

EXPANDED TONALITY IN THREE EARLY PIANO WORKS OF
BÉLA BARTÓK (1881 - 1945)

by

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ABSTRACT:

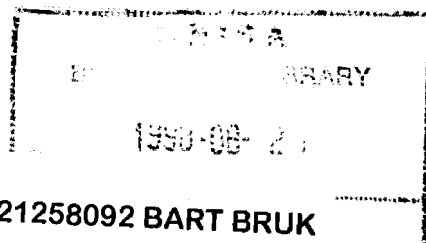
Bartók's own expanded tonal ("supradiatonic") pronouncements reveal that his music, notwithstanding tonally camouflaging surface details, clearly had a tonal foundation which in many respects is a reaction to the emerging atonalism of Schönberg. Analysis of three piano works (1908 - 1916) reveal that Bartók's tonal language embraced intuitively the expanded tonal idiom. The harmonic resources Bartók employed to obscure tonicisation embrace double-degree constructions, quartal formations, chords of addition and omission and other irregular constructions. Diatonic tonal pillars are evident in pedal points, tonic triads and dominant to tonic root movement. Through an application of the Riemann function theory expanded by Hartmann's supposition of fully-chromaticised scales tonal syntax (especially second-phase Strauss cadences or closes) becomes apparent within an expanded tonal product. The analyses conclude that Bartók's inimitable "sound-world" is a twentieth-century manifestation of traditional tonality's primary tenets.

KEY TERMS:

Expanded tonality; Fully-chromaticised scales; Bitonal process; Bitonal product; Double-degree chords; Strauss cadences; Pedal points; Key-introductory six-four chord; Chord of addition; Chord of omission; Quartal constructions; Chord streaming.

(ii)

***DEDICATED to the
Memory of my late brother
Robert Douglas Brukman (1947 - 1995)
who was always an inspiring
source of encouragement as
I furthered my studies.***



786.1

786.21258092 BART BRUK



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Jeffrey Brukman, Cape Town, November 1998.

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CHAPTER ONE: INTRODUCTION

1. BRIEF BIOGRAPHICAL DETAILS

The purpose of this dissertation is not biographical therefore the concise biographical details which follow merely provide some background information regarding the composer whose compositions are analysed in this dissertation.

The twentieth-century composer Béla Viktor János Bartók was born in Nagyszentmiklós, Hungary on 25 March 1881. His place of birth has been renamed Sinnicolau Mare and now forms a part of Romania.

Three cultural groupings lived in Nagyszentmiklós: Hungarians, Rumanians and Germans. Consequently numerous languages and cultures were known to him from childhood and had a dual effect upon him. He had an understanding, tolerance and interest of other cultures, though he held his own culture in high esteem and considered it worthy of preservation.

His strong sense of Hungarian patriotism led him to perform publicly, on occasion, in traditional national costume. It is interesting to note that one of his early successes as a composer was with a symphonic tone poem entitled **Kossuth** (1903). (Kossuth was a Hungarian patriotic figure).

His interest in other cultures and their music led him to explore first-hand (originally with Zoltán Kodály) the music of Hungarian, Rumanian, Slovakian and Arabian peasantry. This ethnomusicological research was conducted part-time from 1905 onwards. It became a full-time occupation in 1934 when his research became officially sanctioned and he was granted a position with the Hungarian Academy of Sciences. In 1940 he relinquished this position and left Hungary due to his anti-Nazi convictions. From 1941 - 1942 he researched Serbo-Croatian folk music at Columbia University (U.S.A.).

This composer and ethnomusicologist was also an outstanding and formidable pianist. He performed as a soloist and accompanist throughout Europe and in America. For twenty seven years (1907 - 1934) he lectured in piano at the Royal Academy of Music in Budapest. Many of his original piano compositions have a clear pedagogical bias to them. Volumes such as **For Children** (1909) and **Mikrokosmos** (1926 - 1937) not only develop various pianistic skills but also introduce students of varying ages and abilities to the musical idioms he encountered during his ethnomusicological travels.

The three main areas of his musical activities - pianism, ethnomusicology and composition - all impacted upon each other during his career to produce a musician with an original, invigorating and challenging outlook and style.

He died in New York in 1945 at the age of sixty four on 26 September.

2. RATIONALE SUPPORTING THIS DISSERTATION

2.1 General guiding principle

The principal purpose of this dissertation is to distinguish tonal coherency in the music of Bartók, using three early piano works as examples of his harmonic language and tonal organisation.

This dissertation explores Bartók's tonal idiom through identifying his tonal stylistic connections with traditional tonal characteristics found during previous eras. It also explores Bartók's twentieth-century application of these tonal traditions.

2.2 Tonal coherency in Bartók's works

This dissertation presents a tonal philosophical framework for analysing the harmonic and tonal structure in the music of Bartók. It is an analytical approach whereby Bartók's own claims against atonality can be upheld. It provides the means for understanding the tonal character and basis of his music, and is not a presentation of a theory of his composition processes. These processes were 'never actually codified'

(Hindley, 1981:415) by Bartók and have been the source of much research and discussion.

This tonal philosophical framework is also the basis whereupon some nonsensical statements concerning Bartókian harmony can be refuted and a theory concerning Bartók's tonal language can be evaluated.

The tonal philosophical framework of this dissertation is rooted in the concept of expanded tonality.¹

2.3 Expanded tonality as a twentieth-century tonal manifestation

Through the codification of expanded tonality which evolved from traditional common-practice tonality, Bartók's tonality can be placed in perspective. His tonality can be seen as a growth from the common-practice period. Helm (1971:15) states: 'He respected and never disregarded the great music of the past'.

During Chapter Two it becomes clear that Bartók was not alone in his development of expanded tonality. The concept of expanded tonality which evolved during the first part of the twentieth-century was developed by a group of composers who inspired each other in a non-formalised alliance. Sadie (1980:2, 207) states

'In 1907 Bartók also found stimulus in contemporary art music, primarily in its tonal aspects and its redefinition of consonance and dissonance; in the loosening of tonality he went through an evolutionary process paralleling those of his contemporaries.'

Stevens (1993:41) in writing about the period from 1907 onwards considers Bartók to be an initiator and leader amongst his contemporaries. He also lists three aspects of expanded tonality which Bartók utilised prior to either Stravinsky or Schönberg.

'In many ways, however, he was ahead of his contemporaries. The piano music of 1908 shows experimentation with bitonality, dissonant counterpoint,

¹ Expanded tonality as a concept is discussed at length in this dissertation. See in particular Chapter Two.

chords in intervals other than thirds, somewhat before the works of Stravinsky and Schoenberg ...'

Thus expanded tonality developed in the hands of like-minded composers during the early decades of the twentieth-century.

This dissertation purports to reveal what has become known as the nature of his tonal language. Bartók's application of this tonal idiom was inherently natural and fundamentally a spontaneous response to the various influences which helped shape his musical thought. It is also a natural reaction to the trends in serious art music composition of the time. Read (quoted by Everson, 1978:117) places this issue in perspective through stating

'... geniuses, are the artists most sensitive to imagery that is present ... in the ... recesses of their own psyche, and that is active in the psychic depths of their contemporaries as well. Thus they bring to expression what is working not only in themselves but also in their fellow-men.'

Therefore wherever it is applicable musical examples, in this dissertation are used by composers other than Bartók.

3. EARLY PIANO WORKS AS A SOURCE FOR STYLISTIC ANALYSIS

3.1 The Works analysed

Three piano works are analysed in this dissertation. They are in chronological order:

- * **Fourteen Bagatelles**, op. 6 (1908)
- * **Allegro barbaro** (1911)
- * **Suite**, op. 14 (1916).

These works cover a period of eight years and range from Bartók's twenty-seventh year to his thirty-fifth year. They can be considered early works in the sense that 1907 - 8 marks the year when the typically Bartókian "voice" makes its entrance.

Sadie ed. (1980:2,208) notes that during this time-span 'the appearance of Bartók's original musical language' can be discerned. The word "original" denotes the germinal stage which results in the prototype of Bartók's mature composition style.

Music historians appear to be divided over the demarcation dates surrounding the opening and closing years of the various composition phases which they feel mark the composer's progress. Therefore the classification of "early period" and its time-span, as applied in this dissertation, is outlined (with reasons) in the ensuing subsection.

3.2 Periodic classification and this dissertation

3.2.1 Germinal period: Time-span

For the purpose of this dissertation the completion of the **Fourteen Bagatelles** (1908) marks the inception of his own uniquely, personal style. The ensuing decade reveals a developmental process which allows this inimitable style to stabilise. This germinal period concludes with the **Suite**, op. 14. According to Griffiths (1984:82) this work

'is the first work wholly typical of Bartók in its harmony, its rhythm, its keyboard layout and, not least, its immensely fruitful fusion of 'natural' folk-song and 'artificial' construction.'

3.2.2 Germinal period: Composition style

This germinal period displays the most salient characteristics of Bartók's style. These characteristics remained at the core of his compositional idiom until his death in 1945. Notwithstanding natural progress and increasing musical maturity there is a unity in his composition style which can be traced to his "germinal decade". Stevens (1993:306) states:

'Now that Bartók's work may be perceived in its entirety, its evolutionary line becomes its most striking aspect. In no other recent composer is there to be observed such an undeviating adherence to the same basic principles throughout an entire career ... With Bartók there were frequent additions to his creative equipment, but seldom subtractions ...'

This point of view is re-enforced by Antokoletz who writes in a book edited by

Gillies (1993:122)

*'virtually all the elements of Bartók's musical language that he was to absorb and transform throughout his career were already contained in microcosm in the **Fourteen Bagatelles** ... his post-war (WWI) compositional and pianistic techniques ... ultimately have their roots in this early set of fourteen masterpieces.'*

Thus it can be seen that even though music historians divide Bartók's oeuvre into phases his compositional style displays an unbroken line of development which stems directly to that "germinal period".

3.2.3 Germinal period and this dissertation

The reference in the dissertation title to "early piano works" refers to works composed during this decade of germination. The use of the word "early" is used to indicate the period of time when Bartók's unique composition style began and was initiated: the period when his composition "voice" emerged and began a period of crystallization.

This germinal period has been chosen for study because of its importance in the formation of the distinctive Bartókian sound world as well as the foundation and formulation of specific stylistic traits.

4. PIANO WORKS AND THEIR IMPORTANCE DURING THE GERMINAL PERIOD

Even though Bartók wrote prolifically for the piano, his 'contributions to the pianist's repertoire remain unsurpassed in the twentieth century' (Yeomans, 1988:(i)) his piano works are not considered to have 'reached the apogee of his creative orbit' (Stevens, 1993:140). Stevens (1993:140) states quite bluntly: 'It is ... not as a composer for the piano that he achieved his greatest distinction.'

However Bartók was an accomplished concert pianist and his piano works display an

affinity for the instrument. 'He was therefore in close touch with the medium' (Stevens, 1993:140).

In my opinion it is through the piano works of this early germinal period that an analyst gains a transparent view of the stylistic characteristics which make Bartók's composition style totally unique. As a pianist he was able to not only write spontaneously for the instrument but to experiment with harmonic textures and tonal obscuration procedures. I consider it to be no co-incidence that the core of this sound-world was laid with a piano work, the **Fourteen Bagatelles**. It is also no co-incidence that Bartók's inimitable *martellato* composition style was ushered in with a piano work, the **Allegro barbaro**. Furthermore I believe that during this germinal decade Bartók used the piano as a vehicle for developing a composition style which not only incorporates but synthesizes folkloristic elements within his general art music style. This is abundantly clear in the following works: **Two Romanian Dances**, op. 8a and the **Suite** for piano, op. 14.

Therefore I believe that through concentrating on piano works composed during this time-period one can study Bartók's application of expanded tonality in its embryonic stages, and discern how his basic application of this tonal idiom was formed and developed during these years.

CHAPTER TWO: EXPANDED TONALITY

1. EXPANDED TONALITY AS AN ORGANIC GROWTH FROM PREVIOUS STYLISTIC PERIODS

The tonal idiom embraced by Bartók is a twentieth-century manifestation of tonality which develops systematically and methodically from the sixteenth century onwards to materialise in the tonal language of the twentieth-century.

According to Van der Berg (1989:4) 'twentieth century tonal styles became the "inevitable" result of the ... "common practice" models.'

This view is re-inforced by Van der Linde (1992:3) who states that 'expanded tonality in twentieth-century music ... developed historically and technically from the music of the medieval period onwards.'

These statements are re-inforced by Bukofzer (1947:12) who states that 'the profound effects of the recognition of tonality persist even in the present-day search for a new and wider concept of tonality'. In other words the twentieth-century manifestation of tonality is founded on traditional tonal principles, not atonal premises.

This is observed in the expanded tonal sound-world which is both a development and extension of "common-practice" functional tonality and harmonic syntax through widening the harmonic palette and obscuring diatonic functional tonal props. Inherent within the sophisticated and decorated harmonic colours and tonal shadings of expanded tonality, diatonic structures and chord functions present the past link with this manifestation of tonality.

Through analysis the methods of tonal obscuration become clear once the functional tonal supports have been isolated. Generally, these obscuration resources camouflage diatonic harmonic projection and movement. Therefore the fundamental composition

conception is based upon tonicisation procedures and harmonic syntax which derive from the "common practice" period and before.

One of the most striking features of this twentieth-century manifestation of tonality is the simultaneous dual evasion and establishment of tonality. The primary level (surface movement) strives to avoid a clear tonal enunciation through creating dissonant elements to obscure the secondary level's tonally gravitating procedures.

Thus, we have a different "new" sound-world based upon traditional tonal properties manifested during the twentieth-century.

2. THREE IMPORTANT THEORISTS

2.1 Jean-Philippe Rameau: Harmonic functions

The principle of functional harmonic progression gravitating towards a tonic was developed by the Baroque theorist-musician Jean-Philippe Rameau (1683 - 1764) with a treatise entitled *Traité de l'harmonie reduite à ses principes naturels* (1722). The concepts of chord root and inversion were coupled to that of fundamental bass thus allowing the principle of functional harmonic progression to develop. The concept of chord inversion made the recognition of harmonic function possible.¹ Functional harmonic progression is an indispensable part of traditional tonality and therefore plays a significant role in determining tonality within the expanded tonal milieu.

Functional harmonic progression pre-supposes the 'concept of a functional hierarchy, with the degrees of the scale placed in order of fifth-relationship from the tonic' (Mitchell, 1963:261).

For Rameau the tonic had an upper and lower dominant situated on either side of the tonic, the interval of a perfect fifth separating either dominant in each instance. This concept which provides a "hierarchical axis" around the magnetic tonic received

¹ For a more thoroughly detailed exposition consult the doctoral thesis of Mitchell, J.W. 1963. *History of theories of functional harmonic progression*, U.S.A.: Indiana University.

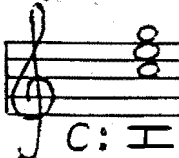
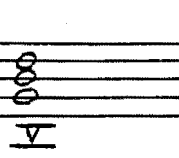
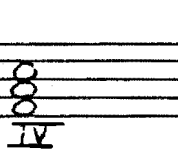

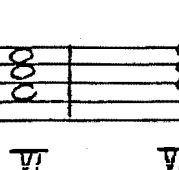
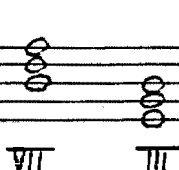
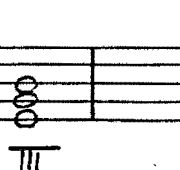
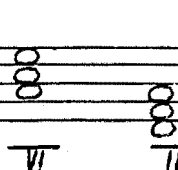
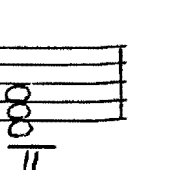
strong support from the following theorists: Giuseppe Tartini (1692 - 1770), Friedrich Marpurg (1718 - 1795) and Hugo Riemann (1849 - 1919).

2.2 Hugo Riemann: Tonal functions

The theorist Hugo Riemann wrote extensively on the subjects of chord function and chord progression in a work entitled *Vereinfachte harmonielehre* (1855). For the purpose of this dissertation the following points relating to his study are briefly mentioned:

- * 'There are only three kinds of tonal functions (significance within the key), namely, tonic, dominant and subdominant' (Mitchell, 1963:159).
- * The tonics of relative major and/or minor keys are related. In Riemann's terminology related keys are termed "parallel" keys. Riemann considered the tonics of the parallel keys 'as representatives of the original ones and as having the same function. They are thus called "parallel clangs"' (Mitchell, 1963:163). Furthermore Mitchell states (1963:262): 'the leading tone harmonies are often considered as within the dominant (function) classification. His concept of "parallel clangs" makes possible the usual secondary functions as aspects of the three primary ones'.
- * Reduced to its bare essentials Riemann's theory has each tonal function (tonic, subdominant and dominant) being represented by its upper and lower mediant triad.

Ex. 2:1

	TONAL FUNCTIONS					
	TONIC		DOMINANT		SUBDOMINANT	
Primary functions						
Upper and lower mediant triad representations						

2.3 Friedrich Hartmann: Fully-chromaticised scales and chord classification

Fully-chromaticised major and minor scales and the mixed scale were formulated by the Austrian theorist Friedrich Hartmann (1900 - 1972) as the foundation of the vocabulary of tonal music in his **Harmonielehre** of 1934 (Vienna, Universal Edition).

Historical formulation

'The fully chromaticised scales are the result of a gradual historical evolutionary process. The standard major scale added to its coloristic and harmonic resources those notes from its tonic minor which the two scales did not have in common. By a similar process, the minor scale was likewise enriched with borrowings from its tonic major. To these were added other chromatic notes, such as the Neapolitan second and the raised (or gypsy) fourth' (Paxinos, 1975:42).

In the fully-chromaticised major scale of C this would account for the chromatic notes E \flat , A \flat and B \flat (added from the tonic minor), D \flat (Neapolitan second) and F \sharp (Gypsy fourth).

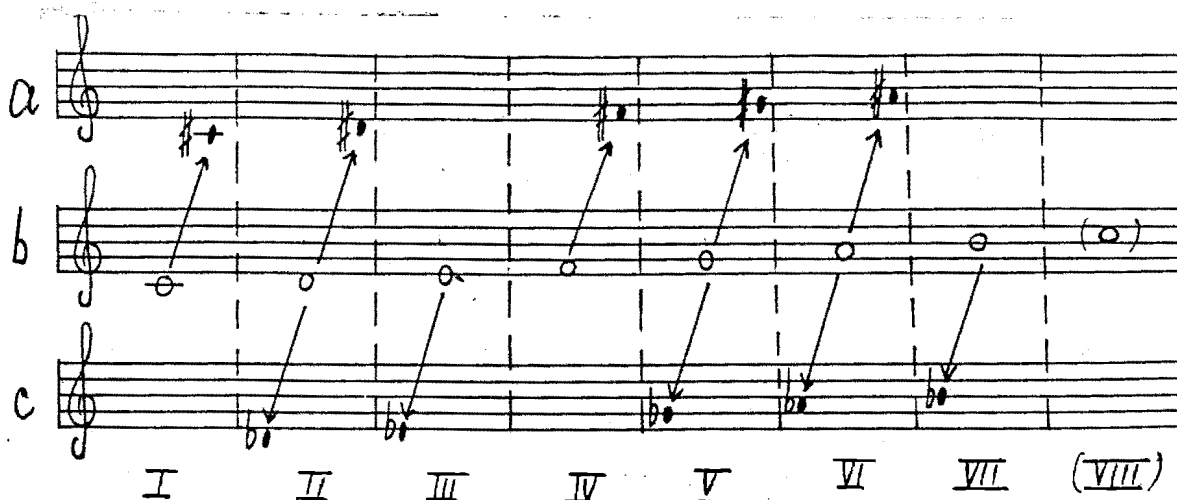
The other chromatic notes are the result of 'the historical process of increasing semitone support from above and below to each of the seven diatonic degrees' (Van der Linde, 1989:2).²

The following music example of the fully-chromaticised major scale serves as an example. The origin of the seventeen notations are diagrammatically represented. These seventeen notations provide the medium whereby each of the seven scale degrees are represented - both diatonically and chromatically. In the following example:

- | | | | |
|----------|-----|---|------------------------------------|
| example: | (a) | = | five chromatically raised degrees |
| | (b) | = | seven diatonic representations |
| | (c) | = | five chromatically lowered degrees |

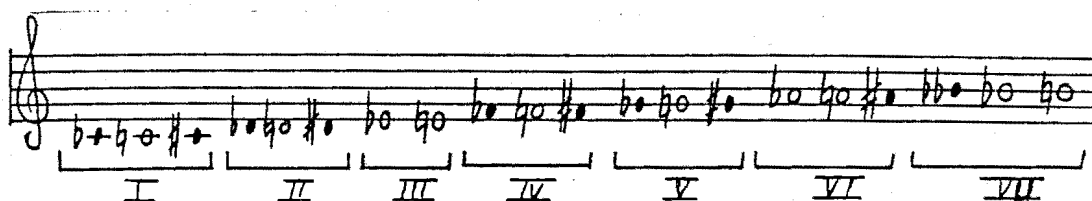
² More detailed information concerning this subject is to be found in the following two publications:
Hartmann, F.H. 1956. **Musical education in the University** Johannesburg: Witwatersrand U.P.
Van der Linde, B.S. 1989. **Study Guide for HCT 401-9**, 6th rev. ed., Pretoria: Unisa.

Ex. 2:2 Schematic representation of the fully-chromaticised major scale of C



Hartmann has identified the culminative step in the historical evolvement of the fully-chromaticised major and minor scales as being the fully-chromaticised mixed scale. This scale is a composite resulting from the fusion of both the fully-chromaticised major and minor scales. It comprises twenty scale members and is notated in the ensuing music example. As can be seen the scale has no bias towards either major or minor and can be considered a complete amalgam of both major and minor.

Ex. 2:3 Fully chromaticised mixed scale of C



The members of the diatonic major and minor scales give rise to four different triadic types: major, minor, diminished and augmented. However, the seventeen member fully-chromaticised scales through the nature of their design allow for a wider range of triadic types. Hartmann has identified fourteen different triadic formations. The following table³ classifies each of the fourteen different triad types.

³

Quoted by Van der Linde, B.S. 1989. Study Guide for HCT 401-9, 6th. rev. ed., Pretoria: Unisa, p.11.

Type	Combination of thirds	Example
a	major + minor	C-E-G
b	minor + major	C-E \flat -G
c	major + major	C-E-G \sharp
d	minor + minor	C-E \flat -G \flat
e	major + diminished	C \sharp -E \sharp -G
f	diminished + major	C \sharp -E \flat -G
g	minor + diminished	C \sharp -E-G \flat
h	diminished + minor	C \sharp -E \flat -G \flat
i	major + augmented	C \flat -E \flat -G \sharp
j	augmented + major	C \flat -E-G \sharp
k	minor + augmented	C \flat -E \flat \flat -G
l	augmented + minor	C \flat -E-G
m	augmented + diminished	C-E \sharp -G
n	diminished + augmented	C-E \flat \flat -G

For tertian constructions higher than triads Hartmann employs Roman numerals to denote the interval of a seventh and capital letters to denote intervals of a ninth. The following two tables classify the symbol which denotes the quality of seventh or ninth interval.

Roman numeral	Interval of the seventh
I	major
II	minor
III	diminished

Capital letter	Interval of the ninth
A	major
B	minor
C	augmented

Method for denoting higher order tertian constructions.

Tetrad (Chord of the seventh):

Lower three notes (triad) + quality of seventh, e.g. all

Pentad (Chord of the ninth):

Lower four notes (tetrad) + quality of ninth, e.g. aIIB

Hexad (Chord of the eleventh):

Lower four notes (tetrad) + upper three notes (triad) e.g. aII.a

Heptad (Chord of the thirteenth):

Lower four notes (tetrad) + upper four notes (tetrad) e.g. aII.cI.

2.3.1 The influence of fully-chromaticised scales upon expanded tonality

Fully-chromaticised scales of either the seventeen or twenty note variety provide the composer with a wider range of notes to create with than the twelve note chromatic scale. With fully-chromaticised scales as harmonic source material a very wide range of harmonic colours are possible.

Chord members can be mixed and grouped in a vast array of chromatic and intricate combinations. Notwithstanding the complex chord structures of expanded tonality tonal perspective can be achieved through coupling the diatonic and chromatic scale degree representatives of the fully-chromaticised scales with the three basic harmonic functions expounded by Riemann. Van der Linde (1989:vi) refers to chords with chromatically inflected roots as possessing 'modified subdominant, dominant and tonic functions'.

This view regarding expanded tonal analysis is upheld by Apel (1983:337) who states that

'there are only three "functionally" different chords, namely, tonic, dominant and subdominant. All other chordal combinations, even the most complex and chromatic, are variants of one of these chords, i.e. they have a tonic-function, dominant function, or subdominant function'.

Through placing the harmonic language of expanded tonality into perspective, tonal syntax can be discerned in all expanded tonal music.

Cadential formulae and other chord-related progressions creating a syntactical harmonic movement within a phrase structure can be logically analysed and placed

into perspective.

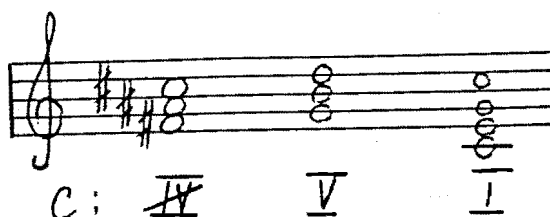
Archetypical cadences within the expanded tonal milieu are the so-called Strauss cadences. These cadences illustrate the use of the fully-chromaticised scale as harmonic source material coupled to the recognition of Riemann's theory of chord functions as applied to the expanded tonal idiom (Paxinos, 1975:42).

3. STRAUSS CADENCES

3.1 Introduction

What are commonly referred to as the Strauss cadences form in their simplest terms a cadence or close where diatonic and chromatic roots are juxtapositioned. This is illustrated in the following example where the subdominant triad is chromatically raised and the dominant triad is represented diatonically.

Ex. 2:4



The late-Romantic German composer Richard Strauss (1864 - 1949) had a predilection for cadences where diatonic and chromatic roots were juxtapositioned. Hence, the terminology "Strauss cadence" pays tribute to the composer who applied this technique to his cadential formulae and inspired the ensuing generation of composers to develop upon his solid foundation.

In the following example the subdominant harmonic function is chromatically represented as a chromatically lowered supertonic triad. It is juxtapositioned with a diatonic representation of the dominant tetrad followed by the tonic triad. This

constitutes an imperfect authentic cadence with Strauss cadence characteristics.

Ex. 2:5 Strauss, Op. 15 no. 5 *Heimkehr* (1886):m.8 - 10².



m.8: B \flat - D - F, A: II^6 , triad type a. Subdominant function

C \sharp = unaccented passing note

m.9: E - G \sharp - B - D, A: V⁷, tetrad type aII. Dominant function

F \sharp = upper auxiliary

m.10¹⁺²: A - C \sharp - E, A: I, triad type a. Tonic function

D = suspension

Strauss cadences can be categorised according to three phases. The ensuing subsection delineates the work of three theorists in the resultant codification of the Strauss cadence's three phases.

3.2 Three theorists: Tenschert, Hartmann and Van der Linde

In 1926 the Austrian theorist Roland Tenschert wrote an article which details Strauss' cadential treatment and usage.⁴ This article uses a plethora of examples but does not arrive at a distinct definition whereby the three phases (which were subsequently codified) are clearly delineated. Tenschert's article is thus informative and descriptive by nature.

⁴ Tenschert, R. "Die Kadenzbehandlung bei Richard Strauss" *Zeitschrift für Musikwissenschaft*, vol. 8 (Leipzig: Breitkopf und Härtel, 1926), pp 161-182.

Friedrich Hartmann verbalised the three evolutionary phases of the Strauss cadence after consulting and considering Tenschert's article and research. Hartmann recognised the chromatic-diatonic juxtapositioning pattern, which is found in Strauss cadences, and accordingly arranged them into three phases (Van der Linde, 1989:68).

Bernard van der Linde formalised Hartmann's verbalised conclusions through applying the "phase theory" to the examples used in Tenschert's article. Through this procedure he arrived at his own definition and drew his own conclusions in 1968 which were refined in 1986.⁵

The latter theorist's classification of the Strauss cadence serves as the basis for analysing cadences in the expanded tonal idiom in this dissertation. In the ensuing subsection examples are drawn from the expanded tonal literature. This displays the inspirational influence of the Strauss cadence on composers who embraced the expanded tonal idiom.

3.3 Three phases of the Strauss cadence within expanded tonality

3.3.1 Phase One

This phase comprises chromatic and diatonic roots which

'occur as successive members of two distant diatonic keys respectively. These two keys are juxtaposed in such a way ... that the re-interpretation of the first diatonic key in terms of the expanded version of the second is both logical and inevitable' (Van der Linde, 1989:68).

Note how in the following example the diatonic keys of E minor and D \flat major are juxtaposed. The triads which are diatonic in D \flat major are given a chromatic re-interpretation in E minor. These four measures constitute a Perfect authentic phase one Strauss cadence in E minor.

⁵ Consult Van der Linde, B.S. 1989. Study Guide for HCT 401-9, 6th rev. ed., Pretoria: Unisa.

