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Saying it with music: a theoretical exploration of musical encoding with reference to Western art music and the songs of the Ngqoko women

Jankowitz, Christo

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INTRODUCTION

More questions than answers

> I should like this work to be read as an open site. Many questions are laid out on it that have not yet found answers… (Michel Foucault, *The Order of Things* quoted in Monelle 2000, 4).

How does a certain piece of music exercise an impact on an audience while another may cause a listener to walk away with feelings of indifference and perhaps even dislike? Is it possible that a certain spice or hidden ingredient is present in the acclaimed works of the musical canon; works that generally endear themselves, even to the uninitiated members of an audience? Or, is it more likely that the composer of these works just conveys his/her[1] ideas with superior skill and communicative effectiveness? Do these compositions contain some greater expressive power, or do the composers of these works just posses an instinctive understanding of the intricacies of human psychology and information processing?

Is there an existing system that enables composers to communicate as candidly and as effectively as they are able to and what, in addition to pure artistic instinct, guides them to the decisions that ultimately engender the framing of the composition?[2] In short, what culturally supported thinking models are in existence that support and guide the composer's artistic judgement?[3]

One cannot help but feel a sense of awe and admiration at the towering artistic achievements such as Mahler's Eighth Symphony, the Mozart operas, Bach's Sacred Cantatas etc. Because these works engender subjective responses from

[1] In the whole text of this thesis the pronoun 'his' will be taken to mean his/her and him is accepted as referring to him/her.

[2] The term 'framing' is borrowed from postmodernism. It refers to the generation and usage of paradigmatic contexts and structures which allow a work to take shape.

[3] While the 'cultural structures' as identified by Pierre Bourdieu is clearly implied here, my usage refers more specifically to systems which shape the production of cultural objects such as art. I use the term to refer specifically to thinking-models or ideological strategies and do not take it to denote social class distinctions.

the individuals with which they come into contact, I ask if it is their communication relies purely on the technical synthesis of a composition, or if it is the profound humanistic essences within the music that engender these responses from us, the audience? Alternatively, are these psychologically intentioned effects perhaps just by-products of the composition itself? Can the composer access and apply these musical effects and attributes in a manner that progresses beyond the mere intellectual rational re-construction and 'ordering' of the material and the random intuitive and subjective impulses of his/her creative intuition?

What knowledge system, other than the purely technical musical one, informs the composer's intentional stimulation of the listener's brain? What enables him to succeed in getting his manipulations of the complex patterning of overtones, chords, melodies, timbres and structures that are typical to Western Art Music, to have an effect on the psyche of the listener?

Where do composers acquire the understanding of these human cognitive processes? What knowledge do these creative personalities possess that allows them to manipulate the structure and content of a musical work in such a way that it accommodates their intentions within these psychological processes? Furthermore, what impulse leads them to decide what to incorporate into a work and what to exclude?[4]

Whatever the solutions that may be given in answer to these questions, one factor is evident: There exists a group of composers that effectively communicates via their music in very cogent and insistent ways, and there is another group whose music appears to impart little meaning. Is it possible that composers within this latter group only concern themselves with the sterile mechanistic, technical and synthetical side of musical creativity, and is it likely

[4] Influential composer and aesthetic theoretician Morton Feldman is famously known to have remarked: 'you do not need ideas, you need material'. Does this then mean that the great musical works depend primarily on certain kinds of musical material for their success? Questions should certainly be put forward about the exact make-up of this kind of material. An investigation of this issue falls however, outside of the scope of the arguments presented in this study.

that these composers expect the human and emotive side of musical forms of expression to simply take care of itself?

I want to illustrate that our thinking is illuminated when we accept that the more successful musical works come from composers who usually have clear communicative intentions, or the preconceived wish to express *something* through their music. However, it is difficult to ascertain exactly what music expresses or indeed how it signifies its content:

> Unfortunately, commentators have persistently found musical signification a difficult area. Musical meaning is said to be "vague" or "foggy". This is apparently because musical semiosis is different in kind from linguistic semiosis, and music therefore cannot be translated into words (Monelle 2000: 8).[5]

The main purpose of this research report is to investigate the notion of 'saying it with music' by exploring and examining selected theoretical writings relating to communication theory, semiotic theory, encoding and *meaning* in music. It is probable that the proposed theories may possibly point towards concrete and tangible concepts which could indicate how music manages to *reach* (or *touch*) us and consequently behaves as a form of signification.

