top and bass part. The following options could be considered:

(i) the application of *tempo rubato* in the form of a slight *rallentando* (~~~) on the fourth beat of bar 18. The tempo is resumed on the first beat of bar 19^3 (in Example 72 indicated as Option 1), or the final chord is slightly elongated, so that the 'g' in the top voice is placed slightly late (Option 2).

Example 72

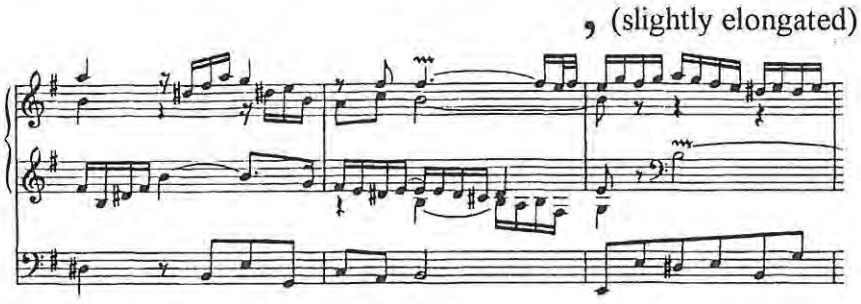
BWV 548, bars 17-19 (NBA IV/5:95).



(ii) the application of agogic accents only. Accordingly, the first chord in bar 19 is placed slightly late by a slight elongation of the break (›) before it. The tempo remains stable.

Example 73

BWV 548, bars 17-19 (NBA IV/5:95).



7. CONCLUSIONS

The application of tempo deviation is to a certain extent the least complicated of the aspects comprising performance practice. This can be attributed to mainly two factors:

(i) The fact that tempo deviation is inherent to music of all periods. The degree in deviation (i.e. 'how much') might vary from period to period, but what is implied by every type of deviation did not change through the ages, and

(ii) the fact that a logical scheme exists, from *tempo variation*, through *tempo rubato* to *agogic accentuation* (in other words from 'extensive' to very small) which fits in the concept of main and secondary cadence. This gives the performer a 'grip' from which the other interpretative aspects can be established. The moment the 'appropriate' *tempi* are established, working out durations of breaks and articulation will come easier.

CHAPTER 4

ARTICULATION

1. INTRODUCTION

The term 'articulation' refers to 'de grotere of kleinere binding tussen de tonen onderling' (Stuifbergen and Schouten, 1980:40).[51] It includes 'all degrees of slurring and detaching of notes: *legatissimo, normal legato, legato-portamento...*, *portato, non-legato, staccato*, and *staccatissimo*.. ' (Keller, 1967:55).[52]

Selecting the articulation appropriate to Bach's cadences is problematic. Even if 'plenty of attention' was given to this topic 'in recent years' (Cantrell, 1985:108), discussions focussing specifically on cadential articulation are practically non-existent.

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51 It is important not to confuse the terms 'phrasing' and 'articulation'. Phrasing refers to the degree of connection between phrases; articulation refers to the degree of connection between successive tones.

52 Articulation consists basically of:

Legatissimo: Keller (1967:58) describes this as a 'viscous, sticky *legato* ...', including overlapping of sounds;

Legato, where 'no gap' and/or 'overlapping of the... sounds' (Hurford, 1990:58) is audible;

Non-legato, which includes all degrees of non-binding between *legato* and *staccato*. An articulation that is 'neither legato... nor clearly detached' (Faulkner, 1984:39), was apparently an integral part of Baroque performance. Hurford (1990:57) uses the term, *détaché* which implies that the 'gap... between the notes should be as small as possible, allowing only sufficient clearance between them *just* to hear the full consonant of the next pipe, and the next...';

Staccato: Hurford (1990:59) describes this touch as 'essentially the most extreme form of *détaché*....' The keys are released much sooner than in *détaché* articulation;

Staccatissimo: This is the shortest possible form of detached playing.

The purpose of articulation is two-fold:

(i) to render clarity (Kirnberger, in Kooiman, 1984:164). This is achieved by the constructive use of breaks.[53] Matthay (1913:137) explains: 'We do not *legato* the ejaculation "Lookoutacariscoming", but we emphasise it by a staccato "Look-out!" from the rest of the shriek'.

(ii) to arouse the affects ('sad,... happy, serious') (Wessel, 1955:47). During the 18th century, slurred articulation connoted flattery, sadness and tenderness, while merriness, joviality and impudence were expressed by detached articulation (ibid.).

Articulation is usually indicated by terms (*staccato*, *legato*, etc.), slurs and various forms of dots. Bach uses mainly slurs and dots as indications of articulation (Fuchs, 1985:49).

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53 The usefulness of breaks (as components of 'what is not') is effectively portrayed by the Chinese philosopher, Lao Tzu, in this strophe from his *Tao Te Ching* (6BC, in Wing, 1986: Passage 11) :

USING WHAT IS NOT

'Thirty spokes converge at one hub; What is not there makes the wheel useful.
Clay shaped to form a vessel; What is not there makes the vessel useful.
Doors and windows are cut to form a room; What is not there makes the room useful.

Therefore, take advantage of what is there; By making use of what is not'.

In the realm of sound, a break is comparable to 'nothingness'. Therefore, just as 'what is not there' shapes 'events in the outside world' (ibid.), accordingly, breaks shape events in music.

2. BACH'S 'STANDARD' ARTICULATION

Music of the Baroque era uses mainly two types of keyboard articulation: *non-legato* and *legato* (Faulkner, 1984:41). This assumption is based on:

(i) Practical considerations. Owing to the specific qualities of the organ, both, *staccatissimo* and *legatissimo*, are 'ineffective' (Gatens, 1981:30), the former because organ pipes require 'some time to speak properly' (ibid.), the latter for the harmonically unjustifiable overlapping of sounds (Zacher, 1984:205).

(ii) reports from theorists:

C.P.E. Bach, favouring *non-legato*, writes:

> There are many who play stickily, as if they had glue between their fingers. ....they hold notes too long. Others .... leave the keys too soon, as if they burned. Both are wrong. Midway between these extremes is best (in Mitchell, 1985:149).

Friedrich Wilhelm Marpurg (1765) refers to 'the ordinary procedure in which one releases the finger from the previous key an instant before one plays the note following' (in Faulkner (1984:39). Johann Nikolaus Forkel refers to 'two tones' that 'are neither disjoined from each other nor blended together' (in David and Mendel, 1946:308).

Regarding the possibility of *legato*, J.S. Bach (himself) writes:

> ...and above all to arrive at a singing style in playing.... (in David and Mendel, 1946:86).[54]

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54 However, a 'singing' ("cantabile") style does not necessarily imply the absence of 'gaps' between sounds (Hurford, 1990:58) as is expected of a 'normal' *legato*. An *impression* of *legato* can be conveyed by the imaginative application of *non-legato* (Faulkner, 1984:42).

C.P.E. Bach mentions 'tones' that are 'well connected' (in Mitchell, 1985:58) and E.L Gerber refers to 'Bach's *legato* manner of organ playing' (in David and Mendel, 1946:186). D.G. Türk (1789) defines *legato* as it is understood today when he 'speaks of a legato without silence between notes' (in Williams, 1986:196).

In determining articulation the following criteria ought to be applied:

(i) The meter. Articulation breaks before strong beats concur with the Baroque principle of '*good* notes' (Quantz, in Le Huray, 1990:16). Accordingly, notes on strong beats (i.e. after bar-lines, upbeats, etc.) are 'emphasised more than the passing notes' or '*bad* notes' (ibid.). Emphasis is achieved by breaks (Hurford, 1990:62) before the relevant notes.

(ii) Bach's indications in the form of slurs. According to Noehren (1984:35), Bach's use of slurs strongly suggests a transfer from string idioms:[55]

> In spite of Bach's fame as an organist and clavier player, one may wonder if the violin might not have been at the heart of his musical feeling? In so much of his writing, regardless of the medium, we see the influence of the violin and strings. We see it carried over into much of the organ music, ...

According to Fuchs[56] (1985:58) slurs indicate the 'intervals that are closely connected' (translated). Although 'an *all-legato* note-relationship' is not necessarily implied by this 'connection', the

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55 Kloppers (1965:205,206) points to the fact that this transfer was limited to articulation. In other respects, the organ was autonomous; (playing) technique and tone colour (registration) were not affected.

56 Fuchs's (1985) study is important. He provides detailed information on Bach's indications and establishes criteria for their application to works and sections that are unmarked.

slurred notes should nevertheless be 'felt to be connected' (Hurford, 1990:100).[57]

Slurred notes appear in the following groupings:

(a) Two notes connected. According to Fuchs (1985:85), Bach uses this grouping very often, especially in two different patterns:

(1) As 'steigende Sekundschritte fallend',

Example 74

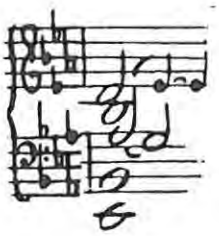
Articulation: Two notes connected (Bach, in Fuchs, 1985:87).

(2) As slurred resolutions to final chords of 'feminine' cadences:

Example 75

Articulation of 'feminine' cadences.

BWV 552 (Bach, in Fuchs: 1985:69):



57 Hence the use of dotted slurs (⌒) in the examples.

(b) Three notes connected, preceded by a single detached note (Fuchs, 1985:97,98). According to Fuchs (idem:60) this articulation occurs whenever the direction of the notes changes. It is also known as the *suspirans* ('breathing figure') (Hurford, 1990:96) as the first detached note represents 'the sensation of a quick breath':

Example 76

Articulation: The *suspirans* (Hurford, 1990: 96 and 97).

'original':

becomes:

(c) Four notes connected (Fuchs, 1985:84):

Example 77

Articulation: Four notes connected (Bach, in Fuchs, 1985:84).

(iii) Fingering. Information on Bach's fingering is provided by his *Applicatio* for Wilhelm Friedemann and by Johann Kasper Vogler's fingering of the *Preludium*

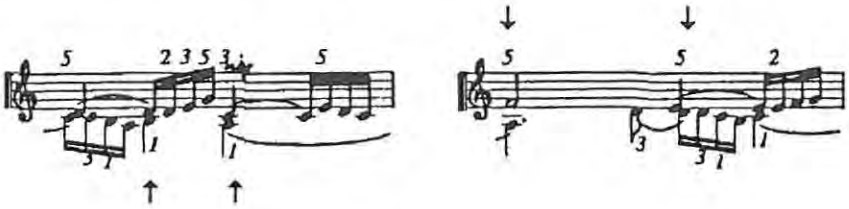
& *Fugetta* BWV 870a.[58] The following are distinctively 'early' fingering practices:

(a) Finger repetition. This implies the 'use of the same finger on two notes in succession' (Faulkner, 1984:24) as shown in the following examples where it affects the use of the thumb and of the fifth finger respectively.

Example 78

Articulation: finger repetition. Right hand.

BWV 870a, bars 6 and 8 (Vogler, in Le Huray, 1990: 10):

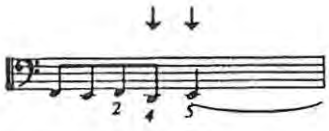


(b) Finger-'vaulting'. Here Faulkner (1984:24) refers to a general rule according to which it is always 'the longer finger that crosses over or the shorter that crosses under' (Faulkner, 1984:24). The following example shows two such possibilities:

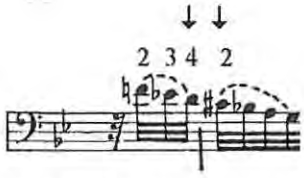
Example 79

Articulation: Finger-vaulting: Left hand.

5 under 4: BWV 870a, bar 9. (Vogler, in Le Huray, 1990:10)



2 over 4: BWV 542, bar 8 (own suggestion):



58 Vogler was a pupil of Bach (Rayfield (1981:41). Although no proof exists that these fingerings are from Bach, they 'do tell us much about the way that the C major (prelude) would have been played by a Bach pupil' (Le Huray, 1990:11).

Bach's presumed acquaintance with modern fingering practices is attributed to statements such as these:

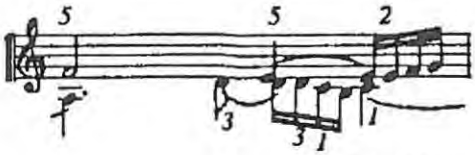
> All his (J.S.Bach's) fingers were equally skillful; all were equally capable... (C.P.E Bach and Agricola in Faulkner, 1984:15);
>
> ....all the fingers of both hands must necessarily be employed.... he rendered all his fingers... equally strong and serviceable (Forkel, in David and Mendel, 1946, 309);
>
> ....he was ...obliged to .... use the thumb in a manner different from that hitherto employed (ibid.).

The following is an example where the thumb is used as a pivot:

Example 80

Articulation. Modern fingering practices: the thumb as pivot.

The *Preludium*, BWV 870a, bar 8^{3-4}: Right hand (Le Huray, 1990:10):



↑↑↑(1[2]1 in 'alto' part)

Despite Bach's apparent use of modern practices, his approach to articulation could not have changed overnight. This viewpoint is confirmed by two important considerations:

(a) C.P.E. Bach was acquainted with, and retained 'earlier fingering patterns' (in Faulkner, 1984:34). The same situation would therefore also apply to his father's approach.

(b) According to Hurford (1990:74) and Faulkner (1984:47) the instruments Bach knew had shorter and narrower manual keys that complicated the use of thumbs and fifth fingers. These instruments could not have been instantly replaced by instruments with longer and wider keys to accommodate Bach's 'new' technique.

(iv) Foot-settings. In determining the articulation of the pedal parts the following points (Faulkner, 1984:46 and 47) are important:

(a) Using the heel was difficult on the instruments Bach knew: 'Old pedalboards normally sloped slightly from the front to back (the opposite of modern pedalboards), making it uncomfortable to reach the pedals with the heels' (idem:47).

(b) Bach's pedal parts are particularly suitable to be executed with 'alternating toes' and 'the same toe on two notes in succession' (analogous to finger repetition):

Example 81

Articulation: foot-setting.

BWV 564, bars 73-75 (alternating toes).

BWV 532, bars 105-106 (toe-repetition):

Faulkner (1984:47) concludes: 'In a technique that eschews substitution and seeks an articulate touch, the preference for the use of the toes in pedaling (sic) makes good sense'.

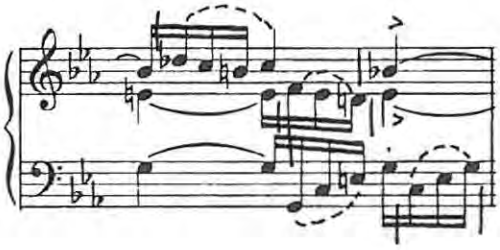
(v) General factors. According to Rayfield's (1981:42) survey of articulation implied by fingering, breaks should be executed after:

(a) Ties, large leaps and before syncopations:

Example 82

Articulation: Ties, leaps and syncopations.

Ties: BWV 534, bar 67.



Leaps: BWV 564 bar 73^{4}-74^{2}.

octave leap

Syncopation: BWV 532, bar 105 (right hand):

3. CADENTIAL ARTICULATION

3.1 Main Cadences

In terms of tempo, three categories of main cadences can be distinguished:

(i) 'Dramatic' cadences creating an exceptionally high degree of tension and usually marked by intense fluctuations in tempo, especially by broad *rallentandi*.

(ii) Prominent cadences, showing high degrees of tension and marked by *rallentandi* within the categories of *tempo variation* and *tempo rubato*.[59]

(iii) Cadences of less prominence marked only by short *rubati* or *agogic accentuation*.

3.1.1 'Dramatic' Cadences

The following examples elaborate in detail on the proposed articulation of selected dramatic cadences.

(i) BWV 564 (bars 73^{4}-75) (Example 83, p.111)

The progression leading to the cadence starts with an agogic accent on the first quaver in bar 74^{1} which is immediately followed by another agogic accent on the second semiquaver of the pedal part. Both accents are produced by elongating the emphasized note. To achieve this effect in the pedal part it is necessary to shorten the

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[59] Definitions of the various categories of tempo deviation were provided in Chapter 3.

first semiquaver and separate it from the accentuated note by means of a momentary break.

Between the second quaver of bar 74^1 and the middle of the same bar, a gradual *accelerando* leads to a contraction of rhythm and an articulation that approximates a *legato* effect.

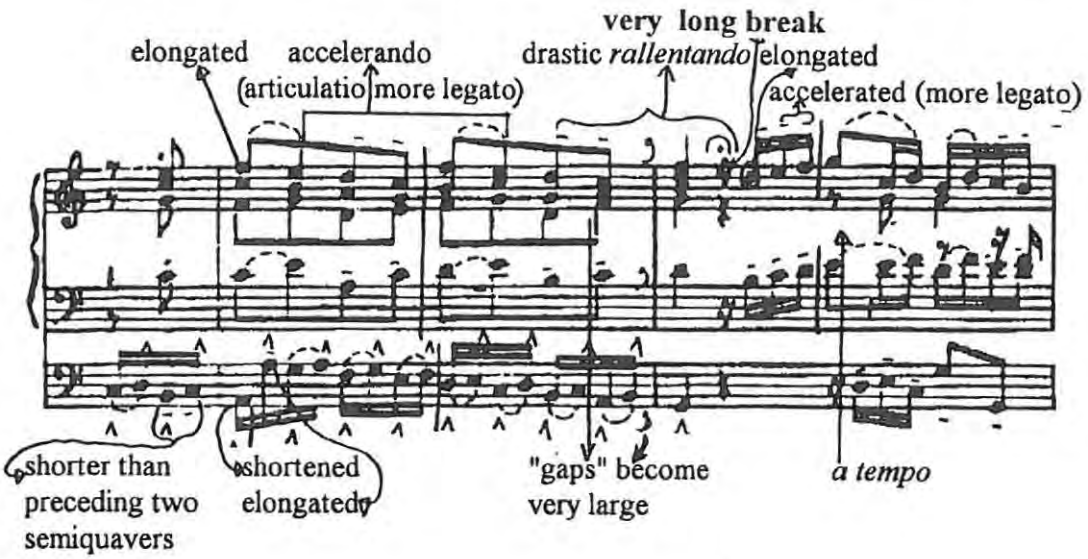
A broad *rallentando* begins during the last two quavers of bar 74 and ends at the rest on the second beat of bar 75. Conditioned by the slower speed the articulation becomes increasingly 'open'. Gaps between the two quavers and four semiquavers in the bass become wide. The semiquavers become shorter and the largest break appears before the *exclamatio* in bar 75.

In order to acknowledge the affective character of the *exclamatio* (bar 75^1) and to raise the tension even further, its entry is set apart from the rest of the music by a long break.

Another and even longer break follows on the chord. Thus the new phrase, beginning in bar 75^2 only enters once all reverberation has ceased. It too undergoes a process of *rubato*, with an agogic accent on the first semiquaver followed by a slight *accelerando* to make up for 'stolen' time. The *a tempo* resumes in bar 75^3:

Example 83

Tempo and articulation combined at 'dramatic' cadences: BWV 564, bars 73^4-75.