Ex. 2:6 Shostakovich, No. 4 from *Six Children's Pieces* (1946): m. 37 - 40



Harmonic representation:

Harmonic re-interpretation: e:

Db:	$\frac{V}{a} c$	$\frac{I}{a}$			
	$\frac{IV}{a} c$	$\frac{VII}{a}$	$\frac{VI}{a}$	$\frac{V}{a}$	$\frac{I}{b}$
	(SD)	(D)	SD	D	T

3.3.2 Phase two

Unlike phase one where key re-interpretation occurs each root note is a member of a fully-chromaticised scale which represents a single expanded tonality.

The following example is a harmonic close which illustrates this phase within the expanded tonal milieu.

Ex. 2:7 Hindemith: *Ludus Tonalis*, "Fuga VI": m. 12



Eb: $\frac{IV^7}{a} d$ $\frac{II^7}{a} I$
 $a II$ $a II$

m. 12^{1,1}: A \flat -(C)-E \flat -G \flat , E \flat : IV⁷d, subdominant function
aII

This tetrad is enharmonically notated as: G \sharp -(B \sharp)-D \sharp -F \sharp

m. 12^{1,2}: F \flat -(A \flat)-C \flat -E $\flat\flat$, E \flat : ~~IV~~⁷, subdominant function
aII

This tetrad is enharmonically notated as: E-(G \sharp)-B-D

m. 12²: E \flat - G - B \flat , E \flat : I, tonic function
a

This plagal close with two harmonic functions can be classified as a Strauss close in second phase due to the juxtapositioning of chromatic and diatonic roots. Note how the chromatically lowered supertonic has subdominant harmonic function in the expanded tonal idiom. Note also the enharmonic orthography utilised by Hindemith, probably to facilitate easier score-reading. Furthermore note the descending Phrygian cadential three-note melodic formula in the bass voice: G \flat - F \flat (without enharmonisation) - E \flat . The semitone movement (F \flat - E \flat) in the approach to the *finalis* - the tonic - is very characteristic of this three-note melodic formula. Thus within the framework of expanded tonality a Strauss close in second phase with Phrygian cadential three-note melodic formula in the bass is formed.

3.3.3 Phase Three

During the first two phases chromatic and diatonic roots are juxtapositioned. During this, the third phase chromatic and diatonic roots are used simultaneously. This invariably allows for a bitonal or bichordal process to be created with a resultant double-degree product.

In the following example⁶ A \flat major and D major are bitonally contrasted. The bitonal product in the expanded scale of D major comprises two double-degree

⁶ Quoted by Van der Linde, B.S. 1989. *Study Guide for HCT401-9*, 6th. rev. ed., Pretoria: Unisa, p.96-97.

constructions.

Ex. 2:8 Lutoslawski, *Folk melodies for piano* (1947): m. 14 - 16²

Harmonic
reduction:

m. 14: a = E \flat - G - B \flat - D \flat (chromatic root E \flat)

b = A - (C \sharp) - E - G (diatonic root A)

double-degree product = A - C \sharp D \flat - E \flat E \sharp - G - B \flat , D: V⁹ pentad type aIIB
d.d.

m. 15-16²: c = A \flat - C - (E \flat) (chromatic root A \flat)

d = D - F \sharp - A (diatonic root D)

double-degree product = D - F \sharp - A \flat A \sharp - C, D: I⁷ tetrad type aII
d.d.

Thus, an imperfect authentic phase three Strauss close is constructed.

4. PEDAL POINTS AS EXPANDED TONAL TONICISING MECHANISMS

A variety of tonicising mechanisms, apart from cadential formulae and functional chord progression, are used to develop both a sense of tonality as well as procedures to ascertain key identification. Pedal points, usually focused around the tonic degree and occasionally focused around the dominant degree, are common features of expanded tonal compositions. These pedal points are frequently indirectly presented

through the use of obscuration techniques which further emphasize the expanded tonal milieu of the music. Some of the most common guises under which pedal points are observed are detailed in the ensuing discussion.

4.1 Pedal Point with single harmonic function

Ex. 2:9 Bartók: Sonatine, third movement, m.92 - 107

92

accel. -

p cresc. -

96

al Tempo I

102

allargando -

sempre cresc. -

107

Aufführungsdauer
Durée d'exécution 45"

The repeated note, D, in the upper right hand part forms an inverted tonic pedal. It is used to re-inforce the macro-tonality of D major which is obscured due to the proliferation of chromatic notes and the mixolydian melody found from m.97 onwards.

These sixteen measures clearly utilise the fully-chromaticised major scale of D with only the following members not in evidence:

- * chromatically raised tonic, supertonic and submediant degrees

- * chromatically lowered dominant and submediant degrees.

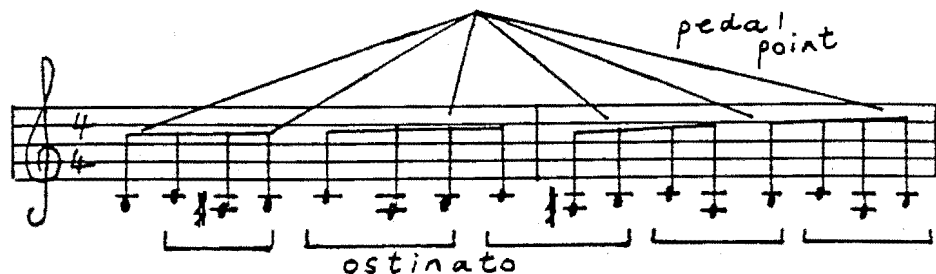
4.2 Pedal point obscured within an ostinato pattern

Ex. 2:10 W. Lang: *Miniaturen* (1927), Op.17 no. 1: m.1-2



The lowest strand comprises a pedal note disguised within an ostinato pattern which in turn is "tucked away" within motivic figuration. This is clearly demonstrated in the following schematic example.

Ex. 2:11 Ostinato pattern and pedal point



In the ostinato pattern the C and A# lend the note B semitonal support from above and below, where the repeated B forms a dominant pedal point in E minor.

4.3 Pedal points with multi-harmonic functions

In the following example both the tonic and dominant degrees are re-inforced through an elided pedal point.

Ex. 2:12 Bartók: Sonatine (1915), mov. 1: "Dudelsackpfeifer" m.1-12

Allegretto (♩ = 80)

1 6 10 12

sf *f* *mf* *sf* *f* *mf* *sf* *f* *mf* *sf* *f* *mf*

sempre f

The left hand accompaniment forcefully enunciates D and A (albeit with dissonant obscuration on occasion) as the dual pedal point representing simultaneously the tonic and dominant function respectively. Their open fifth construction and choice is in all likelihood a reference to the drones of the bagpipe.

As a matter of interest the first four introductory measures comprise a quintal triad, D-A-E, which presents in all encompassing style the three harmonic functions of the tonality elided together. E represents subdominant harmonic function in this example. A similar elision of harmonic functions is observed in the following work by Igor Stravinsky (1882 - 1971) a contemporary of Bartók. Note how this example appears three years after the previously mentioned Bartók example.

Ex. 2:13 Stravinsky: "Marche du Soldat" from *L'Histoire du Soldat* (1918) m.4-10

4 5 6 7 8 9 10

Cor. Trb.

Cb.

p rub

Un sol - dat qui rentre chez
Trappe a sol-dier with his

The persistent ostinato pattern comprises a tonicising pedal point. Mellers (1977:1006) writes

'the D-E in the ostinato is really the tonic and dominant of D major elided together: and that the G of the ostinato represents the subdominant ... In telescoping ... all three of these chords Stravinsky places in space ... chords that would normally progress into one another.'

5. DOMINANT AND SUBDOMINANT MODIFICATION AND SUBSTITUTION

Chords formed on the three primary notes are frequently obscured due to either chromatic alteration of one or more of the constituent member tones or the substitution of another chord to act in lieu of the primary diatonic intention. Thus through surface detail alteration the diatonic intent of a chord or chord progression is disguised.

In the following example the dominant seventh tetrad (type aII) is altered and is presented as a modified dominant. The diatonic scale member, C# is represented as a chromatically lowered C ♯ resulting in the following type bII tetrad: A - C - E - G.

Ex. 2:14 Bartók, *Sonatine*, third movement: m. 102 - 107

102 103 104 105 106 107

allargando

sempre cresc.

p

Aufführungsdauer
Durée d'exécution 1' 45"

The strong tonal pull of the dominant seventh tetrad (type aII) is negated due to the chromatic lowering of the leading note, C#. The dominant - tonic progression is rendered less powerfully complete and its tonal intention is camouflaged. Therefore this phenomenon is encountered within compositions which embrace the expanded tonal idiom.

In the following example the well-worn sound of the dominant seventh (type aII) made trite through two centuries of overuse is replaced firstly by a dominant seventh (type dII) and is followed by a dominant seventh (type eII). The latter is commonly referred to as the French augmented sixth chord. These two modified dominant tetrads act as dominant substitutes. Both of them add colour to the harmony surrounding the dominant degree and display in their construction a direct connection to the fully - chromaticised major scale. This is borne out with the chromatically lowered leading note, D \flat in the tetrad type dII and the chromatically lowered dominant, F \flat in the tetrad type eII.

Ex. 2:15 Lang, op. 17/6: m. 5 - 6



m. 5¹⁻² : B - D - F - A, E : V⁷c (tetrad type dII)

m. 5³ : B - D \sharp - F - A, E : V⁷c (tetrad type eII)

m. 6 : E - G \sharp - B, E : I (triad type a)

D \sharp = lower auxiliary

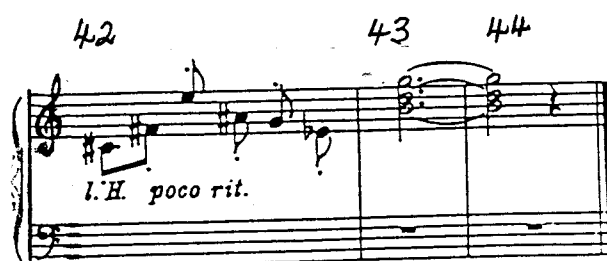
Note how these chord progressions result in an Imperfect authentic close.

The subdominant triad does occur with modified note members either with a chromatically raised or lowered root note or with another chromatically altered

constituent member note. As a subdominant substitute either the diatonic or chromatically lowered supertonic frequently serves as the root note of a chord.

In the following example subdominant harmonic function is represented by the major triad on the flattened submediant (upper mediant relationship with the subdominant). This in itself acts as harmonic function disguisement. However an additional camouflaging element is detected - the constituent member B \flat is enharmonically represented as an A \sharp . Furthermore this A \sharp is elided with the previous tetrad.⁷

Ex. 2:16 Lang, op. 17/4: m. 42 - 44



m. 42¹⁺² : F \sharp - A \sharp - C \sharp - E, G : VII⁷c (tetrad type aII)

Dominant harmonic function

m. 42^{2,2+3} : E \flat - G - B \flat (= A \sharp), G : VI (triad type a)

Subdominant harmonic function

m. 43 + 44 : G - B - D, G : Ib (triad type a)

Due to the diatonic and chromatic roots being juxtapositioned a Strauss phase two plagal cadence is effected. This cadence falls totally within the ambit of the expanded tonal idiom. Note how the tonic is weakened through its appearance in first inversion. Thus a strong and clearly delineated cadential progression is eschewed.

⁷

This analysis differs from that of Roos who, in my opinion, erroneously analyses this measure as a type aIII tetrad formed on the leading note: F \sharp - A \sharp - C \sharp - E \flat . His analysis ignores the diatonic note, G. For reference consult the following Master's dissertation: Roos, J. 1983. *The Piano Music of Walter Lang (1896 - 1966) with special reference to harmony*, Pretoria: Unisa, p.69.

6. DOUBLE-DEGREE CONSTRUCTIONS

A double-degree chord arises when a constituent chord member is represented both diatonically and chromatically. In the following example the principal third of the tetrad is presented simultaneously with the chromatically flattened version of the same degree.

Ex. 2:17 Lang, op. 17/2: m. 3³ - 4²



m. 3³⁻⁴ : C - E E^b - G - B^b, F : V⁷ (tetrad type aII)
d.d

m. 4¹⁻² : F - A - C, F : I (triad type a)

G# = appoggiatura

Note the authentic close formed by this chord progression.

The clash between the E and E^b of the dominant tetrad (double-degree type aII) at m. 3³ is a clear example of a double-degree construction. Since the key is F major the main diatonic leading note is E and the subsidiary leading note is E^b.

Through creating a double-degree on the genus-defining third of the tetrad Lang creates an element of ambiguity and superficial (surface detail) tonal disguise. Analysis reveals the genus-defining major third degree, E to be the principal tetrad member with the E^b acting as a colouristic obscuration.

In the ensuing analyses found in this dissertation other constituent chord members appear as double-degrees. When the root note is obscured in this manner clear cut harmonic definition is camouflaged. As will become evident in the ensuing analysis double-degree constructions develop the ethos of the expanded tonal idiom through

obscuring tonally defining chord elements.

However not all double-degrees arise principally through harmonic considerations. Chapter Three outlines the coincidental construction of double-degree chords due to the vertical convergence of melodic-harmonic lines. These dissonant chords impact upon the texture, developing further the superficial (surface detail) obscurations so prevalent in expanded tonality.

7. BARTÓK AND EXPANDED TONALITY

7.1 Bartók as a twentieth-century tonal composer

According to Burge (1990:73) the unique compositional style of Bartók involves 'both tonal and atonal elements'. This nonsensical statement must be read in conjunction with the following direct quotation emanating from Bartók after he designated keys to two of his *Sketches* (1908 - 1910) to forestall 'those who label all music they do not understand as "atonal" music'.⁸ The aspects of Bartók's harmonic style which Burge labels "atonal" can be explained in terms of expanded tonality and the fully-chromaticised scales.

Bartók did not consider his music to be devoid of cadential formulae, recognisable chord roots or any other form of tonicising agent.

'He never wrote a twelve-tone work, nor one actually atonal; and although some scores ... are relatively far from accepted standards of tonality, even these have a basis in tonality' (Stevens, 1993:174).

Thus it can be concluded that Bartók considered himself to be a tonal composer. However even a cursory examination of his oeuvre will reveal that his tonality is not that found during the Classical and Romantic eras. Whilst his tonality is founded in the Classic-Romantic continuum, it is a twentieth-century manifestation of tonality. As a composer Bartók played an important role in developing a tonal and harmonic

⁸ Quoted in Stevens, H. 1993. *The Life and Music of Béla Bartók*, 3rd. ed., Oxford: Clarendon Press, p.118.

idiom which later came to be known as expanded tonality. Expanded tonal properties are discussed in this chapter and form the basis for analysis in this dissertation.

His tonal language whilst being based on conventional functional harmonic progressions and major or minor tonalities has the following specific twentieth-century traits:

- * modes, in particular Dorian, Phrygian and Lydian
- * synthetic scales, derived in part from folkloristic origin
- * pentatonicism
- * whole tone scales
- * fully-chromaticised scales
- * bimodality and polymodality
- * chromaticism
- * unresolved dissonances including chords of addition and omission
- * non-conventional tonicising procedures
- * Strauss cadences

These aspects and others of his tonal style will be revealed in the detailed analyses which follow. It will become clear that Bartók's music which is tonal in its basic conception is a part and parcel of the organic growth in harmony found during this century.

7.2 Traditional tonal connections in Bartók's style

Notwithstanding the many twentieth-century characteristics of his tonal idiom the core of his tonal language gives every indication of maintaining links with the historical past.

This view is sustained by Straus (1990:1) when he states:

'Music composed in the first half of the twentieth century is permeated by the music of the past ... Sonorities like the triad ... and structural motions like the descending perfect fifth are to profoundly emblematic of traditional tonal practice to melt quietly into a new musical context. Traditional elements

inevitably retain their traditional associations ... They evoke the traditional musical world in which they originated, even as they are subsumed within a new musical context ... They (twentieth-century composers) invoke the past in order to reinterpret it.'

Through maintaining links with the past tonal tradition Bartók does not create an entirely new tonal system or idiom. Whilst some of his compositions display distinct twentieth-century trademarks such as quartal harmonic constructions and tone clusters throughout his career he employs chords based on tertian constructions (Kárpáti, 1982:373). This is especially valid for the germinal period under discussion which has a strongly traditional tertian bias.

Furthermore as a concert pianist, piano pedagogue and music editor Bartók came into daily contact with music from the Classic-Romantic continuum. The influences he unconsciously assimilated from being frequently exposed to this music doubtlessly re-inforced certain fundamental traditional traits.

Lastly the traditional folk music he so rigorously collected and studied re-inforced the tonal nature of his compositions. Nelson (1987:65) quotes Bartók as follows:

'I must again stress: our peasant music, naturally is invariably tonal ... Since we build upon a tonal basis of this kind in our creative work, it is quite self-evident that our works are pronouncedly tonal in type.'

7.3 Analysing Bartók's expanded tonal style

Bartók's expression of tonality frequently does not reveal the music's key with simple, elementary clarity. Whilst functional chord progressions and cadential formulae are present they are invariably camouflaged through the use of a variety of obscuration techniques. These techniques include amongst others chords of omission and addition, double-degree chords and non-tertian harmony. These obscuration techniques and others will be displayed and discussed during the analytical chapters of this dissertation.

Through this analytical process a basis is provided for placing Bartók into tonal

perspective. Cadences, root movement and other tonicising elements can be ascertained and obscuration methods can be clearly delineated. Direct links with traditional tonality can be discerned and specific twentieth-century manifestations of tonality can be isolated and examined.

8. A DISSENTING POINT OF VIEW

8.1 Other theorists consider Bartók's tonal language

A number of musicologists have attempted to codify Bartók's musical language. Wilson⁹ lists a number of theorists who write on the subject and briefly outlines their theories. Of the theorists mentioned by Wilson he considers Lendvai to be 'almost certainly the most influential theorist of Bartók's music' (Wilson, 1992:6). The other theorists mentioned include amongst others Milton Babbitt, Elliott Antokoletz, Felix Salzer and Roy Travis.

Wilson (1992:6) groups these theorists into two "schools": the "Hungarian scholars" and "others". Two of these theorists lead the scholarly research of each "school" respectively. Ernő Lendvai represents the viewpoints of the "Hungarians" and Antokoletz the "non-Hungarians".

A very brief description of Lendvai's theory follows.

8.2 Lendvai

According to Lendvai intervals, formal structure (in particular climactic points), scales, modes and chords are determined by the Fibonacci series or golden section proportion, 'a phenomenon observed in ancient Greek and Egyptian architecture' (Milne, 1982:106).

Coupled to these organisational properties is the 'axis system' which according to

⁹ Wilson, P. 1992. *The Music of Béla Bartók*, London: Yale University Press.

Lendvai played a major role in Bartók's tonal language. Hindley ed. (1981:415) explains it thus:

'... the interval of the tritone ... became the distinguishing mark of Bartók's language and the basis of the system of harmonic axes he evolved ... Each tonic key under this system possesses two virtually related keys, of which each in its turn possesses two others. The base (sic) notes of the two related keys are always a tritone apart, lying a minor third on each side of the tonic. Thus the tritone becomes the basic interval, and two tritones, a minor third apart, form the two axes of the tonic.

Similar pairs of axes are formed starting from the dominant and subdominant, and the tonality of these encompasses the twelve semitones of the chromatic scale.'

8.3 Commentary on Lendvai's theories

It is quite clear from Lendvai's analyses that the supra-ordered phenomena of the Fibonacci series are present in the compositions analysed. However to assume that Bartók consciously planned every note of his compositions to correlate with a fixed numerical series is inconceivable. Such an approach to composition would lead to an artificial inspiration from without and not a musical work humanly inspired from within.

Supra-ordered phenomena in musical composition is not a conscious activity,

'the unconscious creeps into the very crevices of a composition, forming and shaping ideas in the most unlikely places without our even being aware of this formative, silent activity' (Everson, 1978:121).

This idea is elucidated further by Read who states:

'The talented ones, the geniuses, are the artists who are most sensitive to imagery that is present and moving in the dark, nonpersonal recesses of their own psyche ...' (Quoted by Everson, 1978:117).

Bartók viewed composition as a naturally instinctive process, not one dictated according to pre-arranged supra-ordered phenomena. Milne (1982:106) quotes Bartók as follows:

'... intuition plays a far more prominent role than one would imagine. All of

my music and, last but not least, this problem of harmonisation depend on instinct and emotion.'

Compared to Lendvai's theories and analyses about numerical series and the Golden Section this dissertation aims at placing Bartók's tonal language in a wider context and perspective. A perspective which views Bartók's tonality as an extension of the harmonic practices of the Classic - Romantic continuum.

The existence of unusual scalar patterns, many with folkloristic origins, adds a piquant quality to his harmonic idiom. However these scales (some of which do comprise tritone intervals) form part of a wider tonal context and this dissertation will show their existence within the fully-chromaticised milieu. Tritone relationships are viewed from the perspective of the fully-chromaticised ethos as opposed to their derivation from the Golden Section and a numerical series.

Bartók's legacy as an ethnomusicologist displays his consummate precision as a researcher. The results of his research was made readily available through both publishing and public lecturing. He did not selfishly cling to this knowledge, he disseminated it. Therefore it is highly probable that should Bartók have evolved a compositional basis, such as the axis-system, he would have made this system known to others.

Lastly I hope that the ensuing analyses will prove to the reader the viability of expanded tonal analysis as a tool towards understanding Bartók's tonality. I trust that it will become abundantly clear that Bartókian harmony did not simply emerge, but that it has distinct connections with traditional tonality and is merely a twentieth-century manifestation of that tradition.

CHAPTER THREE: FOURTEEN BAGATELLES, OP. 6 (1908)

1. INTRODUCTION

The composition of the **Fourteen Bagatelles** as is mentioned in Chapter One marks a watershed in Bartók's career as a composer. They represent a focal point in Bartók's career as a composer, especially his growth towards a uniquely individualistic style, depicting 'decisive steps towards the future and many of the traits of Bartók's mature style' (Milne, 1982:39).

In the **Fourteen Bagatelles** a two-pronged set of influences are discernable.

The one influential sphere is found in the French Impressionistic composers evolutionary treatment of harmony, especially that of Claude Debussy (1862 - 1918). Here tonality is preserved though its maintenance is flavoured through enrichment procedures such as the re-introduction of modality, whole tone scales, pentatonicism, bitonality, unresolved dissonance and an emphasis upon harmonic colour as opposed to harmonic progression.

The other influential sphere revolves around Bartók's research into Balkan folk music. He was not only exposed to the folkloristic scales, modalities, melodies and harmonies but also to the compact and terse construction of folkloristic music.

These influences led him away from his earlier composition style which was modelled after the late-Romantic idiom. Here the influences of Johannes Brahms (1833 - 1897), Felix Mendelssohn (1809 - 1847) and Franz Liszt (1811 - 1886) are especially prevalent.

In the **Fourteen Bagatelles** Bartók asserts his creative and original understanding of tonality and harmony. With hindsight, it is evident that Bartók's tonality

foreshadowed what was to become known as expanded tonality and that his use of fully-chromaticised scales was entirely intuitive.

This is borne out by Stevens (1993:111) who states:

'By the time the Fourteen Bagatelles, opus 6, were written, Bartók's expressive vocabulary was beginning to assume its definite shape ... 'From Opus 6 on; he wrote to Edwin von der Nüll, 'I always tried to use the supradiatonic tones with the greatest possible freedom.' The Bagatelles demonstrate many of the devices which later became an integral part of this technique.'

In the ensuing discussion the techniques employed by Bartók to either define or obscure tonality are highlighted. Examples drawn from the **Fourteen Bagatelles** illustrate each of the points mentioned.

2. DISTINCTIVE EXPANDED TONAL FEATURES OF OPUS 6

2.1 Fully-chromaticised scales

Bartók designated the key of B minor to the Twelfth Bagatelle (Griffiths, 1984:48). The correctness of this key-designation is borne out in the following notational example. Note how every member of the fully-chromaticised minor scale of B is utilised. This lends credence to the argument that Bartók's intuitive use of the expanded (fully-chromaticised) scales was musically accurate.

Ex. 3:1 Bartók, op. 6/12: m. 32 - 44

32

5/8 6/8 1/58 accel.

molto espress.

36

9/8 1/50 *molto espress.* 6/8

sempre p

39

9/8

pp *più*

42 44

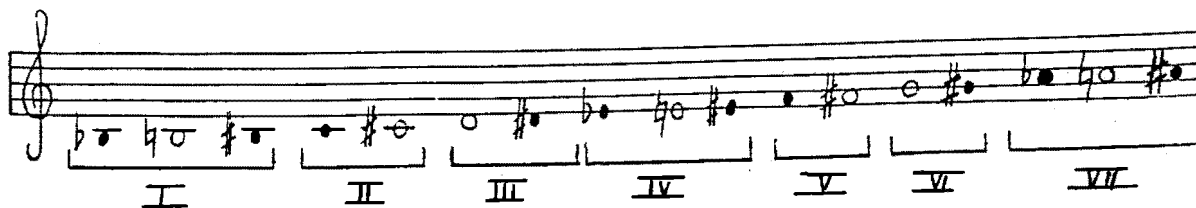
ppp calando

pp *ppp*

Detailed description: This musical score for Bartók's op. 6/12, measures 32-44, is written for piano. It begins at measure 32 with a 5/8 time signature and a key signature of one sharp (F#). The melody in the right hand is characterized by rapid sixteenth-note passages. The left hand provides a harmonic accompaniment with chords and moving lines. Measure 33 introduces a 6/8 time signature, and measure 34 features a 1/58 time signature. The tempo marking 'molto espress.' (very expressive) is present from measure 32 to 34. Measure 35 includes an 'accel.' (accelerando) marking. Measure 36 starts with a 9/8 time signature and a 1/50 time signature, with the tempo marking 'molto espress.' continuing. The dynamic marking 'sempre p' (piano) is indicated. Measure 37 continues the 9/8 time signature. Measure 38 introduces a 6/8 time signature. Measure 39 features a 9/8 time signature and the dynamic marking 'pp' (pianissimo). Measure 40 continues the 9/8 time signature. Measure 41 features a 9/8 time signature and the dynamic marking 'più' (piano). Measure 42 features a 9/8 time signature and the dynamic marking 'pp'. Measure 43 features a 9/8 time signature and the dynamic marking 'ppp' (pianississimo). Measure 44 features a 9/8 time signature and the dynamic marking 'ppp'. The score concludes with a final chord in the right hand and a sustained chord in the left hand.

Ex. 3:2 Fully-chromaticised minor scale of B

(Every member of this scale is utilised in the previous example.)



Note how the final chord progression forms a plagal close within the expanded tonal idiom. This analytical conclusion is drawn through applying the Riemann function theory to this fully-chromaticised scale.

m. 42⁹⁻¹²: C - E \flat - G, b: bV , triad type b. Subdominant function

m. 43 - 44: B - D - F \sharp - A, b: I' , tetrad type bI. Tonic function

A \sharp = upper auxiliary.

This close constitutes a Strauss close in second phase due to the juxtapositioning of chromatic and diatonic roots.

Note the quartal triads notated in the bass clef, m. 39⁵ - 40⁶, which are an example of chord streaming. Their existence within the tonality of B minor can be explained through relating the root and constituent notes of each triad to constituent members of the fully-chromaticised minor scale of B.

2.2 Tonality through suggestion

The third Bagatelle from the opus 6 set serves as a good example regarding Bartók's approach to tonality. Bartók insinuates a tonality through strategically placed hints. However these traces of tonality remain mere suggestions and never emerge as plain and clear expressions of tonality. Thus his assertion of tonality is implied.

However Bartók perceived this Bagatelle to be in C major according to Antokoletz (1993:116). Antokoletz advances the following reasons to support Bartók's statement:

'leading note motions to C at the main cadences as well as the harmonic convergences between the fifth degree, G, in the ostinato and the tonic and third degrees, C and E, in the theme' (Antokoletz, 1993:116, 117).

The following notational example lends credence to the reasons advanced by Antokoletz.

Ex. 3:3 Bartók, op. 6/3: m. 1 - 10

1
3/4 \dot{c}
p sempre leggiero e legato
mf espress.

5
c
e
a

9
d
g
b

10
h

The musical score consists of four systems of piano notation. The first system (measures 1-4) shows a complex, rhythmic melody in the right hand, starting with a treble clef and a 3/4 time signature. The left hand is mostly silent, with a few notes appearing later. The second system (measures 5-8) continues the melody, with the left hand entering with a few notes. The third system (measures 9-10) shows the final measures of the excerpt. The notation includes various dynamics and articulations, such as *p* (piano), *mf* (mezzo-forte), *espress.* (espressivo), and *leggiero e legato* (light and connected). The notes are often beamed together in groups, and there are many accidentals. The overall style is characteristic of Bartók's early work, with a focus on complex rhythms and melodic patterns.

Note the following:

- a and b = C:Vb - I
- c and d = harmonic convergence between E and G creating the incomplete tonic triad, (C) - E - G.
- e, f, g and h = harmonic convergence between C and G creating the incomplete tonic triad, C - (E) - G.
- i = ostinato pattern which has both dominant triadic properties and dominant pedal point characteristics.

This Bagatelle is based on the fully-chromaticised major scale of C and Bartók's use of "supradiatonic tones" indicates his intuitive application of the expanded tonal idiom.

Ex. 3:4 Bartók, op. 6/3: Notation of lower strand m. 1 - 24

Handwritten musical score for a single melodic line, measures 1-24. The notation is on a single staff with a treble clef and a key signature of one sharp (F#). The time signature is 3/4. The score includes dynamic markings: *mf* *espress.* at the beginning, *piu p* around measure 15, and *mf* at the end. There are also accents (^) over measures 5, 10, and 24. The piece concludes with a double bar line at measure 24.