Through the ideas presented in this research report I intend to show that the modalities of the theory of communication with particular reference to the process of encoding, operate at some level as a guiding force in the creation of musical works. By connecting the notion of encoding to the concept of composer intentionality,[6] I will scrutinise to what extent culturally established thought processes (and the theory derived from these) impact on the formation of musical meaning.

[5] The concept 'semiosis' will be defined in Chapter Two.
[6] 'Music is not a natural object, though the sound that conveys it, and the score that defines it are natural objects. But music is an *intentional* object ... It is the product of the encounter between sound and mind, between structure and subject' (Monelle 2000, 5).

Musical communication can be said to occur through channels specific to the musical system itself. However, within this sphere of conveyed meaning composers make concrete artistic choices and employ variable modes of communication. Thus although composer-intention may be of a programmatic, referential or even inter-textual nature,[7] this enquiry does not debate the merits and applicability of these theoretical stances to the musical object but rather interrogates the processes of encoding.[8]

I consequently question whether the act of composing music follows not only abstract structural/musical logic but also manifests as a journey in which the ultimate product (i.e. the composition) is influenced and determined by what and how the composer intends to communicate and how he encodes his message.

Encoding takes place when objects gain certain kinds of meaning. A study of the mechanisms of cultural-encoding processes may subsequently illustrate in some way how the signification structures of music are established.[9] The basis of this idea lies in Semiotic Theory.

It is therefore my intention to investigate the generative function of the process of encoding on the structures of musical signification. For this reason I will refer to the music-making of both the African and Western cultural spheres as core sources in an attempt to identify evidence of universal signification practices in

[7] The term intertextuality was coined in the late 1960s by Julia Kristeva and was quickly taken up by other French theorists of the time. Kristeva and Roland Barthes believed that the post-Renaissance humanist notion of a god-like author dispensing his message could simply no longer account for the complex webs of meaning that inhabited the works of modernism and postmodernism. Jacques Derrida subsequently theorized that writing writes itself and is its own object and subject. Kristeva called the text itself an intertext, 'a mosaic of quotations', which has absorbed and transformed other works, while Barthes understood the intertext as the 'multidimensional space' between texts 'in which a variety of writings, none of them original, blend and clash' (Barthes 1977, 146).

[8] It is considered that the formative process is the encoding process; refer to Chapter Two.

[9] One may ask what is meant by the concept 'process of cultural-encoding' and whether this is similar to what is meant by the process of encoding in general. Considerations of these questions are accessible in semiotic theory. Originally formed in the field of linguistics, semiotics has at the present time encompassed an investigation into all manner of cultural forms of communication. The application of these theories to musical concerns has yielded a body of knowledge that is pertinent to the investigation conducted in this thesis.

music. The songs of the Ngqoko Women and their cultural background serve as a specific model of the African approach to the encoding of music.[10] By viewing the composing processes of two different cultural spheres as case studies, I intend to demonstrate that an underlying process of encoding plays a decisive role in the generation of the musical content itself. I aim to reveal the basic *codes* which are generally entrusted with the task of conveying musical meaning to the listener.[11]

Through examining the encoding processes of two different cultures, it is expected that greater clarity will be reached in identifying the imperatives that guide the process of encoding from a cultural perspective. It is hoped that this will lead to a deeper understanding of the cultural processes which generate the fields of musical meaning. I expect that this will resolve some issues in the ongoing and problematic debate surrounding the issue of meaning in music.

Although no absolute conclusions can be drawn about this issue, I hope to illuminate the debate around meaning by applying relevant theories to musical meaning. I thus expect this investigation to reveal more tangible answers to questions relating to how and what music communicates, and which structures it employs to achieve this.

[10] Each of the African and Western cultural spheres encompasses a diverse number of societies and cultural practices within themselves. In this thesis I specifically focussed my attention on Western Art Music, predominantly emphasising the music of the Classical period. An African tribe which practices highly sophisticated forms of indigenous music-making is the Xhosa. The Ngqoko Women intentionally place the old forms of Xhosa music as inherited from the *KhoiSan at the heart of their activities as performers*. During fieldwork sessions my observations of the Ngqoko Women revealed the immense richness and variety of Xhosa music. I have therefore focussed my attention on the music of this Group as representative of the African sphere because it led to an interesting revelation about the process by which meaning finds its way into the musical object. Thus by using both these selected African and Western cultural spheres as points of reference in the most general (generic) sense, I am able to reveal evidence of a universal approach to the encoding of musical meaning.

[11] The term 'codes' will be defined in the section relation to general Semiotic Theory in Chapter Two.

CHAPTER ONE

The Intersection of Meaning and Syntax in Music.