(ii) BWV 534 (bars 67-71) (Example 84, p.112)

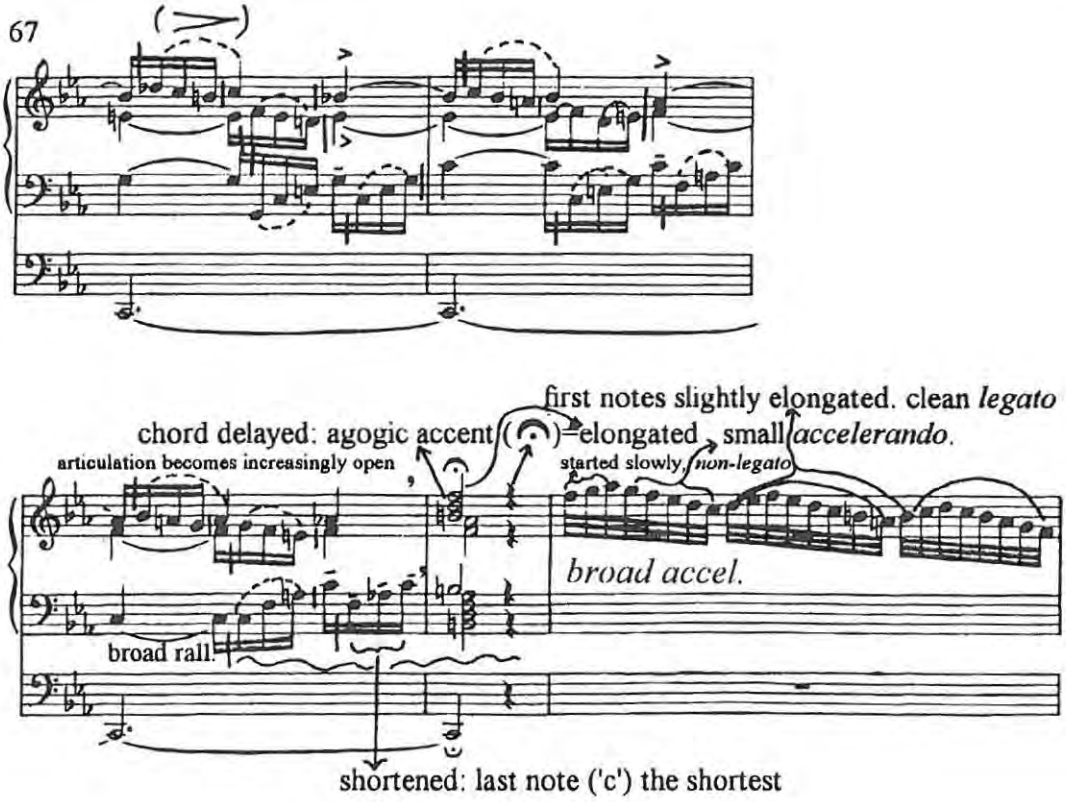
A broad *rallentando*, starting from bar 69 and a gradually more pronounced articulation (reaching its climax in the shortened semiquavers of bar 69^4) prepares for the interrupted cadence in bars 69-70. The diminished seventh chord in bar 70 receives an agogic accent by applying a break the length of which exceeds the limits provided by the slower speed.

The tension produced by the diminished seventh (bar 70) is prolonged on account of the *fermata*, elongated rest and the *cadenza* continuing with diminished seventh harmony. The prevailing tension can be sustained and raised by introducing the *cadenza* very slowly and following it with a broad *accelerando*. The recitativic element can be highlighted by applying *tempo rubato* and agogic accentuation. Accordingly, the first three notes (f-g-a^b) are marked by *non-legato*. The beginning of the first three notes of the new figure (bar 71) is marked by a slight lengthening of

the first note immediately followed by an *accelerando* which also prevails throughout the third figure.

Example 84

Tempo and articulation combined at 'dramatic' cadences: BWV 534, bars 67-71.



(iii) BWV 532 (bars 104-107) (Example 85, p.114)

The improvisatory character of this cadential progression lends it to extraordinarily free interpretation.

The monophonic passage in bar 104 (which owes some of its 'pathos' to the underlying harmony of the Neapolitan sixth) should be started very slowly, concomitant with a well-perceptible lengthening of the first three notes, emphasising

in particular the opening 'g'. The next phrase commences with a short break before and an elongation of its first note, followed by a slight *accelerando*. The last phrase, by contrast, is marked by a large *rallentando*. Throughout the whole passage articulation changes in accordance with the varying tempo: while the first three notes could be played *non-legato*, those of the second phrase, because of the *accelerando*, require a *quasi legato* articulation. The final phrase, in turn, allows for either a gradually more emphatic non-*legato* or a pronounced paired grouping.

The entry of the pedal note 'a' in bar 105 is delayed by a long break which highlights the vast distance between the e^{b} (bar 104^{4}) and the 'a' (bar 105^{1}).

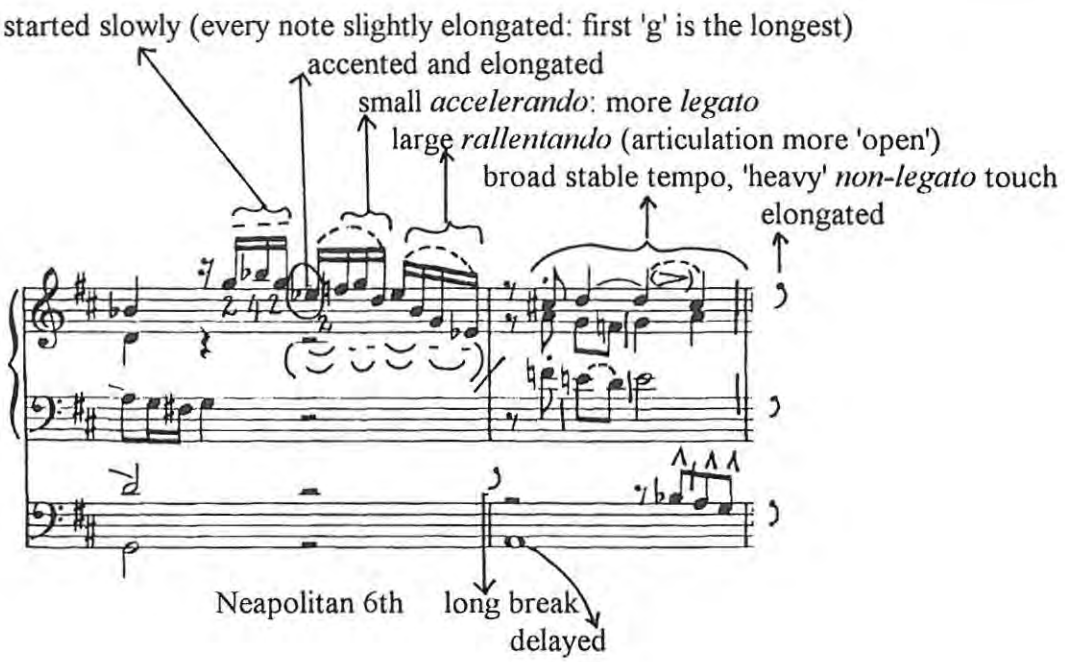
The dense texture and presence of dissonance (intensified by additional and 'clashing' dissonant notes in the double pedal) needs nothing more than a broad tempo that remains stable, complemented by a 'heavy' laid-back *non-legato* touch.

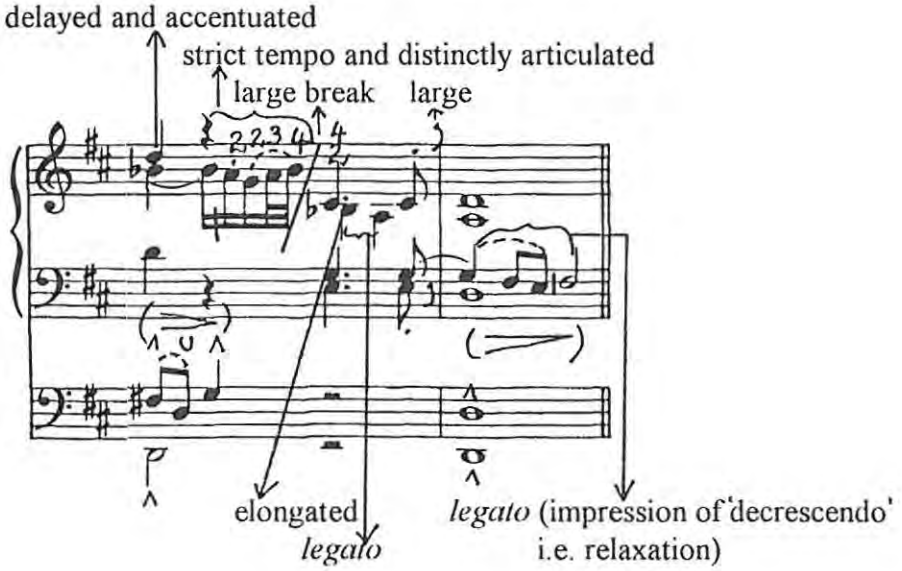
A lengthy break preceding the augmented chord on the first beat of bar 106^{1} helps to intensify the surprise effect. The figure on the second beat should be played in strict tempo but distinctly articulated to make it clearly audible against the two pedal notes. Another lengthy break marks both, the descending diminished seventh leap b^{b} to c# (*passus duriusculus*) and the entry of the diminished seventh chord, connotative of despair. Resolution into the less dissonant V4/3 chord should be delayed. In acknowledging the reduction in tension on account of this resolution, the 'a' (bar 106^{4}), as well as the repeated notes (e, g and c#), are executed as *legato* as possible.

A long break in soprano and second tenor part clearly separates and delays the entry of the final chord and thereby gives it an extra weight. The tied-over 'g' in the tenor can be lengthened to raise the prevailing tension. Playing the remaining part of this phrase with *legato* articulation helps to create an effect of *decrescendo* and relaxation:

Example 85

Tempo and articulation combined at 'dramatic' cadences. BWV 532, bars 104-107:





3.1.2 'Prominent' Cadences

The following examples give in detail the suggested articulation of selected prominent cadences.[60]

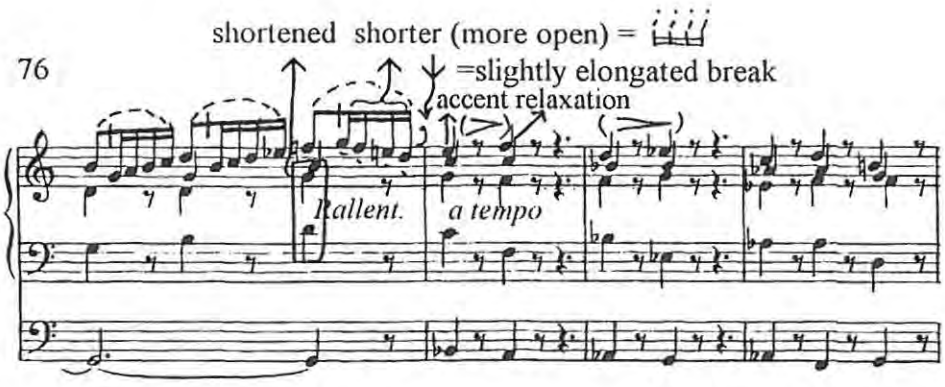
(i) BWV 547 (bars 76-77) (Example 86)

A *rallentando* starting from bar 76^3, concomitant with a more pronounced articulation in which the four semiquavers are gradually shortened, anticipates the interrupted cadence in bars 76-77. The secondary dominant seventh chord in bar 77^1 receives an agogic accent by the application of a break mildly exceeding the limits provided by the *rallentando*. The *a tempo* resumes on the first chord in bar 77 which introduces a parenthesis. Bach meticulously indicated the desired articulation of the parenthesis (bars 77-79) in the form of rests.

Example 86

Tempo and articulation at prominent cadences.

BWV 547, bars 76-79 (NBA IV/5:24).



60 The works containing the examples are characterised by lively *tempi*. The standard articulation, therefore, is *non-legato*.

(ii) BWV 564 (bars 30-32) (Example 87, p. 117)

The progression leading to the cadence starts with dotted motifs (bars $30\text{-}31^1$) articulated by the application of breaks after both the dotted notes and demi-semiquavers.[61]

The first note ('g') of the second beat in bar 31^2 receives an agogig accent by applying a break before, as well as a slight elongation on it. In this way the quasi *legato* articulative unit of flowing demi-semiquavers is set apart from the 'open' dotted rhythms by which it is preceded and followed.

A broad *rallentando* starts on the third beat and ends on the first 'g' of the fourth beat in bar 31. Concomitant with the decrease in tempo, the articulation of the dotted note-groups becomes increasingly 'open',[62] with the largest break appearing before the two cadential chords.

The cadential chords (bars $31^4\text{-}32^1$) introduce the new tempo. In order to acknowledge the joyful *exclamationes* they connote, the articulation of these chords is as short as possible. Breaks within, and after the cadence do not exceed the limits provided by the new tempo.

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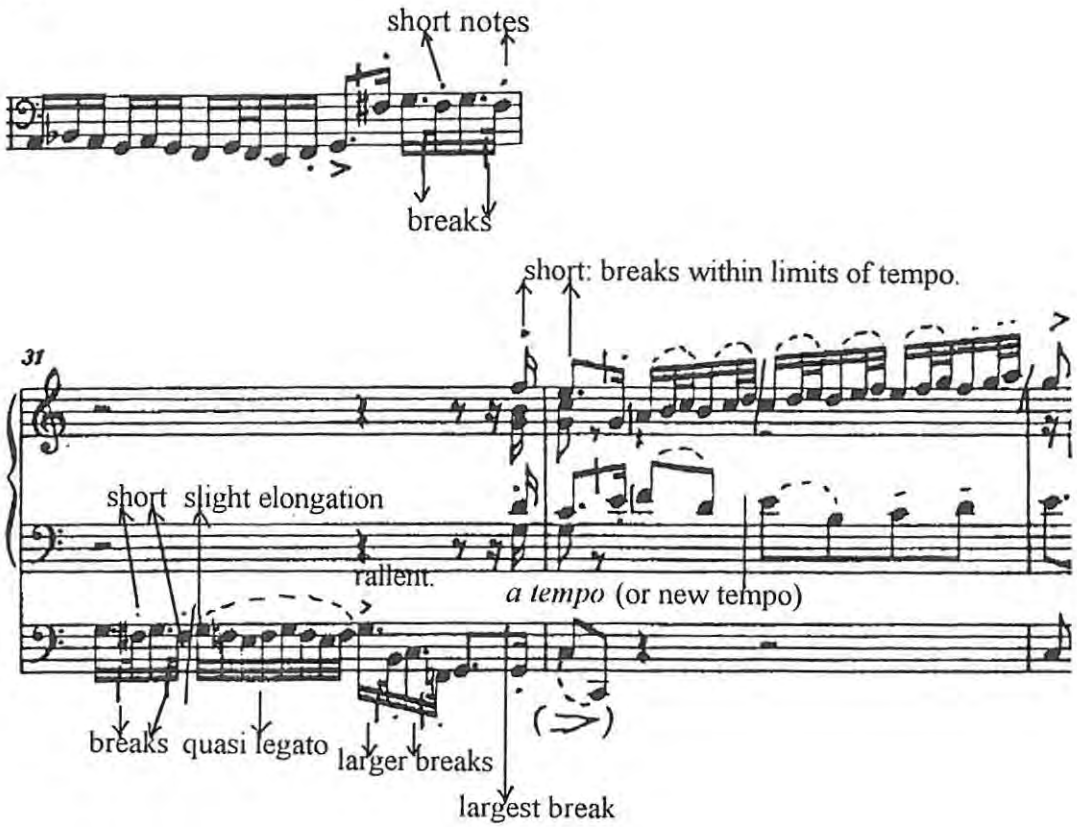
61 According to Löhlein (in Wessel, 1955:278) dotted rhythms suggested 'the splendid' and 'required a firm tone with good articulation'. Although the exact meaning of 'good' is elusive, it seems that it might be synonomous with 'open'. This is supported by the following example in which Bach indicates the shortened notes by (*staccato*) dots (in Fuchs, 1985: 106):

62 Hurford (1990:63) writes: 'As a general rule, dotted-note groups sharpen towards a cadence'. He (ibid.) explains: 'as the pulses lengthen' (as a result of a *rallentando*) 'the small notes continue at their previous length, thus effectively sharpening the dotted rhythm towards the final note'.

Example 87

BWV 564, bars 30-32 (NBA IV/6:4):



(iii) BWV 548 (bars 133-137) (Example 88, p.118)

The chord (V6/5) which forms a melodic and harmonic climax in bar 135 is accentuated. This is achieved by a slight lengthening of the break which precedes it. The articulation becomes increasingly 'open' towards the end of bar 134.

A broad *rallentando* commences with the trill[63] in bar 136[2] and ends with, including the break after the final chord. The trill, preceded by a break (as it 'implies an accent'

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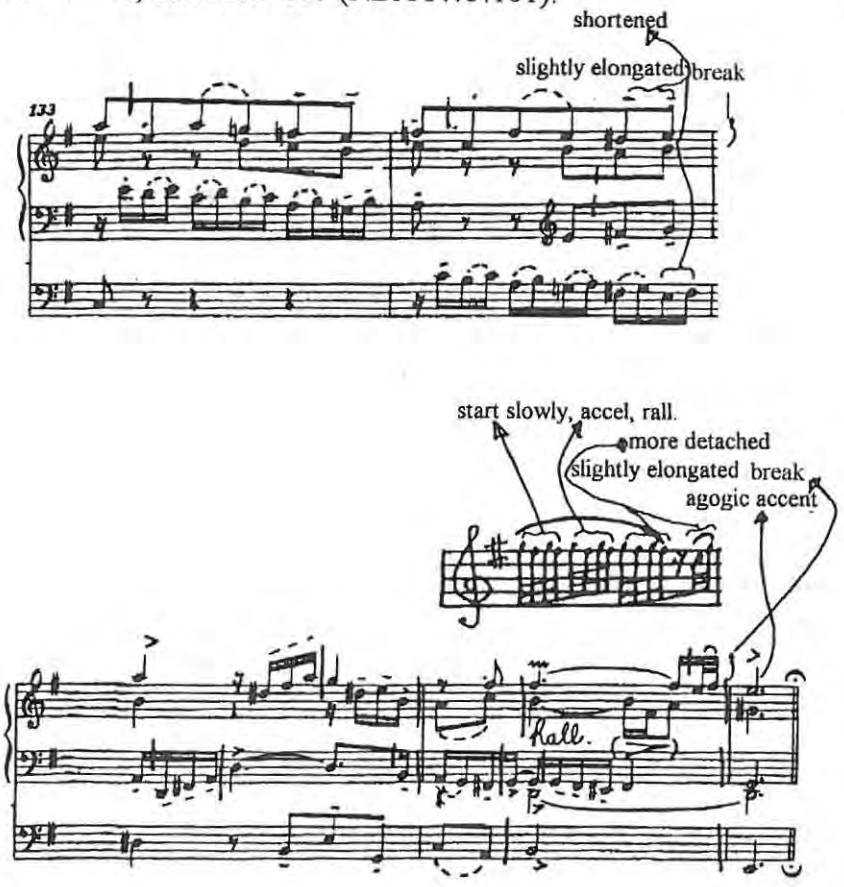
63 According to das 'Teilautograph A 2' (in Killian, 1979, 2 : 402) this ornament is authentic. It is one of the 'länger gestreckte Zeichen' (ibid.) known as a 'Dauertriller mit Nachschlag' (Klotz, 1984:154). Its proposed execution is based upon an example by Klotz (idem:155) within a similar context.

[translated] [Zacher, 1984:204]), ought to start slowly, followed by an *accelerando* and *rallentando* towards its end. Conditioned by the *rallentando*, the articulation of all the parts becomes increasingly 'open' towards the end of bar 136 with the largest break (*silence d'articulation*) appearing between the trill and its two-note termination.[64]

The final chord is slightly delayed in order to emphasise the *tierce de Picardie*[65] whereby the resolution of accumulated tension becomes more pronounced.

Example 88

BWV 548, bars 133-137 (NBA IV/5:101).



64 According to Fuchs (1985:67) Bach often groups the trill and two-note termination under separate slurs; hence the suggestion for a break.

65 According to Killian (1979,2: 389-402 ['Kritischer Bericht']) this *tierce de Picardie* is authentic.

3.1.3 Cadences of Less Prominence

Cadences of this kind often occur within motorically-orientated works that - by their very nature - demand a basically stable meter which allows only for a moderate degree of rhythmic deviation. Nevertheless, such cadences can still be marked by a careful use of the following devices:

(i) a very slight *rallentando* (often nothing more than a hesitation), concomitant with an articulation that becomes increasingly open on the penultimate chord of the cadence. This usually involves the notes contained in the last beat of a bar;

(ii) a slightly elongated break that follows the penultimate chord of the cadence;

(iii) an accentuated final chord, slightly delayed by the mentioned elongated break, and

(iv) the resumption of the tempo (i.e. *a tempo*) at the beginning of the new phrase. The tempo is resumed right away, or the opening notes of the new phrase are started slightly slower with an 'open' articulation.