Ex. 3:5 The melodic (lower) strand comprises the following notes:

The notes bracketed under (a) represent the complete lower tritone of the fully-chromaticised major scale of C. The notes bracketed under (b) represent the ascending diatonic members of C major scale from the submediant to the upper tonic, m.22³-24.

Ex. 3:6 Bartók, op 6/3: m. 22 - 24

In this Bagatelle the three notes A, B and C are used to re-affirm the tonality through diatonic representation. This occurs at the conclusion of the Bagatelle when a rhythmically and harmonically weak imperfect authentic close is formed. Note, also, how the ostinato pattern in the final measure emphasises tonic triadic properties, as opposed to dominant, as the music comes to rest on the incomplete tonic triad, C - (E) - G. The lack of a genus-defining third creates an element of tonal ambiguity in line with Bartók's assertion of tonality through implication.

It can be seen that through melodic movement, upper and lower strand harmonic convergences, ostinato patterns and pedal points Bartók attempts to procure tonality and not eschew it, albeit through untraditional methods. The fully-chromaticised major scale acts as an all-embracing tonal focal point. Once the notes of the ostinato pattern are included with the melodic ones it emerges that only three degrees of the fully-chromaticised scale are not used: the chromatically raised and lowered dominant and the chromatically raised submediant.

Ex. 3:7 Fully-chromaticised major scale of C

(Notes used in this Bagatelle are indicated with arrows)

2.3 Bitonality

Bartók wrote the following concerning the tonality of the first Bagatelle:

‘The tonality of the first Bagatelle is is, of course, not a mixture of C-sharp minor and F minor, but simply a Phrygian coloured C major’. (Quoted by Simms, 1986:237).

This statement describes the tonal product of a bitonal process.¹ It also significantly draws attention to Bartók’s intuitive use of the fully-chromaticised scale. The first ten measures of the first Bagatelle serve as a notational example.

Ex. 3:8 Bartók, op. 6/1: m. 1 - 10

¹

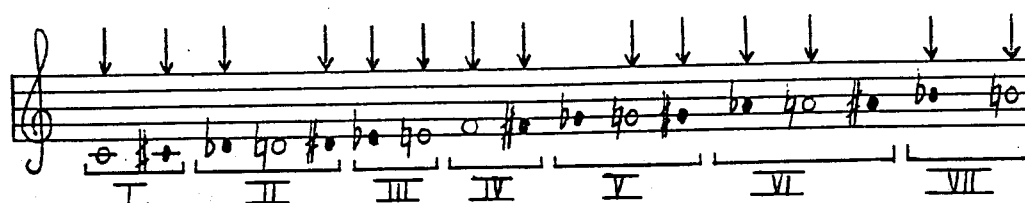
The concepts surrounding the terms process and product as applied to bitonality were first introduced by F.H. Hartmann. Van der Linde (probably for the first time in print) draws on Hartmann’s definitions of these two aspects of bitonality in his inaugural lecture **Polytonality: Another case of Atonality?** (1969, Pretoria: Unisa Press.) Basically the process of bitonality produces an aural, and subsequently analytical, monotonal product. This product invariably utilises both the diatonic and chromatic members of the fully-chromaticised scales. Furthermore the expanded tonal monotonal product usually gives rise to the formation of double-degree chords. Each key in the bitonal process is diatonic in construction, thereby allowing for the fully-chromaticised product.

The bitonal process is led visually through Bartók's utilisation of two key-signatures. A further aspect of the bitonal process is the diatonic representation of each strand; the upper being, I believe, in E major and the lower in C Phrygian.

The "amalgamation" of E major and C Phrygian into a tonal product represented by the fully-chromaticised scale results in the following:

Ex. 3:9 Fully-chromaticised major scale of C

(Arrows indicate the notes utilised)



Only three members of the fully-chromaticised major scale are not used. This clearly substantiates Bartók's tonal definition of the music and my previous assertion that Bartók instinctively used the fully-chromaticised scale as a tonal foundation for composition.

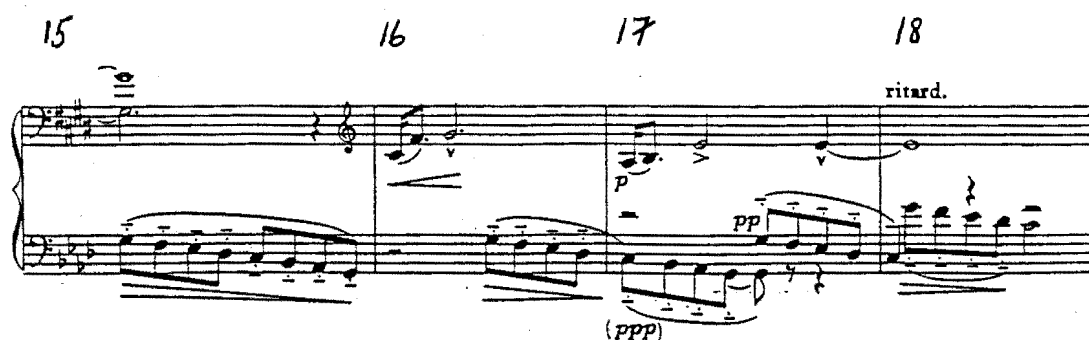
However analysts who do not possess a knowledge of the fully-chromaticised scales blatantly dismiss Bartók's key-designation as either 'curious' (Griffiths, 1984:48) or state that 'the primary integrative element of the work is not a key' (Simms, 1986:238). Antokoletz, who is also unaware of the fully-chromaticised scales does not wish to disagree with Bartók's key-designation and consequently draws attention to 'the tonic C major triad (which) serves as the convergent point of the two lines at prominent focal points' (Antokoletz, 1993:114).

In the previous example note that the notes C and E occur as a harmonic major third interval at m.3¹, 5¹ and 10¹. They represent an incomplete major triad C - E - (G). The lower Phrygian strand outlines the tonic minor triad C - E \flat - G with F and D \flat as unaccented passing notes. Thus the E \flat clashes with the sustained E \sharp causing a double-degree tonic triad to be formed: C - E \flat E \sharp - G, where E is the principal d.d.

mediant degree and E \flat the subsidiary mediant degree.

At m. 10¹ the interval C - E signifies a point of structural and harmonic repose. This is even more evident during the concluding incomplete measure, m.18, where the bitonal product represented by the tonic triad, C - E - G, is clearly enunciated. This is portrayed in the following notational example.

Ex. 3:10 Bartók, op. 6/1: m. 15 - 18

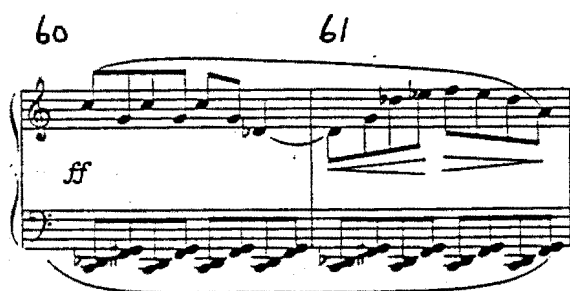


The monotonal product of the bitonal process employed by Bartók reveals his instinctive embodiment of the tenets of expanded tonality in his composition style.

3. SPECIFIC TONAL OBSCURATION TECHNIQUES

3.1 Chords of omission

Ex. 3:11 Bartók, op. 6/10: m. 60 - 61

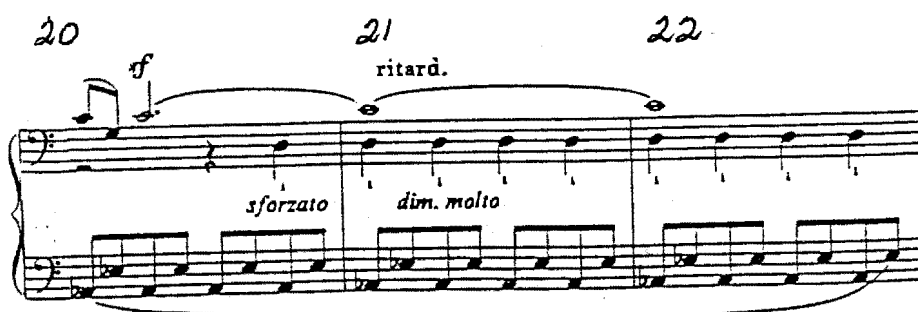


Note how the left hand ostinato pattern with tonic pedal point properties contains two colouring seconds, D \flat and F \sharp , both of which replace the genus-defining note E of the tonic triad C - E - G. Thus Bartók succeeds in eschewing an unambiguous

diatonic representation of the tonic triad. Tonal equivocation is pursued in the upper part which avoids a clear diatonic enunciation of the tonic triad. Quartal horizontal movement which incorporates the chromatic note $D\flat$ (m. 60³⁺⁴) is a further pointer towards tonal camouflaging.

3.2 Chords of addition

Ex. 3:12 Bartók, op. 6/10: m. 20 - 22



The major triad formed on the lowered submediant, $A\flat - C - E\flat$, is a chord of addition. The non-tertian chord note D is added to the complete representation of the triad. Through the incorporation of a dissonant element (D) the harmonic clarity of the diatonic triad is obscured. This is in conformity with the expanded tonal ethos.

3.3 French Sixth with modified dominant characteristics

Bartók eschews the principal dominant chord in many instances and replaces it with chords used in lieu of the principal dominant. This has the effect of minimising the strong tonal pull of the principal dominant, which results in the dominant being obscured. The following two examples display the effect of the French Sixth acting in the capacity of a modified dominant.

Example A

Ex. 3:13 Bartók, op. 6/11: m. 54 - 55



This tetrad formed on the diatonic dominant degree is a strongly implied French Sixth (type eII) tetrad without the third, B. It is notated as follows: G - (B) - D \flat - F and is used in lieu of the stereotyped dominant seventh (type aII). This tetrad's formation on the diatonic dominant degree gives it additional credence as a modified dominant. Its obscuration of the principal dominant falls within the ambit of the expanded tonal idiom. Note the resolution within the expanded tonal idiom. The notes G and C fleetingly represent tonic harmony, the natural resolution of a dominant - inspired chord. This feeling of "resolution" is quickly negated through the use of a dissonant and irregularly constructed chord.

Example B

Ex 3:14 Bartók, op. 6/14: m. 18 - 29

18

3/8

22 26

ritard. molto

29 a tempo

This pentad formed on the diatonic dominant degree of D major has strong French Sixth (type eII) characteristics. It is notated as follows: A - C# - Eb - G - B (type eIIA) and appears in first inversion. It is used in lieu of the stereotyped dominant major ninth (type aIIA). Bartók's use of this pentad in first inversion supports tonicisation procedures. The C# as the bass note acts as a tonal pillar and indicator because it is the leading note of D major. The repetitive use of this pentad for eleven consecutive measures is a further aid towards this pentad's tonally generating properties. However, it does not resolve onto its own natural tonic and is used merely to suggest a tonality. It is followed by a strongly implied C major section which is not a near - related key of D major. This juxtapositioning of two distantly related tonal areas falls within the ethos of the expanded tonal idiom.

3.4 Chord Streaming

3.4.1 Tertian chord streaming

3.4.1.1 Ex. 3:15 Bartók, op. 6/12: m. 23 - 25

(Chord streaming: m. 23⁵ - 25)

Note how the pentad type aIIA is employed in parallel motion above the sustained octave (A). The successive use of this pentad with a fixed note positioning allows the chord to be established 'as a mere sensuous and sonorous factor' (Apel, 1983:641). Bartók's use of this composition device displays the influence of the French Impressionistic composer, Debussy.

3.4.1.2 Ex. 3:16 Bartók, op. 6/10: m. 41 - 43

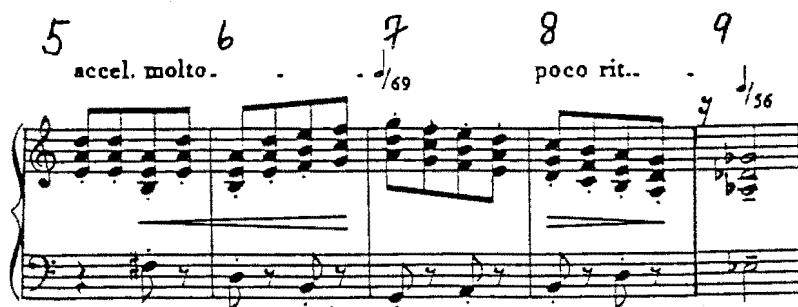
In this example chord streaming occurs in the left hand against an independent right hand melody. Partially incomplete dominant seventh chords (tetrad type a II) are streamed in a descending pattern, m. 41³ - 43¹. The strong harmonic connotations of the tetrad are negated and the harmonic colour of the tetrad is emphasized. Furthermore functional harmonic movement, usually associated with this tetrad type, is de-emphasized.

3.4.1.3 Ex. 3:17 Bartók, op. 6/10: m. 69 - 70

Sequentially descending augmented triads are accompanied by six-four major triads which are streamed. Through the use of chord streaming traditional harmonic movement is temporarily suspended and triadic colour is emphasized.

3.4.2 Non-tertian streaming

Ex. 3:18 Bartók, op. 6/11: m. 5 - 9



Parallel quartal constructions harmonise each of the melodic notes. Note the two resultant quartal tetrads formed at m. 5² and 9, respectively: F# - B - E - A and E \flat - A \flat - D \flat - G \flat . The dissonant quality of a quartal construction is entrenched aurally through parallelism. It is not resolved and is used in a harmonically non-functional way. Thus the expanded tonal spirit is embraced. Furthermore it is embodied through Bartók emphasising the distinctly unique aural quality of quartal constructions through his application of the streaming technique.

3.4.3 Tritone streaming

Ex. 3:19 Bartók, op. 6/8: m. 28 - 32

Tritone streaming in the left hand part is used to disguise the G minor tonality which is represented throughout by way of a sustained tonic pedal note. The last tritone in the streaming-series, C - F#, has tonally gravitating properties as it is the tritone

belonging to G minor. It is part of an unassertive authentic close which is constituted as follows:

m. 29²: D - $\frac{F\# - (A) - C}{\text{tritone}}$, g: V⁷d, tetrad type aII.
Dominant function

G = tonic pedal note

B, E = passing notes

m. 30 : G - B_b - (D) - E, g: I, triad type b. Tonic function
tritone chord of addition

D, F# = double retardation

Note how the effect of dissonant tritone streaming is exacerbated through the sequential treatment of a phrase built on tritone intervals in the right hand: m. 28² - 29 and m. 30 respectively. This sequence is another aid towards camouflaging the tonality and cadential point marking the close of this Bagatelle. Both the tritone streaming and sequential repetition are aids towards establishing the principles of the expanded tonal ethos.

3.5 Whole tone and Pentatonic scales

The influence of Debussy is observed through Bartók's use of whole tone and pentatonic scales. In the following notational example the right hand part outlines examples of these two types of scales.

Ex. 3:20 Bartók, op. 6/9: m. 33 - 36

33 34 35 36

poco accel..

leggiero

non rit.

pp

a = whole tone scale: F G A B D \flat E \flat F

b = whole tone scale (incomplete): (D E) G \flat A \flat B \flat C D

- c = pentatonic scale: C \flat D \flat E \flat G \flat A \flat (C \flat)
 d = pentatonic scale: D \flat E \flat G \flat A \flat B \flat (D \flat)

Note how these scales eschew tonally defining semitonal movement. Thus their tonally suggestive properties as opposed to tonally definitive properties allow the expanded tonal ethos to develop through their use.

3.6 Double-degree chords

Double-degree constructions during the **Fourteen Bagatelles** are mainly the result of horizontal orthographic considerations taking precedence over vertical considerations. Therefore their appearance is mainly coincidental and not purposefully aimed at harmonically destabilising and camouflaging the tonal design. However the mere presence of double-degree constructions has a colouristic and dissonant impact upon the texture. This clearly characterises the expanded tonal idiom where surface details obscure the basic harmonic content and construction of the music.

Ex. 3:21 Bartók, op. 6/10: m. 5 - 6



Note the two double-degree constructions at m. 6¹ and 6⁴ respectively:

- m. 6¹ : $\frac{C \ C\#}{d.d.}$ - E - G#, C : I (type c)
 m. 6⁴ : $\frac{A\flat \ A\sharp}{d.d.}$ - C - E, C : VI (type c)

Both of these double-degree constructions are the result of the following two aspects acting associatively.

- * The right hand strand comprises augmented triads in descending chord streaming formation which is momentarily interrupted at m. 6³.
- * The left hand strand comprises single-line thematic content which is independently conceived and is related to the previous four measures thematic construction.

The following two examples arise from a similar set of circumstances.

Ex. 3:22 Bartók, op. 6/11: m. 22 - 27

22 23 24 25 26 27

a tempo molto accel. .

cres.

The two double-degree constructions are:

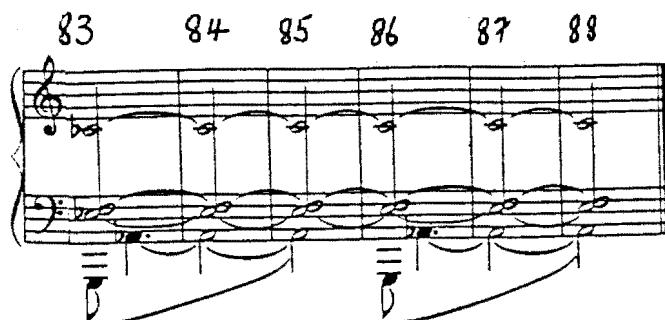
m. 25^{2,2} : $\underline{G\ G\#} - B - (D)$, C : V (triad type a)
d.d

m. 27^{1,2} : A - $\underline{D\ D\#} - G$, C : VI (quartal construction)
d.d

In both examples the right hand strand is pursuing an ascending scalar-type movement. In the first example it acts associatively with the left hand's shifting major third ostinato-type pattern and in the second example it acts associatively with streamed quartal constructions.

3.7 Obscuration through incorrect orthography

Ex. 3:23 Bartók,² op. 6/11: m. 83 - 88



m. 83 - 85; m. 86 - 88 : G - B (=C \flat) - (D) - F - A \flat - (C) - E \flat

This heptad is a dominant minor thirteenth (type aII.bII) where the leading note degree, B is enharmonically notated as a C \flat . This incorrect orthography obscures the construction of the final chord which is camouflaged further through the brief appearance of the diatonic dominant root note, G. Furthermore this dissonant and tonally strong heptad is not resolved onto its own natural tonic whereby a clearly defined key is created through harmonic punctuation. Therefore this heptad is utilised as a disguised tonal suggestion. In culminating a movement with such a strong element of tonal concealment Bartók is embracing fully the ethos of the expanded tonal idiom.

²

The author is indebted to Prof. B. van der Linde for drawing his attention to this example.

Ex. 3:24 Bartók, op. 6/7: m. 49 - 57¹

49 50 51 52 53

(a) (b) calando (c)

54 55 56 57

poco a poco accel..

poco a poco cresc..

This passage is based on the three primary triads of C major represented as double-degree triads with an additional colouring second. Thus a double-degree chord of addition is created in each instance. The three irregular constructions are:

- (a) C - E \flat E \sharp - G (+D), C : I
d.d
- (b) G - B \flat B \sharp - D (+A), C : V
d.d
- (c) F - A \flat A \sharp - C (+G), C : IV
d.d

In all three examples the genus-defining third is diatonically notated. The subsidiary - third representation in each instance is enharmonically notated. Therefore the:

- E \flat at (a) is incorrectly notated as a D \sharp ;
B \flat at (b) is incorrectly notated as an A \sharp ;
A \flat at (c) is incorrectly notated as a G \sharp .

This incorrect orthography does not minimise the double-degree aural impact of the passage. Visually it facilitates easier sight reading and acts as a guide towards how the pianist should place their hands on the keyboard (left hand above right hand).

Through utilising the incorrect orthography Bartók does draw attention to the black versus white key phenomenon. Some writers construe the effect of one hand playing exclusively on white notes and the other hand exclusively on black notes as an example of bitonality. Stevens (1993:111) states:

'The seventh (Bagatelle), Allegretto molto capriccioso, like the first, has bitonal elements, the left hand chiefly on the black keys at the beginning, the right hand on the white'.

This view is echoed by Purswell (1981:24) who states:

'No. 7 is another bitonal piece ... the black note melody in the right hand is accompanied by downward arpeggios on white notes in the left hand'.

I can only surmise that these two writers view the black note - white note scenario as a type of F# major - C major phenomenon, probably drawing on an incorrect interpretation of the famous "Petrouchka chord".³ Visually this chord comprises a F# major triad (in first inversion) and a C major triad. However the end-product is a double-degree pentad: F# - A# - C C# - E - G (Van der Linde, 1969:12).
d.d.

The black versus white key phenomenon would in all likelihood not be an issue if the chromatic notes were not enharmonically notated.

Furthermore the linear quartal formation A# - D# - G# found in the left hand receives visual emphasis through the incorrect orthography. In this example the incorrect orthography does lead to analytical tonal disguise even though the aural impact is clearly a monotonal product in C major.

³

This piquant sounding chord is found in the ballet **Petrouchka** (1911) by Stravinsky; hence, its name.

Ex. 3:25 Bartók, op. 6/11: m. 22 - 26

22 23 24 25 26

a tempo molto accel. .

cresc.

Note the incorrectly notated major triad at m. 25^{1,2}. The E# should read F♯, allowing a major triad B♭ - D - F to be correctly notated. This incorrect orthography is the result of horizontally accurate notation taking precedence over vertical orthography. The left hand clearly outlines chromatically shifting major thirds and the right hand strand clearly follows a scalar pattern which is made easier to sight-read due to its notation in sharps. This results in the vertically incorrect orthography appearing at m. 25^{1,2}.

Gillies (1983:8) states that: 'from 1926 a preference for the horizontal over the vertical became increasingly pronounced in his music, and its pitch notations'. The fact that Bartók employs this principle during this composition is further evidence that the **Fourteen Bagatelles** contain Bartók's mature composition style in embryo form. However this composition is pre-1926 and is still largely experimental by Bartók's own admission (Purcell, 1981:23).

4. TONALLY ENHANCING TECHNIQUES

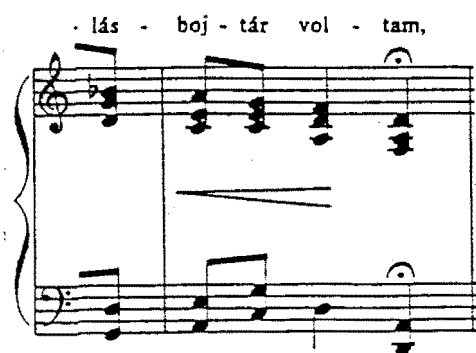
4.1 Cadencing

Harmonic punctuation and tonal definition are developed through cadencing. Though it is an aid towards achieving tonal clarity, the examples which follow clearly illustrate their expanded tonal properties. Harmonic obscuration techniques are employed to achieve cadencing which contains an element of some ambiguity.

Bagatelle no. 4 contains two cadences and a close which illustrate Bartók's cadential

treatment during this opus.

Ex. 3:26 Bartók, op. 6/4: m. 1^{3,2} - 2



m. 1^{3,2}: G - B \flat - D, d: IV, type b.

m. 2^{1,1}: A - C - E, d: V, type b.

m. 2^{1,2}: C - E - G, d: VII, type a.

m. 2²⁺³: D - F - A, d: I, type b.

These three harmonic functions presented in this function-sequence results in an authentic cadence.

Nelson (1987:71) believes that 'hierarchic harmonic procedures are absent'. He is clearly unaware of the fully-chromaticised minor scale which incorporates elements of the natural (Aeolian) minor scale. The appearance of the leading note as a C \flat and not as a C \sharp does not render the cadential progression to be without functional chord movement. It allows for modal colouring to be effected and develops the expanded tonal ethos of minimising clear-cut harmonic movement.

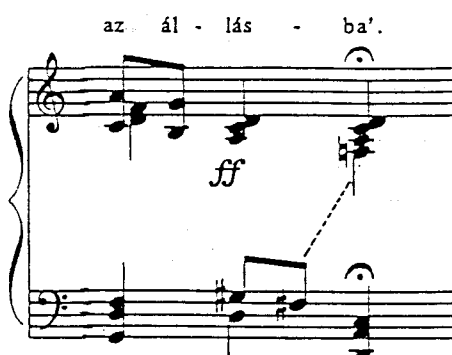
The next example comprises the same basic cadential progression with the triads replaced by higher order tertian constructions.

Ex. 3:27 Bartók, op. 6/4: m. 3^{3,2} - 4

d: IV^7 V^7 VII^7 I^7 _____
 bII bII aIIA bII
 SD O O T

The plagal close during m. 8 (which is identically repeated at m. 12) clearly displays expanded tonal attributes.

Ex. 3:28 Bartók, op. 6/4: m. 8



m. 8¹ : G - B \flat - D - F, d : IV^7 , tetrad type bII. Subdominant function

C and A = appoggiatura's

m. 8² : D - F \sharp - A - C, d : I^7 , tetrad type aII. Tonic function

G \sharp = chromatically raised upper auxiliary

m. 8³ : D - F - A - C, d : I^7 , tetrad type bII. Tonic function

Note the use of the chromatically raised and diatonic mediant degree in semitonal succession. This representation of the subsidiary mediant, F# followed by the principal mediant, F♮ displays the use of the fully-chromaticised scale as a camouflaging agent within the expanded tonal idiom.

The presentation of both the defining harmonic degrees (IV and I) at m. 8¹ and m. 8³ as unresolved tetrads containing dissonant elements allows the impact of the close to appear camouflaged. Furthermore the appearance of a tetrad type aII, at m. 8², on the tonic degree creates harmonic insecurity and tonal ambiguity. The use of the strongly dissonant G# as a non-chordal tone adds to the destabilising nature of this tetrad.

Notwithstanding the camouflaging aspects of this close the primary harmonic objectives are clearly visible and imbue the music with a sense of tonal purpose and direction.

4.2 Key-introductory six-four chord⁴ as a modulatory technique

In this opus two distinct examples of a six-four chord ushering in a new key are to be found. Thus an unresolved six-four chord (phase two) demarcates a new key's point of arrival and is used as a technique to effect a direct modulation between two tonal areas.

Due to the colouristic nature of music based on fully-chromaticised scales tonal modulations are not necessary to create tonal variety and harmonic shadings. However in the two examples which follow modulation is discreetly linked to the composition's formal structure. It either introduces a new tonal area, as is the case with the first example, or it re-introduces the original tonal area during the final formal division.

⁴

As far as can be ascertained Prof. B. van der Linde is the first theorist to call attention to this phenomenon. For further details of this analytical discovery consult

Van der Linde, B.S. 1989. *Study Guide for HCT401-9*, 6th. rev. ed., Pretoria: Unisa.

Van der Linde, B.S. 1993. *Study Guide for HARMPO-W*, 2nd. rev. ed., Pretoria: Unisa.

4.2.1 Ex. 3:29 Bartók, op. 6/5: m. 36 - 45

The musical score consists of two systems of piano music. The first system contains measures 36 through 41, and the second system contains measures 42 through 45. The notation is in G minor, 3/4 time. Measures 36-40 feature a tonic six-four chord in F major (F-A-C) with a dissonant major second (C) added, creating a G-Bb-D(+C) chord. Measures 41-45 show the key of G minor reasserted.

From m. 41 onwards the macro-tonality of this Bagatelle, G minor, is reasserted after a short tonal diversion to F major, m. 28 - 40. The tonic six-four chord which re-introduces the key of G minor at m. 41 is camouflaged through the use of an added dissonant major second, C. The triad is thus a chord of addition and is constructed as follows: G - B \flat - D (+C). The movement from F major to G minor can be construed as an "abrupt modulation" with the latter key being introduced simultaneously with the use of the six-four chord.

4.2.2 Ex. 3:30 Bartók, op. 6/2: m. 11 - 14

11 12 13

$\frac{2}{2}$

poco f

14

dim.

These brief four measures are in C major. Note how thirteen members of the seventeen member fully-chromaticised major scale of C are utilised, including every diatonic member. The key is unequivocally introduced at the start of m. 11 which has a chord of the added sixth as its harmonic basis: C - E - G (+A). The A serves as a diatonic added second with a subtle camouflaging effect.

Ex. 3:31 Fully-chromaticised major scale of C

(arrows indicate the notes utilised in the passage.)

I II III IV V VI VII

4.3 Pedal points

4.3.1 Undisguised pedal points

4.3.1.1 Sustained note

Ex. 3:32 Bartók, op. 6/5: m. 77 - 90

77
a tempo
mf

81
dim.

84
p

87
pp

90

In the afore-going example note how the macro-tonality, G minor, is re-inforced through a sustained tonic note, G. This note, which appears in the bass, acts as a sustained tonic pedal point. Thus the tonic degree is used to create tonal focus.

4.3.1.2 Repeated tetrad

The re-iterated tonic tetrad (type bII) m. 85 - 89 comprises the note G in a melodically prominent placing. Thus the root, G, of the tetrad comprises tonic pedal

point characteristics and can be considered as an inverted tonic pedal point.

Note how this tetrad is emphasized through the preceding tetrad occurring at (a) and (b) which provides support from below.

Both the sustained and repeated note pedal points are centred around the tonic note thereby further entrenching the tonality. From m. 85 - 89 this constitutes the doubling of the tetrad's root note.