1.1 Making sense of Musical Meaning

> Anything acquires meaning if it is connected with, or indicates, or refers to, something beyond itself, so that its full nature points to and is revealed in that connection (Morris R. Cohen quoted in Meyer 1967, 6).[12]

It is widely accepted that music is imbued with meaning and that it is capable of conveying something that is meaningful in some way. Claude Levi Strauss views it as a 'myth coded in sounds instead of words' (1981, 659). Semioticians see music as both signifier and signified (Monelle 1992, 29).[13] However, exactly what music expresses or what music 'says' is not concrete; consensus on the communicated message is not easily found:

> What is musical meaning? Specifically, how does the listener derive meaning from music?...But, semantically, where is the musical meaning to be found?...Unfortunately, there is a wide gap between the progress that has been made in understanding how music is perceived and what it means to listeners… (Aiello and Sloboda 1994, 54-5).

The issue of meaning in music has also assumed a significant role in recent musicological discourse. Jonathan Kramer states that:

> The problem of musical meaning stands at the forefront of recent thinking about music. Whether music has meaning, what kinds of meaning it may have, and for whom; the relationship of musical meaning to individual subjectivity, social life, and cultural context – these questions have inspired strong feelings and sharp debate (2002, 1).

Philosophers have also grappled with this question for some time. Stephen Davies, writing fairly recently, asserts that:

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[12] Metaphors are frequently revealed in these kinds of connections. Can one thus expect that the meaning of musical passages lie in the production of musical metaphors?

[13] The *signifier* is the vehicle which contains or transports the message/content. The *signified* is the content/ message itself.

> The nature of aesthetic discussions and disagreements about music indicates that we accept that music is the bearer of meaning or sense…Nevertheless, neither what it is that music means nor the way the music bears its meaning is readily apparent (2003, 121).

The intention to convey meaning is a central concern for most knowledge systems. In mathematics, the natural-sciences, linguistics and more specifically its offshoot semiotics, a concern for meaning is primary.[14] As a result numerous attempts to study musical meaning and solve the problems it presents have been made by creating metaphors and drawing analogies with other knowledge systems.

Leonard B. Meyer (and others) conducted mathematical/scientific investigations of musical meaning in their explorations concerning the applicability of ideas from Information Theory to the issue at hand. This calculated gauging of cognitive processes and human responses to musical stimuli yielded few noteworthy results other than discussions of the effect of such stimuli on the information processing capacities of the human brain; this effect was viewed as the meaning.[15]

The study of language involves the examination of Phonology, Syntax and Semantics (Bernstein 1976, 9). In taking account of the notion that music and language display similarities in structure, Leonard Bernstein expects that an analogy drawn between music and language would be useful in unravelling the secrets of musical meaning. Moreover, he accepts that linguistic study 'offers both terminology and procedures that are directly applicable to music' (ibid, 71). He later justifies this idea by stating that: 'Language is our common property, and therefore our universal area of syntactical reference – for musicians and laymen alike' (ibid, 107).

[14] 'Although linguistic analysis is an analysis of structure and not of meaning, it has to begin in some way with questions of meaning. The Indian informant cannot be asked, "Is this an allophone of the same phoneme?", but rather, "Does this mean the same?" (Monelle 1992, 41).

[15] The approach of Meyer's early theoretical work *Emotion and Meaning in Music* (1956) is echoed in Thomas Clifton's phenomenological investigation of music (*Music as Heard* 1983). The phenomenological aspects of musical meaning are illustrated in Chapter Six of this Thesis.

A similar conclusion was made by Émile Benveniste. This semiologist proposed that language is the only semiotic system which is capable of describing and interpreting other semiotic systems. Thus, even though music has been termed a language of emotions as in Suzanne Langer's book *Philosophy in a New Key* (1942),[16] or simply labelled a language in itself as in Deryck Cooke's seminal work *The Language of Music* (1959), there is sufficient theoretical belief to suggest that insight into the issue of music and its meaning can be obtained by drawing an analogy between music and language.