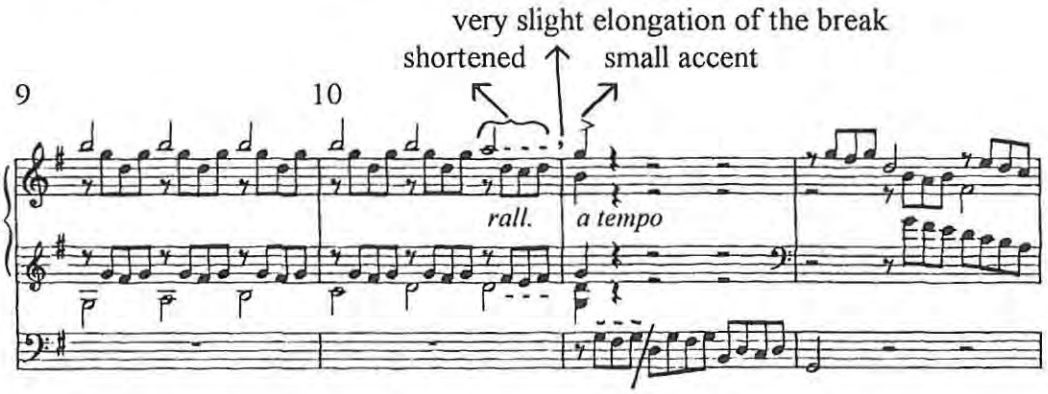
This pattern is highlighted in the examples that follow.

In BWV 550, the last beat of bar 10 is marked by a very slight *rallentando* and shortened articulation of the inner notes. A slightly elongated break follows and the tempo is resumed *on* the final chord of the cadence in bar 11:

Example 89

The articulation of less prominent main cadences.

BWV 550, bars 9-12 (NBA IV/5:138)

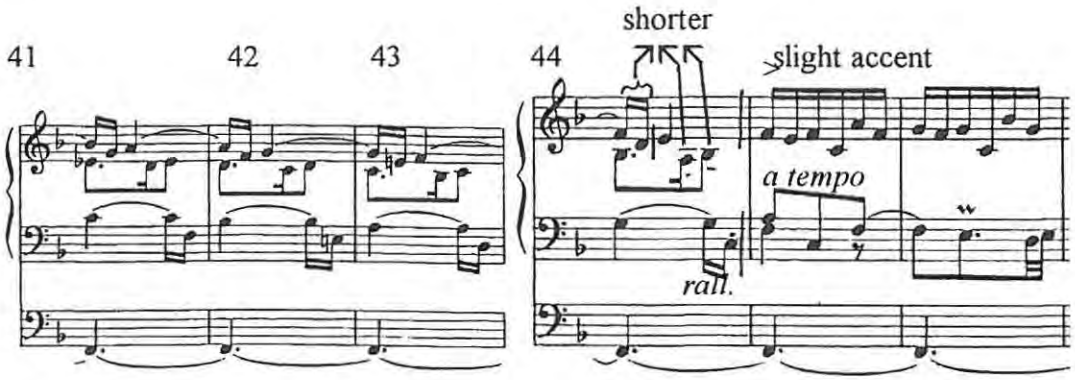


The performance of the following cadence from BWV 540 follows an identical pattern as BWV 550. The *a tempo* resumes on the final chord in bar 45.

Example 90

The articulation of less prominent main cadences.

BWV 540, bars 41-46 (NBA IV/5:113):

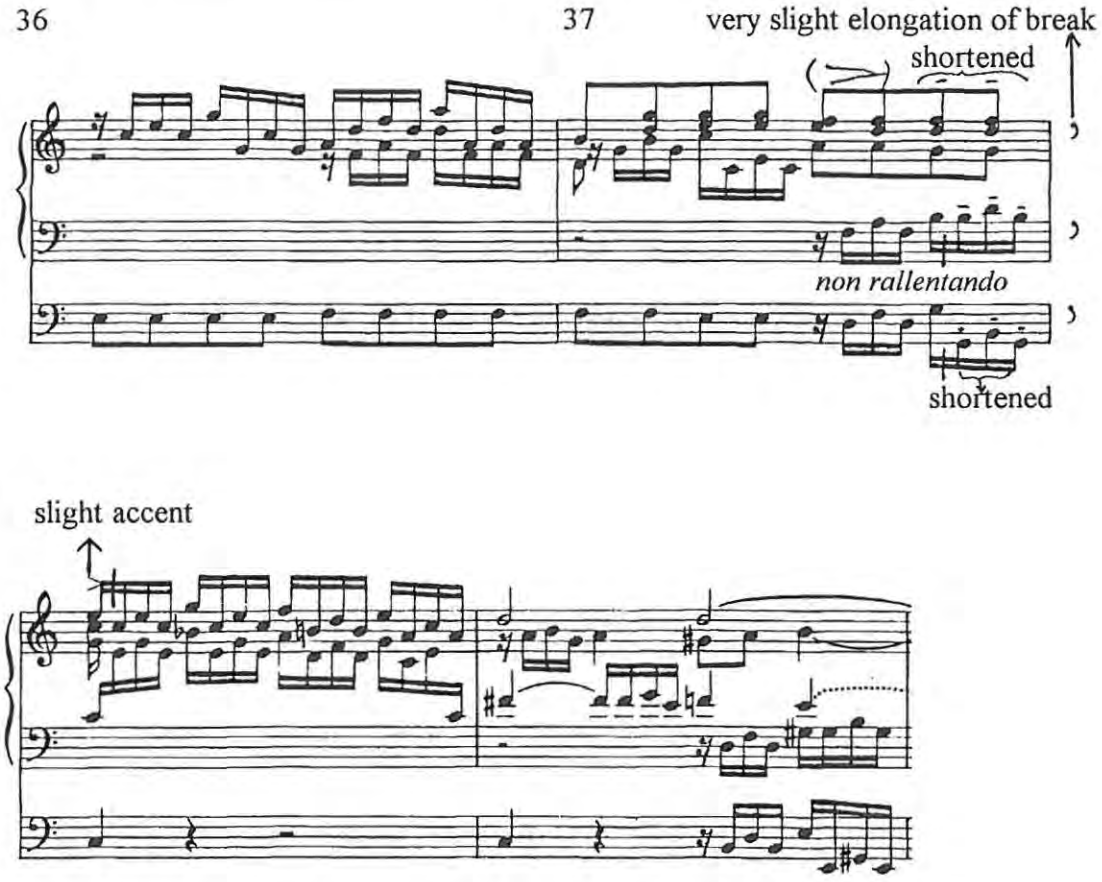


The cadence in bars 37-38 of BWV 543 is characterised by a motoric rhythm. A slight hesitation on the second semiquaver that introduces the new phrase in bar 38 is therefore appropriate:

Example 91

Articulation of less prominent main cadences.

BWV 543, bars 36-39 (NBA IV/5:188).



3.2 Secondary Cadences

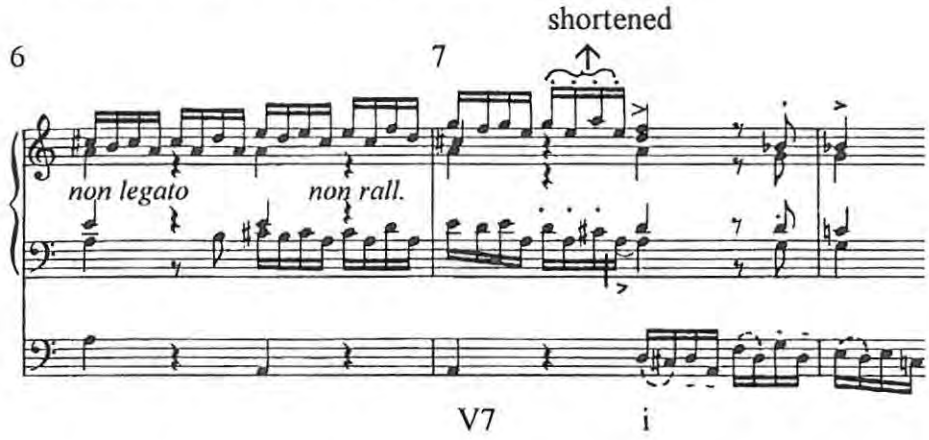
Secondary cadences, which 'are so transitory that we take them in our stride' (Donington, 1982:20), do not need recognition beyond agogic accentuation. In fact, subtle changes in articulation within an otherwise stable tempo are sufficient, as shown in the following examples:

The cadence in bar 7 of BWV 538 is marked by a shortening of the last four semiquavers before the final chord. The tempo remains stable.

Example 92

Articulation of secondary cadences:

BWV 538, bars 6-8[1] (NBA IV/5:76)

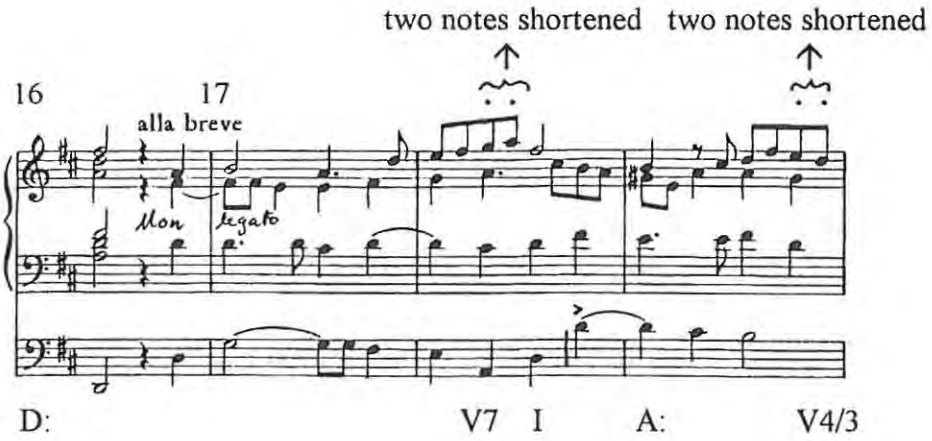


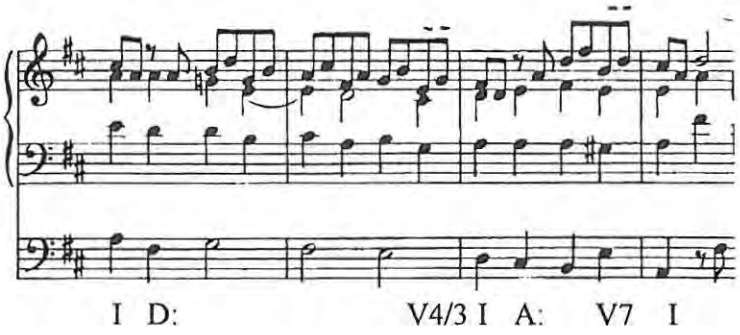
In the middle section of BWV 532 secondary cadences appear in remarkably close succession. In order to preserve the coherence and continuity required by this *alla breve* movement, the notes comprising penultimate chords of cadences are shortened without any deviation in tempo:

Example 93

Articulation at secondary cadences.

BWV 532, bars 16-23 (NBA IV/5:59).



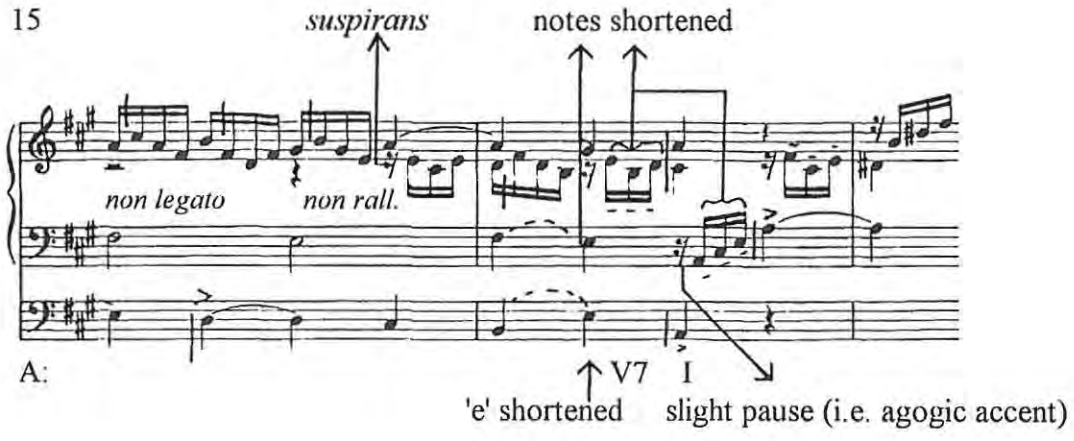


The ephemeral character of the cadence in bar 16^{2-3} of BWV 536 is caused by the flowing semiquavers in the form of sequential *suspirans* figures that dominate the entire piece. In order to make this cadence perceptible, the notes in the penultimate chord, as well as those introducing the new phrase, are shortened. The quick 'breath' in bar (bar 16^{3}), represented by the rest, provides for a very slight pause. The briefly delayed 'pick-up' of the new phrase is 'quite smooth and inconspicuous' (Donington, 1982: 21).

Example 94

The articulation of secondary cadences.

BWV 536, bars $15\text{-}17^{1}$ (NBA IV/5:181)



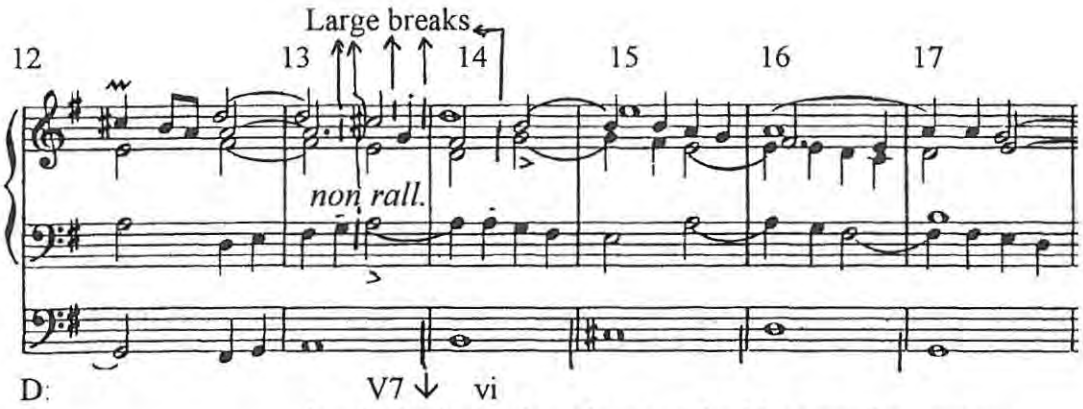
Textural uniformity and a continuous rhythmic flow, which characterise the *Grave* in BWV 572, almost conceal an interesting interrupted cadence in bars 12-13. While it can be marked by clear breaks in the manual parts (as indicated below) an equally

large break in the pedal part (between the notes 'a' and 'b') would interfere with the ascending bass progression and disturb the flow of this passage:

Example 95

The articulation of secondary cadences.

BWV 572, Grave, bars 12-17 (Peters IV:64)



break similar to the other ones in this ascending passage

4. CONCLUSIONS

Among the various aspects that shape the performance of Bach's organ works, articulation is the most difficult to determine. This, however, does not mean that articulation can be dismissed as an aspect of lesser importantance or entirely of personal taste.

In dealing with cadential articulation, the following ought to be kept in mind:

(i) An imaginative use of articulation is essential to the performance of music from the Baroque Era. This applies *eo ipso* also to the interpretation of Bach's organ works which - in order to become meaningful to the listener - require not only

such standard devices as clear breaks at phrase-endings but also a rich variety of other, smaller nuances of articulation.

ii) Tempo deviation and articulation function proportionate to each other, i.e. a higher degree of retardation requires a more prominent articulation. In a like manner, a more prominent articulation necessitates a corresponding degree of retardation.

(iii) Tempo deviation, in turn, depends on factors such as harmony, melody, meter (rhythm) and texture which also affect the degree of tension and relaxation at cadence points. Ultimately, it is these factors - combined with historical evidence - which ought to be the fundamental criterion in determining a 'stylistically correct' articulation.

(iv) Notwithstanding any of the above points, articulation should never be exaggerated and pedantic. *Subtlety* is the golden rule, as recommended by Hurford (1990:106):

> ...beware of the dangers of over-articulation.... Understatement is invariably more effective than overstatement, and a subtlety of approach is more winning to the ear than stressing the obvious.

CHAPTER 5

APPLICATION: BWV 541 AND 542

1. INTRODUCTION

BWV 541 and 542 represent the culmination of the two main styles discernible in Bach's free organ works. While BWV 541 epitomizes the 'motorically'-orientated (virtuosic) works, BWV 542 represents those works characterised by an improvisatory style. These two works, therefore, serve as excellent paradigms for the stylistically 'correct' phrasing of Bach's entire organ *oevre*.

2. THE *PRELUDE IN G MAJOR*, BWV 541 (1730s or 1740s) [66]

2.1 General

Williams (1, 1980:115) describes BWV 541 as:

> a series of single bars, restless in their drive .... and derived more or less in turn from one or other of the opening figures (see Example 96).

He (ibid.) continues:

> Not only can it not be forseen at any one moment which figure is likely to be developed next, but the kind of development itself is unusual. There is no simple repetition; instead, a bar-by-bar composition process takes up the basic

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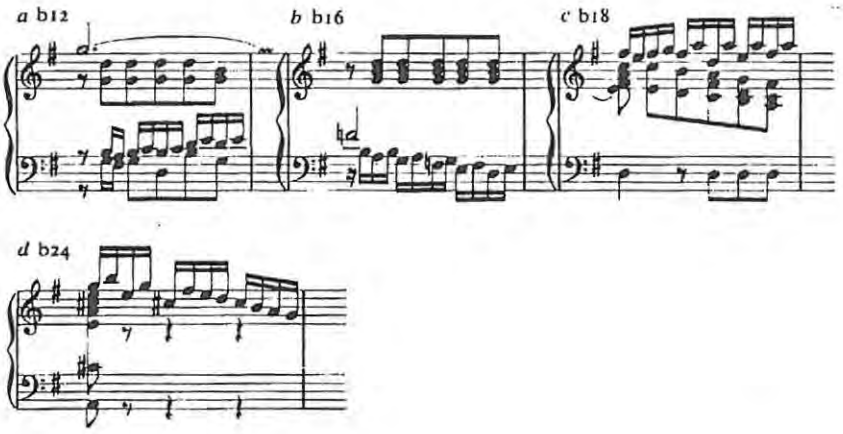
66 The title in the autograph A3 is: '>Praeludium pro Organo con Pedal: oblig: di J.S. Bach<.' (Kilian 2, 1979: 432). Kilian (ibid.427) bases these dates on the fact that the autograph 'stellt....eine Reinschrift dar, die Bach wahrscheinlich erst in den 1730er oder gar erst in den 1740er Jahren angefertigt hat', though he (ibid.) agrees that the 'Komposition selbst ist zweifellos früher erstanden'.

figures, extracts a shape or a texture or a rhythm from them and creates a kind of *ad hoc* form whose unity is ensured by the fact that both the opening and closing bars are heard elsewhere in the movement (b29 and b45 respectively).

Example 96

The 'opening' figures of BWV 541: *a*, *b*, *c* and *d* (Williams 1, 1980:114).



2.2 Form

The 'contracted' *ritornello* form (Williams 1, 1980:113) can be divided into four large parts.[67] Every part is terminated by a perfect (V7-I/i) cadence:

A1 (bars 1-29^1):

Introduction in G major: Bars 1-12^1.

Figure *a*: Bars 12^1-16^1 ('main theme' [Keller, 1967:143]).