This tetrad acts as an unifying harmonic agent throughout this Bagatelle and is constructed from the mode of the principal theme. This is borne out in the following notational example.

Ex. 3:33 Bartók, op. 6/5: m. 1 - 23

1 5

p leggiero

p poco marc.

Ej! po pred

9

naš, po pred naš, po pred na - šie dve - re, po pred na - šie dve - re,

13 16

Ej! ma - lo - va - ňý šu - haj, ma - lo - va - ňý šu - haj bie - lu ru - žu se -

21 23

The asymmetrically constructed fifteen measure theme is a Slovakian folksong which is notated, with accompanying text, in the lower strand from m. 5 - 19. This diatonic melody is based on the Dorian mode of G.

The repeated tetrad, which is notated in the treble clef, is constructed from the diatonic members of the Dorian mode of G where the tonic note is the root and the thirds superimposed above it create the tetrad: G - B \flat - D - F. This tetrad appears in first inversion and is not 'an ostinato of added-note chords' (Stevens, 1993:111). This is made abundantly clear from m. 21 onwards where the tetrad is displayed in root position and in all three inversions with all four diatonic member tones being the only notes in existence.

Note how at (c) the repeated tonic pedal note continues unabated even though the underlying harmony does alter.

4.3.2 Disguised pedal point

Bagatelle no. 2 comprises a dominant pedal point which is disguised through the addition of a diatonic major second.

The dominant quality of the pedal point is easily ascertained once the tonal quality of the melody and the utilisation of the fully-chromaticised scale, which is notated on the lower staff, becomes clear. The first five measures serve as an example.

Ex. 3:34 Bartók, op. 6/2: m. 1 - 5³

1 2 3

Allegro giocoso $\text{♩}/16$
2/2

p

a b

4 5

c d e f

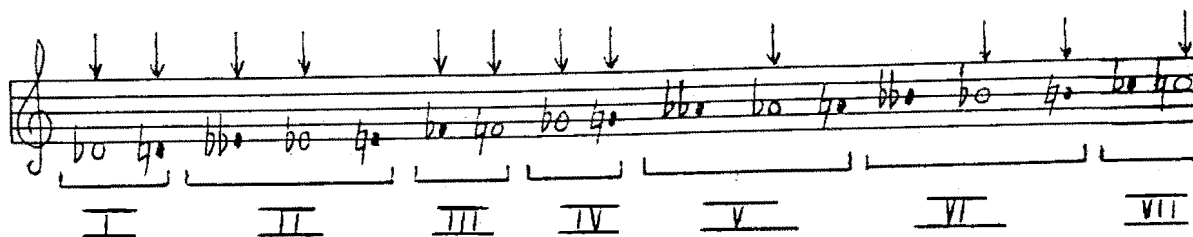
The left hand comprises a series of two-note groupings which are labelled (a) - (f) in the example. The following example relates to these groupings.

Ex. 3:35

(a) (b) (c) (d) (e) (f)

The strong magnetic pull towards the tonic is clearly evident. Diatonic tritone-resolution, (b) and (c) is another clear indicator of the key being that of D \flat major.

All the diatonic member tones of D \flat major scale are present with either a chromatically raised or lowered partner excepting the dominant and leading note degrees which are notated exclusively diatonically. The following example of the fully-chromaticised scale of D \flat major clearly depicts this where arrows indicate the notes used by Bartók.

Ex. 3:36 Fully-chromaticised major scale of D \flat 

The development of this pedal point (m. 23³ - 30) is a further indication of its dominant properties. Note in the following example how pure diatonic and added second representations alternate and form an ostinato pattern within the pedal point manifestation.

Ex. 3:37 Bartók, op. 6/2: m. 23³ - 30

Note how at m. 30³⁺⁴ the original ostinato notes are harmonically integrated with the left hand forming the tonic triad with typical expanded tonal characteristics. It is a chord of omission without the genus-defining major third. This element of ambiguity is compounded further through the use of a colouring second, B \flat , creating a partially completed chord of the added sixth: D \flat - (F) - A \flat (+ B \flat).

Through using the analytical processes akin to expanded tonality the dominant quality of the pedal point can be positively identified.

CHAPTER FOUR: ALLEGRO BARBARO (1911)

1. INTRODUCTION

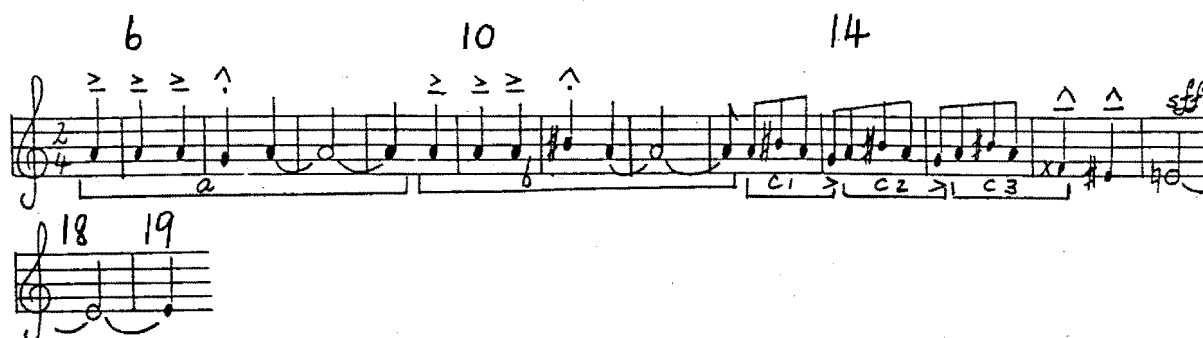
Allegro barbaro is a piano work which clearly depicts raw, unrestrained energy. The inspirational source for this vigorous and powerful piece can be located in the folk music Bartók was exposed to during his ethnomusicological excursions. Stevens (1993:120) writes: 'Its savage energy has its roots in the East; it is an authentically Magyar work'.

The rhythmical characteristics which pervade this work are the music's most dominant feature and can be tabulated as follows:

- * Firstly, the performance tempo must be strictly maintained and adhered to (tempo giusto).
- * Secondly, the underlying rhythmic structure is identified through its quickly-moving, motorically pounding features. This rhythmic framework is rendered more complex through the utilisation of shifting accents and metrical changes. These rhythmical characteristics are found in the fabric of Hungarian peasant dance music. Bartók has adapted these folkloristic characteristics and incorporated them into a Western style piano piece. 'Bartók shows for the first time in his music for piano a complete assimilation of folk elements, a folk-determination of an original work whose autochthony cannot be misread' (Stevens, 1993:120).

The melodic-thematic content also displays a folkloristic derivation. The principal thematic phrase found near the beginning serves as an example.

Ex. 4:1 Bartók, *Allegro barbaro*: m. 5² - 19, Notation of melodic-thematic strand



This phrase is characterised by step-wise movement, a narrow range and a repetitive re-enforcement of both a single note, A and a short four-note motif at C1, C2 and C3 which develops from both a and b, where b is a slightly varied form of a. Furthermore a, b and c are terse and concise motivic statements. These characteristics are all found within the motivic-thematic fabric of Hungarian folk music.

Allegro barbaro is structured according to a ternary design. The A sections which flank the middle B section are largely based on similar thematic material thus, the main differences between the two sections are textural, modal and dynamic. Bartók's presentation of similar thematic material in an altered guise giving it an entirely modified perspective displays his inventiveness in applying variation technique.

Section A is principally characterised by:

- * a very thick homophonic largely chordal texture achieved through melodic octave doubling and doubling of chordal notes;
- * a proliferation of heavy dynamic markings and interpretive indications; and
- * the use of the minor mode.

Compared to Section A the middle Section, B, comprises:

- * a thinner homophonic texture mainly due to a slender, mostly four-part, chordal presentation with a minimum of melodic octave doubling;
- * a considerably quieter range of dynamics apart from some fortissimo outbursts; and
- * the major mode predominates initially and is followed by tonal instability where the minor mode predominates.

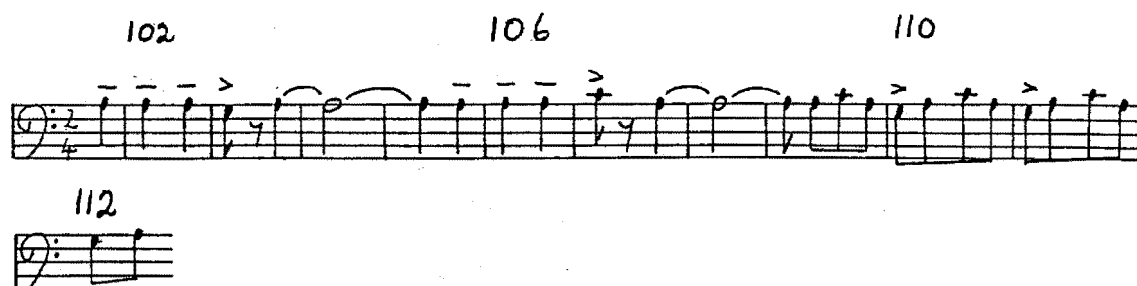
2. SECTION A: m.1 - 101¹

2.1 Tonality within Section A

2.1.1 Principal thematic content

Allegro barbaro utilises a fifteen-measure melodic-thematic motif as its principal theme. This theme is based on the natural minor scale of A.¹ It appears, almost in its entirety, in diatonic orthography from m.101² onwards.

Ex. 4:2 Bartók, **Allegro barbaro**, m. 101² - 112¹, Notation of melodic-thematic strand



This diatonically based notation is in strong contrast with the notation used during the first appearance of the theme from m. 5² onwards.

¹ The author is indebted to Prof. B. van der Linde for this information.

Ex. 4:3 Bartók, Allegro barbaro, m. 5² - 19¹, Notation of melodic-thematic strand



Here the use of chromatic scale members, notably the B#, obscures the visual impact of the melody's tonality. However, the musical effect of the key of A minor is not totally negated through the introduction of orthographical enharmonisation. The repetition of the tonic note and the construction of the melody whereby it revolves around the tonic note serve as the principal protagonists of the A minor tonality. Apart from three degrees B#, Fx and E# the melody is notated diatonically.

2.1.2 Harmonic accompaniment

Ex. 4:4 Bartók, Allegro barbaro, m. 1-15

The musical notation for Ex. 4:4 shows a piano accompaniment in 2/4 time, A minor. The piano part is marked with various ornaments (accents, slurs, and dynamic markings like *sf*, *mf*, *ff*) and a melodic line starting at measure 10. The notation is in 2/4 time and A minor.

The homophonic chordal texture accompanying the A minor-based melodic theme is clearly constructed in the key of F# minor.

The many repetitions and appearances of the tonic triad in clear diatonic representation as well as the alternation of diatonic tonic and dominant root notes are the primary factors entrenching the tonality of F# minor.

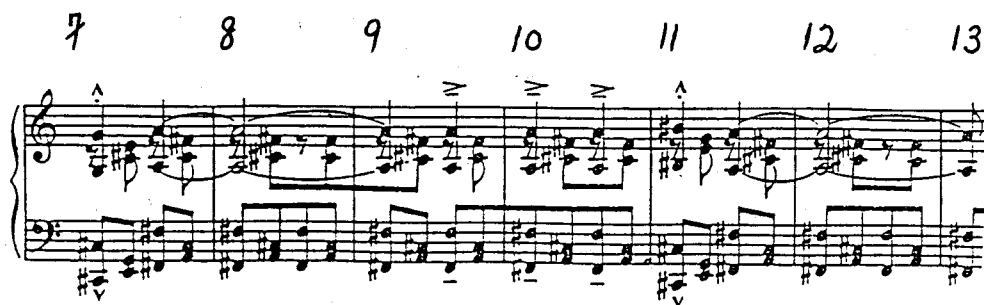
The accompaniment strands are strongly diatonic in notation apart from the dominant triad which is portrayed as a type d (diminished).

2.1.3 Bitonality

The juxtaposition of an A minor melody against a F# minor accompaniment results in a case of bitonality.² Bitonality as a process in this instance is effectively portrayed due to the predominance of diatonicism within the strands. The key of the bitonal product is that of F# minor. Bartók utilises the processes of bitonality to create an expanded - tonal product. Expanded tonality is clearly evidenced through the use of the fully-chromaticised minor scale and double-degree constructions (discussed during 2.1.4). Thus both the monotonal product and the strongly intended bitonal processes are in evidence.

2.1.4 Double-degree constructions

Ex. 4:5 Bartók, *Allegro barbaro*, m. 7 - 13¹



²

For this information the author is indebted to Prof. B. van der Linde.

2.1.6 Unorthographical notation

The score of *Allegro barbaro* abounds with accidentals, as the music is scored without recourse to key signatures. This profusion of accidentals within the score reveals a systematic selection of pitches influenced by the notational principles of tonality. Stevens (1993:120) states that 'Bartók seems to have been concerned with the relation of all notes to a single tonality'.

Consider the theme in the following notational example. This eight-measure theme is the second theme to appear during *Allegro barbaro*. It could be notated without recourse to sharps and double sharps as it is located in the key of A (natural) minor. However, Bartók's notation has a definite tonal bias. This theme is notated according to the melodic chromatic scale of F# minor (a subset of the fully-chromaticised minor scale) thereby further entrenching the product tonality of the bitonal process. The example at (a) illustrates the orthography of the monotonal product, whilst (b) illustrates the original A minor conception.

Ex. 4:7 Bartók, *Allegro barbaro*, m. 42 - 49

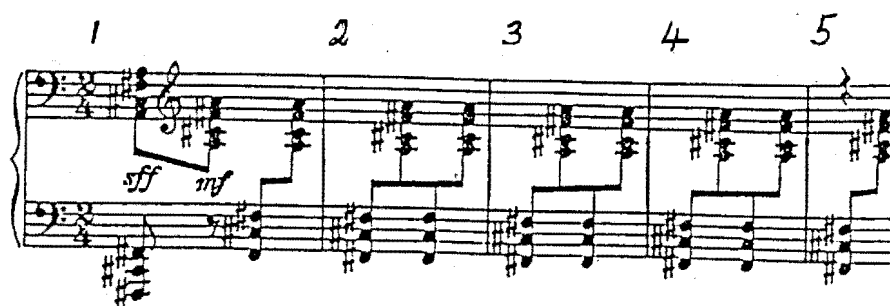
(only salient melody notes are notated)

The musical notation shows two staves, (a) and (b), illustrating different notational approaches to the same melody. The melody consists of eight measures, numbered 42 to 49 above the staff. Staff (a) shows the melody with many accidentals (sharps and double sharps) indicating a monotonal product in F# minor. Staff (b) shows the same melody with fewer accidentals, indicating the original A minor conception.

2.1.7 The tonic triad

Ex. 4:8 Bartók, *Allegro barbaro*, m. 1 - 5¹

(Note how the triadic members are all diatonic)



This evenly constructed rhythmic repetition of the tonic triad in closed position, found here during the introduction establishes both tonal stability and a harmonic focal point. The same harmonic-rhythmic pattern is found at intermittent intervals, allowing the tonality to be unequivocally re-asserted and entrenched.

Whilst Bartók utilises this tonic triad repetition as a means of establishing tonal stability, he also uses these measures in the creation of musical atmosphere. Rhythmic, textural and dynamic elements are embodied in these *martellato*-type sections. The introduction sets the scene for the volatile quality which directly ensues. By the same token the closing of Section A m.88 - 101¹ paves the way for the calmer middle section which follows. This is achieved through a long-ranging diminuendo spanning twelve measures.

2.2 C# minor section

2.2.1 Bitonality

The intervening modulatory section in C# minor m.16 - 33 is also based upon the fully-chromaticised minor scale. The principal thematic material found from m.19² - 30¹ is an identical transposition of that found from m. 5² - 17.

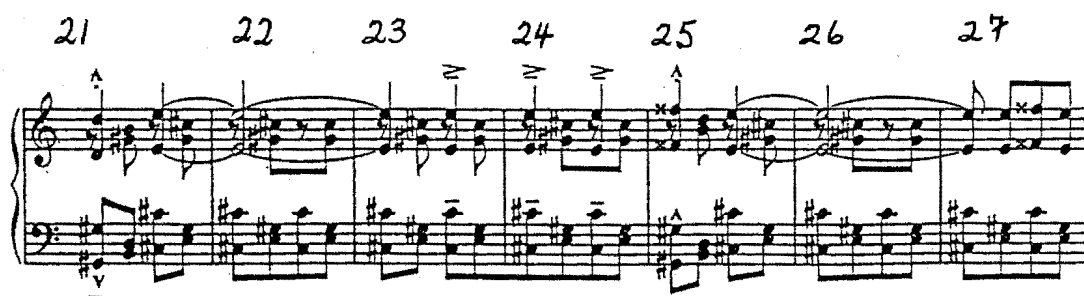
Once again the bitonal process is very clear. The melodic strand is in E (natural) minor. Only one degree is not diatonically notated; the note G is notated as a Fx.

Ex. 4:9 Bartók, *Allegro barbaro*, m. 19² - 30¹, Notation of melodic-thematic strand



The accompanying harmony is clearly in C# minor. Note the clear diatonic enunciation of the tonic triad and the diatonic dominant-tonic root movement. The following seven measures serve as an example.

Ex. 4:10 Bartók, *Allegro barbaro*, m. 21 - 27

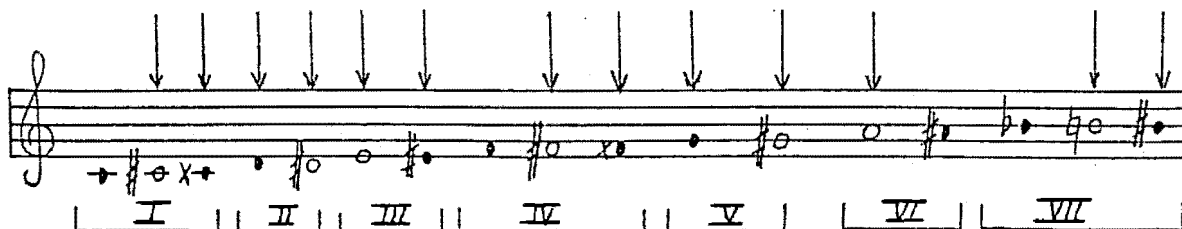


Thus the monotonal product is that of C# minor with clear bitonal processes.

Once again the dominant harmony is obscured through the use of a double-degree chord, where the root note is presented both diatonically and chromatically. So as not to obscure the strong diatonic implication of the dominant root note (G#), I believe the note G♭ is presented enharmonically as a Fx.

The key of the monotonal product utilises the fully-chromaticised minor scale of C#. In the following example this scale is notated and the notes utilised in this section are marked with arrows.

Ex. 4:11 Fully-chromaticised minor scale of C#



2.2.2 Modulation to C# minor

Ex. 4:12 Bartók, *Allegro barbaro*: m. 13 - 17

A musical score for measures 13 to 17 of Bartók's *Allegro barbaro*. The score is in treble and bass clefs. Measures 13, 14, 15, and 16 are marked with measure numbers above them. Measure 17 is marked with a measure number and a forte (ff) dynamic marking. Below the staff, there are harmonic annotations. For measure 13, it is f#: I / b. For measure 14, it is V / d and I / b. For measure 15, it is V / d and I / b. For measure 16, it is c#: V / a and I / b. For measure 17, it is I / b.

This modulation is effected without recourse to a pivot chord and can thus be classified as a direct modulation.

The impact of this direct modulation is not abrupt because the melodic movement serves to seamlessly link the two tonal sections. The melodic notes at m.16 and 17 in their diatonic form are G, F and E respectively (A natural minor). Bartók uses enharmonic equivalents for the first two notes, Fx and E#, and the diatonic E for the third note. Both Fx and E# are members of the melodic chromatic minor scale of C# and Bartók's orthography assists in creating a seamless tonal link.

Furthermore the harmonic intention of a double-degree construction at m.16¹ is made clear. The diatonic root note G# is clearly portrayed as the operative harmonic tone

and not the note $G\flat$. This confusion could have arisen from the following $\underline{GG\#} - B\# - D\#$. Therefore the diatonic $G\flat$ is notated enharmonically as a Fx .
d.d

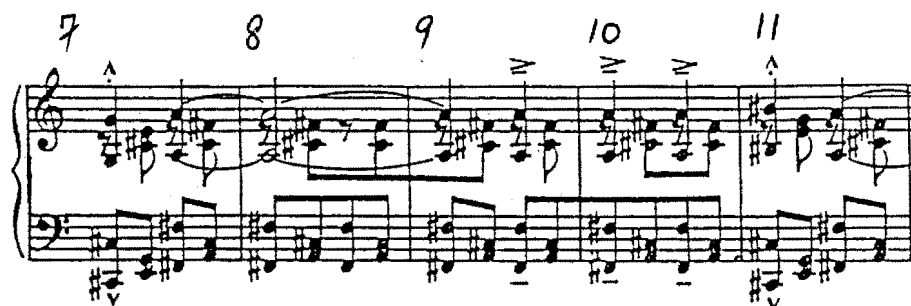
If each of the three notes which conclude the A minor melody (m. 16 - 17) were diatonically notated as G - F - E the descending Phrygian three-note formula, which appears would be more easily apparent. The existence of the three-note formula within a melodic context does not render this as a Phrygian-type harmonic close. However its usage within a melodic context is possibly derived from Bartók's folkloristic investigations.

2.3 Tonal obscuration procedures

2.3.1 Dominant obscuration

2.3.1.1 Example A

Ex. 4:13 Bartók, *Allegro barbaro*, m. 7 - 11



The naturally strong diatonic dominant harmony is rendered less potent due to the following two obscuration procedures. At m. 7¹ instead of a major quality triad being present (with strong leading note tendencies) a diminished triad is found. Both the lowered leading note and lowered supertonic play a role in minimising the impact of the dominant.

At m. 11¹ an unorthographically notated double-degree chord obscures the dominant character of the harmony. (See discussion under 2.1.4.)

2.3.1.2 Example B

Ex. 4:14 Bartók, *Allegro barbaro*, m. 58 - 66

The first three measures of this example are clearly dominant intended. This is revealed through the harmonic resting point found from m.61 onwards, the diatonic dominant-tonic bass note movement and the aural intent of the passage. Furthermore the constant use of the notes C# and E# are prime indicators of these three measures dominant function orientated harmony.

The ambiguity embodied in this representation of dominant function harmony is revealed as follows:

- * double-degree augmented quality triad with unorthographical notation. It is the following triad formed on the mediant degree:

$$A - \underset{\text{d.d}}{\underline{C (B\#) C\#}} - E\# , f\# : IIIb, \text{ type c.}$$
- * Use of a non-primary harmonic function triad whereby Bartók optimises the expanded tonal ethos.
- * Use of unorthographical double-degree notation where the constituent note C is enharmonically notated as a B#. Through enharmonically altering two notes (B# = C; E# = F) a three-note motivically inspired bitonal process becomes apparent. This is depicted in the following notationally simplified example.

Ex. 4:15 Bartók, *Allegro barbaro*, m. 58 - 61, Diagrammatic representation of bitonal process and product

A natural minor

F# minor (monotonal product)

58 59 60 61

f#:

V I
a b

- * The measure which leads directly to the "tonic-harmony" comprises both thematic and harmonic tonicisation procedures. The dominant harmony intention of the previous two measures becomes very clear as an implied harmonic imperfect authentic close is formed utilising a diatonic tonic triad and a diatonic dominant triad. In the following notationally simplified example these procedures are depicted.

Ex. 4:16 Bartók, *Allegro barbaro*: m. 60^{1,2} - 61¹, Diagrammatic representation

60^{1, 2} 61¹

a

b c

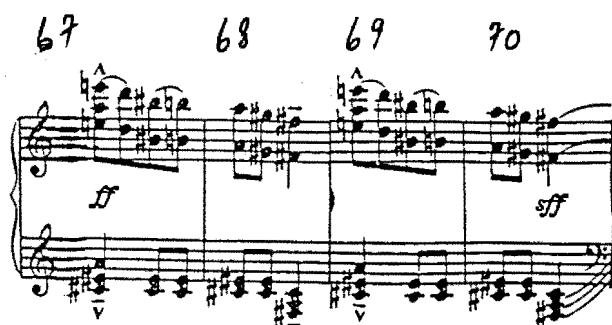
D T

d

- a = descending minor scale leading directly to the tonic thus emphasising the tonic.
- b = dominant diatonic major triad. The A is an accented passing note.
- c = clearly enunciated tonic triad.
- d = implied imperfect authentic close.

2.3.1.3 Example C

Ex. 4:17 Bartók, *Allegro barbaro*: m. 67 - 70



These four measures, which are two directly repeated measures, make use of bimodality with a monotonal product. The upper strand is a synthetic scale based on a modal combination: the Locrian mode starting on F# (considering the B# as an enharmonised C) with the second degree, G, borrowed from the Aeolian mode. This unique modal combination is used simultaneously with the harmonic lower strand which is based on the harmonic minor scale. This bimodal process (both strands based on modes starting on F#) has a monotonal product which is illustrated below and clearly embraces the expanded tonal ethos due to the existence of double-degrees and subsidiary dominant tonal function representation.

- * m. 67, 68^{1,1}, 69 : A - C# - E E#, f# : IIIb type c. Dominant function d.d.
- * m. 68^{1,2}, 70^{1,2} : C# - E# - G#, f# : V type a. Dominant function
- * m. 68², 70² : F# - A - C#, f# : I type b. Tonic function

Note how the dominant function is mainly depicted through the use of the mediant triad in first inversion. Appearing in this inversion with the dominant note, C#, being the bass note, dominant function harmony is subtly emphasised.

2.4 Juxtapositioning of chromatic and diatonic roots

Ex. 4:18 Bartók, *Allegro barbaro*: m. 76 - 80

The musical score for measures 76-80 of Bartók's *Allegro barbaro* is presented. The upper staff (treble clef) contains a synthetic scale based on the Mixolydian mode starting on A, with a chromatically raised Lydian fourth degree. The lower staff (bass clef) contains the harmonisation of the melody in the key of F# minor. The score includes dynamic markings of *ff* and *sff*, and a tritone root movement progression.

During these five measures the following expanded tonal characteristics are prevalent: bitonal process and product, plus tritone root movement progression.

2.4.1 Bitonal process and product

The upper strand is a synthetic scale based upon the Mixolydian mode starting on A with a chromatically raised Lydian fourth degree creating a unique modal combination. The lower strand represents the harmonisation of the melody which appears in the key of F# minor.

This bitonal process results in a monotonal bitonal product in the key of F# minor based on the fully-chromaticised minor scale.

2.4.2 Tritone root movement progression: m. 78 - 80

The expanded tonal idiom is clearly embraced in the tritone root movement progression, chromatically lowered dominant to tonic. In these three measures the

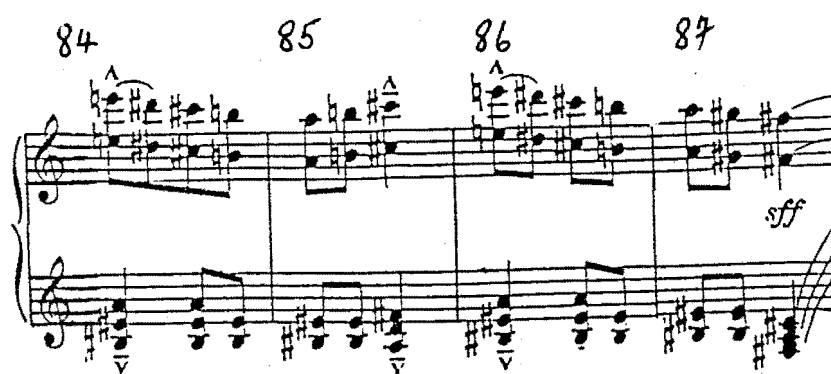
twofold properties of the fully-chromaticised scale becomes apparent, whereby both a diatonic and chromatic function is fulfilled. Thus, a second phase Strauss imperfect authentic close is formed.

2.4.3 Interrupted close: m. 76 - 77

The first two measures of this example constitute a sub-phrase which is punctuated with a well camouflaged interrupted close. This close accords well with the expanded tonal ethos as a strongly diatonic based progression is avoided. The submediant triad is diatonically represented though it appears in the harmonically weak second inversion, whilst the dominant triad is structured on the chromatically lowered dominant. Thus a structurally weak interrupted close is formed.

2.5 Simultaneous use of bimodality and bitonality

Ex. 4:19 Bartók, *Allegro barbaro*: m. 84 - 87



The upper strand is constructed upon the notes belonging to the Dorian mode starting on F#. The lower strand is based on the notes of the fully-chromaticised minor scale of F#. Hence the appearance of bimodality.

The lower strand is notated with the notes B# and E#. These should read C and F respectively, for then with the A which appears with them a major second inversion triad is formed on the flattened tonic degree. Aurally this is what is perceived. However due to Bartók's use of the notes B# and E# and the diatonic appearance of the tonic triad at m. 87² (which is repeated rhythmically until m. 101¹, thus stabilising the macrotonality) the harmonic syntax requires this strand to be analysed in F# minor and not F major. The monotonal product is thus that of F# minor.

The F major quality of the triad notated E# - Gx (A) - B# remains analytically intact and it is analysed as if it were enharmonically notated: F - A - C, f# : f^\sharp , type a.