Figure *b*: Bars 16^1-18^1.

Figure *c*: Bars 18^1-24^1.

Figure *d*: Bars 24^1-27^1.

Main perfect cadence in D major: Bars 28^3-29^1. Grammatical connotation of cadence: Full-stop ending a paragraph.

---

67 Descriptions of the figures (i.e. *a b c d*) are based upon Williams's (1, 1980:113) scheme.

A2 (bars 29^1-46^1):

Return and development of figure *a* in dominant (D major to e minor): Bars $29\text{-}37^1$.

Figure *b*, *c*, *d* ('much modified' (ibid.). Bars $37\text{-}42^1$.

Secondary perfect cadence in b minor: Bars 42^3-43^1. Grammatical connotation of cadence: comma within a sentence.

Main perfect cadence in b minor: Bars 45^3-46^1. Grammatical connotation: Full-stop ending a paragraph

A3 (46^1-59^1):

Figures *a* and *b* are further developed.

Secondary perfect cadence in G major : Bars 58^3-59^1. Grammatical connotation: semicolon.[68]

A4 + Coda (bars 59^1-82^3):

Return to tonic key (G)

Figures *b* and *c* further developed.

Main perfect cadence in G major: Bars 78^3-79^1. Grammatical connotation: Colon.

Coda: Bars 79^1-82^3.

Main perfect (final) cadence in G major: Bars 81^3-82^3. Grammatical connotation: Full-stop ending the last paragraph of a chapter.

---

68 The distinction between main and secondary cadence is obscured in BWV 541: The cadence in bar 58-59, on the one hand, ends a prominent structure (A3) and should therefore be classified as a main cadence. On the other hand, its unperturbed continuity strongly resembling the secondary cadence in bars 42-43, justifies its classification as a secondary cadence. A formal analysis grouping A3 and A4 together as one large section would not be wrong. The realisation of this cadence is largely a matter of personal taste. The suggestions made here favour a secondary type of cadence.

2.3 Performance

The tempo of BWV 541 is 'lively', complemented by a *non-legato* articulation. This assumption is based on:

(i) Bach's indication, *vivace*, in the Autograph A3 (Kilian 1, 1978:33) connoting 'liveliness' and 'joy' (Wessel, 1955:192).

(ii) suggestions for registration particularly beneficial to detached articulation and liveliness. Hence Klinda's (1987:160) idea of 'eine schlanke Pleno-Registrierung, etwa Prinzipalstimmen 8', 4', 2', Mixtur und/oder Zimbel, dazu im Pedal (nicht zu volle) Grundstimmen 16', 8', 4', einen schlanken Zungenklang 16' oder 8' und Mixtur, aber keine füllige 16'-Stimme oder 32'-Register', and Keller's (1967:144) suggestion for a 'brilliant, clear, but not too shrill Plenum on the HW' that remains unchanged..

(iii) the basic character of the work, described by Keller (1967:143) as 'an abundance of youthful happiness', expressed by:

(a) the choice of key, i.e. G major, which was perceived as 'pleasant' (Wessel, 1955:157) or 'vigorous' (Lacombe, in Steblin, 1983:109), 'naive' and 'innocent' (Vogler, in Steblin, 1983:133).

(b) the choice of time-signature, i.e. 3/4 meter, perceived as 'gay' and 'lively' during the eighteenth century (Wessel, 1955:178).

(c) a *non-legato* articulation connoting 'joy' and 'vividness'.. (Wessel, 1955:281). Hence Mattheson's recommendation that 'the liveliness of

allegros should normally be expressed by detached notes' (Le Huray, 1990:16).[69]

2.4 Cadences

The cadential progressions show a pattern providing valuable clues on how they should be performed. This pattern includes the following stages:

(i) An increase in tension, produced by (see Examples 97ff):

(a) an ascending melodic progression;

(b) the interposition of chords (i.e. rhetorical *exclamationes*) within a prevailing contrapuntal texture, and

(c) an increase in the use of chromaticism and/or dissonance.

(ii) A climax, followed by a reduction of tension on account of:

(a) the use of a stepwise descending melodic progression (except bars 78-79 that show a melodic ascent);

(b) a return to diatonicism and consonance;

(c) a change in texture from a homophonic/monophonic to a contrapuntal one (Williams 1, 1980:112), and

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[69] All suggestions regarding articulation function within the confines of *non-legato* articulation. A slur, for example, thus indicates a *non-legato* that is *more legato* but not necessarily *legato*, while a dot, short line (-), or vertical line indicate a *non-legato* that is *more* detached, but not necessarily *staccato*.

(d) a return to smoothly flowing rhythms which is the basic factor underlying the extraordinarily 'ephemeral' character of all the cadences.

(iii) Complete relaxation, produced by the perfect cadence and continuing up to the start of the new phrase.

These stages are shown in the following diagram:

Diagram 1

The stages in the cadential progressions of BWV 541

TENSION (usually 3-6 bars before cadence) ⇨ **CLIMAX** (one or two bars before cadence) ⇨ **REDUCTION IN TENSION** (very close to cadence) ⇨ **COMPLETE RELAXATION** (at final chord of cadence) ⇨ **RELAXATION REMAINS** (at start of new phrase).

In determining the interpretation of the various cadences of BWV 541 it is important to bear in mind that the ephemeral character of practically all the cadences automatically disallows for any major changes in tempo and articulation, the more so as such changes could easily interfere with the coherence of the work. To strictly retain both, speed and articulation, seems equally inadvisable as this would merely result in a mechanical performance. Under these circumstances a subtle 'give-and-take' within the confines of *tempo rubato* and/or *agogic accentuation*, concomitant with equally subtle changes in articulation, seem preferable.

2.4.1 Main Cadences

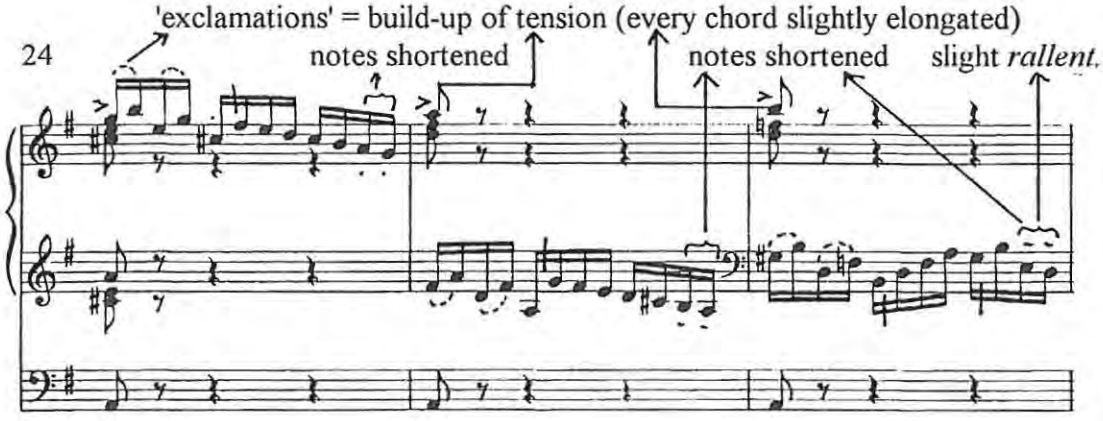
The main cadences are those ending sections A1 (bars 28^3-29^1), A2 (bars 45^3-46^1) A4 (bars 78^3-79^1) and the Coda (bars 81^3-82^3) (see Examples 97ff). Following is a detailed discussion on the suggested performance of the main cadences in BWV 541.

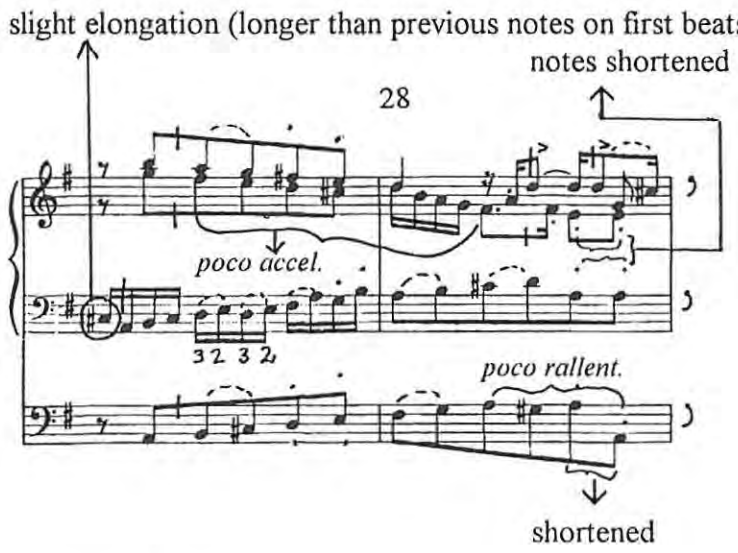
The build-up of tension caused by ascending *exclamationes* and the harmony increasingly demanding resolution in bars 24^1-27^1 is marked by agogic accents. Accordingly, the last two notes of every bar are shortened and the first beats slightly elongated. The climax in bar 27^1 receives an agogic accent by a slightly longer elongation of it than the previous notes on first beats.

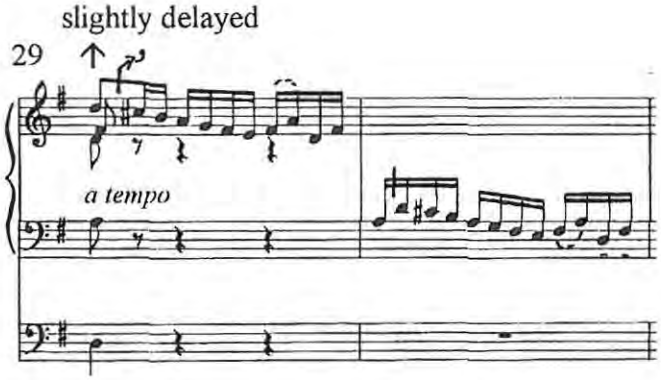
The sharp reduction in tension characterising bars 27^2-28^2 is marked by a slight *accelerando*, counterbalanced by a slight *rallentando* in bar 28^{2-3} and increasingly detached articulation in bar 28^3. The entry of the final chord of the cadence (bar 29^1), representing a full-stop, is slightly delayed. At the same point normal tempo is resumed concurrent with the new phrase (bars 29^1ff).

Example 97

BWV 541: Bars 24-30 (NBA IV/5:147).







The first chord in bar 44 gets an agogic accent and in this way marks the beginning of a melodic ascent. The climax in bar 45^1 consisting of an unstable second inversion chord (i6/4 in b minor) is approached by a *rallentando*, an articulation that becomes more 'open', and is followed by a slightly elongated break.

A very slight *accelerando* signifies the reduction in tension caused by the melodic descent and change to a fuller texture in bar 45. In order to ensure that the *non-legato* is not obscured by the *accelerando* in bar 45, paired articulation (fingering: 3232) connoting 'seriousness' and 'splendour' (Wessel, 1955:282) is distinctly applied. A *rallentando* and shorter articulation on the third beat of 45^3 anticipates the final accented chord of the cadence (bar 46^1) which is slightly delayed. [70]

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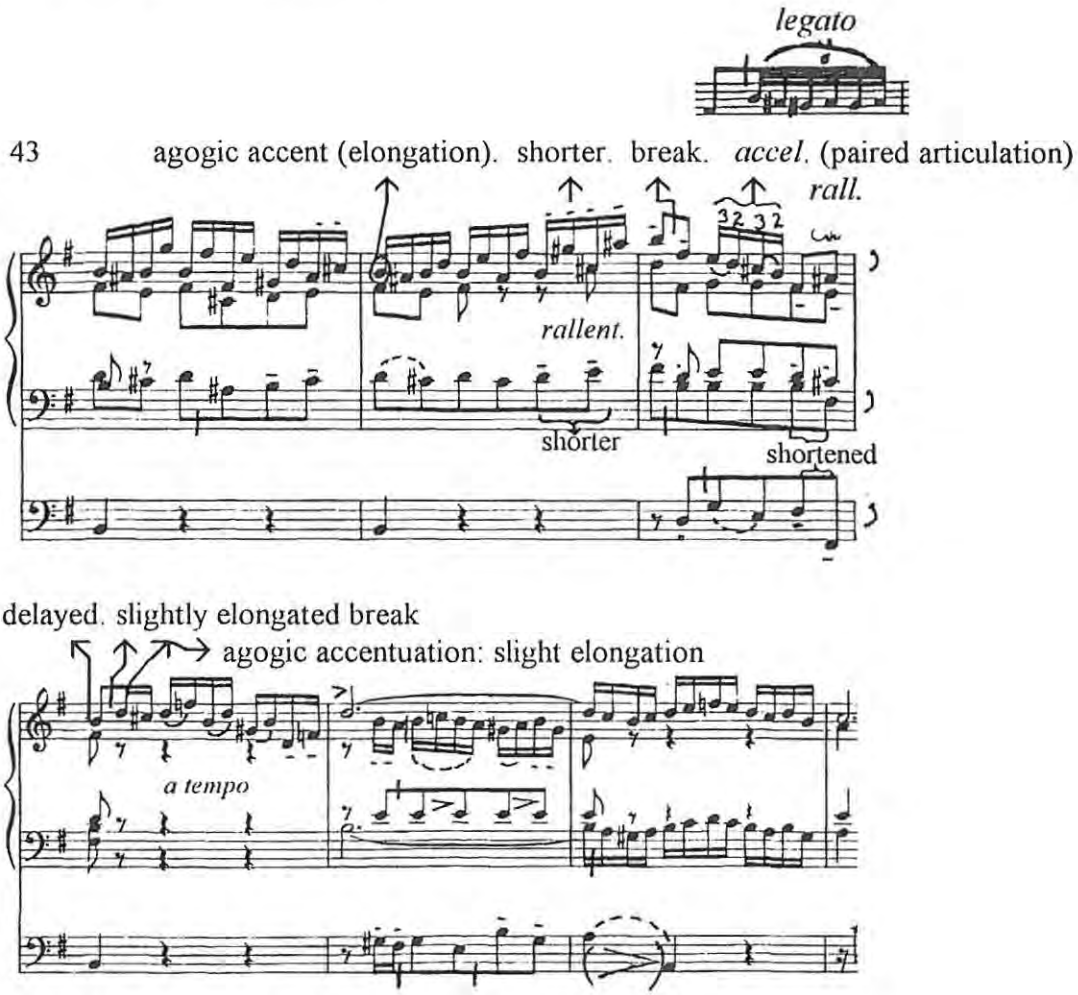
70 The execution of the 'Doppelschlag + Mordent' (i.e. turn and mordent) suggested by Klotz (1984:144) is shown in Example 98.

A slightly elongated break follows in bar 46[1]. The 'd' introducing the new modulating phrase receives an agogic accent by a slight elongation.[71] The original tempo is resumed:

Example 98

Bars 43-48 (NBA IV/5:148).



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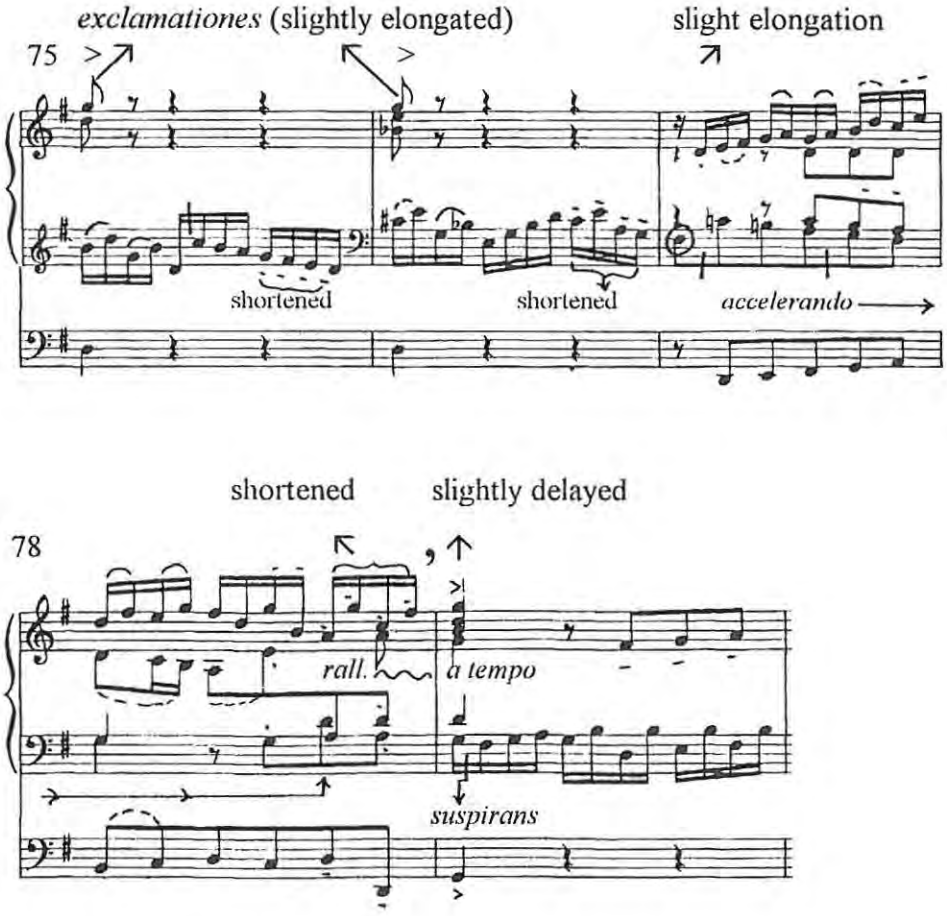
71 This cadence shares with the earlier one in bars 28-29 not only an approach from a high 'b' (bars 27 and 45 respectively), but is also followed by a phrase of similar rhythmic structure (bars 29 and 46 respectively). However, while bars 29-30 continue the effect of relaxation (owing to the descending D major scale), bar 46 immediately re-introduces a degree of tension, owing to the chromatic diminished seventh chord, underlying this passage. This subtle difference adds an interesting nuance to the music.

The *exclamationes* in bars 75-76, and the start of the melodic ascent in bar 77 (deviating from the 'standard' pattern) are played more or less similar to those in bars 24-26 and bar 27 respectively (see Example 97, pp. 132-133). This implies an elongation of the f# in bar 77^1, followed by a subtle *accelerando* until bar 78^3. A slight *rallentando* is applied at the last four semiquavers in bar 78. The final chord in bar 79^1 is slightly delayed by elongating the break preceding it. The original tempo is resumed in bar 79^1 after a small break:

Example 99

Bars 75-79 (NBA IV/5:150).



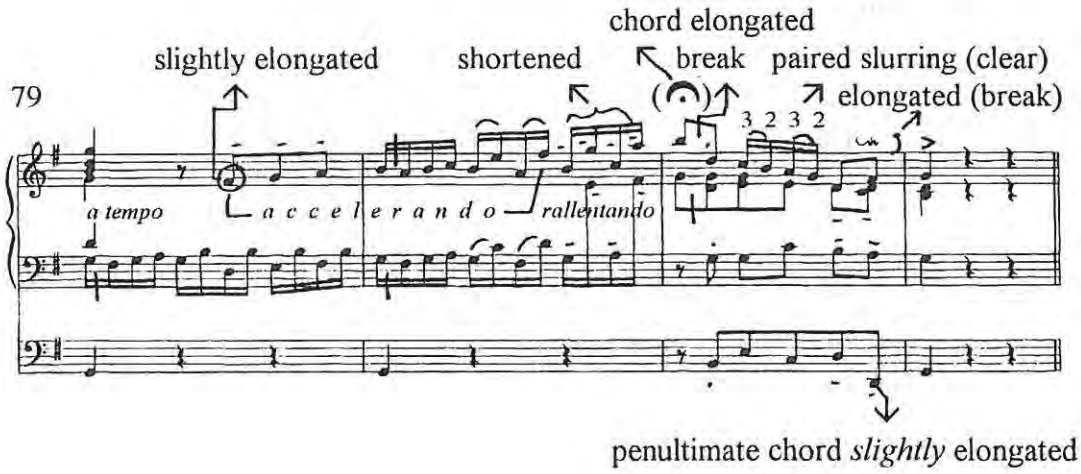
The final cadential progression (bars 79-82^3) is started by an elongation of the f# in bar 79, followed by a slight *accelerando* until bar 80^2 to highlight the melodic ascent.

The last four semiquavers in bar 80^3 are shortened and marked by a *rallentando*, broader than the previous ones in order to create expectation of the climax in bar 81^1.

A clearly accentuated climax (bar 81^1) is followed by an elongated break, which, however, is not overstated. The rest of bar 81 is broader, with pronounced paired articulation of the second beat. The penultimate chord (including the last note of the ornament[72]) is slightly elongated. The final chord is slightly delayed by elongating the break preceding it. The final chord in bar 92 is short and the break following is not too long; the fugal subject and final chord of the prelude are consonant, the danger of dissonance produced by overlapping sounds does not exist..

Example 100

The final cadence: Bars 79-82 (NBA IV/5:150).



2.4.2 Secondary Cadences

In order not to interfere with the continuity of rhythmic flow, the two secondary cadences in bars $42\text{-}43^1$ and $58^3\text{-}59^1$ respectively, ought to be marked by means of

72 The ornament is exactly the same as the one in Example 98, Page 134. It starts this time on a 'g'.

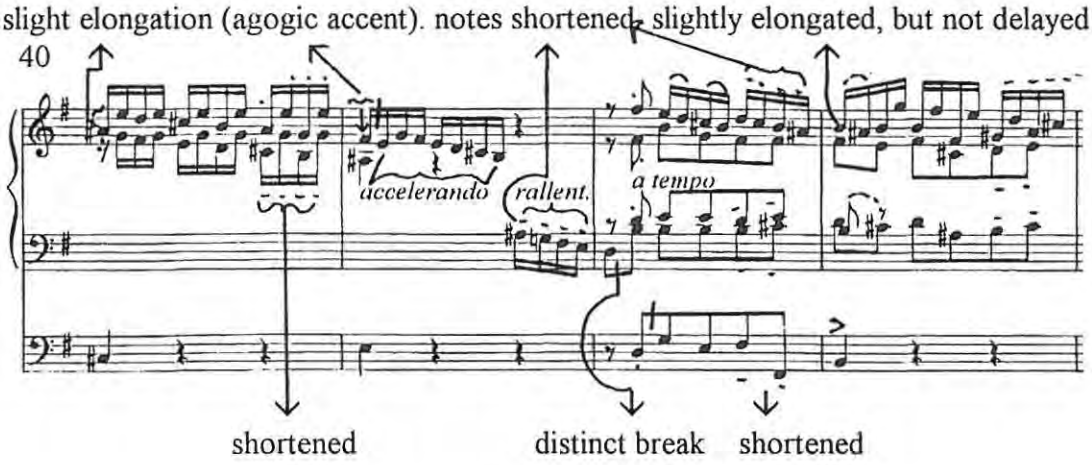
articulation only, i.e. a shortening the notes on the penultimate chords and a small break separating the new phrase from the final chord of the cadence.

However, in bars 40-41 and 55-57 respectively, agogic accents are permissible on the first beat of every bar, followed by slight *accelerandi* counterpoised by small *rallentandi* (bars 40-41 and 55-57[1]). The high 'b' in bar 57 is slightly elongated to mark the beginning of the descending melody:

Example 101

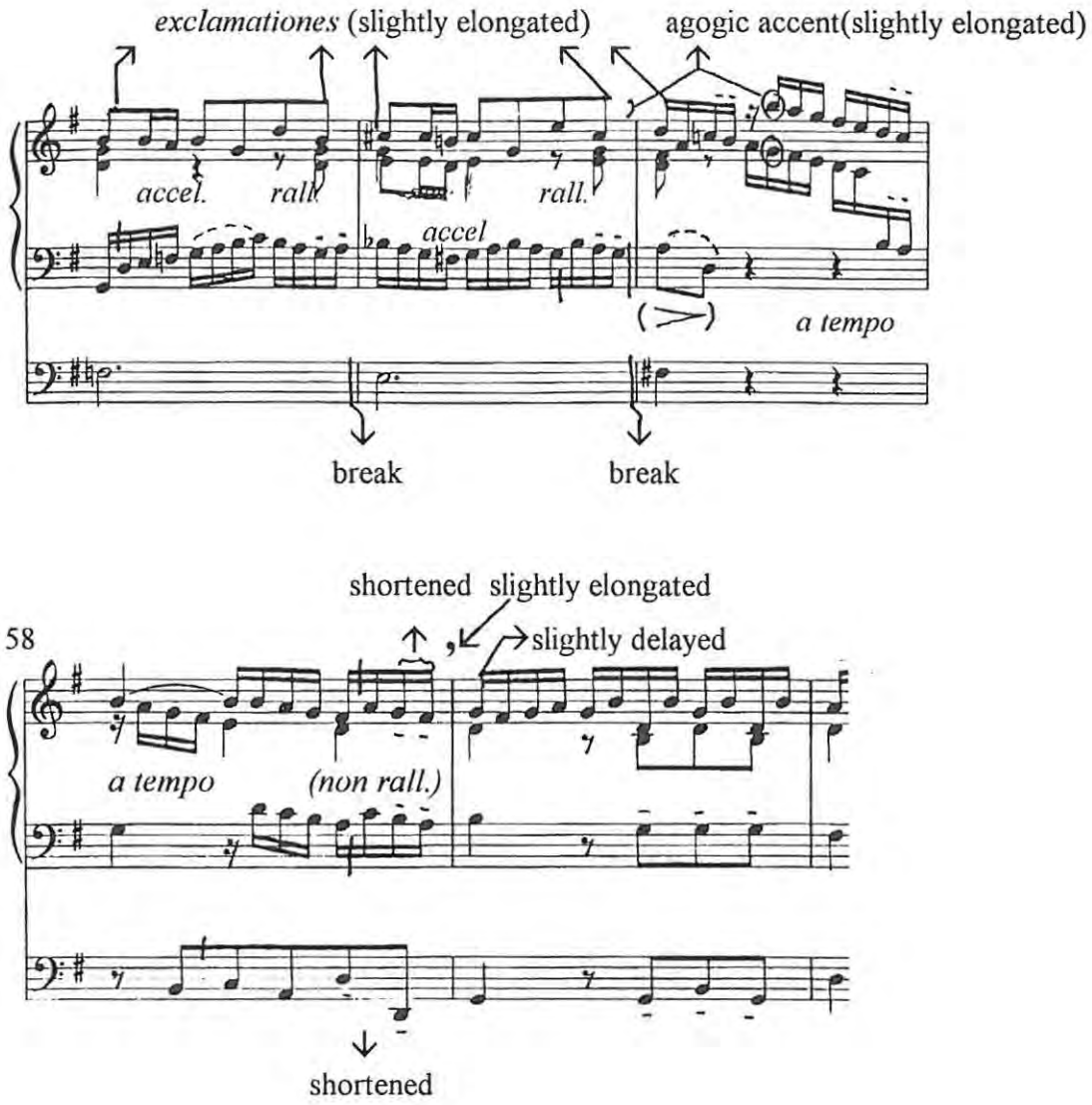
Secondary cadences.

Bars 40-43 (NBA IV/5:148).



Example 101 (continued)

Bars 55-59 (NBA IV/5:149).



3. *THE FANTASIA IN G MINOR* BWV 542 (1717-1723)[73]

3.1 General

The 'fantasy style' was developed by seventeenth century composers such as C. Merulo, G. Frescobaldi, J. Froberger,[74] D. Buxtehude and N. Bruhns (Hurford, 1990:83,85). In most of their fantasias or toccatas the various musical elements are 'isoliert dargestellt' (Frotscher, 1978:886). Bach's *Fantasia*, by contrast, shows a unique integration of its musical elements, achieved by a process of 'Schichtung' (or 'piling up') which results in an extraordinary 'dramatic' character (ibid.).

3.2 Form

The form of BWV 542 fits a musico-rhetorical (Williams I, 1980:120 and Kloppers, 1965:77) scheme remarkably well. Accordingly, five main parts, terminated by main cadences, and several sub-sections terminated by main and secondary cadences can be distinguished. With very few exceptions, all cadences are feminine. The form of BWV 542 is shown in the following diagram: [75]

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73 According to Schmieder and Klotz (in Kilian 2, 1979:453-454) BWV 542 originated in Köthen around 1720. An autograph manuscript of the work does not exist; only copies by Bach scholars such as Krebs, Agricola and Kittel.

74 This style probably reached Germany *via* Froberger. In this regard Hurford (1990:83) writes: 'Frescobaldi's pupil, the German organist J.J. Froberger, travelled widely .... and it is likely that the development of the *stilus fantasticus* in the north German organ school of Buxtehude and Bruhns owed a considerable debt to Froberger's influence'.

75 The explanation of the five main parts of the form is based upon that provided by Kloppers (1965:77). However, his musico-rhetorical scheme ('ABABA') hardly reflects differences in the 'physical' structure and has been replaced by the more correct A, A1, A2, and B and B1. Although Kloppers's rhetorical scheme is not questioned, his remark that a performance 'sollte sich richten nach dem rhetorischen Aufbau des Werkes, unabhängig davon, ob dieser Aufbau sich zugleich mit einem musikalischen Formschema deckt oder nicht' (Kloppers's underlining) is unacceptable.

Diagram 2

The form of BWV 542.

A (bars 1-9^{1}): ***Propositio***. Key: g minor.

Subsection 1 (bars 1-4^{1}) in g minor: 'main material; roulades' (Williams I, 1980:120).

Secondary perfect cadence (vii°6/5-i) in g minor: Bars 3^{3}-4^{1}. Grammatical connotation: Comma.

Subsection 2 (bars 4^{1}-9^{1}) g minor: 'scales etc on tonic, then dominant; pedal point' (Williams I, 1980:120.).

Main imperfect cadence (~~iv°~~ ♭6#4/3-V) in g minor: Bars 8^{3}-9^{1}. Grammatical connotation: Question or exclamation mark.

B (bars 9^{2}-14^{2}): ***Confutatio***. Keys: c minor-g minor-d minor.

'Opposing statement; imitative, more modulatory, with moving bass line; strict four parts' (Williams I, 1980:120). Continuity necessitated by overlapping phrases: small 'cadences' in every part.

Main imperfect cadence (iv° 6#4/3-V) in d minor: Bars 13^{4}-14^{2}. Grammatical connotation: Question mark.

A1 (bars 14^{2}-25^{1}) ***Confirmatio***. Keys: d, b, c, g, e^{b}, f and g minor. 'Partial return to the main material (in particular, roulades and multiple suspension); more chromatic idiom; enharmonic modulation (Williams I, 1980:120.). Epic element prevails (Kloppers, 1965:118).

Subsection 3: (bars 14^{2}-20^{1}).

Bars 14^{2}-15^{1}. Enharmonic modulation from d to b minor.

Secondary interrupted cadence (vii°6/5-i6) in b minor: Bars 14^{4}-15^{2}: Grammatical connotation: Comma or semicolon.

Bars 15^{4}-16^{1}. Enharmonic modulation from b to c minor.

Secondary interrupted cadence (vii°6/5-i6) in c minor: Bars 15^{4}-16^{1}. Grammatical connotation: Semicolon.

(Subsection 3 continued)

Bars 16^2-18^2. Modulation from c to g minor *via* a Neapolitan 6th in bar 16.

Secondary imperfect cadence (ii°4/3-V7) in g minor: Bars 17^4-18^1. Grammatical connotation: Comma or semicolon.

Bars 18^2-20^1. Extension of final chord of preceding cadence over dominant pedal point. Key: g minor.

Main imperfect cadence (G6-V) in g minor: Bars 19^4-20^1. Grammatical connotation: Question, or exclamation mark.

Subsection 4 (bars 20^2-25^1).

Bars 20^2-21^1: Modulation to e^b minor.

Cadence evasion 20^4-22^3: A fluctuation between i and dominant harmonies prevails. Instead of an expected resolution to i in e^b minor in bar 22^1, a kind of interrupted cadence starts a modulating section.

Bars 22^3-24^1. Modulation from e^b minor to f minor.

Secondary interrupted cadence: (vii°7-i6) in f minor: Bars 23^4-24^2. Grammatical connotation: semicolon, comma or dash.

Bars 24^2-25^1. Modulation from f minor to g minor. Chromaticism.

Main perfect cadence (V7-♮I) in g minor. Bars 24^4-25^1. Grammatical connotation: full-stop or exclamation.

B1 (bars 25^1-31^1) ***Confutatio***: Keys: f, c, and g minor.

Like bars 9-14, 'but a fifth lower, upper parts inverted, lengthened by one bar' (Williams I, 1980:120.), transposed a fourth up and cadence (bars 30-31) resembles the one in bars 24-25 (Kloppers, 1965:119).

Main imperfect cadence (iv°♮6#4/3-V) in g minor: Bars 30^4-31^1. Grammatical connotation: Question mark.

Subsection 5: Bridge Passage (bars 31^2-35^2) ***Confirmatio***. Modulation from g minor by means of an incomplete cycle of fifths to g^b minor.

Secondary interrupted 'masculine' cadence in (V4/2-i°#6/^{b}5 in g^b minor, or the final chord, enharmonically spelled, consists of a#-c#-e♮-g [first inversion], i.e. vii°6/5 of V in e minor): Bars 34^4-35^2. Grammatical connotation: Exclamation mark. Rhetorically, an exclamation of despair.

A2 (bars 35^2-49) *Confirmatio* (continued) and *Peroratio*

Subsection 6 (bars 35^2-44^2): *Confirmatio* (continued)

Bars 35^4-39^1. Modulation from e minor to c minor.
Enharmonic spelling (g-b^b-d^b-f^b- to a#-c#-e♮-g) introduces chromatic section similar to that of bars 20^4-24^2 (see under **Subsection 4**: **Cadence evasion**) Starts in e minor and enharmonically modulating to c minor: chord e#-g#-b♮-d [bar 38^4] becomes b♮-d-f-a^b [bar 39^1], i.e. vii°7 in c minor).

Cadential evasion. Bars 38^4-39^1. The interrupted cadence corresponding to bars 23^4-24^2 is absent.

Bars 39^1-44^2. Modulation from c, to g minor. N6 chord features prominently (bars 41^4 and 42^4).

Main interrupted cadence (V9-I♮7- iv°♮6#4/3) in g minor: Bars 43^4-44^2.

Grammatical connotation: Question mark.

Subsection 7 (bars 44^2-49)

Bars 44^2-45^1: Enharmonic modulation from g to f minor.

Secondary interrupted cadence (vii°7-i6/4) in f minor: Bars 44^4-45^1. Grammatical connotation: comma or semicolon.

Bars 45^2-48^2: c, g minor.

Main interrupted cadence (N6-iv°7) in g. Bars 47^4-48^2. Grammatical connotation of an exclamation mark. Rhetorically, a desperate outcry.

Bars 48-49: Solo pedal link. g minor. ***Peroratio***.
Main perfect cadence (V7-i) in g minor: Bars 48^4-49^4.

3.3 Performance

Two stylistic components serve as an indication of how BWV 542 should be performed. A contrapuntal component, represented by two sections (*B* and *B1*), indicate a performance in more or less strict time, while the sections in fantasy style (i.e. 'expressive passages') will 'not be subject to time' (Frescobaldi, in Hurford, 1990:83). Mattheson (1739) (in Hurford, 1990:84) explains how the 'fantasy style' should be realised:

> for this [fantasy] style is the freest and least restricted style which one can devise for composing, singing and playing ... since one is restricted by neither words nor melody, but only harmony, so that the singers' or players' skill can be revealed ... without close observation of the beat and pitch, though these do occur on paper ... sometimes fast, sometimes slow; sometimes with one, sometimes with many voice parts; also sometimes a little behind the beat; without metre, yet not without a view to pleasing, to dazzling, and to astonishing.

The question is: What are the limits set by 'freest' and 'least restrictive'?

Hurford (1990:83), convinced that Frescobaldi's remark amply provides for a 'personal dimension of freedom', is equally convinced that 'Frescobaldi is seeking musical freedom, not anarchy, albeit with a high degree of rhythmic elasticity'.

Perhaps the most valuable clue to the problem of freedom in BWV 542 emerges from the following:

> ..die Fantasia (gelangt) nicht zu einer Auflösung des dramatischen Konflikts. Weder die rezitativisch 'sprechenden' Figuren noch die gebundenen Zwischenspiele noch die chromatischen Verdichtungen behalten die Oberhand. Und wenn das Pedal am Schluss in Halbtönen nach oben steigt, klingt das wie eine Frage, die ohne Antwort bleibt. In gewissem Sinne bringt die Fuge eine solche Antwort (Frotscher, 1978:887).

The performer will have to carefully balance the freedom required by the dramatic element with the continuity and forward drive needed in order to secure a feeling of unresolved tension. Should excessive freedom dominate, coherency will be undermined; should rhythmic steadiness dominate, the 'fantasy' element will be lost.

Regarding registration, the contrasting sectional form requires a differentiation in sound, realised by manual or register changes (Kloppers, 1965:77). Keller (1967:114) proposes the fantasy (*A*) sections be played with a *plenum* of the *Hauptwerk*, and the '*fugato* sections' with 'a penetrating combination of reeds, flues, and mutations' of the *Positiv*. Klotz (1985:86) has a more unusual suggestion in mind: alternation 'between the mixture-*plenum* of the one manual and reed-*plenum* of another'.[76]

3.4 Cadences

The following points encapsulate the most important general cadential trends in BWV 542:[77]

(i) Owing to the fact that BWV 542 may well be considered a concatenation of cadences, the performer's realisation of these cadences also reflects his/her concept of the entire work. In the *A* sections, cadences are often separated by

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[76] 16-foot stops ought to be included in the HW-*plenum*. Harmon (1981:15), referring to the organ in St. Jacobi Church in Hamburg, writes: 'Those present-day organists who eschew 16-foot manual registers as characteristically Romantic and contributing nothing but muddiness to the ensemble unless played in the treble register, should take note of the three stops of 16-foot pitch in the Schnitger Werck (i.e. *HW*) scheme along with the designation of the 8-foot Principal register as Octava, conclusive evidence that the manual's plenum was conceived as a rich and grave sound based on a 16-foot foundation as the point of departure'.

[77] Most of these points have already been discussed in previous chapters and were mentioned in the formal scheme (see 3.2). They are also comprehensively addressed in the discussions and examples of individual cadences that follow.

one bar only. In the *B* sections 'cadences' appear equally often, but are somewhat disguised by phrase overlapping.

(ii) Additionally to main and secondary cadences, cadence evasions are of equal importance.

(iii) All main cadences, except those in bars 30^4-31^1 and 47^4-48^2, are followed by rests. This also applies to most of the secondary cadences.

(iv) All cadences, except a very few, are 'feminine'. They are usually combined with pedal points and show 'multiple suspensions' (Williams I, 1980:123).

(v) Most of the cadences are chromatic and consist of 'unexpected resolutions' (ibid.) that create tension. In fact, all but three cadences (bars 3^4-4^1, 24^4-25^1 and 48^4-49^1 [i.e. perfect cadences]), are either imperfect or interrupted.

(vi) The *A*-sections are more 'bold' with regard to modulations (Kloppers, 1965:76). Diminished seventh chords linking cadences in the improvisatory (fantasy) sections 'are treated enharmonically (as in some older and contemporary Italian recitative)' (Williams I, 1980:123).

(vii) The texture of cadences within 'improvisational recitatives' (Arnold, 1973:106) (i.e. in the *A*-sections) shows a general pattern in which a homophonic texture is flanked by monophonic ones.