3. SECTION B. m. 101² - 178

3.1 F major: m. 101² - 112¹

Ex. 4:20 Bartók, *Allegro barbaro*, m. 101² - 111

The musical score for Bartók's *Allegro barbaro*, measures 101 to 111, is presented in two systems. The first system covers measures 102 to 107, and the second system covers measures 108 to 111. The music is written for piano (p) and includes various articulations like accents and slurs. The key signature is one flat (B-flat), but the harmony is bitonal, combining elements of F major and F# minor. The tempo markings are 'poco sosten.' for measures 102, 105, and 107, and 'a tempo' for measures 103, 104, 106, and 108.

3.1.1 Bitonal process

The theme found in the upper melodic strand is found during Section A, m. 5² - 19¹. Here it is accurately notated according to A (natural) minor.

The accompanying harmony appears in the key of F major. Notwithstanding three chromatically lowered degrees, the key of F major is clearly discernable; especially the diatonic presentation of the tonic triad which is repeated and creates tonal stability.

Thus two clear tonal strands within the bitonal process are evident.

3.1.2 Bitonal product

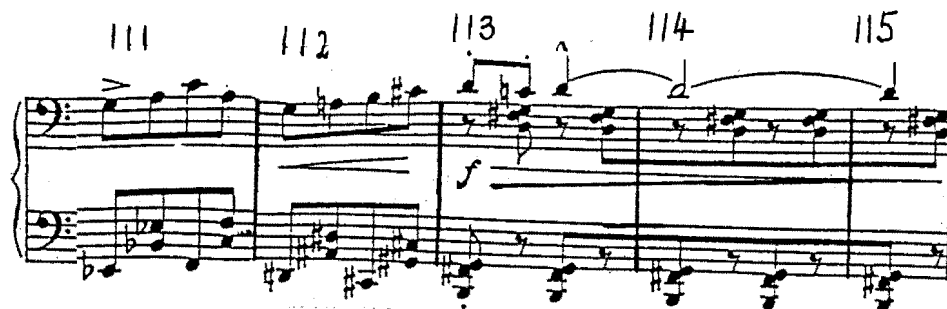
F major emerges as the key of the monotonal bitonal product, utilising the fully-chromaticised major scale of F.

Compared to the original presentation of this theme during Section A in F# minor an entirely altered perspective is created through the different harmonic-tonal treatment. Here the opposite mode based on a chromatic downward slide from F# minor is used. Dominant and tonic function harmony alternate within the realm of expanded tonality, similarly to that of Section A. The tonic triad is depicted diatonically whilst dominant function harmony is represented by either a tetrad, type aII or a triad, type a formed on the chromatically lowered leading note. The non-diatonic representation of dominant function harmony renders it both harmonically unassertive and camouflaged. The harmonic strength of the tetrad is further weakened due to its third inversion positioning.

3.2 Modulation to B minor

A modulation which connects two keys an augmented fourth apart is found overlapping with the close of the F major section. The two keys connected are F major and B minor (an augmented fourth apart).

Ex. 4:21 Bartók, *Allegro barbaro*: m. 111 - 115¹



Note the partial enharmonisation between m. 111¹ and m. 112². This allows the aural impact to proceed seamlessly without a noticeable interruption. Harmonically there is no connection between the triads of either key, therefore this modulation can be classified as a direct modulation.

m. 111¹ : E \flat - G - B \flat , F : VII, type a.

A = unaccented passing note.

m. 111² : F - A - C, F : I, type a.

m. 112¹ : D \sharp - [F \times = G] - A \sharp , b : III, type a.

A = unaccented passing note.

m. 112² : C \sharp - (E) - G \sharp , b : II, type b. Subdominant function.

B = accented passing note.

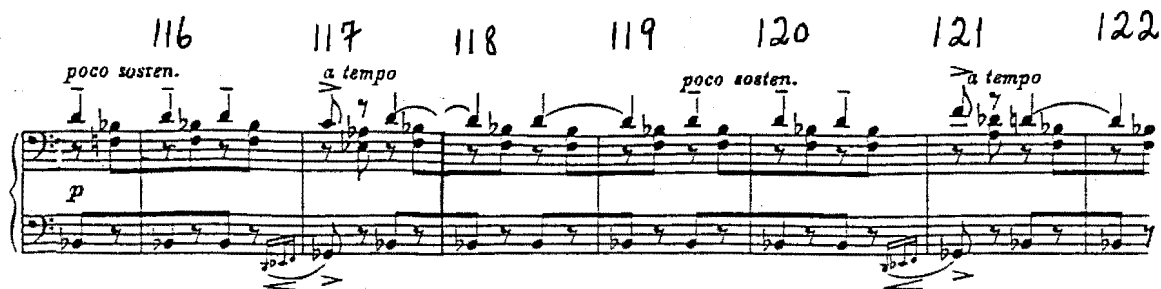
m. 113 - 115¹ : B - D - F \sharp , b : I, type b. Tonic function.

G = an additional second, creating an "added sixth" effect.

Thus a plagal close from m. 112² - 115¹ is formed.

3.3 B \flat major: m. 115² - 122¹

Ex. 4:22 Bartók, *Allegro barbaro*: m. 115² - 122¹



A direct transposition a perfect fourth higher (compared to m.101² - 105¹) is the only discernable difference between the two renditions. Harmonically the same chord types are utilised as well as the adherence to the melodic chromatic major scale which is a subset of the fully-chromaticised major scale.

3.4 Sequential patterning

Ex. 4:23 Bartók, *Allegro barbaro*: m. 122² - 127¹



A short two-pulse pattern is treated sequentially with four rising repetitions. Bartók uses these measures as a means towards introducing the next tonal centre. It begins in B \flat major thus alleviating an abrupt harmonic change to B minor.

Within the sequential patterning melodic and rhythmic features remain recognisably intact, though harmonically each repetition does not receive identical treatment. The sequential pattern comprises two pulse beats, with the triad formed on the first pulse beat varying in quality and the tetrad formed on the second pulse beat remaining intact (type bI). This is diagrammatically represented as follows:

m.122 ²	123 ¹	123 ²	124 ¹	124 ²	125 ¹	125 ²	126 ¹	126 ²	127 ¹
pattern	sequence			sequence		sequence		sequence	
Triad or tetrad quality	a	bI	a	bI	b	bI	b	bI	aIIA *
									bI

* = deviation from the norm of a triadic structure on this pulse beat.

3.5 B minor: m. 127 - 149

3.5.1 Expanded tonal characteristics

Ex. 4:24 Bartók, *Allegro barbaro*: m. 127 - 149

The musical score for Bartók's *Allegro barbaro*, measures 127-149, is presented in three systems. The key signature is B minor (two sharps: F# and C#). The time signature is 7/8.

- System 1 (Measures 127-130):** Measure 127 is marked *ff*. Measure 128 is marked *mf*. The system ends with a double bar line.
- System 2 (Measures 131-144):** Measure 131 is marked *ff*. Measure 132 is marked *sff*. Measure 133 is marked *mf*. Measure 134 is marked *ff*. Measure 135 is marked *sff*. Measure 136 is marked *ff*. Measure 137 is marked *sff*. Measure 138 is marked *ff*. Measure 139 is marked *sff*. Measure 140 is marked *ff*. Measure 141 is marked *sff*. Measure 142 is marked *ff*. Measure 143 is marked *sff*. Measure 144 is marked *ff*. The system ends with a double bar line.
- System 3 (Measures 145-149):** Measure 145 is marked *ff*. Measure 146 is marked *sff*. Measure 147 is marked *ff*. Measure 148 is marked *sff*. Measure 149 is marked *ff*. The system ends with a double bar line.

Dynamic markings include *ff* (fortissimo), *sff* (sforzando), *mf* (mezzo-forte), and *dim.* (diminuendo). The tempo marking *poco sosten.* is present above measure 144. The phrase *poco a poco* is written above measures 147 and 148.

These measures are not characterised by clear, unambiguous tonal syntax created through diatonic chord constructions and root movement. Tonal coherence is achieved principally through harmonic insinuation therefore these measures fully embrace the expanded tonal idiom.

During these measures Bartók employs the fully-chromaticised minor scale of B. This scale is used extensively and only two degrees are not utilised: the chromatically lowered tonic and the chromatically raised subdominant. This scale is notated in the following example with all notes utilised by Bartók indicated with arrows.

Ex. 4:25 Fully-chromaticised minor scale of B



In the harmonic reduction at 3.5.3 the following aspects are clearly delineated. Thematically these measures comprise a series of inexact sequential patterns (labelled 1, 2, 3 and 4), which are interrupted by two short and one longer thematic interjection, reminiscent of Section A (labelled x and y respectively). The sequential figures display thematic coherence with Section A due to the evenly pulsating chordal accompaniment.

3.5.2 Bitonal aspects

The "Section A type" interjections do not only bear thematic resemblance to the opening section but comprise the same bitonal attributes as well. The four measures beginning at m. 139 serve as an example.

The upper strand is in A minor (B# is an unorthographical notation of the note C) whilst the lower strand is in F# minor. The monotonal product of this bitonal process is F# minor. Within the larger harmonic scheme these four measures represent the dominant of B minor even though, both thematically and harmonically, they represent a clear reference to the opening section (F# minor).

3.5.3 Harmonic overview

In the ensuing notational example a harmonic reduction of m.127 to 149 is detailed.

Ex. 4:26 Harmonic reduction of m. 127 - 149

m. 127 | 130 | 131 | 132 | 134 | 135 | 136 | 138 | 139 | 143-149

z z z

W x y

b: VII^9 V F^9 V III^9 V I^9

b II A b b II A b a II A b a I A

lower third root connection

lower third root connection

upper third root connection

imperfect authentic close

* w, x and y = sequential type patterns. Each of these patterns contains a suspension-type note resolving chromatically downwards allowing the true chord to appear.

* z = thematic interjection reminiscent of Section A.

Harmonic clarity is not developed through the appearance of two pentads with chromatically lowered root notes and the non-diatonic presentation of the chord structures at the cadential point. This point of harmonic arrival is rendered less potent due to the existence of only two strongly implied harmonic functions, thus forming a close. However harmonic coherence and stability is reached at this close through the diatonic representation of the dominant and tonic notes respectively and the six-

measure pulsating repetition of a pentad with the diatonic tone as root note.

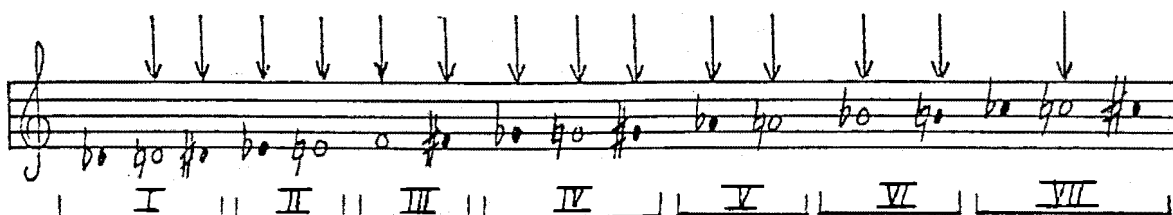
Harmonic coherence and stability is furthermore obtained through the upper or lower third root connection between chordal structures.

3.6 D minor: m. 151 - 178

3.6.1 Tonality and the fully-chromaticised scale

This sub-section is in the key of D minor and is based on the fully-chromaticised minor scale of D. Bartók utilises this scale extensively as only three degrees are not utilised: chromatically lowered tonic, chromatically lowered leading note and the chromatically raised leading note. In the following example the fully-chromaticised minor scale of D is notated with the notes utilised by Bartók indicated with arrows.

Ex. 4:27 Fully chromaticised minor scale of D



3.6.2 Expanded tonal characteristics

The tonality of D minor is established through the following means:

3.6.2.1 Partially sustained tonic triad

Ex. 4:28 Bartók, *Allegro barbaro*: m. 151 - 158

151 152 153 154 155 156 157 158

meno sost. *mf marc.* *p* *mf* *p* *mf* *p* *mf*

accel. al. - - Tempo I.

These eight measures are focused around tonic orientated harmony:

- * m. 151, 152 repeated with a short octave displacement, m. 153, 154. A linear presentation of the diatonic tetrad (type b II) with the notes G and G# adding colour and creating obscurity. The two sustained notes are harmonically important as they constitute the root (D) and the genus-defining third (F) respectively.
- * m. 155 - 158 are focused around a chord of addition; the tonic triad D - F - A with a colouring second the Lydian fourth, G# lending support from below to the dominant degree A.

The B \flat found at m.155 and 157 is an upper auxiliary.

The C found at m.156 allows for the linear formation of a tetrad (type b II).

The E \flat found at m.158 allows for the linear formation of a pentad

D - F - A - (C) - E \flat (type b II B) with G# as an additional colouring second.

3.6.2.2 Partial representation of the chromatically lowered dominant triad

Ex. 4:29 Bartók, *Allegro barbaro*: m. 159 - 167¹

The left hand represents the incomplete chromatically lowered dominant triad, A \flat - C - (E \flat). It forms a pedal point effect. The right hand is centered around tonic harmony represented by the genus-defining third degree, F. The descending acciatura triads which accompany the right hand part add a colourful chord streaming effect and enhance the tonic harmony. Both the dominant and tonic functions are both simultaneously developed.

3.6.2.3 Obscured dominant triad with diatonic root

Ex. 4:30 Bartók, *Allegro Barbaro*: m. 167² - 170

Dominant function harmony is developed with a diatonic root note, A. The strength of the chord structure is weakened due to the leading note degree not being raised and the existence of an additional colouring second, D \sharp which lends support from below to the chord note, E.

- * m. 168 delineates the tetrad A - C - E - G (type b II) with colouring second, D#.
- * m. 169 delineates the triad A - C - E (type b) with colouring second, D#. The note F is an upper auxiliary.
- * m. 170 delineates the pentad A - C - E - (G) - B \flat (type b II B) with colouring second, D#.

3.6.2.4.1 Altered Neapolitan triad

Ex. 4:31 Bartók, *Allegro barbaro*: m. 171 - 178

171 172 173 174 175 176 177 178

ritard. - molto -

The left hand part, m. 171 - 173, is based on an altered Neapolitan triad, E \flat - G \flat - (B \flat) and repeated from m. 175 to 177 with enharmonic notation: D# - F# - (A#). Here it emphasises obscured tonic function harmony.

The right hand part during these eight measures clearly concentrates on developing tonic harmony and the tonality of D minor.

During the three measures, m. 171 - 173, the principal thematic notes are D and C. The note D emphasises the tonic in clear diatonic terms and the note C as a lower auxiliary lends the tonic support from below. The same principle applies to m. 175 to 177 where the note A represents the dominant and the note G is a lower auxiliary.

Only one of the Section A theme's is used during this structural reprise. It is the eight measure theme initially established at m. 34 extending to m. 41. In the foregoing example this theme is highlighted. During this structural reprise this theme is utilised twice in succession and then compressed into a two measure unit re-iterating the principal motivic components and maintaining the "one-in-a-bar" two-chord harmonic alternation found during the initial thematic appearance.

The two chords which alternate throughout these twenty measures (m. 179 - 198) are the following:

- * E# - G# - B#, f# : ~~VII~~b, triad type b. Dominant function.
Fx is an accented passing note.

- * F# - A - C#, f# : 1, triad type b. Tonic function.

It is used without any ambiguity on eight occasions out of a possible ten. This serves to entrench the principal tonality of **Allegro barbaro**. In the two appearances where the tonic triad is disguised due to dissonance the following harmonic situation arises:

- * F# - A - C# + (B# = C)

This is an enharmonically notated double-degree construction with Bartók maintaining orthographical accuracy with respect to the melodic chromatic minor scale of F# which does not comprise a C natural.

4.2 Climactic development

Bartók develops excitement and culminative anticipation through repeating the material with a continually thickening texture which covers an ever increasing wider keyboard compass with a perpetual crescendo.

Ex. 4:34 Bartók, *Allegro barbaro*: m. 199 - 206

Handwritten measure numbers 199, 200, 201, 202, 203, 204, 205, 206 are placed above the staff. The score includes dynamic markings: *fff*, *mf*, *cresc.*, and *ff*. A pedal point is indicated in measure 199 with the notation *(Ped.)*.

An eight measure repetition of the dominant function harmony is found extending from m. 199 to 206. The Fx is in this instance an upper auxiliary. Bartók develops a sense of progression and rhythmic propulsion through the lengthy crescendo which occurs over seven of the eight measures. Dominant function harmony is represented by a minor quality leading note triad.

The natural resolution of this triad is interrupted by a four measure scalar passage and only occurs at m. 212. Here a purely diatonic representation of the tonic triad is reiterated over ten measures creating conclusively tonal clarity.

4.3 Scalar interpolation

The four measure scalar interpolation is based on the white notes of the piano's keyboard and moves in conjunct ascending motion starting on the note F, m. 207 - 210. The orthographical accuracy of m. 211 allows it to be classified as preparation for the tonic harmony which follows. Here a B# replaces the note C used during the previous four measures.

The scalar interpolation comprises two modes presented consecutively. They are indicated in the example which follows:

Ex. 4:35 Bartók, *Allegro barbaro*: m. 207 - 212

207 208 209 210 211 212

p cresc. - - - *sosten.* *a tempo*

Lydian *Mixolydian*

ff ff ff *ff*

The scalar interpolation begins on a note which is the enharmonisation of the previous triad's root note, E#. It functions as a type of chromatically lowered tonic which reasserts itself strongly when it is diatonically presented from m. 212 onwards.

CHAPTER FIVE: FIRST MOVEMENT, SUITE OP. 14

1. INTRODUCTION

This movement has the flavour of a Romanian folk dance. Even though it is wholly original in conception it displays 'the undeniable inspiration of Romanian folk music' (Kárpáti, 1993:156). This is especially noticeable during the opening theme which frequently utilises the chromatically raised fourth degree, the Lydian fourth.

The Lydian fourth forms a tritone interval with the tonic degree. The relationship between the two degrees, melodically and harmonically, is not only prevalent during this movement. It permeates the structure of the entire **Suite**.

This emphasis upon the tritone is not only due to the chromatic raising of the fourth degree in the melodic line. The interval of a tritone is also a by-product of the whole-tone scale, which is utilised during this movement and the **Suite** as a whole.

The whole-tone scale through its construction naturally results in augmented triads which create tonal instability and camouflage direct diatonic harmonic progressions. This is in keeping with the expanded tonal milieu. Melodically the resultant tritone interval is also an aid towards developing the ethos of the expanded tonal idiom.

This movement is a clear example of expanded tonality, especially the camouflaging of diatonic harmonic progressions and tonal intent.

2. FULLY-CHROMATICISED SCALES

The seventeen member fully-chromaticised major scale forms the basis for much of this movement. The non-diatonic members of this scale add additional colour to the harmonic palette. In the following example two chord roots are chromatically inflected: the subdominant is chromatically raised and the leading note is

chromatically lowered. Bartók places each of these chords respectively in juxtaposition with the diatonic tonic triad (B \flat - D - F) thus creating an element of tonal instability. Furthermore this juxtapositioning of diatonic and chromatic roots and chords imbues the harmony with a piquant quality.

Ex. 5:1 Bartók, op. 14/1: m. 7 - 12

Handwritten annotations above the staff: *a*, *b*, *d*, *e*, *c*

Handwritten Roman numerals below the staff: B^{\flat} : I, IV, I, IV, I, VII

a, b, c = lower auxiliary
d, e = unaccented passing note

In this extract Bartók optimally utilises the fully-chromaticised major scale of B \flat . All, except five of the possible seventeen scale members are used. Note how the tonally strong diatonic leading note (A) is not utilised. In the following example the scale members which are utilised are indicated by means of an arrow.

Ex. 5:2 Fully-chromaticised major scale of B \flat

Arrows pointing down to notes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17

Handwritten Roman numerals below the staff: I, II, III, IV, V, VI, VII

3. TONAL SYNTACTICAL FEATURES

3.1 Cadencing

As in all music with a tonal basis the end of a phrase or period is indicated through means of musical punctuation: the cadence or close. Bartók utilises this principle within the expanded tonal idiom through camouflaging diatonically inspired harmonic functions. The following examples bear this out.

3.1.1 Imperfect close

Ex. 5:3 Bartók, op. 14/1: m. 11 - 12



m. 11: B \flat - D - F, B \flat : I, triad type a. Tonic function

C = lower auxiliary

m. 12: A \flat - C \flat - E \flat , B \flat : ~~VII~~, triad type b. Dominant function

The imperfect close clearly portrays Bartók's application of the expanded tonal idiom. The dominant harmonic function is represented by the minor triad formed on the chromatically lowered leading note, A \flat - C \flat - E \flat . Note the juxtapositioning of diatonic and chromatic root notes, allowing this close to be classified as a Strauss close in second phase.

3.1.2 Two Plagal cadences

The expanded tonal idiom is embraced through the use of phase two Strauss

cadencing procedures. Note how in both instances diatonic and chromatic root notes are juxtapositioned.

Furthermore, the fact that plagal cadences are used to harmonically punctuate and structurally articulate are an indication that tonal strength is eschewed in favour of a muted harmonic effect. This is in accordance with the ethos of the expanded tonal idiom where tonality is largely articulated through unassertive procedures.

Each of these cadences is introduced through a pivot chord representing dominant harmonic function. The pivot chord involves a harmonic re-interpretation of a chord with a diatonic root to a chord in a new key with a chromatic root. Note how the key of the cadence and the previous key are in mediant relationship with each other.

Example A

Ex. 5:4 Bartók, op. 14/1: m. 19 - 20



m. 19^{1-2,1}: D# - F# - A#, d#: I, triad type b.

Pivot chord re-interpretation

m. 19^{1-2,1}: D# - F# - A#, b:~~III~~, triad type b. Dominant harmonic function

Chromatic root note

G# = échappée

m. 19^{2,2} : C# - E - G#, b:II, triad type b. Subdominant harmonic function

Diatonic root note

F# = échappée

m. 20 : B - D - F#, b: I, triad type b. Tonic harmonic function

Example B

Ex. 5:5 Bartók, op. 14/1: m. 27 - 28



m. 27^{1-2,1}: Bb - D - F, Bb: I, triad type a.

Pivot chord re-interpretation

m. 27^{1-2,1}: Bb - D - F, G: ~~III~~, triad type a. Dominant harmonic function

Chromatic root note

E = échappée

m. 27^{2,2} : Ab - C - Eb, G: ~~II~~, triad type a. Subdominant harmonic function

Chromatic root note

D = échappée

m. 28 : G - B - D, G: I, triad type a. Tonic harmonic function

Diatonic root note

Note the three-note descending Phrygian cadence formula, Bb - Ab - G in the bass, where the *finalis* is approached from above with semitonal movement. Thus, a second phase Strauss plagal cadence with the melodic characteristics in the bass voice of a Phrygian cadence.

These two examples of plagal cadences (Strauss phase two) both use colouristic,

chromatic root notes to further conceal tonal definition. These notes of tonal chromatic disguise are members of the fully-chromaticised scale. Their use in juxtaposition with diatonic scale members reflects on the wider palette made available through the fully-chromaticised scales.

3.2 Chord association

3.2.1 Tritone root movement

It is not only at cadential points that harmonic function can be discerned. In the following example harmonic progression and tonal functions do clearly exist.

Ex. 5:6 Bartók, op. 14/1: m. 7 - 10

Handwritten annotations above the staff: 7, 8, 9, 10. Notes are labeled with letters: a, b, d, e. Below the staff, Roman numerals are written: Bb : I, IV, I, IV.

a, b = lower auxiliary
d, e = unaccented passing note.

The triads found at m. 8 and 10 are constructed above a non-diatonic root. The note E, chromatically raised fourth in Bb major, is the triadic root. Bartók placed this root in juxtaposition with the diatonically represented tonic triad thus causing both tonal instability and adding a sharp, biting quality to the aural impact of the harmony. The interval of a tritone which separates these two root notes is a further cause for harmonic angularity and instability.

Note the double-degree construction at m. 10, clearly epitomising the expanded tonal

idiom due to the melodic decoration of the genus-defining third. This triad's (E - $\frac{\text{GG\#}}{\text{d.d.}}$

- B) major quality is not rendered ambivalent due to the melodic G \sharp , but it is momentarily camouflaged.

Due to a knowledge of the fully-chromaticised scales the triad at m. 8 and 10 can be analysed as a raised sub-dominant and not regarded as 'a mistuned or substitute dominant' (Kárpáti, 1993:157). Kárpáti envisages the raised subdominant triad as being an enharmonisation of the orthographically complex F \flat - $\frac{\text{A}\flat\flat\text{A}\flat}{\text{d.d.}}$ - C \flat .

Through considering the root as 'a mistuned or substitute dominant' he is without realising it acknowledging both the fully-chromaticised major scale and the expanded tonal idiom. He does not possess the expanded tonal vernacular but is describing a chromatically lowered (through enharmonisation) modified dominant.

The gist of the argument proffered by Kárpáti for regarding the raised subdominant as an enharmonised lowered dominant is that he regards this section to be based on a synthetic scale: B \flat - C - D - E - F \sharp - G - A - B \flat . A scale

'in which the fifth degree has now also been sharpened, leaving now no perfect fifth above the tonic B \flat ... the chords accompanying the tune have no perfect fifth intervals either, so instead of the traditional alternation of tonic and dominant we have alternating B \flat major and E major (instead of F major). E major is a mistuned or substitute dominant ...' (Kárpáti, 1993:156, 157).

I believe that it is possible, though not preferable, to regard the raised subdominant as an enharmonised chromatically lowered dominant because there are two subsequent appearances of similar melodic-thematic material employing the chromatically lowered dominant note as a root note:

m. 13 - 16 : f \sharp : alternation of I and V^\flat (tetrad type aI)

m. 17 - 19 : d \sharp : alternation of I and V^\flat (tetrad type bI)

However, in both of the above instances the melody note appearing with the modified dominant tetrad is diatonic, whereas the melody note appearing with the raised subdominant (m. 8 and 10) is chromatically raised.

Furthermore the tonality from m. 1 - 12 is clearly that of B \flat major based on the fully chromaticised major scale of B \flat . Kárpáti's synthetic scale (which is a subset of the fully-chromaticised major scale) is based only on the melodic content of the first eleven measures and ignores the C \flat found in m. 12. It does not take into consideration the notes of the triads which accompany the melody. The fully-chromaticised major scale embraces these notes as well as including the numerous appearances of the diatonic dominant degree, F, as a member of the tonic triad, B \flat - D - F.

I believe that the musical syntax of these opening measures which requires accepting the given notation and the fully-chromaticised major scale concludes with a disguised imperfect close and that subdominant harmonic function is represented during these initial measures as a raised subdominant.

3.2.2 Diatonic root movement

In the following two examples note how the root notes remain diatonic and the tonic triad is represented diatonically. These two factors are used by Bartók to develop a sense of tonality. The expanded tonal ethos is observed within the chord construction of the dominant function harmonies which avoid the diatonic tritone interval. This interval has strong tonicising elements and through avoiding its use the tonicising elements are muted.

Example A

Ex. 5:7 Bartók, op 14/1: m. 21 - 26

21 22 23 24 25 26

a tempo *f*

mf (Pedal)

B^b : I V^9 I V^7 I V^9

a a I A a a I a I A

a, b, c, d, e = lower auxiliary

f, g = unaccented passing notes

The "one-in-a-bar" harmonic rhythm alternates between tonic and dominant function chords respectively. The tonic triad is diatonically represented, presenting an unambiguous tonicisation. The dominant harmonic function is represented by a major pentad (m. 22 and 26) and a major tetrad (m. 24); chord types a IA and a I respectively.

Through eschewing the use of the diatonic note E^b and using the chromatically raised E^{\sharp} within the dominant pentad (type a IA) and the dominant tetrad (type aI) an element of tonal vagueness is created. However tonal purpose and tonal implication are clearly formulated due to the diatonic root movement between tonic and dominant root notes.

Example B

Ex. 5:8 Bartók, op 14/1: m. 29 - 34

29 30 31 32 33 34

a d b c e

E: I $\frac{V^7}{aI}$ $\frac{V^7}{aII}$ $\frac{V^7}{bI}$ I $\frac{V^7}{aI}$ $\frac{V^7}{aII}$

a,b,c = lower auxiliary

d, c = unaccented passing notes

In this example the harmonically strong primary dominant tetrad (type aII) is used twice, though its effect as a strong tonicising agent is to a large extent negated due to its weak metrical placement and brevity within the measure. Furthermore its juxtaposition with the stronger metrical placement of the dominant tetrad, type aI is an additional cause for its harmonic impact to be thwarted. Notwithstanding this fact the tonal intent between tonic and dominant function chords in the formation of a tonal organism is clearly discernable.

3.3 Harmonic organisms a third apart

Whilst B♭ major is the macro-tonality clearly evident during both the opening and closing sections of the movement, other tonal organisms during the movement are apparent. Some of these tonal organisms appear in third relationship. The choice of keys an apparent or chromatic third apart in near-related relationship further entrenches the notion that the movement has a solid harmonic-tonal basis. It also illustrates Bartók's link with the past and displays the purely traditional harmonic

basis of his composition style.

The third-related tonal organisms appearing during the A-section (m. 1 - 36) and its thematically varied reprise (m. 78 - 116) are tabulated as follows.