(viii) A large variety of rhetorical figures are present and their connotations mostly communicable through the imaginative application of various performance techniques. The following diagram represents some of the most important figures that appear in cadential progressions of the *Fantasia*:

Diagram 3

Some of the rhetorical figures in the cadences of BWV 542[78]

FIGURE	DESCRIPTION / CONNOTATION
Anaphora	'repetition of a word at the beginning of several sentences' (Mattheson, 1739: X ['Preface to....' by Harriss, 1981}).
Anabasis	'ascending figure', often symbolising Christ's resurrection and ascension into heaven (Walther, 1732:34).
Aposiopesis	'sudden interruption of the speech', such 'as the silence ("Schweigen") or *Generalpause*, symbolising death, eternity, separation or sighs'.
Circulatio	'circular/quick rotating movement' associated with W-words: "*Wirbel, Wind, Wellen, Wehen,....*" Creates a feeling of entanglement and confinement'.
Congeries	'accumulation of thoughts' marked by an increase in texture.
Dubitatio	doubt or uncertainty: 'expressed by a doubtful modulation or standstill'.
Ellipse	'sudden interruption of a thought and the beginning of a total new one, or a strange cadence'.
Emphasis	'emphasis of specific thoughts; illumination or explanation'.
Epanalepsis	'emphasised repetition'.
Epistrophe	'repetition of a concluding progression at the end of another phrase'. Could have the connotation of a mocking imitation.
Exclamatio	'usually characterised by a sudden abrupt chord or ...an ascending leap of a sixth'.
Gradatio/Climax	stepwise ascent. Mostly found at end of a work.
Katabasis	a falling figure, representing 'something abject, petty and contemptible' (Walther, in Williams, 1986:68).
Noema	'homophonic section ....separated from non-homophonic one'.
Parrhesia	'occurrence of strange and "bold" dissonances'.
Passus duriusculus	'ein etwas harter Gang' ('a somewhat harsh progression') (Budday, 1977:140). 3 forms (Bernhard, in Budday, 1977:141 and 142): Progressions of (i) ascending and descending semitones, (ii) augmented 2nds, diminished 3rds, augmented and diminished 4ths and 5ths and (iii) false relationships.
Pathopoiia	'an "unnatural (chromatic) progression" to arouse passionate emotions' (Burmeister and Bernhard, in Budday, 1977:141)
Pleonasmus	'when more is said than necessary' -wordiness/verbosity
Saltus duriusculus	a 'somewhat harsh leap', for example, an ascending or descending leap of a diminished 4th and 7th, a descending leap of diminished 5th, etc. (Bernhard, in Budday, 1977, 140). Portrays negative affects, e.g. deceitfulness, etc. (ibid)
Suspensio	'delaying the musical thought'.

78 All descriptions (translated) are from Kloppers (1965: 50, 59, 81, 82, 87, 100, 101, 102, 103, 111, 113 and 119), except when indicated otherwise.

3.4.1 Main Cadences

3.4.1.1 End of *A* (*Propositio*) (Bars 8^3-9^1): Imperfect Cadence (ii°$^{\flat}$6#4/3-V)

Bar 8 starts slowly with a detached articulation, followed by a subtle *accelerando* and an articulation simultaneously becoming more *legato* to effectively signify the 'accumulation' of thoughts (*congeries*) and verbosity (*pleonasmus*) represented by a textural increase (Kloppers, 1965:115-116).

In focussing attention on the contrasting 'exclamations' (sustained notes) in the top parts, large breaks are applied before them. In this way the tendency towards *legato*, enhanced by the *accelerando*, is counteracted in the top parts, and the way is paved for essential accents.

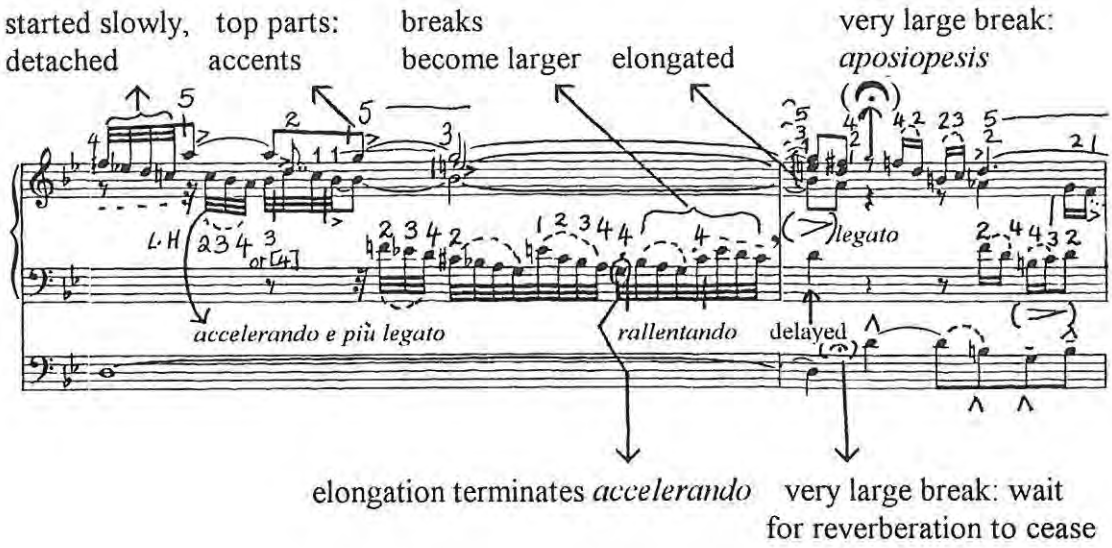
The *accelerando* which ends with an an agogic accent involving a slight elongation of the 'g' (bar 8^4), is followed by a *rallentando* that reaches a climax in the rests in bar 9. Towards the end of bar 8 the articulation is marked by breaks which become gradually longer.

To mark the entry of 'd' in the tenor part of bar 9^1, an agogic accent is produced by slightly shortening the preceding c# and lengthening the break between the two notes. A simultaneous elongation of the sustained harmony in bar 9^1 lends further weight to this progression. The subsequent D major chord, resolving the sustained harmony, abruptly releases tension - an affect made more poignant by strict *legato* articulation and a slight shortening of the final chord.

Bars 8-9 close with the figure, *aposiopesis*, represented by a long break (bar 9^2), connotative of (e.g.) silence ('Schweigen'), death or eternity:

Example 102

BWV 542: Bars 8-9 (NBA IV/5:168).



3.4.1.2 End of B, *Fugato* (*Confutatio*) (Bars 9^2-14^2): Imperfect Cadence (iv°♮6#4/3-V)

This *fugato*[79], is played in strict time combined with a paired articulation (two-note slurring)[80] up to bar 13 thus sustaining and enhancing its underlying 'contemplative' (Kloppers, 1965:118) character.

The 'cadences' in every part are marked by a break within the confines of a stable tempo.

In bar 13 the paired slurring is replaced by a smooth *non-legato* articulation, which signifies the resolution of any conflict in the 'argument'. The rest in bar 13^4 is

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79 According to Kloppers (1965:116,117), the *fugato* represents a 'commentary' on, and a 'discussion' of the dramatic 'account' of the first nine bars of the work. According to a remark by Forkel (ibid.), the three upper parts involved in the 'conversation' represent three individuals.

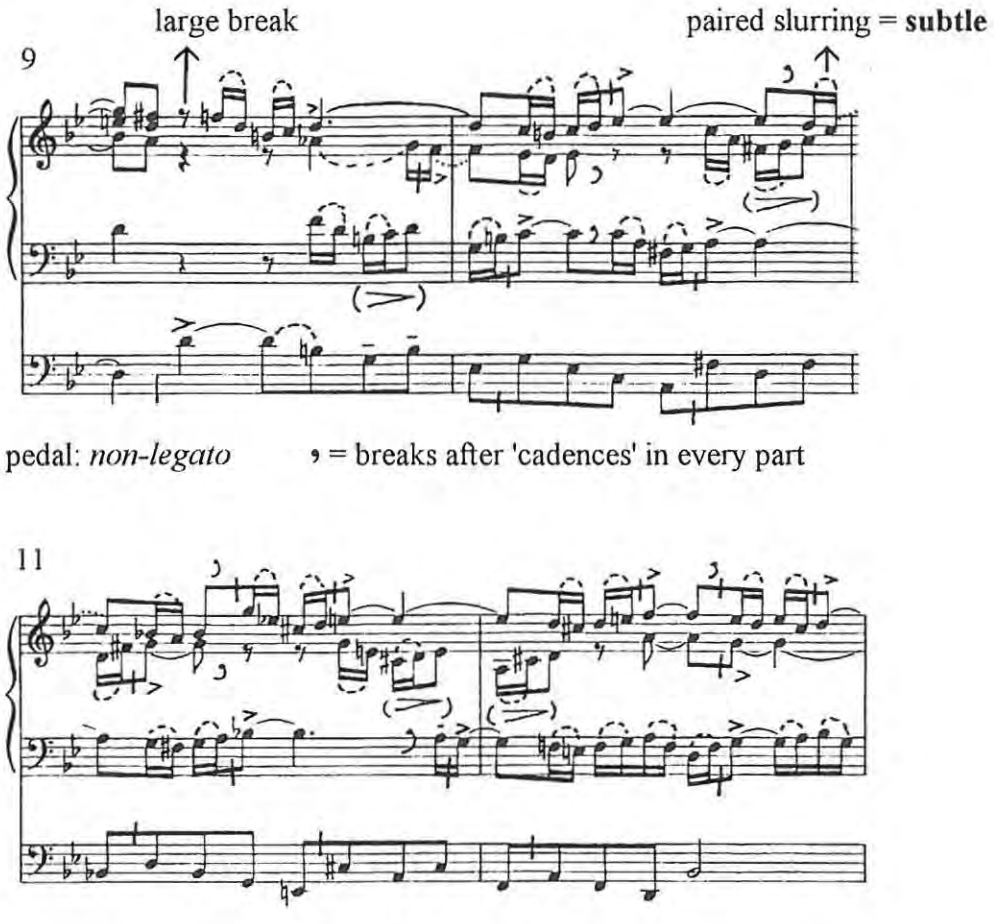
80 According to Wessel (1955:281), paired slurring connotes 'tenderness', 'sorrow', and 'meditation'.

elongated in anticipation of the top part that represents the speaker who has the upper hand ('last say').

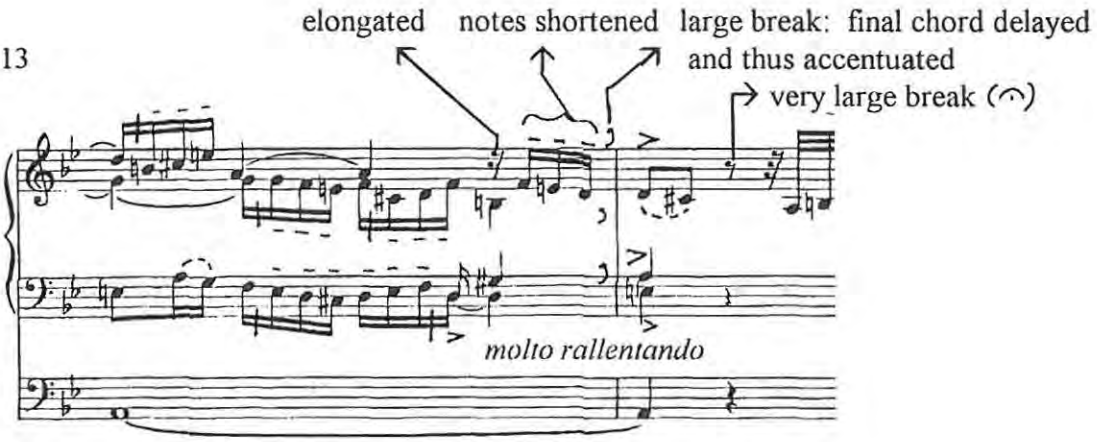
The cadence in bars 13^4-14^1 is basically a repetition (*epistrophe*) of the one in bars 8-9 (Kloppers, 1965:117), but marked by a larger *rallentando*, a more sharply detached articulation, a more prominent agogic accent on the final chord (bar 14), and a longer break after the cadence in bar 14^2. These 'exaggerations' are suggestive of the element of mockery in the 'reference' to the preceding narration (bars 1-9) by the three speakers:

Example 103

BWV 542: Bars 9-14 (NBA IV/5:168).



13



3.4.1.3 End of Subsection 3 (Bars 19^4-20^1) of A1 (*Confirmatio*): Imperfect Cadence (G6-V).

Prominent figures/motifs (*suspirans* and syncopation), combined with 'conservative' chords (V7, i6/4 and iv°7) and a homophonic texture, lend a distinctly rhythmic character to bars 18-19. While retaining a stable tempo, the use of the 'old' fingering (i.e. 234 in the right, and repeated 24 in the left hand) facilitates a clear demarcation of the various motifs by short breaks before stressed notes. In spite of a strictly retained overall tempo, the sudden appearance of *suspirans* figures in bar 19 creates the effect of an *accelerando*.

A long break ought to follow the 'e'-natural in bar 19^4 on account of:

(i) the large descending leap that follows;

(ii) the *pathopoiia* figure in the form of a false relationship between 'e' and e^b;

(iii) the 'brusque' appearance of an intensely chromatic cadence (*ellipse*): (G6 [with doubled 'third'] - V;

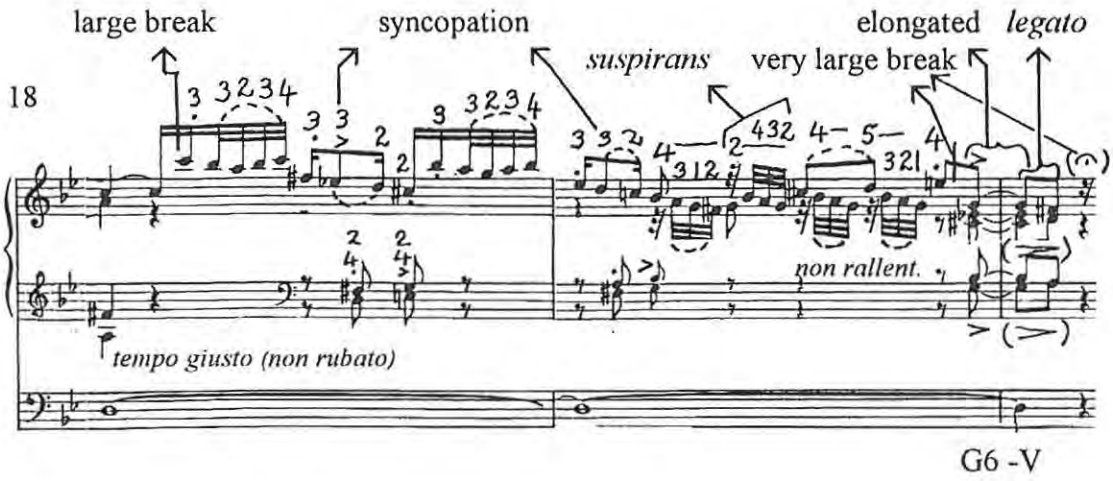
(iv) the suspended (*suspensio*) G6 resulting in a vacillation of meter.

The difference between the 'harsh' cadence (bars 19^4-20^1) and its relatively 'conservative' preceding section is enhanced by an elongation of the German sixth which not only delays the resolution, but also adds additional weight to the chromatic harmony.

The resolution into the final chord (V) is executed *legato* to avoid an accent on the ultimate chord. The cadence is followed by a very large break:

Example 104

BWV 542: Bars 18-20 (NBA IV/5:169).



3.4.1.4 End of Subsection 4 (Bars 24^4-25^1) and A1 (*Confirmatio*): Perfect Cadence (V7- ♮II)

This is the most important of all the inner cadences. Apart from being perfect with an unexpected G-major final chord, it also divides the work in two large parts.

A seemingly suitable way in which to realise this cadential progression is to do what Hurford (1990:85) suggests for a similar example in Buxtehude's *Prelude and Fugue in f# Minor*. This involves a give-and-take, i.e. an *accelerando* counterpoised by a

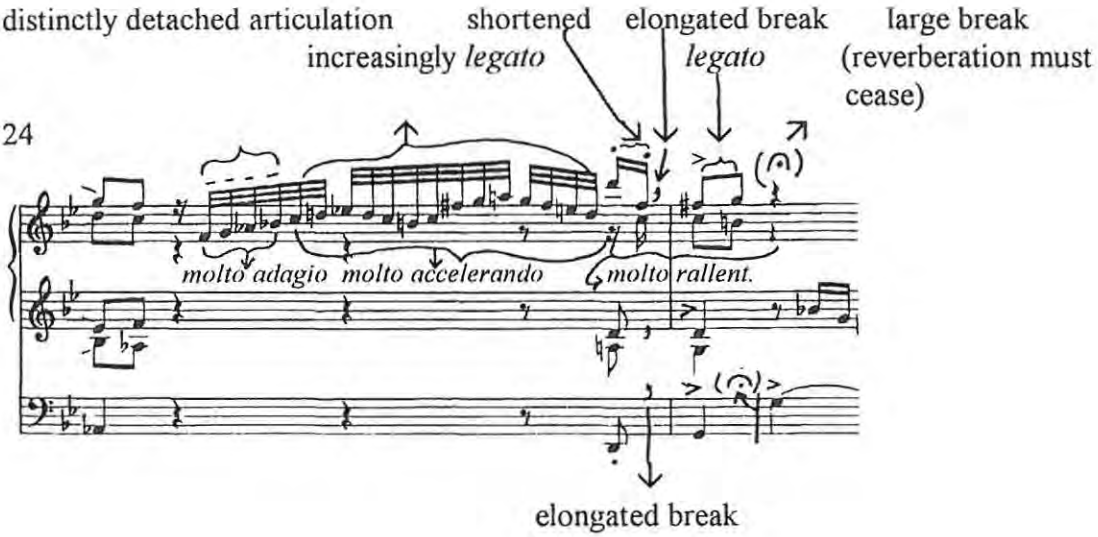
rallentando. Such passages 'will take no more nor less time than if they had been played strictly as written' (ibid).

Accordingly, the florid passage in bar 24^2 starts *molto adagio* combined with a clearly detached articulation. A *molto accelerando*, concurrent with an increasingly less detached articulation follows. A molto *rallentando* is suddenly introduced on the climax 'd' and all notes of the penultimate chord are sharply shortened.

A lengthened break between bars 24 and 25 delays the final cadential chord. After a *legato*-resolution in bar 25^2, an extensive break follows. The break lasts as long as the time it takes for the reverberation to cease completely and should not be shorter than the one in bar 24^2 after the secondary interrupted cadence:

Example 105

BWV 542: Bars 24-25.



3.4.1.5 End of B1 (*Confutatio*) (Bars 30^4-31^1): Imperfect Cadence (iv°♮6#4/3-V)

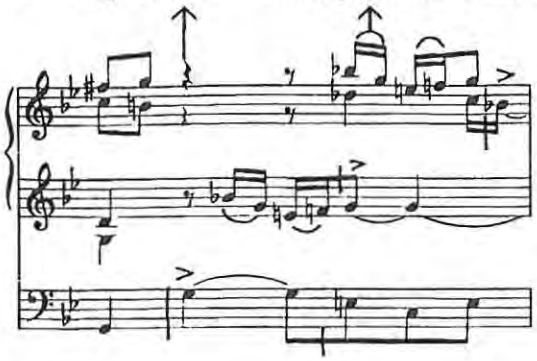
Section B1 (bars 25 -31) is more or less similar to Section B (bars 9-13) and will therefore require a similar interpretation (see 3.4.1.2). However, the use of a higher range (a perfect fourth up) for B1 may indicate that the 'conversation' between the three imagined speakers has grown in intensity. A sharper articulation of the two-note slurring and a more prominent articulation in general, will enhance such an assumption. Unlike Section B, where rests mark the end of the polyphonic passage, Section B1 is closely joined to Subsection 6 of A2. However, the absence of such rests is compensated for by a long break that ought to follow on the cadence in bars 30-31.

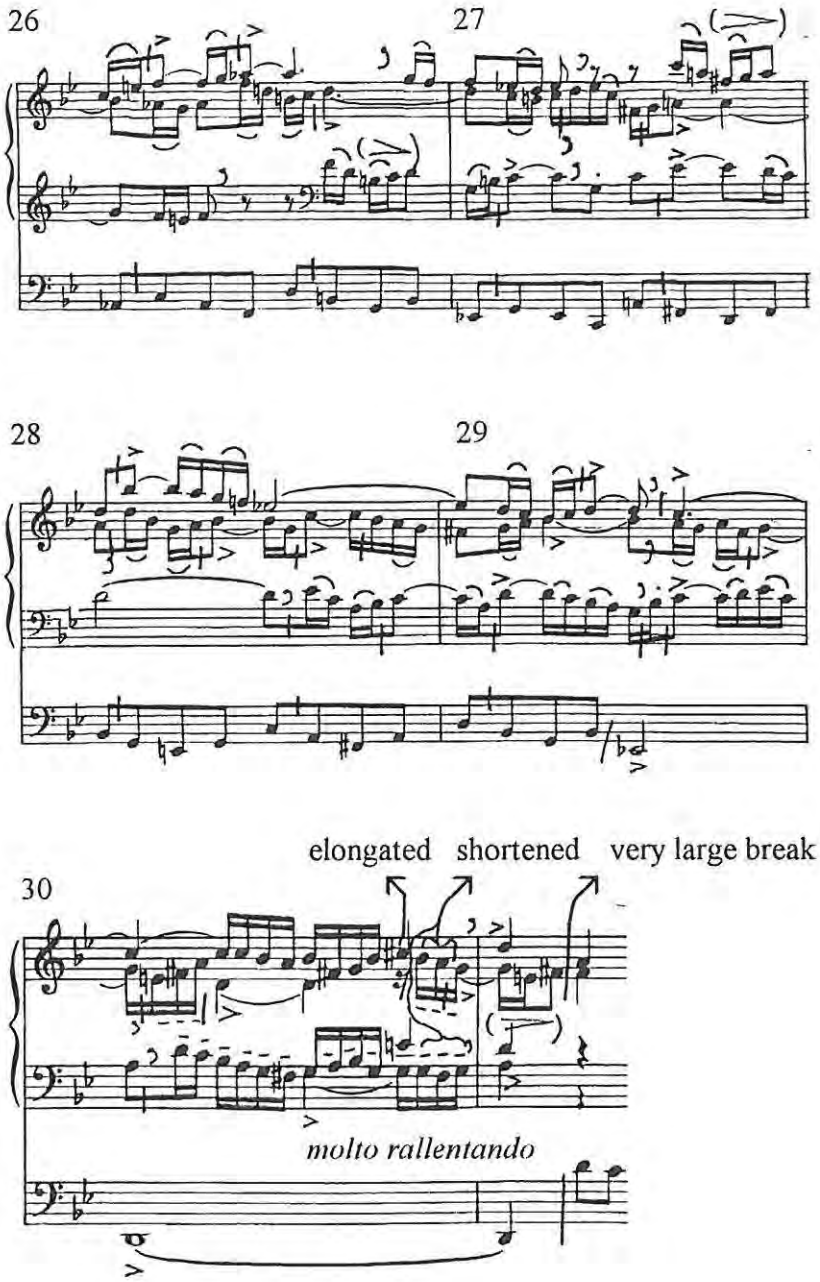
Example 106

BWV 542: Bars 25-31 (NBA IV/5:169-170).

(𝄾) = breaks after 'cadences' in every part.

25 large break more prominent, but not pedantic





3.4.1.6 End of Subsection 6 of A2 (*Confirmatio/Peroratio*) (Bars 43[4]-44[2]): Interrupted Cadence (V9-I♮7-iv°♮6#4/3)

Owing to the high degree of tension[81] characterising bars 41-46, the repeated figures (*anaphora* [Kloppers, 1965:121]) ought to be emphasised by agogic accents. Towards the end of bar 43, a *molto rallentando* and an articulation gradually

81 Elements such as chromaticism and dissonance had been discussed in Chapter 1.

becoming more detached anticipates the interrupted cadence and the rest that follows it (*aposiopesis*) (Kloppers, 1965:121).

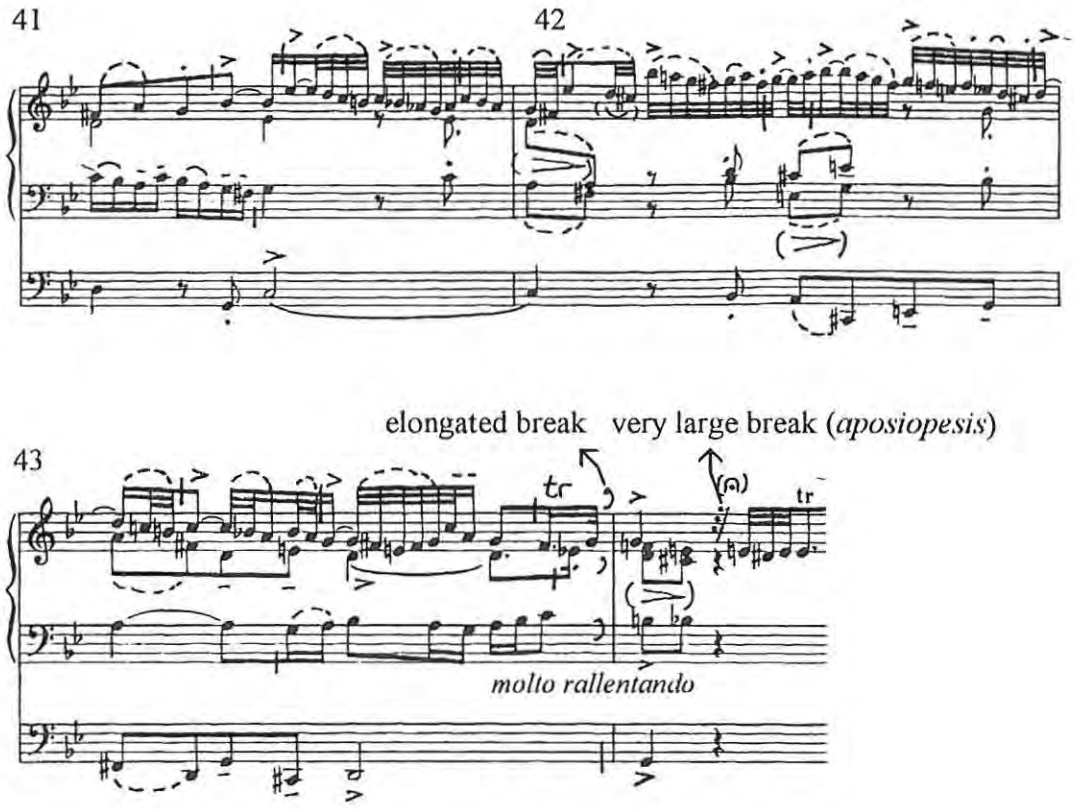
The dissonant final 'resolution' in bar 44[1] receives an agogic accent by the application of a long break before it. An even longer break ought to follow this cadence which, grammatically, representing an exclamation mark:

Example 107

BWV 542: Bars 41-44 (NBA IV/5:171).

> = slight elongations of these notes, followed by slight *accelerandi*

 = a *non-legato* that is nearly *legato*



3.4.1.7 End of Subsection 7 of A2 (*Confirmatio* and *Peroratio*) (Bars 47^4-48^2): Interrupted Cadence (N6-iv°7)

The motivic progression (*anaphora*) in bars 46-47 starts slowly, followed by a *molto accelerando* concomitant with subtle nuances in the form of agogic accents. The accelerated motion suddenly stops on 'g' representing an *exclamatio* (bar 47^4). After a considerable lengthening of the 'g', the cadence (bars 47^4-48^2) follows *molto adagio* concomitant with poignant two-note slurring in order to higlight the feeling of pathos created by the combined use of a Neapolitan sixth, diminished seventh chord and the *passus duriusculus* (g-c#) in the bass.

The final diminished seven is elongated to raise the tension further. A large break (i.e. 'Eine spannungsgeladene Pause'=*aposiopese* [Kloppers, 1965:121]) follows the c# (bar 48^1) (see Example 108, p. 157).

3.4.1.8 End of A2 (*Peroratio*) (Bars 48^4-49^4): Final Perfect Cadence (V7-i)

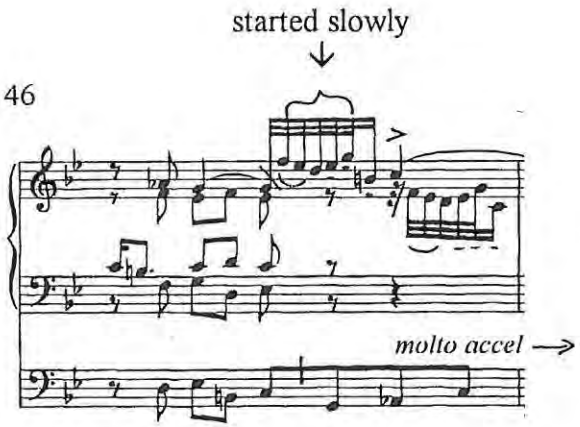
In order to capture the tension of the ascending chromatic passage (bar 48) sounding like 'eine Frage, die ohne Antwort bleibt' (Frotscher, 1978:887), the first note ('d') is slightly elongated. A slight *accelerando* and *rallentando* follow with increasingly prominent articulation (shortening of notes).

The first 'd' in the pedal (bar 47^4) is kept for a while, followed by a break thus symbolising the culmination of tension and the 'threat' of complete 'tonal anarchy'.

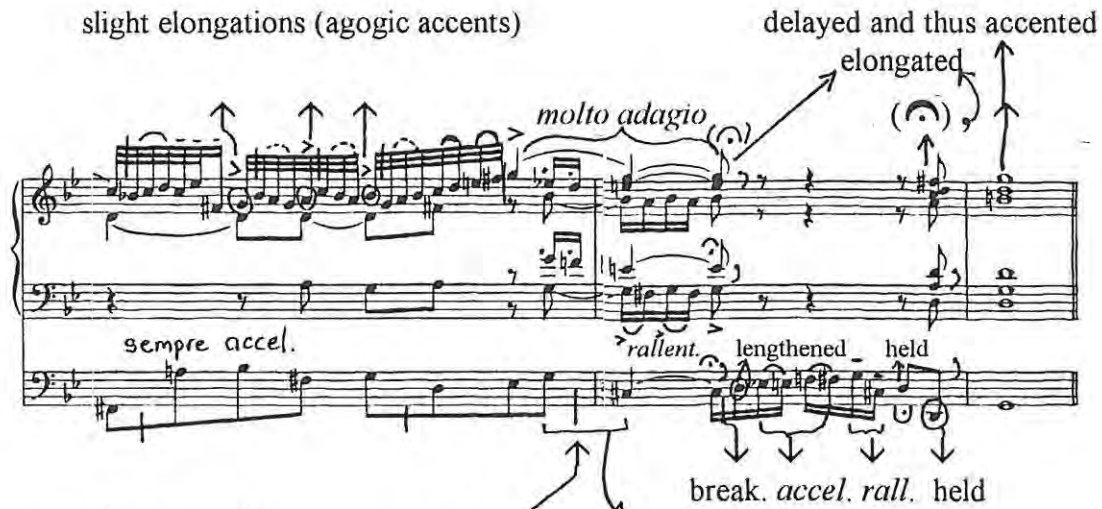
The final cadence follows *molto adagio*. Both chords (representing rhetorical *exclamationes*) as well as the break between them (bars 48-49) are elongated in order to highlight the resolution of the accumulated tension into the final chord.

Example 108

BWV 542: Bars 46-49 (NBA IV/5:171).



pedal = *non-legato*



pedal ='non-legato'

break: *saltus duriusculus* (leap of dim. 5th)

3.4.2 Secondary Cadences

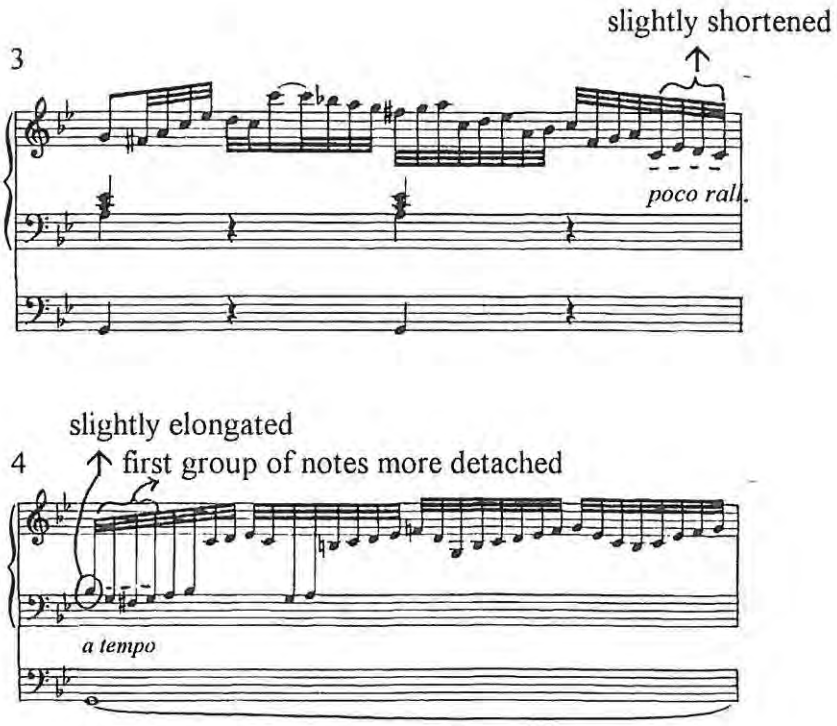
3.4.2.1 End of Subsection 1 of A (*Propositio*) (Bars 3^3-4^1): Perfect Cadence (vii°6/5-i)

This cadence - rather disguised within a figurative passage - represents a comma. Its fleeting character only allows for a slight hesitation realised by a *poco rallentando*

and more 'open' articulation involving the last four notes in bar 3. The b^b in bar 4^1 is agogically accentuated by a slight elongation, and is played *non-legato* together with the three following notes (g-f#-g):

Example 109

BWV 542: Bars 3-4 (NBA IV/5:167).



3.4.2.2. Cadences within Subsection 3 of A1 (*Confirmatio*): Bars 14^4-15^2, 15^4-16^1 (Interrupted: vii°6/5-i6) and 17^4-18^1 (Imperfect: ii°4/3-V7)[82]

According to Kloppers (1965:118) the epic element that recurs in the cadential progressions (bars 14^2-18^2) can be attributed to the presence of the figures *aposiopese*, *exclamatio*, *emphasis*, *anaphora*, *epanalepsis* and *saltus duriusculus* (last mentioned specifically in bar 15).

In order to show the build-up of tension between bars 14^2 and 18^2, Hurford's (1990:85) method of give-and-take (*accelerandi* and *rallentandi*) is applied with corresponding fluctuations in articulation. As the music progresses these fluctuations in tempo and articulation become larger at every cadence until a climax is reached in bar 18.

In order to mark the beginning of section A1, the recitativic ascending scale-passage in bar 14^2 starts slowly with a clearly detached articulation. An *accelerando* follows with an articulation becoming increasingly *legato*. A sudden slightly elongated break is executed after the 'g' to stress the ascending sixth interval to the tied 'e' (*exclamatio*). A molto *rallentando* is applied at the interrupted cadence (bars 14^4-15^2), a slight elongated break is applied between bars 14-15 and the suspended parts are elongated before they are resolved. The break that follows (bar 3^2) representing a comma, is fairly short in order not to jeopardise the smooth build-up of tension.

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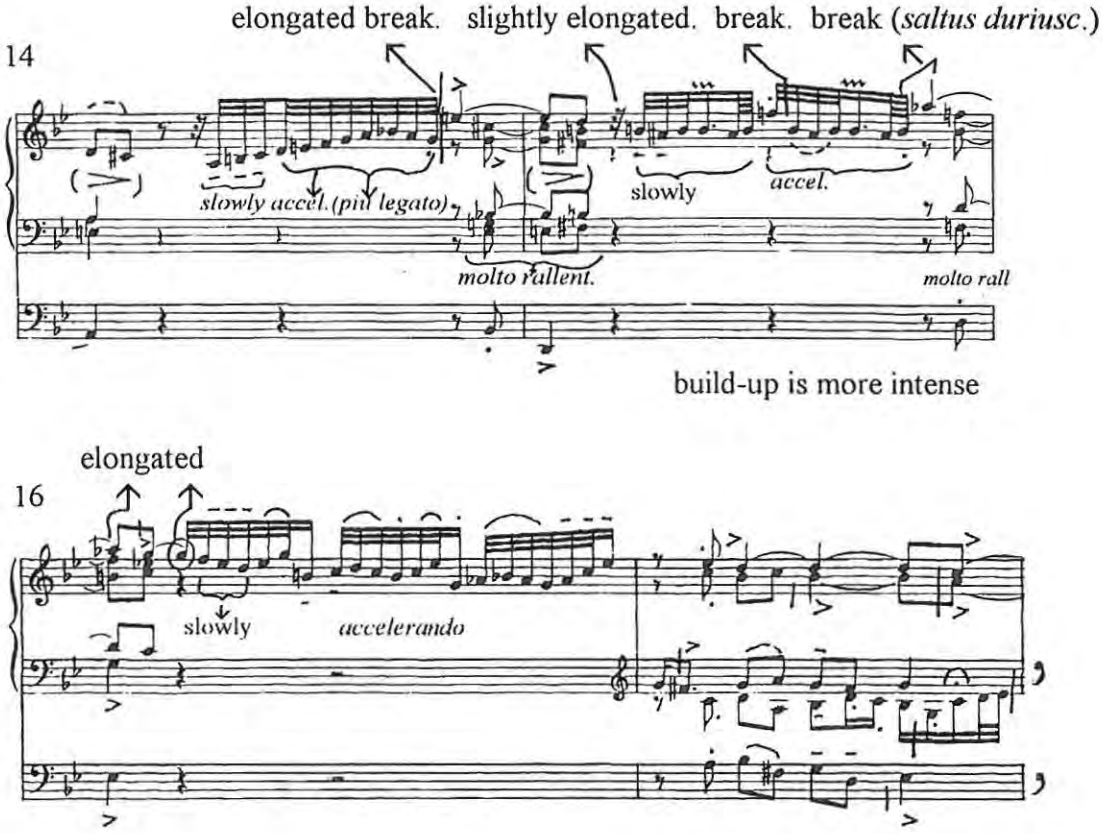
82 Two points need explanation. The three cadences are grouped together, because they form interconnected segments showing a large build-up of tension that reaches a climax in bar 18. Secondly, the cadence in bar 18 can also be regarded as an interrupted cadence, however, the formula reminds of a 'modernised' form of the Phrygian cadence (iv6-V).

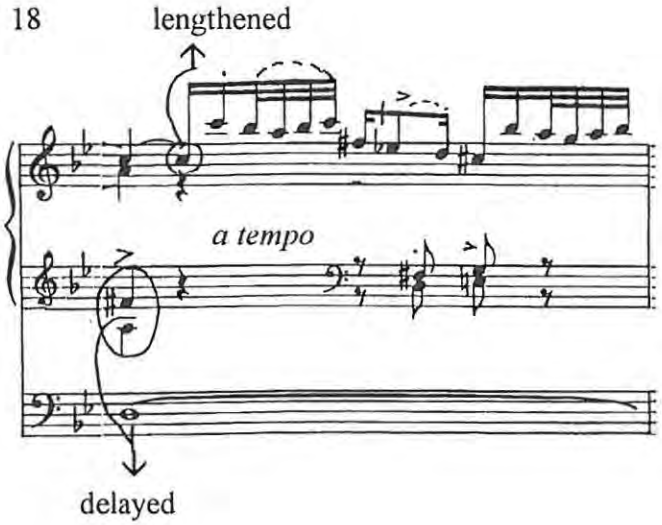
The following cadential progression is realised in a similar manner, but with larger fluctuations in tempo and articulation. The two upward leaps of a diminished 5th and 7th respectively (bar 15^{2-3}) are executed detached, with a larger break at the second one (*saltus duriusculus*) of the second group (*epanalepsis*).