Ex. 5:9 Diagrammatic representation of third-related tonal organisms

A section m. 1-12 | 13-16 | 17-19' | 19²-20 | 21-27' | 27²-28 | 29-35^{2,1} | 35^{2,2}-3

Tonal organisms: B^b f[#] | d[#] b | B^b G | E | G

apparent third through enharmonisation

chromatic third

chromatic third organisms in succession

A reprise m. 78-92 | 93-95 | 96-116

Tonal organisms: B^b G | B^b

chromatic third organisms in succession

• → = note in common

apparent third = apparent third relationship between two tonal organisms

chromatic third = chromatic third relationship between two tonal organisms

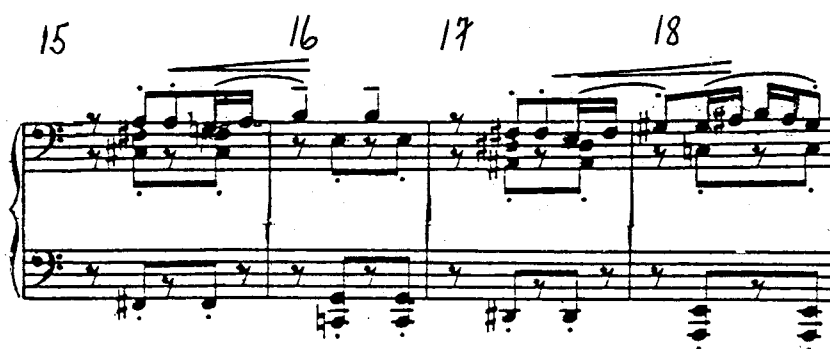
4. MODULATORY PROCEDURES

4.1 Direct modulation

Examples of direct modulation between third-related tonal areas are found during this movement. The mediant relationship between two tonal organisms allows each organism to be complemented. Even though there is no harmonically linking continuity between the two keys involved, the introduction of the second key is not perceived as an abrupt, ill-fitting key shift. This is due to the mediant relationship between the keys. Once again this illustrates the historically traditional foundation upon which Bartók's tonal idiom is based.

In the following example a direct modulation between F# minor and D# minor is effected.

Ex. 5:10 Bartók, op. 14/1: m. 15 - 18



m. 15 + 16: F# minor

m. 15: F# - A - C#, f#: I, triad type b.

G# = lower auxiliary

m. 16: C - E - G - B, f#: V, tetrad type a1

Juxtapositioning of diatonic and chromatic root notes with a tritone relationship.

m. 17 + 18: D# minor - lower mediant diatonic relationship

m. 17: D# - F# - A#, d#: I, triad type b.

E = lower auxiliary

m. 18: A - C - E - G#, d#: $\backslash 7$, tetrad type bI.

A# = unaccented passing note

Juxtapositioning of diatonic and chromatic root notes with a tritone relationship.

4.2 Pivot chord modulation

The ensuing example clearly fits the expanded tonal mould as the pivot chord is a chromatic member of the fully-chromaticised scale in both keys. The two keys are in minor mediant relationship: E and G majors respectively. The pivot chord (A \flat - C - E \flat) is the major triad formed on the chromatically lowered subdominant in E major and the chromatically lowered supertonic in G major.

Ex. 5:11 Bartók, op 14/1: m. 87 - 93

87 88 89 90 91 92

Tempo I.

93

m. 87: E - G# - B, E: I, triad type a.

m. 88 - 90: E - $\underline{G \ G\#}$ - B, E: I, triad type a.
d.d.

m. 91 - 92: A \flat - C - E \flat , E: IV, triad type a.
B \flat = lower auxiliary

Harmonic re-interpretation (pivot chord)

m. 91 - 92: A \flat - C - E \flat , G: II, triad type a.
B \flat = lower auxiliary

m. 93: D - F \sharp - A, G: V, triad type a.

Harmonic re-interpretation of m. 91 - 92 creates a Neapolitan triad in G major with clear subdominant harmonic function progressing onto an unambiguous diatonic dominant triad.

5. FRENCH AND ITALIAN AUGMENTED SIXTH TETRAD WITHIN THE EXPANDED TONAL IDIOM

Within the expanded tonal idiom the colouristic French and Italian augmented sixth tetrads are usually associated with representing a harmonic function which enables tonicisation to develop. In this movement both these augmented sixth tetrads are encountered with clear harmonic function purposes.

5.1 French augmented sixth

Ex. 5:12 Bartók, op. 14/1: m. 74 - 76

A French augmented sixth construction is found repetitively at m. 74^{2,2}, 75^{2,2}, 76^{1,2} and 76^{2,2}. The lowest note in each repetition, D \sharp , is given dynamic emphasis through

the use of a sforzando, whilst the right hand component is emphasised through an acute accent. Thus, this particular construction is highlighted and made an outstanding feature of the phrase.

This tetrad has strong harmonic implications. The orthography which Bartók employs is: E# - Gx - B - D#. This type eII tetrad appears in third inversion where the leading tone (with sforzando marking) is the bass note, thus emphasising dominant function harmony.

The dominant properties of this tetrad are obscured due to the unusual scale degree of the tetrad's root (the raised tonic), the spacing of the notes and the lack of traditional resolution. However, the four-times repetition within the limited space of three measures lends to the tetrad structural harmonic importance. The doubling of the dominant note (B) and the aforementioned emphasis of the leading tone degree, both assist in emphasising the dominant function harmonic purpose of this tetrad. The tonality of E major is thus stressed at this point within the expanded tonal milieu. The root of this dominant harmonic function tetrad is a chromatic member of the fully-chromaticised major scale.

5.2 Italian augmented sixth

Two clearly discernable Italian augmented sixth constructions are found during this movement.

Example A

The first is encountered from m. 52 - 61. Here, two triads alternate with each other creating harmonic tension and instability through the repetition and lack of resolution of harmonically sensitive and loaded notes.

The two triads are respectively:

- * G# - B - D, b: VIb, type d (diminished triad)

- * A# - C - E, b: ~~VIIb~~, type f (Italian augmented sixth)
 C# unaccented passing note; D = accented passing note.

Ex. 5:13 Bartók, op. 14/1: m. 52 - 61

52

al tempo (♩ = 140)

57 61

Unlike the diminished triad, the Italian augmented sixth has dynamic articulation, stressing its position and appearance.

In determining the tonal focal point of this harmonic organism the sustained pedal note B (m. 52 - 55) and the ensuing left hand figuration with the note B as a repetitively sounded pedal note allows B to evolve as a focal point. The note D within the figuration (m. 58 - 61¹) and its appearance within the right hand's chord constructions determines the mode as being minor. In the left hand part it forms an upper auxiliary.

This unusual construction of the Italian augmented sixth chord on the leading note implies an emphasis of the dominant harmonic function.

Example B

The second set of appearances of an Italian augmented sixth chord are from m. 68 - 71¹. At this point the following two chords alternate with each other:

- * C# - E - G, e: ~~VIIb~~, type d (diminished triad)
- * D# - F - A, e: ~~VII~~, type f (Italian augmented sixth)

F# unaccented passing note; G = accented passing note

Ex. 5:14 Bartók, op. 14/1: m. 68 - 71¹



The weaving, step-wise figuration of the left-hand part encompasses the interval of a minor third. The note G denotes the minor mode. A strong tonicisation procedure employed during this tonal organism is the pedal note effect created with the repetition of the tonic note (five out of the eight appearances with accentuation articulation).

The Italian augmented sixth construction has strong dominant function implications and consequently is a powerful tool in the tonicisation process. The doubling of the leading note, the accentuation thereof and the construction of the triad with the root as the leading note are all contributory factors towards the harmonic interpretation of this chord's dominant function characteristics.

6. THE DOMINANT SEVENTH WITHIN THE EXPANDED TONAL IDIOM

Traditionally during the Classic-Romantic continuum the dominant seventh is a chord which acts as a strong tonicising agent with a clear harmonic function and purpose.

Its use in the expanded tonal idiom of this movement is principally colouristic as opposed to functional.

The appearance of the tetrad, type aII: G# - B# - (D#) - F# at m. 72^{1,2}, 72^{2,2} and 73^{1,2} is not to assist tonal definition. This tetrad arises co-incidentally due to the chord streaming in the right hand part. It does not operate functionally and serves as a purely colouristic construction.

Ex. 5:15 Bartók, op. 14/1: m. 72 - 73¹



7. METHODS OF TONAL OBSCURATION

Analysis reveals five principal methods of tonal obscurity which are apparent during this movement.

7.1 Chord streaming

Examples of chord parallelism where a specific chord is consecutively presented in a linear chord shift, creating a stream effect of a single chordal type are found during the middle section of this movement.

Chord streaming dispenses with functional harmonic root movement. It takes advantage of a specific "chord colour". Functional harmonic movement and progression is thus momentarily neutralized, and clear harmonic movement is blurred.

In the ensuing extract chord streaming of a major triad in root position through a chromatically descending shift is evidenced from m. 39¹ to m. 40¹. Triadic circling around a harmonic point (m. 37 - m. 38) seemingly creates an apparent chord stream. This apparent chord stream lends triadic support, above and below the principal triad

(G - B - D). Thus, G major as a tonal organism is strengthened.

Ex. 5:16 Bartók, op. 14/1: m. 37 - 40¹



Measure and pulse number	Chord combination	Chord type	General comments
37 ¹	F# - A# - C#	a	Circling around a harmonic point.
37 ²	E# - G# - B#	b	
38 ¹	A - C# - E	a	D = harmonic dominant pedal note.
38 ²	G - B - D	a	
39 ¹	F# - A# - C#	a	Chromatically descending chord streaming shift.
39 ²	F - A - C	a	
40 ¹	E - G# - B	a	

In the preceding extract all the triads appear in root position. The extract which follows is based upon the same pattern of events, though the triads are in second inversion. The chromatically descending shift (m. 43¹ to m. 44¹) is not a precisely constructed chord stream: enharmonisation of the D# at m. 43² allows this triad to form part of the stream, and the D# at m. 44¹ ought to read D \flat if a purely constructed stream is to ensue. However, the gist of the thematic material allows the effect of chord streaming to prevail.

Ex. 5:17 Bartók, op. 14/1: m. 41 - 44¹

Measure and pulse number	Chord combination	Chord type	General comments
41 ¹	C# - E - G#	b	Circling around a
41 ²	B# - D# - Fx	b	harmonic point.
42 ¹	F# - A - C#	b	E = harmonic dominant
42 ²	D# - F# - A	d	<u>pedal note.</u>
43 ¹	C# - E - G#	b	Chromatically
43 ²	C - E \flat (D#) - G	b	descending chord
44 ¹	B - D# - F#	a	streaming shift.

Diatonic "whole tone" separated descending chord streaming appears in the left hand part from m. 45 - 46¹ and is repeated again from m. 47 to 48¹.

Two further concise examples of chord streaming emphasising colouristic chromatic downward sliding, appear during m. 49 - 50.

Ex. 5:18 Bartók, op. 14/1: m. 45 - 50



7.2 Double-degree constructions

7.2.1 Double-degree triads

In this movement diatonic major triads are obscured through diatonic and chromatic representation of the genus defining major third. This results in both tonal instability and ambiguity because the diatonic triad is rendered tonally vague due to its indistinct formulation.

The example which ensues comprises a major triad E - G# - B. The inclusion of the G \natural creates the following double-degree chord: E - $\underline{\text{G G\#}}$ - B, triad type a, with d.d.

double-degree G - G#. F# is unaccented passing note.

Ex. 5:19 Bartók, op. 14/1: m. 6



A similarly constructed double-degree chord appears at m. 45¹. The contextual presentation of the two examples differs. The former example with its wide spacing allows the double-degree to appear as a piquant dissonance. This next example presents the double-degree as a clashing semitonal dissonance. Both examples possess a clear harmonic function within the tonal syntax and are therefore easily identifiable as double-degree chords.

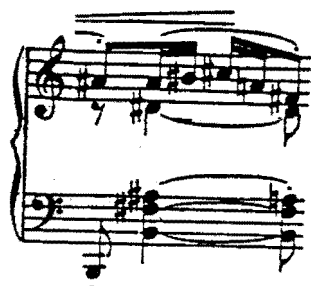
Ex. 5:20 Bartók, op. 14/1: m. 45¹



7.2.2 Double-degree tetrads

Two double-degree tetrads are observed in this movement. The first example is found at m. 34 where a dominant tetrad (type aII) is presented. The tonal ambiguity, though, is quickly dispelled through the appearance of the same tetrad in unambiguous representation.

Ex. 5:21 Bartók, op. 14/1: m. 34



The second example is found at m. 47² where a subdominant function tetrad (type dII) is formed. This double-degree tetrad (A - $\underline{C C\#}$ - Eb - G) is a dissonant construction d.d.

requiring resolution, which does not transpire. The resultant harmonic tension which ensues is compounded by the ambiguity of the tetrad's construction.

Ex. 5:22 Bartók, op. 14/1: m. 47²



7.3 Chord of omission

The first example of a chord of omission is found during the final cadencing which demarcates the end of the first structural section. At m. 35^{2,2} the following triad in G major, A \flat - C - E is alluded to. This augmented triad (type c) is disguised through the appearance of a colouring second B \flat which replaces the note C and consequently creates a chord of omission. The F \sharp is a non-essential harmonic tone: *échappée*.

Note the harmonic camouflaging of the two subdominant function triads in this plagal close.

Ex. 5:23 Bartók, op. 14/1: m. 35 - 36

35 36

poco rit. - - -

RH: VI I

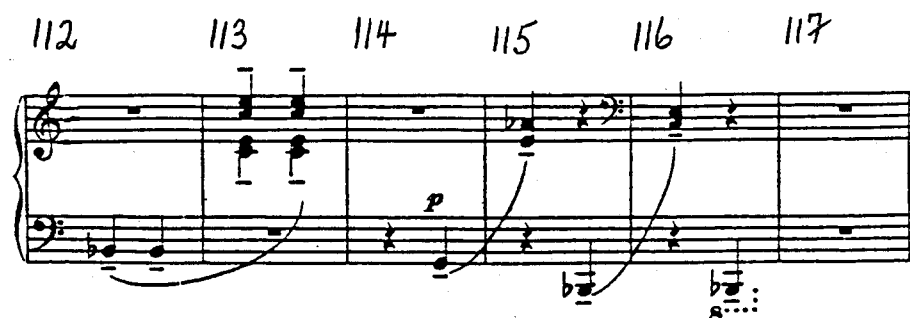
LH: IV I

 SD T

A further example of a chord of omission is located during the final section of this tripartite structured movement.

In the closing measures the tonic triad is implied as a means of tonal assertiveness. The tonic note B \flat is stressed through articulation at m. 112, 115² and 116². This note is linked to an ensuing major third, C and E through means of a slur which suggests a single unit of thought. The notes C and E substitute for the notes D and F respectively, thus creating a chord of omission. The tonic triad B \flat - D - F is alluded to and is replaced by a "whole tone" tonic triad. A distinct tonal presentation is negated and in keeping with the expanded tonal idiom is merely suggested.

Ex. 5:24 Bartók, op. 14/1: m. 112 - 117



7.4 Whole tone scale

The final twelve measures are based virtually exclusively on the whole tone scale of B \flat save for the intrusive G natural (m. 110 - 114).

It is used at the conclusion of the movement as a tonicising agent. The lack of traditional dominant to tonic movement due to the lowered leading note (A \flat) allows the tonality to be at once both evaded and established. In this sense it is a useful tool for the purpose of colouring the principal harmonic features within the expanded tonal idiom.

Ex. 5:25 Bartók, op. 14/1: m. 100 - 105

The six measures starting at m. 100 utilise the whole tone scale in the upper and lower most strands. The intervening notes do not all belong to the whole tone scale. However all these notes are members of the fully chromaticised major scale of B \flat , whereby the whole tone scalar features serve to negate the impact of forward thrusting harmonic progression.

A monotonal aural product results where the following two chords in B \flat major alternate with each other: Ib and IV through enharmonisation of the notes A \flat and G \flat to G \sharp and F \sharp respectively, where G \sharp is a triad member and F \sharp a lower auxiliary.

However the A \flat and G \flat in Bartók's orthography suggests that the tonic triad should alternate with an obscured flattened dominant. For this harmonic interpretation to be realised, two notes including the root note would have to be enharmonised: F \flat and C \flat respectively. Therefore I consider the former harmonic analysis to be valid, where the root note, E, remains intact.

As in the opening measures of the movement tritone root movement between B \flat and E is to be found. Here it is obscured due to the orthography and the appearance of the tonic triad in inversion.

CHAPTER SIX: SECOND MOVEMENT, SUITE OP. 14

1. INTRODUCTION

This movement is chiefly characterised by the following harmonic features: shifting tonality, persistent use of tonally ambiguous augmented triads (type c), the unstable tritone interval, chords of omission and addition, and double-degree constructions. These features have the dual function of both developing and obscuring tonally gravitating procedures.

The use of the whole tone scale and its resultant aspects displays Bartók's concern with macro-structural unity within the *Suite*.

The ensuing analysis concentrates on identifying and commenting upon these harmonic features, where every feature and musical element impacts interdependantly, resulting in a fully integrated musical product.

2. SHIFTING TONALITY

A series of harmonic organisms characterises the macro-harmonic structure. Each organism comprises both elements which either develop or alternately obscure tonality. These elements inter-relate with each other, thereby creating the specific atmosphere surrounding each organism.

Being devoid of a single over-arching macro-tonality the harmonic language and idiom of this movement comprises a continual movement from one key (organism) to another.

A schematic representation of the movement's harmonic organisms during the first 122 measures places the shifting tonality conclusion into context. Note the tritone relationships and the mediant relationship. These relationships are a development of

what was formulated during the first movement.

Ex.6:1 Schematic representation of harmonic organisms: m. 1 - 122

m. 1 - 8 | 9 - 16 | 17 - 30² | 30³ - 48 | 49 - 56 | 57 - 60 | 61 - 64 | 65 - 68 | 69 - 122'

upper apparent third relationship tritone relationship upper diatonic third relationship tritone relationship

3. TECHNIQUES CREATING BOTH THE DEVELOPMENT AND OBSCURATION OF TONALITY DURING FIVE HARMONIC ORGANISMS

3.1 Harmonic organism: m. 1 - 16

Ex. 6:2 Bartók, op. 14/2: m. 1 - 16

p marcatisissimo

f# : I

a^b : I

3.1.1 Diatonic tonic triads developing tonality

Two eight measure symmetrical sentences (m. 1 - 8 and 9 - 16) both comprise two phrases. The first of which ends inconclusively, whilst the second phrase of each sentence has a clear harmonic direction in its conclusion, thus giving each eight measure sentence harmonic direction. This direction is enunciated through two closed position diatonic triads (type b). Through doubling each triad's root note Bartók emphasises the tonicising impact of each triad.

The first sentence is directed towards F# minor, where the tonic triad (F# - A - C#) is clearly profiled, m. 7² - 8². The second sentence is directed towards A♭ minor, where the tonic triad (A♭ - C♭ - E♭) is clearly profiled, m. 15² - 16².

With the enunciation of the F# and A♭ minor tonic triads respectively, the harmonic ambiguity and instability inherent in each sentence is dispensed with, and a clearly stated diatonic focal point is established.

3.1.2 Augmented triads obscuring tonality

During each sentence harmonic ambiguity and instability is created through the consecutive use of unresolved augmented triads in second inversion. The second sentence is sequentially repeated a perfect fourth higher (compared to the first) excepting for the final two measures. The sequential repetition at a higher interval is an additional aid towards creating musical tension, thus, further highlighting both harmonic ambiguity and instability.

3.2 Harmonic organism: m. 33 - 48

Ex. 6:3 Bartók, op 14/2: m. 33 - 38 (full-score)

m. 33 - 48 (single-line enharmonisation)

The musical score for Bartók, op 14/2, measures 33-48, is presented in a single-line enharmonisation format. The main score is written for piano and includes a treble clef and a key signature of one sharp (F#). The tempo is marked 'f giocoso'. The single-line enharmonisation below the main score shows measures 33-37 with a treble clef and a key signature of one sharp (F#). The bottom staff shows measures 38-43 with a bass clef and a key signature of one sharp (F#). The final measure is marked 48.

3.2.1 Fully-chromaticised major scale

The fully-chromaticised major scale of D is used. The tonality is reinforced through the melodic content of the thematic material which is contained in the left hand part.

The repetition of the note D (m. 39 - 43) with strong dynamic articulation, on the first beat of the measure coupled to a longer note value, enhances the melodically tonicising impact of the note D within the thematic material.

Bartók makes use of the following letternames amongst others: G \flat , F, D \flat and C.

They are enharmonic representations of the following scale members: F#, E#, C# and B# respectively. In my opinion the enharmonised form of these scale members is used by Bartók to facilitate keyboard sight reading. In the example (notated according to the fully-chromaticised major scale of D), note how the G and E# lend upper and lower support to the genus defining major third, F#. Thus Bartók's orthography of the melodic thematic material camouflages the tonal basis of the passage.

3.2.2 Inverted pedal points

Pedal points highlighting both the tonic and dominant tonal areas comprise the right hand part. Pedal points form natural regions for tonal development and harmonic enunciation. Here their tonally developing function is obscured through the use of lower diatonic semitones which as colouring seconds create dissonance. G# and C# are the colouring seconds which obscure A and D respectively, where A represents the dominant and D the tonic.

3.3 Harmonic organism: m. 49 - 56

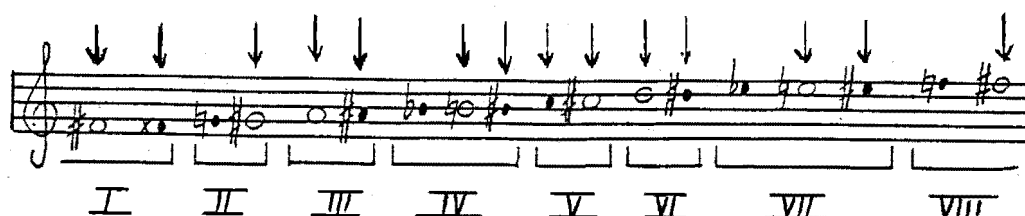
Ex. 6:4 Bartók, op. 14/2: m. 48³ - 56

The musical score for Bartók's op. 14/2, measures 49-56, is presented in two systems. The first system covers measures 49 to 52, and the second system covers measures 53 to 56. The tempo marking 'più tranquillo' is present above measures 49-52, and 'cresc.' is present below measures 53-56. The dynamic marking 'mf' is present below measure 49. The score is in 3/4 time and features a complex harmonic structure with many accidentals. The right hand part is highly melodic with many chromatic alterations, while the left hand part provides a harmonic foundation with sustained notes and some chromatic movement.

3.3.1 Fully-chromaticised scale

These eight measures appear in the key of F# minor. All, excepting four, members of the fully-chromaticised minor scale are used. In the following music example the notes used are marked with an arrow.

Ex. 6:5 Fully-chromaticised minor scale of F#



3.3.2 Tonal confirmation through melodic movement

The melodic content of the upper strand of the left hand part re-enforces the tonality of F# minor. It revolves around the tonally defining minor third interval, and is derived from the first four notes of the melodic minor chromatic scale.

3.3.3 Chord of addition effect obscuring tonality

The right hand part's rising perfect octave pattern creates tonal equivocation through using two forms of the leading note degree (E and E#) as well as the major third degree (A#). This ambiguity is further compounded through the addition of the interval of a major seventh, sounded with each perfect octave, which causes a colouring second to be formed thereby creating a chord of addition effect. Consequently the notes Cx, D and Gx which are not members of the fully-chromaticised minor scale fulfil a colouristic, obscuration function, typical of the expanded tonal idiom.

3.4 Harmonic organism: m. 57 - 71

Ex. 6:6 Bartók, op. 14/2: m. 57 - 71

The musical score consists of two systems of staves. The first system covers measures 57 to 61. It begins with a treble clef and a bass clef, with a key signature of one sharp (F#). The tempo/mood is marked 'ff marcatissimo'. The second system covers measures 65 to 71. It begins with a treble clef and a bass clef, with a key signature change to one flat (Bb) at measure 65. The dynamics range from 'f' to 'ff'.

3.4.1 Obscured thematic and harmonic content

These fifteen measures have a keyboard range which spans five octaves. The writing follows an angular line and dislodges the inherent musical sensibility through octave and tritone displacement. The following music example reduces the texture to a single line and ignores the octave displacements, thus allowing the following thematic content to emerge.

Ex. 6:7 Single-line reduction, Bartók, op. 14/2: m. 57 - 71

Handwritten musical notation for Bartók's op. 14/2, measures 57-71. The notation is on a single staff with a treble clef. Measures 57-61 are bracketed and labeled 'C# minor'. Measures 65-71 are bracketed and labeled 'D minor' and 'C major'. The notation shows a series of notes with various accidentals, including sharps and naturals, and rests.

3.4.1.1 Scalar movement promoting tonality

The keys of C# minor, G# minor and C major are strongly alluded to through the use of harmonic chromatic minor scale movement, either ascending or descending but nevertheless moving assiduously towards the tonic degree. The structural importance of this degree is emphasised through strong articulation. Through using incomplete scalar movement to delineate a tonality Bartók displays his expanded tonal tendency for unassertive tonal enunciation.

3.4.1.2 Tritone interval promoting tonality

The interval of an augmented fourth creating the dissonant tritone effect is used conspicuously from m. 65 to 67. The C# at m. 67² resolves naturally through rising to the upper tonic. The harmonic tension and expectation created by this tritone belonging to the key of D minor is thus resolved (even without the G moving to the F) and a transient tonality is established. However the consecutive use of the tritone intervals immediately preceding this resolution creates added harmonic tension and obscurity.

3.5 Harmonic organism: m. 72² - 122¹

Ex. 6:8 Bartók, op. 14/2: m. 73 - 82

Handwritten numbers 73 and 77 are above the first system, and 80 and 82 are above the second system.

3.5.1 Pedal point

A clearly represented diatonic tonic pedal point acts as a strong tonicisation procedure during this C major harmonic organism. This tonic pedal point is presented alternately as a single note or as an octave and persists throughout this organism. It is portrayed firstly as a repeated note (m. 71² - 72³) and secondly as a sustained note which is repeated at intermittent intervals.

3.5.2 Ostinato pattern with whole tone scale characteristics

Ex. 6:9 Bartók, op. 14/2: m. 81 - 82

Handwritten numbers 81 and 82 are above the musical score.

A two measure ostinato pattern is established at m. 81 and 82 above the sustained tonic pedal point. This pattern is repeated without interruption until m. 122¹. It comprises two augmented triads, the first in second inversion and the second in first inversion, both developed from the whole tone scale of C.

This scale both develops and obscures tonality and is therefore an ideal component of the expanded tonal fabric. In this organism its major tonally strengthening aspects are: diatonic major third vertical interval (C - E), e.g. m. 82¹; principal notes in the right hand, m. 86 - 108², when only constituent members of the scale are utilised; and the melodic progression: me - ray - doh.

Ex. 6:10 Bartók, op. 14/2: m. 86 - 106²

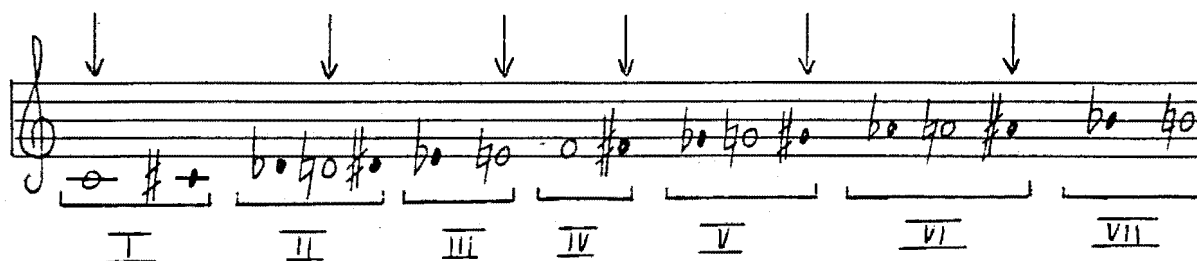
86 90

95 a tempo 99

103 106

Note how these measures are based wholly on the whole-tone scale which is merely a subset of the fully-chromaticised major scale of C. This is depicted in the following example where the whole-tone scale members are clearly indicated with arrows.

Ex. 6:11 Fully-chromaticised major scale of C



**4. TONALITY DEVELOPED PRINCIPALLY THROUGH
OBSCURATION PROCEDURES**

The harmonic organism found from m. 139 to 154 is primarily developed through obscuration procedures. In this organism the music is centred around C major.

4.1 Irregularly constructed chord of addition and omission

Ex. 6:12 Bartók, op. 14/2: m. 147 - 150



The eight measures m. 147 - 154 strongly imply the tonic triad of C - E - G. The introduction of this chord is spread over two measures, m. 147 and 148 and constitutes a tonally ambiguous chord of omission where the genus-defining major third (E) is omitted and is replaced by a colouring second F#. The tritone movement in the bass part (C to F#) creates more tonal uncertainty and unpredictability. However, C in the bass is a pedal point and constitutes a point of tonal magnetism and reference amid the general tonal obscuration.

The note B which appears for the first time at m. 150¹ and is repeated until this organism is completed is a colouring second which does not replace a constituent chord element and is therefore an additional dissonant element with chord of addition properties. Thus it can be construed that the construction appearing from m. 149 to 154, C - (E) - F# - G - B, comprises both chord of omission and chord of addition properties. It is therefore at once both a chord of omission and addition.

4.2 Dominant function double-degree construction

Ex. 6:13 Bartók, op. 14/2: m. 143 - 146

143 144 145 146

The four measures immediately preceding these eight measures of "tonic harmony" are based on dominant function harmony thus constituting a dominant to tonic harmonic progression. Dominant function is strongly camouflaged through its presentation as a double-degree triad on the lowered leading note appearing in first inversion: B \flat - D \flat D - F. Fragmented linear profiling of the chord is a further aspect towards the creation of non-harmonic clarity.

5. TONALITY ACHIEVED MAINLY THROUGH TONALLY DEFINING PROCEDURES

The harmonic organism around F major is found from m. 187 to 209. Tonality is propagated by recognisable tonicisation procedures which are not strongly camouflaged but nevertheless do not undeniably promote tonality. The following are the tonicisation procedures utilised in the development of F major as a key centre.

5.1 Tritone movement

Ex. 6:14 Bartók, op. 14/2: m. 191 - 194

191 192 193 194



The two notes forming the tritone interval (E - B \flat) are repeated (with ostinato pattern characteristics) without the natural resolution (F - A) being effected. This merely strengthens the tonicisation power of the tritone interval and enhances its function as a tonal pillar with dominant harmonic function properties.

5.2 Diminished tetrad

The initial tritone interval ostinato pattern is extended to a four-note pattern (m. 203 - 206) where the lowered submediant is incorporated. When considered in conjunction with the underlying sustained G in the bass a diminished tetrad (type dIII) formed on the leading note in first inversion, E - G - B \flat - D \flat , is formed. This tetrad has strongly suggestive tonal properties, as dominant function harmony in the key of F major.

Ex. 6:15 Bartók, op. 14/2: m. 203 - 205¹

203 204 205

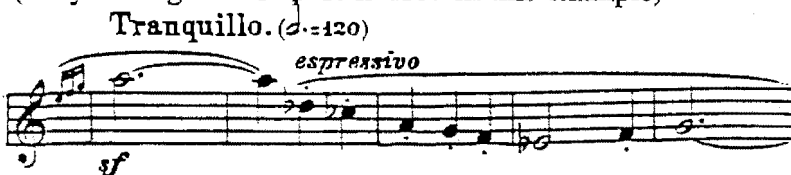


5.3 Whole tone scale

In addition to the dominant harmonic function characteristics described in 5.1 and 5.2 the right hand part is clearly based on the whole tone scale of F. This scale acts as a further tonicising agent albeit with disguised characteristics.

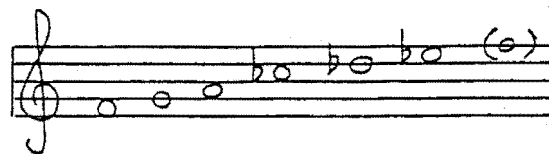
Ex. 6:16 Bartók, op. 14/2: m. 194 - 198

(Only the right hand part is used in this example)



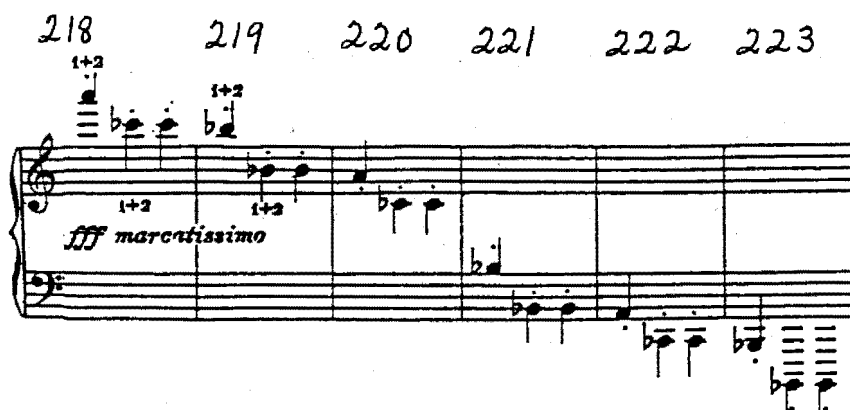
The whole tone scale it is based on is notated as follows:

Ex. 6:17 Whole tone scale of F



6. CONCLUDING CLOSE AND HARMONIC PUNCTUATION

Ex. 6:18 Bartók, op. 14/2: m. 218 - 223



The final close and culminating harmonic punctuation comprises a downward spiralling two-measure figure. Two measures, m. 218 and 219 are repeated twice,

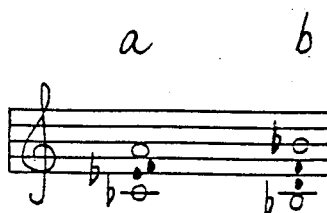
each time at an interval two octaves lower.

This closing harmonic punctuation is rendered with limited harmonic power and strength due to:

- * the appearance of a close and not a fully-fledged cadence;
- * linear, horizontal presentation in single notes of the implied chord structure's most salient notes;
- * the implied use of a dominant seventh substitute tetrad; and
- * the resolution of this tetrad displaced an octave lower, partially negating the natural voice-leading resolution tendencies of the progression.

Without octave displacement the salient harmonic notes would appear thus:

Ex. 6:19



The "open" notes are the notes used during the progression. The "closed" notes are the notes implied, to form a complete chord, by the voice-leading tendencies of the "open" notes. The strongly implied chords are:

- (a) (F) - A - C \flat - (E \flat), B \flat : V 7 c, tetrad type eII.
- (b) B \flat - (D - F), B \flat : I, triad type a.

The French augmented sixth chord (tetrad type eII) has strong dominant function properties and is used in lieu of a primary dominant seventh. As it resolves onto the implied tonic triad a perfect close is strongly suggested. Through closing a movement with harmonic implication and not clear-cut enunciation Bartók embraces the tonal realm of expanded tonality.

CHAPTER SEVEN: THIRD MOVEMENT, SUITE OP. 14

1. INTRODUCTION

During this movement progression and a sense of impetus is not primarily gained through the facilitation of harmonic progression, where a series of chords arranged in an ordered sequence, in consort with other elements, directs the music's progressive ebb and flow.

Forward thrusting progression and a sense of "energy-movement" is projected through gradual dynamic level intensification, increasing voice-layers resulting in a thickening of texture, perpetually running figurations covering a wide-ranging keyboard compass and a very fast tempo. The culminative effect of these elements acting associatively generates an exciting and intense musical product.

Tonality is projected mainly through the use of the fully-chromaticised minor scale, tonic pedal points and ostinato patterns suggesting a gravitation around the tonic triad.

This movement is constructed within a loosely-fitting compound ternary design with invigorating thematic variation and transformation comprising the reprise of the initial section.

2. TONALITY ASPECTS OF SECTION A: m. 1 - 59

2.1 Ostinato patterns

2.1.1 Tonic orientated ostinato patterns

This section is primarily based upon three ostinato patterns, each with a clear melodic content. Each ostinato pattern encapsulates a tonicisation procedure and their combined interaction produces a minor mode tonality specifically focused around the tonality of D minor. However, in accordance with the expanded tonal idiom an element of obscurity surrounds each tonicisation procedure. Therefore the tonality

of D minor is strongly alluded to and is without an unequivocal formulation.

The three ostinato patterns are:

Ex. 7:1



- (a) The first five notes of the diatonic minor scale are strongly implied, the first four diatonically and the fifth chromatically. The tonicisation effect which is developed during this ostinato pattern is obscured through the chromatic semitonal lowering of the dominant degree, A \flat .
- (b) The tonic triad of D minor is outlined and an element of ambiguity is introduced through the chromatic raising of the subdominant degree, G \sharp . (The Lydian fourth so prevalent in the folk music analysed by Bartók.)
- (c) This chord of omission surrounds the tonic triad, where E \flat and G \sharp are colouring seconds replacing the constituent diatonic note of F. E \flat is the Neopolitan second and G \sharp the Lydian fourth, both members of the fully-chromaticised minor scale of D. The E \flat lends semitonal support from above to the tonic degree and the G \sharp lends semitonal support from below to the dominant degree. Through the omission of the minor triad's genus-defining minor third (F) a strong element of tonal ambiguity is introduced.

Tonic pedal point properties of (a) and (b)

The repeated note D, the first note within the ostinato pattern comprises a tonic pedal point within the ostinato repetition. Its bass depth (displaced an octave lower from the other notes) and its regularly recurring rhythmic impact emphasise the tonicisation

characteristics of the tonic pedal note. This is revealed in the following two notational examples.

Ostinato pattern (a)

Ex. 7:2 Bartók, op. 14/3: m. 1 - 4

1 2 3 4

Allegro molto. ($\text{♩} = 124$)

p non legato

Ostinato pattern (b)

Ex. 7:3 Bartók, op. 14/3: m. 10 - 13

10 11 12 13

Tritone elements of (a) and (b)

Note how two notes creating obscurity ($A\flat$ and $G\sharp$) are both enharmonisations of each other covering a tritone intervallic distance from the tonic note respectively: $D - G\sharp$ and $A\flat$ to D . Thus, a further element of tonal instability and angularity is brought to bear upon the tonal structure of each ostinato pattern beyond the obscurity techniques outlined at (a) and (b) respectively.

2.1.2 Dominant orientated ostinato pattern

The ostinato pattern which comprises tonic chord of omission properties is supported from below with a short three-note ostinato which emphasises the dominant. Their

simultaneous use results in vertical quartal intervals being formed. The following four measures display the construction of the short three-note dominant orientated ostinato pattern, resultant quartal intervals and the consecutive use of quartal doubling. Note the simultaneous use of three different ostinato patterns in the following example.

Ex. 7:4 Bartók, op. 14/3: m. 34 - 37



Whilst the quartal doubling creates tonal obscurity through avoiding the tertian construction of the diatonic triadic system, in this instance it acts as a tonal anchor because at m. 34^{2,1} and 34^{4,1} the vertical construction formed with the left hand note is a tonic triad in first inversion.

Notwithstanding the fact that in performance this vertical construction will be only momentarily audible within the progressive sweep of the phrase its mere presence is a tonally stabilising element.

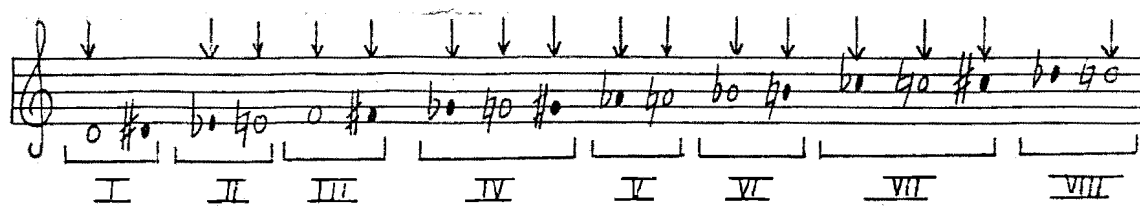
2.2 Fully-chromaticised minor scale

During this first section Bartók's orthography reveals his intuitive use of the fully-chromaticised minor scale as a source for composition.

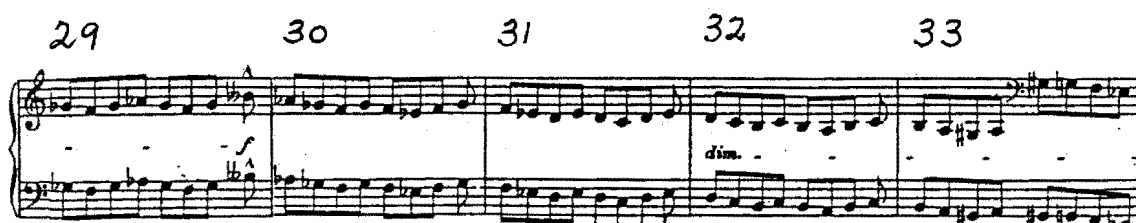
Only two members of the fully-chromaticised minor scale of D are not employed: the raised and lowered tonic degree, D[#] and D^b respectively. Thus the tonic degree is always presented in its pure and unequivocal form. This ensures that the tonic degree is a strong tonicising agent without any tonally ambiguous properties.

Ex. 7:5 Fully-chromaticised minor scale of D

(arrows indicate the notes that are used)

**Unorthographical representation**

The note B $\flat\flat$ (m. 29^{4,2}) is not a member of the fully-chromaticised minor scale of D. I believe that Bartók's use of this note is deliberate and not an example of carelessness.

Ex. 7:6 Bartók op 14/3: m. 29 - 33

B $\flat\flat$ is the first note in a descending sequential chain pattern comprising eight notes. A diatonic interval separates the first two notes of the sequential pattern in each instance. I believe that to achieve orthographical standardisation Bartók used the note B $\flat\flat$ instead of the correct scale member A \sharp which would result in a chromatic semitone instead of a diatonic semitone separating the first two notes during the initial presentation of the sequential chain pattern.

2.3 Short chain of connected minor triads

The three strong triadic structures at m. 50 - 51, 54 - 55 and 58 - 59 respectively represent three rising triadic structures with chromatic third relationship. The

appearance of the second and third triads occurs with thematic interpolation separating them, but this does not detract from their powerful harmonic arrival effect nor their chromatic third association.

The analytical explanation which follows the following example clearly displays their associated construction and their inter-connected harmonic function. In keeping with the expanded tonal ethos the diatonic harmonic function is obscured.

Ex. 7:7 Bartók, op. 14/3: m. 50 - 59

m. 50 - 51: F# - A - C#, d: III , triad type b. Dominant harmonic function.

m. 54 - 55: A - C - E, d: V, triad type b. Dominant harmonic function.

This constitutes an altered chord due to chromatic lowering of the diatonic leading note C#. Due to the C \flat a minor triad construction results, instead of the tonally strong major triad.

m. 58 - 59: C - E \flat - G, d: VII, triad type b. Dominant harmonic function.

This chain of chromatically associated minor triads clearly depicts the expanded tonal ethos through the representation of a harmonic function without reference to the traditional diatonic form of that function.

3. SECTION B: m. 60 - 83²

3.1 Tonality

This section is principally in C major though four measures, m. 64 - 67, appear in F# major. These two tonal areas are a tritone apart and are a further example of the structural unity Bartók achieves throughout this movement and *Suite* through using the interval of a tritone.

3.2 Two unusual irregular constructions

3.2.1 Double-degree tonic triad of addition

Ex. 7:8 Bartók, op. 14/3 m. 60 - 62

60 61 62

Poco più mosso. (♩ = 160)

ff martellato

The genus-defining third degree is presented in both its chromatic (E \flat) and diatonic (E \sharp) guises. In accordance with the ethos of expanded tonality two additional obscuration techniques are employed. F \sharp is an additional colouring second. Thus the tonic double-degree triad has chord of addition properties. This dissonant construction which incorporates the tritone interval (C - F \sharp) is obscured further through the use of a diatonic upper auxiliary, A.

3.2.2 Double-degree tetrad of omission

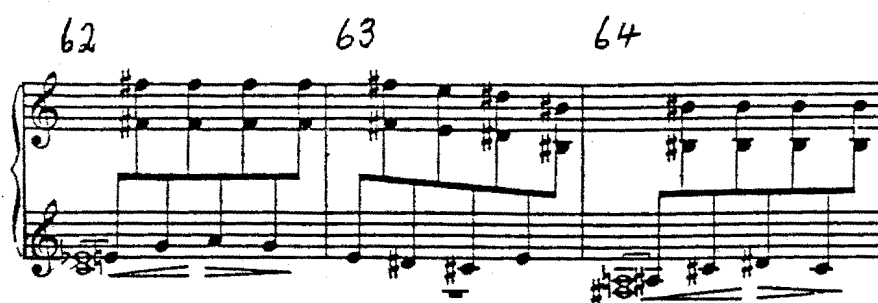
Ex. 7:9 Bartók, op. 14/3: m. 71 - 75

71 72 73 74 75

The irregular vertical construction found at m. 71, 73 and 75 comprises the genus-defining third degree as a double-degree (E^b and E^{\sharp}). F^{\sharp} replaces the diatonic constituent member, G. These obscuration techniques disguise the diatonic tonal pillar represented by the diatonic root note, C.

3.3 Modulation through the partial enharmonisation of the tritone

Ex. 7:10 Bartók, op. 14/3: m. 62 - 64



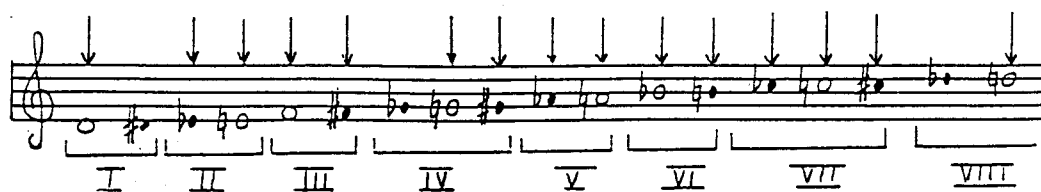
Note how the tritone generating interval C - F^{\sharp} is partially enharmonised at m. 63⁴ to a B^{\sharp} . This enharmonised note creates the link between the two tritone separated tonal organisms. B^{\sharp} forms an integral part of the tonic harmony of the F^{\sharp} major organism. It is the colouring second (forming a tritone interval from the tonic) in this double-degree triad of addition.

4. TONALITY ASPECTS OF THEMATIC REPRISE: m. 83³ - 134

4.1 Macro-tonality

As in the initial presentation of this section the music is in D minor and is based on the fully-chromaticised minor scale. The notes utilised are indicated with arrows in the ensuing music example. Note that only three scale members are not employed: the chromatically lowered subdominant and the chromatically raised and lowered tonic. Therefore the tonic degree is always presented diatonically without tonal equivocation, thus creating a secure, magnetic tonal pull towards the tonic area.

Ex. 7:11 Fully-chromaticised minor scale of D



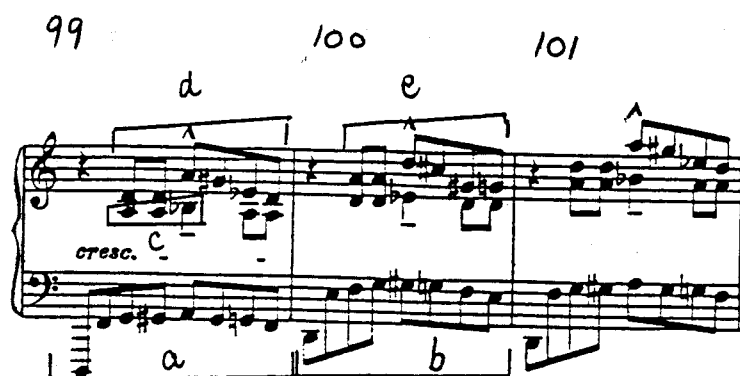
During this thematic reprise the thematic material is richly varied and structured towards obtaining a strong climactic effect as the movement hurtles towards its culmination. By far, the greater part of this section is based on the tonic triad which acts as a strong tonicising agent.

4.2 m. 83³ - 104:

Tonicising ostinato patterns

This section correlates with the initial thematic presentation because the same ostinato patterns are employed with similar divisions between the two hands of these patterns. In the following example the patterns marked (a), (b) and (d) are tonally-defining ostinato patterns centered around the tonic triad. The pattern labelled (e) is a transformation of the pattern labelled (d). (c) represents a short ostinato pattern emphasising the dominant.

Ex. 7:12 Bartók, op. 14/3: m. 99 - 101



4.3 m. 105 - 116: Chords of omission

The sixteen-note figure found at m. 105 - 106 forms the basis for a twelve measure development doubled at the octave. This figure contains both tonic and dominant function characteristics which are presented through chord of omission procedures:

- * m. 105 (labelled X): D - E \flat - G \sharp - A, a chord of omission representing the diatonic tonic triad D - F - A. E \flat and G \sharp are colouring seconds lending semitonal support to the tonic and dominant notes respectively.
- * m. 105⁴ - 106^{2,1} (labelled y): A - B \flat - E \flat - E \natural , a chord of omission representing the diatonic dominant triad, A - C \sharp - E. B \flat and E \flat are both colouring seconds utilised in lieu of the diatonic note C \sharp .

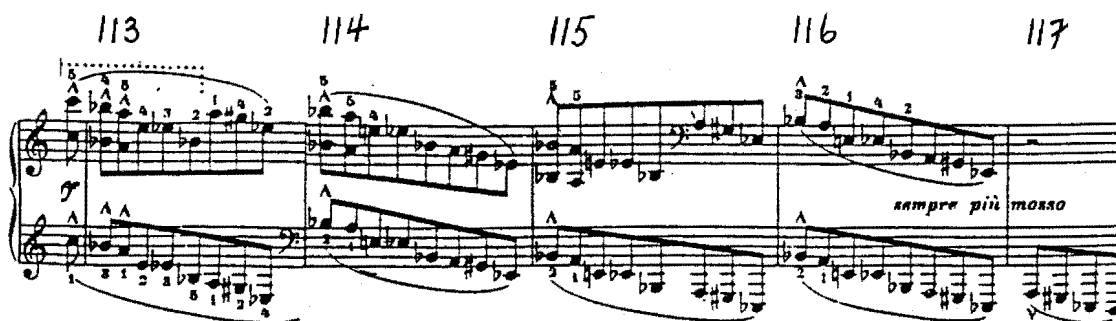
The five notes indicated via a dotted bracket are derivatives of the two previously mentioned chords of omission and complete the melodic content of the sixteen note figuration.

Ex. 7:13 Bartók, op 14/3: m. 105 - 106



Note the dominant function harmonic focus of the four measures concluding this thematic development. They pave the way for the tonic convergence at the conclusion of this movement.

Ex. 7:14 Bartók, op. 14/3: m. 113 - 117²



4.4 m. 117 - 134

4.4.1 Tonic chord of omission

The tonic is the principal harmony from m. 117 onwards apart from two dominant function interpolations. The tonic is powerfully alluded to through the chord of omission which is one of the original ostinato patterns of the movement. Through repetition at ever-increasing higher planes appearing in written-out arpeggio form, the tonic is forcefully entrenched.

Ex. 7:15 Bartók, op. 14/3: m. 117 - 118



4.4.2 Dominant harmonic function chord streaming

The mediant-degree (dominant function) is referred to at m. 119. It is represented by a double-degree tetrad: F# - A - C# - C \flat - E.
d.d.

This paves the way for chord streaming at m. 123 above the sustained root F#. Consequently the harmonic focus of the triad is not lost but is merely coloured by the

chord streaming.

Ex. 7:16 Bartók, op. 14/3: m. 119 and 123

A more limited form of chord streaming outlines the dominant triad formed on the chromatically lowered root with double-degree characteristics at m. 126^{3 and 4} and 127^{3 and 4}. The constituent triadic members are:

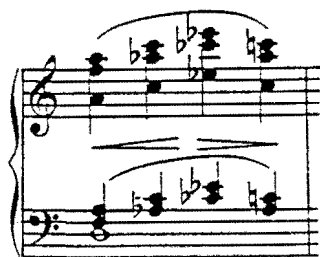
A \flat - $\underline{\text{C}\mathbb{b} - \text{C}\sharp} - \text{E}\mathbb{b}$.
d.d.

Ex. 7:17 Bartók, op. 14/3: m. 126 - 127

4.4.3 Tonic triad chord streaming

In the same way that the chord streaming at m. 123 is a natural development of m. 119, the tonic chord streaming at m. 125 is a logical expansion of m. 121. The chord streaming at m. 125 occurs above a sustained diatonic root note, D. Consequently the harmonic focus of the triad is not lost but is merely coloured by the chord streaming.

Ex. 7:18 Bartók, op. 14/3: m. 125



4.4.4 Final cadencing

Ex. 7:19 Bartók, op. 14/3: m. 131 - 134

Ex. 7:20 Harmonic reduction m. 131 - 134

The harmonic punctuation which concludes this movement is not clearly enunciated and is merely alluded to. A fully-fledged cadence is not employed and a close is strongly implied. Thus through purport a Strauss authentic close in second phase is

created.

Diatonic dominant function is omitted and is replaced by two alternating chromatic dominant function chords. The tonic triad is not clearly represented and is outlined by a chord of omission which also includes a colouring second. Thus the analytical conclusion that this close has validity only through implication. The harmonic reduction which follows the chord-by-chord analysis clearly bears this out.

m. 131 - 132²: Alternating dominant function chords

C^b - E^b - (G^b), d: ~~VII~~, triad type a.

A^b - C - (E^b), d: ~~V~~, triad type a.

m. 132² - 134: Tonic function.

Tonic pedal point. (E^b = upper auxiliary)

Tonic triad of omission: D - E^b - G[#] - A.

B^b = appoggiatura.

CHAPTER EIGHT: FOURTH MOVEMENT, SUITE OP. 14

1. INTRODUCTION

This, the culminating movement is the shortest of all four, comprising a brief thirty five measures. It starkly contrasts the other movements which precede it and imparts an isolated, barren melancholic atmosphere. Rhythmic, melodic and harmonic elements associatively create this atmosphere through possessing inexact structural properties.

Rhythmically a clearly defined regularly recurring pattern is avoided and is replaced by vascillating time signatures and irregular pulse arrangements.

Melodically the material is presented in sparsely splintered fragments. It is concealed amongst the largely discordant texture and comprises principally of intervals encompassing a limited range.

Harmonically the music progresses in accordance with the expanded tonal idiom. Harmonic stability and coherence are merely alluded to. Harmonic points of reference are disguised and embrace totally the realm of expanded tonality.

The key of B \flat major is embraced by this movement. It is suggested through pedal points, melodic profiling, an obscured key-introductory six-four chord, an equivocal tonic triad, descending scale movement and double-degree constructions. Thus through these procedures the tonality is not unambiguously stated it is merely implied.

2. m. 1-18

2.1 Pedal Points

Two pedal points, one on the dominant and the other on the tonic are encountered

during these eighteen measures. Both emerge as tonal pillars and strong tonicising agents though the tonic pedal point possesses more impact than the dominant pedal point.

2.1.1 Inverted dominant pedal point

Ex. 8:1 Bartók, op. 14/4: m. 1 - 6

1 2 3 4 5

Sostenuto. (♩ = 120-130)

p dolce

6

The dominant pedal point is encountered during the opening six measures of the movement and it flanks salient melodic material. Therefore texturally its presence is obscured, thus its impact as a tonal stabiliser is minimised. During the sixth measure the doubling is lessened and at m. 6 the dominant appears in a single line. This is a further indication of the pedal point's systematic reduction of influence.

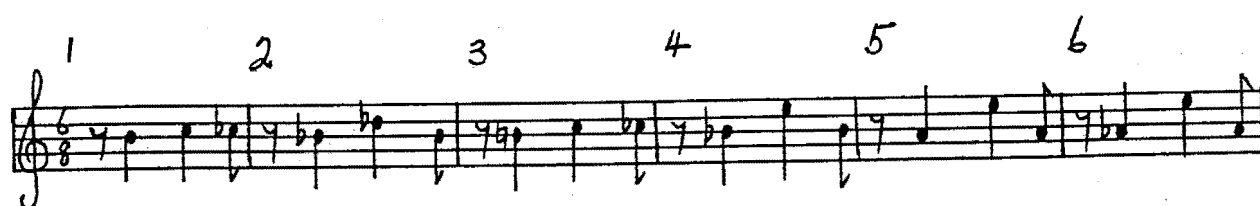
Note the short melodic motifs (doubled at the octave) which operate within the notes representing the pedal point.

These notes contain a dissonant vertical tritone relationship with the dominant pedal note, F, at m. 1 and m. 3. A horizontal tritone relationship is observed at m. 4. The

melodic profiling of tritone related intervals displays a compositional connection to the preceding three movements and what is to follow during this the fourth movement.

This tritone melodic movement is clearly apparent in the following example where only the melodic content is notated and the pedal point properties are omitted.

Ex. 8:2 Bartók, op. 14/4: m. 1 - 6: Melodic-thematic profiling



2.1.2 Inverted tonic pedal point

The tonic pedal point is presented with melodic clarity within the music's texture. It is presented diatonically as a repeated note (with upper octave displacement) without any ambiguity. Therefore its tonicising impact is clearly apparent as it weights the music towards a specific tonal area. Note how the acciatura's lend tonal support from the octave above the principal note.

Ex. 8:3 Bartók, op. 14/4: m. 10 - 16¹

Notwithstanding the fact that the tonic pedal point is tonally influential the accompanying bass line outlines in descending formation the first five diatonic notes of E major: a key with tritone relationship to the principal key of B \flat major. In context with the other preceding movements this tritone relationship is a form of macro-structural cyclical thematic transformation. It also represents harmonically a strong pull away from the principal tonality of B \flat major. Thus two opposing keys operate simultaneously creating an element of tonal ambiguity. The ensuing four-stave thematic reduction clearly displays the tonal forces opposed to the establishment of a secure tonal base:

Ex. 8:4 Bartók, op. 14/4: m. 10 - 17: Schematic harmonic representation

10 11 12 13 14 15 16 17

(a) pattern sequence partial sequence

(b)

(c)

(d)

E: III \flat a V a II \flat a* I \flat a VII \flat a VII \flat a B \flat : I \flat T II \flat a* SD

- (a) = Tonic pedal point: B \flat major
- (b) = Subsidiary melodic line derived from chords
- (c) = Basic chord structures without unessential note movement
- (d) = Bass line movement
- * = Neapolitan sixth with subdominant function

This analytical scenario where the strong attempt by the tonic pedal point of B♭ major to assert a tonality, is off-set and obscured by the tritone related tonality of E major clearly represents Bartók's application of the expanded tonal idiom. The analysis by Karpati is harmonically incomplete for he merely states 'this B♭ is constantly contrasted with B♯' (1993:160). Whereas the B♭ (pedal point) is more correctly contrasted with another key.