The tied 'g' of the final chord in bar 16^{1-2} is elongated to raise the tension further. Bars 16-18 is performed in a similar way as the two preceding cadential progressions. The tied 'c' (bar 18^{1-2}) is kept extra long, a break follows and the next section is introduced in strict time:

Example 110

BWV 542: Bars 14-18 (NBA IV/5:169).



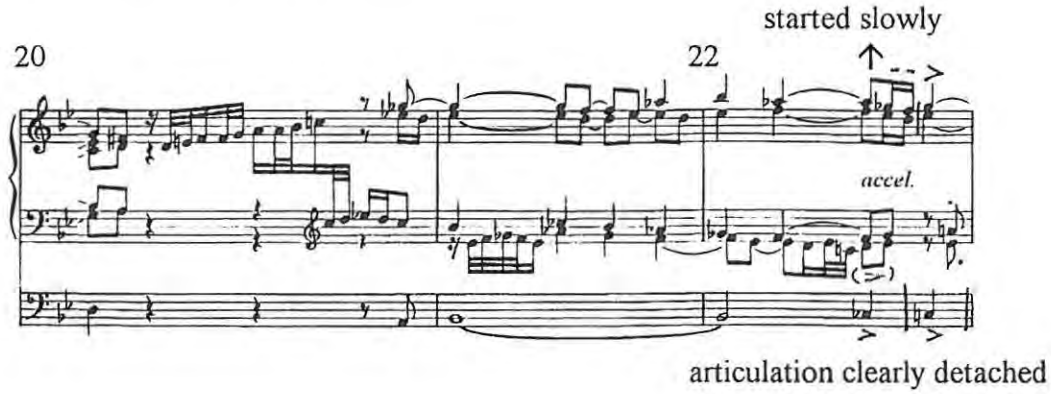


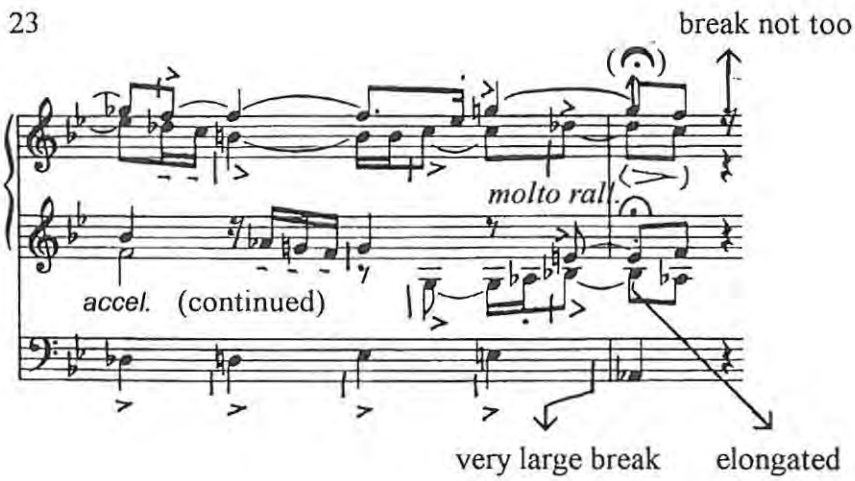
3.4.2.3 Subsection 4 of A1 (Confirmatio): Bars 23^4-24^2: Interrupted Cadence (vii°7-i6)

The interpretation of bars 22^3-24^2 is similarly to that of bars 15-18. However, in bars 22^3-23^4 (marked *accelerando*) *legato* should be replaced by a detached articulation in order to increase the tension created by the ascending bass line and the tied-over notes:

Example 111

BWV 542: Bars 20-24 (NBA IV/5:169).





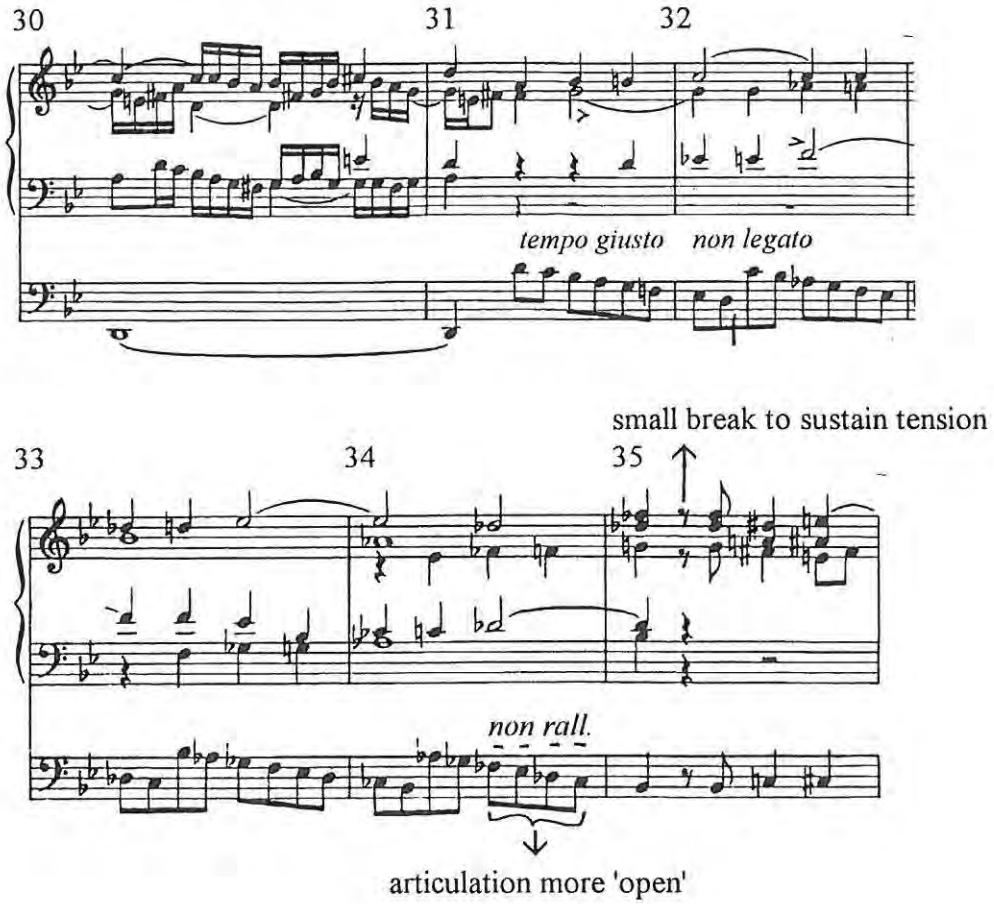
3.4.2.4 End of Subsection 5 (*Confirmatio* and Bridge Passage) (Bars 34^4-35^2): Interrupted Cadence (V4/2- $\dot{i}^{\circ}$#6/$\flat$5)

Bars 31-35 and 22-24 (discussed under 3.4.2.4) share in a common factor in the form of ascending chromaticism (i.e. *gradatio* [Kloppers, 1965:120). However, contrary to bars 22-24, this bridge passage, representing an 'accumulation of thoughts' (*congeries* [ibid.]) shows an almost 'old-fashioned' four-part choral texture and strikingly smooth rhythmic structure. This passage, therefore, is played in strict tempo. The articulation is an even *non-legato* - showing a tendency towards *legato* - with slight accents on tied notes, achieved by small breaks before accented notes.

The surprise effect produced by the interrupted cadence (*aposiopesis*) (bars 34-35) is the more powerful as, apart from a minor articulation change in the pedal, it ought to be approached without any fluctuation in tempo. Under these circumstances, the unexpected 'dissonant' final chord (breaking the preceding cycle of fifths) creates a sudden increase in tension. The quaver rest, following the diminished chord, ought to be strictly in time in order to retain the tension into the bars following it:

Example 112

BWV 542: Bars 30-35 (NBA IV/5:170).

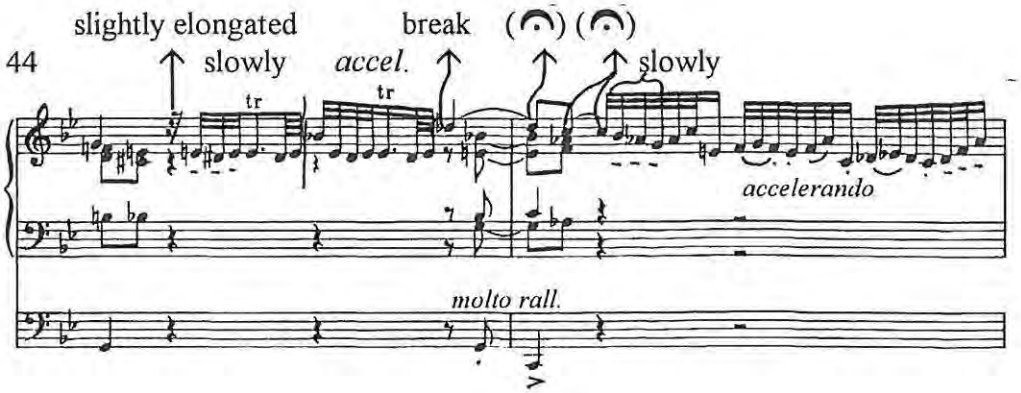


3.4.2.5 Cadence within Subsection 7 of A2 (*Confirmatio/Peroratio*): Bars 44^{4}-45^{1} (Interrupted Cadence [vii°7-i6/4])

This cadential progression (bars 44^{2}-45^{2}) is a transposed replica of bars 15-16 and should be executed in the same way:

Example 113

BWV 542: Bars 44-45 (NBA IV/5:171).



3.4.3 Cadential Evasion

3.4.3.1 In Subsection 4 of A1 (*Confirmatio*): Bars 20^2-22^3

In applying agogic accentuation to the monophonic *anabasis* figure in bar 20, Hurford (1990:66) writes:

> ...the pairs of demisemiquavers may be played progressively more quickly, the time gained in so doing being compensated for by progressively lengthening the semiquavers; added shape is lent to the phrase by slightly extending the opening of each pulse, as shown by my pause marks.. (See Example 114).

In bars 20^2-22^3 there are to distinct places where expected cadences do not realise.

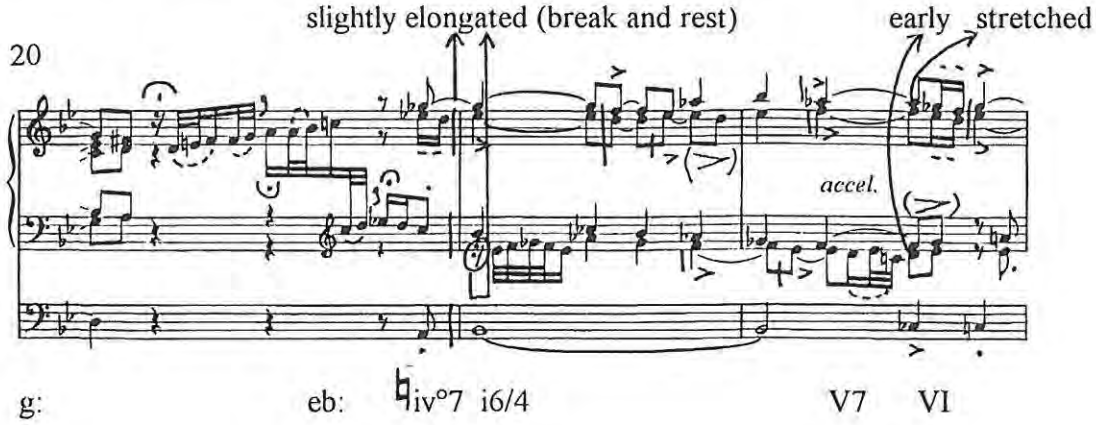
The first cadential evasion occurs between bars 20^4-21^1. The harmony of the monophonic passage in bar 20 is that of a dominant ninth (i.e. d-f#-a-c-e^b). The expected resolution, therefore, would be any appropriate chord (most probably i or VI) in g minor. Instead, an enharmonic change of the dominant ninth into a diminished seventh (a-c-e^b-g^b) leads to e^b minor, but not directly to V of e^b, but to

yet another tension-raising element, i.e. chord i6/4. A slightly elongated break representing a hesitation is executed between the two final chords of the 'cadence' (bars 20^4-21^1) while an elongation of the rest in bar 21^1 will ensure that the unresolved tension is maintained.

At the second place (bar 22^{2-3}), an expected perfect cadence (V7-i) in e^b minor is replaced by an interrupted cadence (V7-VI) that leads into a dramatic chromatic passage. A slight *accelerando* on the second chord of bar 22 results in an early entry of c^b and 'd' in pedal and left hand part respectively (first quaver of third beat). This is counterbalanced by an equally slight broadening of the right hand passage on the second half of the third beat which also delays the resolution of the dissonant harmony:

Example 114

BWV 542: Bars 20-22 (NBA IV/5:169).



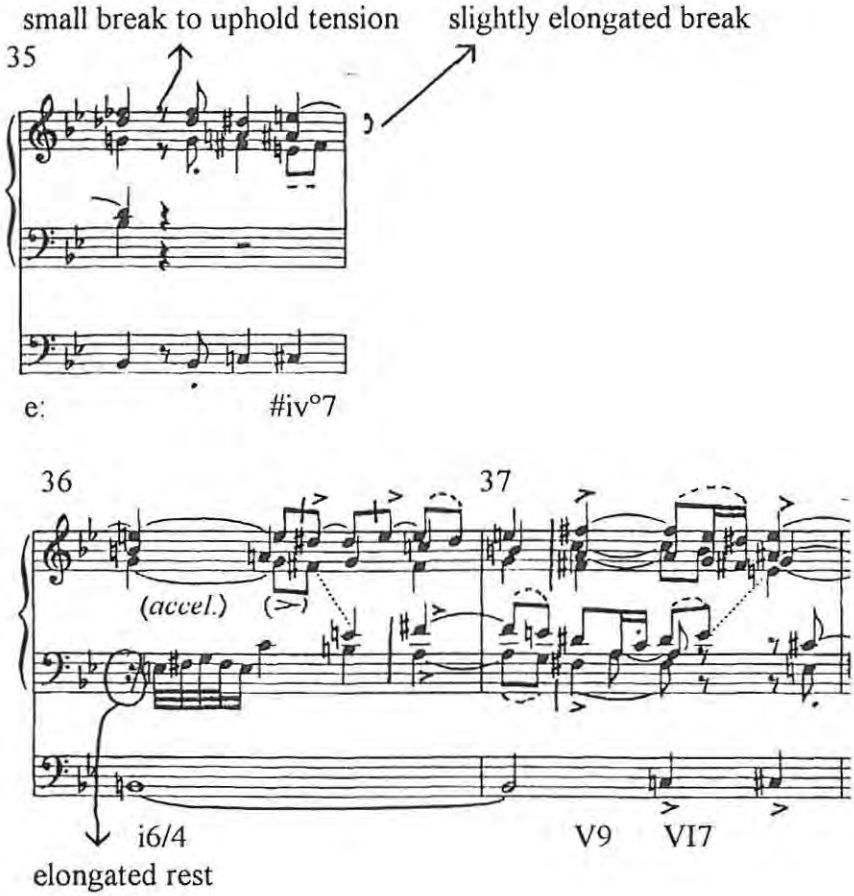
NB: 𝄐 and 𝄾 = Hurford's suggestions.

3.4.3.2 In Subsection 6 of A2 (*Confirmatio/Peroratio*): Bars 35^{4}-39^{1}

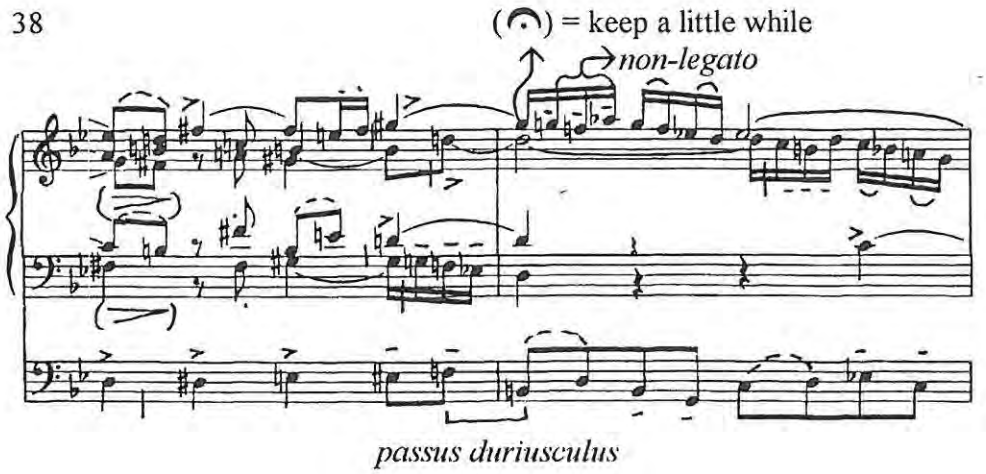
As bars 35-37 correspond to bars 20-22 they should be interpreted in a similar manner. In bars 38-39 the evasion of an interrupted cadence (e#-g#-b-d to f#-a#-c#) is the result of an unexpected enharmonic modulation to c minor; the notes e#-g#-b-d are changed to b-d-f-a^{b}, which is chord vii°7 in c minor. In order to show this modulation the first chord in bar 39 is elongated. In this way the second note of a *passus duriusculus* (f-natural and b-natural) between bars 38 and 39 is emphasised:

Example 115

BWV 542: Bars 35-39 (NBA IV/5:170).



Example 115 (continued)



CONCLUSION

In summing up the various investigations the question arises: how 'successful' are cadences as a means to clarify the phrasing in Bach's free organ works? They certainly provide various clues in the following aspects:

(i) Tension and relaxation in cadential structures indicate the places and duration of breaks and simultaneously appeal to the performer's imagination: By prolonging tension or relaxation, the performer becomes active in the phrasing process.

(ii) Cadences help to clarify the correct interpretation of signs such as rests, *fermate* and double-bar lines.

(iii) The distribution of main and secondary cadential types within the various (structural, grammatical, rhetorical, or 'affective') forms provides an essential framework from which phrasing can be judged. This is especially effective in judging the appropriate tempo deviations at various cadence-points.

(iv) Bach's tendency to increase texture at cadence points often affects the fingering of certain passages causing inevitable minor breaks, which, in turn, clearly indicate the exact manner of articulation.

(v) Depending on their respective qualities, cadences also affect articulation *via* the various degrees of tempo deviation: Any changes in articuation are proportionate to the degree of deviation in tempo. The larger the change in tempo, the more prominent the change in articulation.

Notwithstanding any of the above points, it is important never to loose sight of the interrelationship between the individual cadences and the totality of the work into which these cadences are embedded. Not only are the two cadential chords inextricably part of the broader cadential process, i.e. the progressions by which they are preceded and followed, but, the broader cadential structure, in turn, is part of the overall structure of a work. As was seen in the previous chapter, main and secondary cadence require an entirely different approach within an improvisatory framework or a motorically-orientated structure. In a like manner, the structure of cadences - because of their abundance in Bach's works - strongly determines the prevailing style of a work, i.e. improvisatory or motorically-orientated, and therefore strongly influence the overall interpretation.

It can, therefore, be concluded, that, in spite of Neumann's (1982:197) remark, 'In matters of Bach interpretation almost everything is controversial', the cadences are indeed a determinant factor in the phrasing of the preludes, toccatas and fantasias of J.S. Bach.

Finally, what are the possible implications of this study for further research? The problem of 'correct' articulation of the works by J.S. Bach still remains an elusive and vague area and is far from being solved. Although obviously addressed by recordings and conferences, more publications in the form of books, specifically suggesting articulation in general and also at cadences, are needed.

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