2.2 Obscured chord progression: I - II⁷♭ - I

However, the principal tonality does briefly prevail after this tritone intrusion albeit with vastly obscured harmonic constructions. This chord progression concludes the first structural section with a weakened and disguised plagal close.

Ex. 8:5 Bartók, op. 14/4: m. 15⁶ - 18

* m. 16: B♭ - D♭ - D♯ - F, B♭: 1, double-degree triad
d.d

The melodic notes C♭ and F♭ are colouring seconds which lend semitonal support above the tonic note and below the dominant note respectively. Enharmonised these two notes represent the dominant and tonic of E major respectively, thus detracting further from the stabilisation of B♭ major.

* m. 17, C - E♭ - E♯ - G♭ - G♯ - B♭, B♭: 11⁷♭, double-degree tetrad type all
d.d d.d

This tetrad comprises simultaneously major triad (C - E - G) and diminished triad (C - E♭ - G♭) properties. Whilst it fulfils subdominant function it is a strongly obscured construction formed on the supertonic.

* m. 18, B \flat - D \flat - D \sharp - F, B \flat : 1b, double-degree triad
d.d.

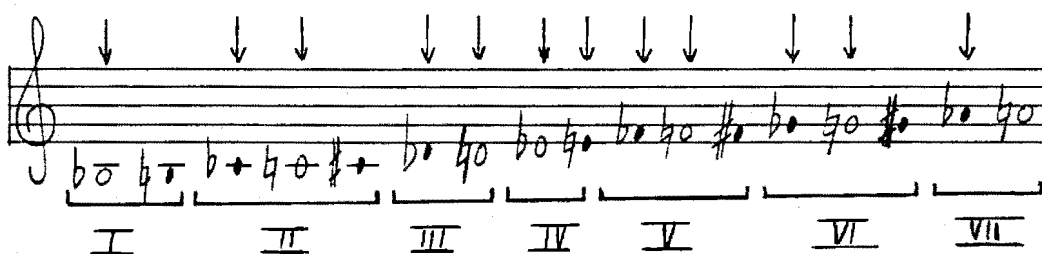
The upper part's notes C \flat - F \flat - G \flat - A \flat are melodic colouration notated according to the fully-chromaticised major scale of B \flat . However, enharmonised they represent the tonic triad of E major in second inversion with an additional colouring second: E - G \sharp - B(+ F \sharp). This is yet again a subtle reference to the tritone tonal dichotomy present in this movement and the work as a whole.

The harmonic progression II $^7\flat$ - Ib constitutes a plagal close (m. 17 and 18). This strongly camouflaged close represents harmonic punctuation within the unassertive ethos of the expanded tonal idiom.

Note how these three measures adhere orthographically to the fully-chromaticised major scale of B \flat , yet again displaying Bartók's intuitive use of this form of the major scale. Twelve out of a possible seventeen members are utilised.

Ex. 8:6 Fully-chromaticised major scale of B \flat

(Notes utilised are indicated with arrows)



3. m. 19 -27

3.1 Structural properties

The melodic shape of the patterns found at m. 16 - 17¹ and 18 - 19¹ are found during the first section at m. 9 - 10¹ in the upper right hand part. The rhythm encountered at m. 20 - 21¹ is the same as the opening syncopated pattern found during the first six measures. Thus the section can be considered a motivic growth of the opening

section. Furthermore the semitone shifting thirds found from m. 22 - 26¹ are a development of the semitone melodic movement found during the opening of this movement.

3.2 Harmonic construction

Ex. 8:7 Bartók, op. 14/4: m. 20 - 26

20

ritard. al Più sostenuto. (♩.100)

espr. molto espr. p. dolcissima

23

poco stringendo - cresc.

26

poco rit. Tempo I.

dim. p. dolce

This passage is harmonically ambiguous especially from m. 22 onwards where limited streaming of contrary motion major thirds occurs. These major thirds serve as tonal shading, obscuring the natural harmonic flow and tinging the harmony with an eerie quality.

The bass line offers some guide towards establishing an element of harmonic coherence. In the ensuing example only the salient bass line notes are notated.

Ex. 8:8 Bartók, op. 14/4, m. 20 - 26: Salient bass line notes

The musical notation shows measures 19 through 26. Measures 19-23 are in E major, and measures 24-26 are in A^b major. The bass line notes are as follows:

Measure	Notes
19	E
20	E, G#
21	E, G#
22	E, G#
23	E, G#
24	A ^b , G ^b
25	A ^b , G ^b
26	A ^b , G ^b

Below the staff, a dashed line separates the two tonalities: E major (measures 19-23) and A^b major (measures 24-26). The enharmonic link between G# and A^b is indicated at measure 22.

Up to m. 23 the bass line outlines three tonally inducing elements and at m. 22¹ the right hand part affirms the choice of key. These measures are in E major. The tritone relationship with B^b is once again a factor.

- * 1 = a dominant pedal point. The interval of a major third (E - G#) at the close of the pedal point, which is the resting point of the right hand's melodic profile, confirms the tonality.
- * 2 = The natural tritone of the diatonic scale of E major.
- * 3 = Descending diatonic scale movement resting on the genus-defining major third degree, G#.

Note the enharmonic link between this note and the key of the next transient tonality, A^b. (G# = enharmonisation.) Here the bass line outlines dominant to tonic movement with a chromatic A^b lending semitonal support from above to the tonic degree. In the score this chromatic note is displaced by an octave interval which minimises its harmonic impact. This is a further example of tonal ambiguity so evident within the expanded tonal idiom.

3.3 Double-degree tetrads

The two measures m. 26 and 27 comprise double-degree tetrads. The melodic fragmentation which tinges the quality of these constructions emphasises the tonic note through semitonal support from above and below respectively. C^b, m. 26 is thus an upper auxiliary and A, m. 27 a lower auxiliary.

Ex. 8:9 Bartók, op. 14/4: m. 26 and 27

26 27

Tempo I.

m. 26, $A\flat - C - \underline{E\flat E\sharp} - G$; $B\flat: VII^7$, tetrad type aI
d.d

m. 27, $G - B - \underline{D D\sharp} - F\sharp$; $B\flat: VI^7$, tetrad type aI
d.d

4. m. 28 - 35

This concluding section is clearly in $B\flat$ major. A number of strong tonally gravitating elements are used together with a variety of obscuration techniques in the development of this tonality. These elements of expanded tonality are discussed in the ensuing subsections.

4.1 Synthetic scale with major scale properties

During these ten measures the bass line outlines a varied version of the descending major scale of $B\flat$. It therefore acts as a discreet tonicising agent. This scale is rendered with the following chromatic alteration: raised fourth degree, $E\sharp$. This alteration is derived from the Lydian mode. Therefore this scale has synthetic scalar properties.

Ex. 8:10 Bartók, op. 14/4: m. 28 - 35 (bass line reduction)

28 29 30 31 32 33 34 35

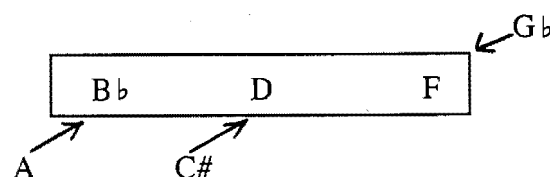
Note the additional metrical length accorded to the dominant and tonic degrees respectively. Thus the principal tonal pillars of the key are given metrical strength, especially the tonic which acts as the stronger tonicising agent of the two.

4.2 Key-introductory six-four chord

Ex. 8:11 Bartók, op. 14/4: m. 28 - 29



The chord construction found at m. 28 and 29 is a tonic key-introductory six-four chord with colouring second disguisement. The diatonic constituent members B \flat - D - F are present. The notes A, C \sharp and G \flat are colouring seconds which imply semitonal support to the constituent members either from above or below, as follows:



Tritone tonal dichotomy (between B \flat major and E major) from this point onwards is eschewed and the music stands firmly in the key of B \flat major. The tonic key-introductory six-four chord marks the point of entrance for the principal key of the movement to be enunciated without ambiguity. The obscurations to the tonality can be explained in terms of the expanded tonal idiom.

The melodic profiling accompanying this sustained six-four chord is doubled at the octave and confirms the tonic attributes of the chord, albeit with strong tonal

disguisement. It is a melodic presentation of a chord of omission based on the tonic degree with the genus-defining major third as the omitted constituent triad member. Two colouring seconds, B \sharp enharmonised as C \flat , and F \flat , replace the major third degree, D.

Thus m. 28 and 29 comprise a disguised tonic key-introductory six-four chord and a melodically profiled tonic orientated chord of omission.

4.3 Tonic pedal point

The arrangement and spacing of notes in the right hand part during the presentation of the key-introductory six-four chord at m. 28 is repeated until the close of the movement.

Due to the tonic degree being the lowest note coupled to a static, unvarying presentation compared to the descending movement of the bass line and the asymmetrical weaving of the melodic line, this precursor of the chord cluster has tonic pedal point properties.

The following three measures serve as an example.

Ex. 8:12 Bartók, op. 14/4: m. 30 - 32

The musical score shows three measures (30, 31, 32) of a piece in 4/4 time. The key signature has two sharps (F# and C#). The right hand (treble clef) plays a melodic line with a descending movement, while the left hand (bass clef) maintains a static tonic pedal point (F#). The score includes the markings 'sempre dim.' and 'sempre più tranquillo'.

This tonic pedal point is a tetrad type a II with chord of omission properties. Both the

genus-defining major third, D, and the fifth, F, are replaced by colouring seconds, C# and Gb, respectively. Thus the tonicisation elements are presented with disguisement which minimise their impact and display the ethos of the expanded tonal idiom.

A further element towards creating tonicisation unassertiveness is revealed in the texture. This tonic pedal point is "tucked away" with material flanking it on either side.

At m. 32 this pedal point forms an integral part of the final harmonic punctuation.

4.4 Final plagal close

The movement ends with a plagal close. Subdominant function harmony is represented at m. 32 and tonic function harmony for the ensuing three measures, m. 33 - 35.

Ex. 8:13 Bartók, op. 14/4: m. 32 - 35

The musical score for Bartók's op. 14/4, measures 32-35, is presented in a two-staff format. The key signature is B major (two sharps). The time signature is 14/4. The score is divided into four measures, labeled 32, 33, 34, and 35. Measures 32 and 33 feature a complex harmonic structure with multiple layers of chords and a prominent pedal point in the bass. Measures 34 and 35 show a tonic function harmony. The score includes dynamic markings such as *pp* and *ppp*.

4.4.1 Subdominant function harmony - m. 32

The chord structure $\frac{C \ C\#}{d.d} - E - Gb - Bb (+ A)$ is a double-degree tetrad type e II

with an additional colouring second A. Bartók does not allow the fundamental

diatonic aspects of this complex tetrad to be entirely disguised. The supertonic chord structure at m. 32 is principally suggested through the diatonic presentation of the major tenth interval in the bass, C to E.

The quartal structure with subdominant harmonic function in the melody further enhances the subdominant harmonic function.

It is a quartal construction formed on the flattened supertonic, C \flat - F \flat - B $\flat\flat$. Through enharmonisation (B - E - A) a subtle reminder of the tonal dichotomy between B \flat major and E major is revealed. This element of ambiguity is an aspect of the expanded tonal ethos and exemplifies the unassertive, disguised enunciation of tonality.

4.4.2 Tonic function harmony

The diatonic tonic degree is represented by an irregularly constructed tetrad which simultaneously comprises chord of addition and omission properties. The tonic degree is given an unequivocal diatonic presentation and its impact is heightened through octave doubling. The genus-defining major third, D, is diatonically represented with semitonal support from below, C \sharp . The fifth degree, F, is omitted and is replaced with a colouring second, G \flat , from above. Thus the tetrad appears as follows:

B \flat - D - (F) - A (+ C \sharp , G \flat), tetrad type aI.

The quartal constructions which colouristically accompany the tonic tetrad can be directly related to the linear quartal melodic profiling found during m. 32. During m. 34 and 35 the B $\flat\flat$ is omitted. The notes C \flat and F \flat are a final reminder of the tritone dichotomy which permeated this movement and *Suite*. Enharmonised they represent the dominant (B) and tonic (E) of E major. This final disguised presentation of the tritone separated tonality does not impinge upon the strength of the B \flat major key at the close. It is merely a reflection of the dichotomy evident during this movement.

CHAPTER NINE: CONCLUSION

1. INTRODUCTION

The principal contention throughout this dissertation has been that Bartók conceived his compositions within a tonal realm and as a tonal composer embraced the expanded tonal idiom.

The analyses undertaken in this dissertation reveal a well-ordered and articulate tonal organisation at the root of each piece's construction. They also reveal that Bartók's tonally generating procedures whilst being founded in the Classic-Romantic continuum, represent a developmental growth in their application. This aspect coupled to the disguisement of harmonic function and tonal pillars creates the primary prerequisites for classifying Bartók as a composer who embraced the expanded tonal idiom.

2. ANALYTICAL APPROACH

The analytical approach and style of presentation has not been uniform throughout. Two aspects have influenced the analytical approach undertaken in each instance. They are: the purpose and function of the work within the dissertation as a whole and the music itself.

The **Fourteen Bagatelles** (1908), Chapter three, are presented as a cohesive unit and each individual Bagatelle does not have a complete accompanying analysis. A detailed examination of the harmonic structure's content, of the opus as a whole, is undertaken. Bartók's application of specific expanded tonal harmonic procedures are highlighted and discussed. Music examples illustrate these procedures and emphasise the significance of the **Fourteen Bagatelles** in heralding Bartók's unique style and "new voice". Thus the analytical approach emphasises the historical and musicological importance of the **Fourteen Bagatelles** with the emergence of Bartók's identifiable composition style.

Allegro Barbaro (1911), Chapter four, is analysed in its entirety. The special tonal characteristics and harmonic procedures employed are discussed, as far as is possible, in chronological order of appearance. Special attention is given to highlighting procedures and techniques which either develop or obscure tonality within the expanded tonal idiom. These techniques and procedures are observed during the **Fourteen Bagatelles** and their use throughout **Allegro Barbaro** displays how Bartók's foundation stones remain intact from 1907 onwards.

The first and third movements of the **Suite** (1916), Chapters five and seven respectively, are both analysed similarly. The analytical presentation of both movements is topic based, whereby the techniques and procedures which are used to heighten or obscure tonality are discussed. These topic based expositions do not follow the chronological sequence of events during each movement but serve to highlight how the movement's techniques and procedures are derived from the **Fourteen Bagatelles** displaying the stability of Bartók's core compositional elements.

The second and fourth movements of the **Suite** (1916), Chapters six and eight respectively, lend themselves to a more chronological analytical presentation which is similar in style to that employed during the **Allegro Barbaro** analysis. It remains apparent that the tonal characteristics and harmonic procedures ascertained during the **Fourteen Bagatelles** remain primarily intact during these movements. This is further evidence of the constancy of Bartók's style which was established and maintained from 1907 onwards.

3. ANALYTICAL PROCESS

The analytical process employed throughout this dissertation revolves around a framework from which it is possible to perceive the inner logic of the harmonic procedures and tonal organisation employed by Bartók. It is possible to view the tonal structure as an organised system with tonally defining procedures which can be systematically classified and identified.

This analytical process is an aid towards demonstrating the correctness of the assertion that Bartók was primarily a tonal composer who embraced the expanded tonal idiom. It allows the underlying tonal skeletal design to emerge and be observed notwithstanding the following surface details:

- * the aural impact of Bartók's music is frequently dissonant due to either complex dissonant chordal structures or dissonance arising from contrapuntally weaving lines;
- * a proliferation of accidentals whereby many notes not belonging to the diatonic scale or key are found;
- * a lack of easily identifiable traditional key-creating devices;
- * the piquant juxtapositioning of diatonic and chromatic root note movement.

Stevens (1993:158) has hinted at the expanded tonal ethos though his lack of knowledge of the postulates governing the analytical process employed in this dissertation leads him to partially explain some of the features of expanded tonality without reaching the core of the issue:

'(the) temporary decomposition of tonality, new shadings of traditional triads, combinations of major and minor characteristics.'

The analyses in this dissertation are the result of the analytical process employed whereby a philosophical framework for understanding the tonal character and basis of the music studied is provided.

Expanded tonality emerges as a natural growth from the tonal structures encountered during the Classic-Romantic continuum. Procedures and techniques which either develop or obscure tonality are both derived from traditional tonal procedures.

4. DEVELOPING TONICISATION WITHIN THE EXPANDED TONAL ETHOS

4.1 Tertian constructions

Notwithstanding the fact that some passages of music do reveal a non-tertian

construction and basis the music is overwhelmingly tertian in conception and design. Numerous examples of diatonically formed triads and higher order tertian constructions are found. Traditional major, minor, augmented and diminished triads (types a, b, c and d respectively) are clearly used throughout the works analysed. Their appearance displays Bartók's association with past traditions and procedures.

In keeping with the expanded tonal idiom many of these tertian constructions are formed on chromatically raised or lowered root notes thus obscuring the diatonic tonal intention.

4.1.1 Tonic triad and tetrads

Bartók usually presents the tonic triad in its diatonic form in root position. Therefore the tonic triad has tonal stabilising qualities and acts as a major proponent in the establishment of a tonality. The tonic degree as a tonal anchor appears unambiguously and thus emphasises the tonality. (See Examples 4:4, 4:8, 4:14, 4:17, 4:18, 4:33, 5:1, 5:6, 5:7 and 6:2). The tetrad found at Ex. 4:33 formed on the diatonic tonic degree is not tonally strong due to its construction as a type bII.

4.1.2 Tonic substitution

The lower mediant below the tonic substitutes for the diatonic tonic degree. The tetrad formed on the diatonic submediant is a colouristic substitution of the tonic harmonic function. At Ex. 4:32 it appears as a tetrad type dI, and at Ex. 8:9 it appears as a tetrad aI with double-degree obscuration. In both instances the unusual tetrad type is in itself a form of tonal obscuration.

4.1.3 Dominant triad and tetrads

The diatonic dominant triad is rarely encountered. It is a naturally strong tonal indicator and is therefore not conducive to developing the expanded tonal type of tonality where powerful tonal indicators are largely eschewed. Its placement (see Ex.

4:17) is metrically fleeting and its effect is merely transitory. At Ex. 4:30 the dominant triad is presented as a minor quality triad (not the usual major) thus the normally strong impact is negated.

The traditional dominant seventh (type aII) tetrad is largely eschewed. An incompletely constructed dominant seventh (type aII) is encountered at Ex. 3:19. Through presenting the tetrad without all its constituent members Bartók does obscure its naturally strong tonal tendencies. At Ex. 5:8 the tetrad type aII is presented fleetingly. Thus its impact tonally is negligible.

The dominant tetrad is presented in some unusual guises which minimise the natural tonal strength of the tetrad:

Ex. 5:10 = tetrad type bI

Ex. 4:30 = tetrad type bII

Ex. 5:7 = tetrad type aI.

The dominant pentad minimises the natural tonal strength associated with the dominant degree due to some unusual constructions:

Ex. 4:30 = pentad type bIIB

Ex. 5:7 = pentad type aIA.

The French augmented sixth (type eII) is used in lieu of the dominant seventh (type aII). It appears in root position and not the traditional second inversion which emphasises the augmented sixth interval. Through utilising the tetrad in root position Bartók emphasises the chromatically flattened fifth of the tetrad. This is in keeping with the expanded tonal idiom where traditional diatonic elements are obscured (see examples 3:13 and 5:12). The Italian sixth (type f) follows a similar dominant obscuration function and is found at Ex. 5:13 and 5:14.

4.1.4 Modified dominant

Bartók obscures the dominant through chromatically lowering the dominant and creating a triad on the chromatically lowered dominant degree. Thus the dominant as a strong tonal indicator becomes more vague and ambiguous. At Ex. 7:20 the chromatically lowered dominant triad is found.

4.1.5 Dominant substitution

Chords with either an upper or lower mediant relationship to the dominant degree are used in lieu of the dominant. Triads formed on the mediant degree, with dominant harmonic function, are represented as follows: diatonic root note with the following obscuration procedures: augmented triad (type c) with double-degree (see Ex. 4:14 and 4:17). Chromatically raised root note (see Ex. 5:4 and 7:7). Triads formed on the leading tone degree, with dominant harmonic function, are represented as follows: diatonic root note (see Ex. 4:33) with a minor quality and not the usual tonally strong diminished and chromatically lowered root note (see examples 7:20, 4:21 and 5:3).

A dominant function tetrad formed on the flattened leading note is found at Ex. 8:9. It camouflages the tonal intent through its construction as a type aI with a double-degree.

4.1.6 Diatonic and modified subdominant

The subdominant harmonic function is usually represented without primary diatonic root representation. Bartók obscures the subdominant degree further through either chromatically raising or lowering the subdominant degree and creating a triad on the chromatically raised or lowered subdominant degree (see examples 5:23 and 5:11). Thus the impact of the subdominant as a tonal pillar is obscured through these modifications.

4.1.7 Subdominant substitution

Chords with a lower mediant relationship to the subdominant degree are used in lieu of the subdominant. Triads formed on the supertonic, with subdominant harmonic function, are represented as follows: diatonic root note and chromatically lowered root note (see examples 4:21, 5:33 and 8:4). As subdominant harmonic substitutes these triads obscure the subdominant as a tonal pillar and create an element of tonal ambiguity. Note the tetrad formed on the diatonic supertonic degree. It is a secondary dominant (type aII) but is obscured due to double-degrees and the lack of resolution.

The non-diatonic root notes mentioned in the preceding paragraphs are formed on the following degrees: chromatically lowered supertonic, chromatically raised or lowered mediant, chromatically raised or lowered subdominant, chromatically lowered dominant, chromatically raised or lowered submediant and chromatically lowered leading tone. All of these chromatically inflected scale degrees are members of the fully-chromaticised scales (either major or minor).

4.2 Fully-chromaticised scales

Central to the expanded tonal idiom are the fully-chromaticised scales. These scales (which clearly developed throughout the Classic-Romantic continuum) form the basis of Bartók's tonal language. Orthographically he adheres to their construction with chromatically inflected notes invariably being constituent members of a fully-chromaticised scale. Bartók's accurate use of these scales displays both his musical intuition and instinctive reaction to the musical activities of other contemporary composers. Yates (1967:179) came to a similar conclusion '*Bartók is employing, by notation and implication, a scale he does not define, which includes more than twelve notes*'.

In the works analysed Bartók intuitively makes use of either the major or minor forms of the fully-chromaticised scales, each with seventeen constituent note members. The dissertation contains numerous examples. My analyses do not reveal his use of the

twenty note expanded mixed scale. Therefore the music analysed is clearly either major or minor in conception. Ex. 3:2 illustrates the use of every member of a fully-chromaticised minor scale. This displays Bartók's intuitive orthographical accuracy and his use of tonally orientated scales as the basis for his compositions.

4.3 Cadences and closes

In common with tonal compositions tonal syntax and points of harmonic punctuation are clearly discernable. Bartók uses cadential points to articulate tonal syntax and harmonic punctuation. Due to the expanded tonal ethos these points are not unambiguously presented. Bartók utilises the following procedures of disguisement to develop the expanded tonal idiom:

- * Closes are used more frequently than fully-fledged cadences. Consequently the strength of cadential punctuation is minimised.
- * The weaker plagal ending (close) is favoured over the stronger authentic cadential formulae (see examples 3:1, 5:4 and 5:5).
- * Diatonic and chromatic root notes are juxtapositioned resulting in numerous phase two Strauss cadences or closes (see examples 3:1, 4:18, 5:3, 5:5 and 7:20).
- * Modal inflections do occur at Ex. 5:5. The Phrygian mode three-note melodic formula (descending) appears in the bass.

4.4 Mediant relationships

The chromatic type of upper and lower mediant relationship prevails. This is in keeping with the expanded tonal idiom where the surface detail of the music is colourfully chromatic resulting in a piquant and angular aural impact. Mediant relationships are observed between tonal organisms and chord-chains. Mediant relationships between tonal organisms often result in direct modulations (see Ex. 5:10). Chord-chains with mediant relationships often form chains representing a particular harmonic function (see examples 7:9, 7:15 and 7:18).

4.5 Ostinato patterns and Pedal Points

Both of these composition techniques are used as strong tonally generating procedures. Ostinato patterns are usually centred around the tonic, (see examples 7:2, 7:3 and 7:4). In numerous instances the tonic pedal point is camouflaged within an ostinato pattern. Pedal points are encountered in the following three guises:

undisguised	=	Ex. 3:32, 3:33 and 6:8
disguised	=	Ex. 3:34 and 8:12
inverted	=	Ex. 6:3, 8:1 and 8:3.

4.6 Bitonality

Numerous examples of bitonality exist in the works analysed. In all cases the individual tonal strands are diatonic in construction. Thus the bitonal process is unequivocal. A monotonal product is the result and all the notes used can be explained in terms of the fully-chromaticised scale (see examples 3:8, 3:10, 4:4, 4:10, 4:15 and 4:20.). Bimodality is observed at Ex. 4:19.

4.7 Dominant - Tonic diatonic root movement

Diatonic root movement between the dominant and tonic degrees is a principal purveyor of tonal clarity and stability. It is frequently used to provide tonal pillars amidst a dissonant and complex surface movement. The following examples display how dominant to tonic root movement develops a sense of tonality, Ex. 4:4, 4:10 and 5:8.

4.8 Modulation

As in all music with a tonal conception modulation between two keys is discernable. A direct modulation between two tonal areas with a mediant relationship is discerned at Ex. 5:10. A pivot chord modulation involving a chromatically lowered root note is found at Ex. 5:11. Modulation through enharmonisation of melodic notes is found

at Ex. 4:21 and 7:10.

5. OBSCURATION PROCEDURES OF TRADITIONAL TONALLY ENHANCING SOURCES

5.1 Irregular constructions

Tertian constructions which are obscured through either addition or omission result in irregular constructions. The methods for achieving irregularity are tabulated below:

5.1.1 Double-degree chords

The genus-defining third of a triad or higher order tertian construction is frequently presented in its principal diatonic form with a chromatically altered subsidiary representation. Through obscuring the genus-defining third the tertian construction is imbued with an element of ambiguity (see examples 3:24, 5:19 and 5:20).

Less frequent is the diatonic and chromatic representation of the fifth of a tertian construction (see example 4:17).

Bartók frequently presents the root note diatonically without ambiguity. In instances where the root note is presented both diatonically and chromatically Bartók endeavours to keep the diatonic note clearly recognisable (see examples 3:21 and 3:22). In some instances the chromatic representation is enharmonically notated (see examples 4:5 and 4:10).

Tetrads with double-degrees are encountered at examples 8:9 and 8:13.

5.1.2 Chords of addition and omission

Additional colouring seconds usually obscure the remainder of a chord leaving the root note unambiguously clear (see Ex. 3:12). This is mostly the pattern with chords of addition.

Chords of addition with double-degree obscuration are found at examples 3:24 and 7:8.

Chords of omission frequently omit the genus-defining third creating a strong element of tonal ambiguity. Chords of omission are observed at examples 3:11, 5:23, 5:24, 7:13 and 7:14.

The irregular construction at Ex. 6:12 is both a chord of addition and omission.

A chord of omission with double-degree obscuration is found at Ex. 7:9.

The key-introductory six-four chord is always presented with obscuration. It appears as a chord of addition with additional colouring seconds (see examples 3:29, 3:30 and 8:10).

5.2 Chord streaming

Bartók uses chord streaming within the expanded tonal idiom to either emphasise harmonic colour and de-emphasise tonal progression or to create a point of tonal generation. See examples 3:15, 3:16, 3:17, 5:16, 5:17, 5:18, 7:16 and 7:18 for examples of tertian chord streaming. During Ex. 3:18 chord streaming is used to emphasise non-tertian constructions and emphasises the harmonic colour of non-tertian constructions. An example of tritone streaming is found at Ex. 3:19.

5.3 Whole-tone, pentatonic and synthetic scales

All three scale types are subsets of the fully-chromaticised scale and are used to obscure clear-cut diatonic tonal movement. Whole-tone and pentatonic scales eschew tonally generating semitone movement, consequently the resulting chord structures disguise functional harmonic progressions (see examples 3:20, 5:25 and 6:16).

Synthetic scales are usually irregular and asymmetrical in construction. Their use results in piquant, angular root movement where frequently chromatic and diatonic root notes are juxtapositioned. Modal modification results in synthetic scales at examples 4:17 and 8:10.

5.4 Quartal constructions

Whilst quartal constructions are non-tertian their principle of construction follows that of tertian formations. Horizontal and vertical quartal constructions are found during the works analysed. Their function is colouristic and to obscure diatonic tonal pillars not to act within a harmonically functional context.

6. FINAL REMARK

Each of the aforementioned aspects act interdependantly upon each other. Bartók uses them associatively to create a musical product within the expanded tonal idiom. His aptitude for assimilating ideas and reproducing them with differing combinations results in an ongoing development of musical style within the expanded tonal idiom.

Graf (1978:229) states the following regarding Bartók's supreme musical expertise:

'He possesses not only the fantasy of a genius, but the lucidity of a genius as well. The music forms that Bartók created, his harmonies and his rhythm, were studied with intelligent keenness. His artistic world is not just a sphere of fantasy, but a world of logic. Bartók's artistic development ... is without any arbitrariness, clear and sure ... Imagination, intelligence and morality are united in Bartók's work, as they are in every great art.'

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