Analogies are usually drawn when divergent systems display some mutual resemblance. However, Roger Scruton expects the music-language analogy to be fruitful *only* if the 'resemblance is deep, so that the knowledge of one thing casts light upon the other' (1997, 171).[17]

The two central sites that linguistic enquiries usually occupy are the planes of syntax and semantics; the area of phonology is viewed as the ultimate product of these two disciplines and has not enjoyed the rigorous forms of academic scrutiny afforded to the other two aspects. It is reasonable to expect that the music-language analogy would yield particularly thought-provoking information when there is deliberation about musical meaning:

> Music is often said to express or evoke something that might have been conveyed verbally. In certain restricted cases …something like music is even used as a referential coded substitute for language.[18] But many cultures recognise conventionally coded induced associations of specific musical entities with persons, events or things, in real life as well as in ritual or drama.[19] In the most familiar cases the something that might have been conveyed verbally is

[16] 'From Rousseau to Kierkegaard and Croce among philosophers, from Marpurg to Hausegger and Riemann among music critics, but above all among musicians themselves… we find the belief very widely disseminated that music is an emotional catharsis…' (Langer 1949,174).
[17] My emphasis.
[18] The well documented utilisation of the 'talking drum' as means of communication in African tribal villages is a case in point.
[19] In African cultures these 'events' are often central to the content and meaning of the music, and is viewed in that context as the very justification for the existence of music. African music cannot be viewed outside of the context of its functionality.

> emotive/expressive rather than cognitive/ostensive, and sometimes a more or less systematic doctrine of musical affect or musical ethos is found (Scott 2000, 27).[20]

Derek B. Scott touches on the salient issues surrounding an inquiry into the nature of musical meaning. The theories of musical *affect* and *rhetoric* certainly suggest that certain structures and systems which connect musical substance with semantic content are already in place. This seems to have invited numerous writers to undertake a task to elucidate the connecting aesthetic between the actual notes and their conveyed meaning.

As a result, one is frequently confronted with the belief that vocal music conveys its meaning more effectively due to the clear connection between sound and text. This is largely attributed to the instances where 'absolute' musical elements have successfully been observed to connect with non-musical entities.[21] These can be traced back even to the earliest musical utterances. In addition, there are clear occurrences where the instrumental and vocal (verbal) content seem to operate two (and sometimes contradictory) semantic planes simultaneously.[22] The interpretation of these facts has resulted in a false impression and understanding about the manner in which musical signification operates. Expecting that the connection between musical figures and words, as exemplified in the common device of word-painting, points towards the manner

[20] In Renaissance aesthetics the technique of word painting is central to the manner in which music develops its linear structure. This suggests that a clear connection between musical ideas and linguistically fashioned meanings has been in existence for a considerable length of time. Similarly, the Baroque *Affektenlehre* is thought to have codified certain musical 'signs' as indicators of specific emotional states. This led to the widespread belief in the existence of a body of concrete musical figures which are loaded with a universally accepted semantic content. Descending chromatic lines, for example, would be associated with emotions of deep tragedy or pathos whereas ascending melodic trajectories imply optimism, ascent into heaven, increasing intensity or moving forward etc. In reality the concept of *Affekt* only refers to the need for an expressive substance to exist in music and the idea of the *Affektenlehre* has been confused with the Baroque use of rhetorical devices. The latter served as a subtle and abstract set of principles which guided the formation of musical structures, with emphasis on the manner of delivery and no apparent regard for the implied meaning. This complex issue is examined in Chapter Three of this thesis.

[21] The term 'absolute' is used here in the connection with the school of thought that promotes the idea of absolute music as apposed to programmatic music.

[22] This issue is discussed in Chapter Four.

in which music signifies is a grave error. The issue is more complicated than this.

The connection that cultures make between music and meaning seems to be an important one. Scruton emphasizes that the investigations which have hitherto framed this issue 'invite us to treat the relation between music and language as something more than a passing accident' (1997, 172.) Moreover, there are instances where the musical content and handling of musical structure has been likened to the rhetoric of speech or discourse.[23]

These arguments and interpretations have generated historical debates surrounding the existence and merits of 'absolute' and 'programme music'. The belief that absolute music allowed for the purest and most accomplished level of musical construction and expression was widely promoted in the writings of nineteenth century music critic Eduard Hanslick. However, the latter's writing (which concerns itself more with the issues of expressive purity and formal perfection) does not deny the existence of musical meaning.

It appears that the need to achieve sustaining structures within the realm of instrumental music (vocal music is reasonably guided by the structure of its text) required that musical elements be connected with entities beyond the sonic sphere. It was generally found that human experiences and psychological states served as the basis of this connection and that there is a level of programmatic content in even the most 'absolute' of musical utterances.

> In high-cultures musical entities are often systematically correlated with non-musical phenomena,[24] many of which have strong expressive associations of their own…Individual affects, or whole classes of affect, are ascribed to musical entities like motives or tunes, or to musical features like rhythms or intervals,

[23] This will be extensively examined in Chapter Three; also refer to footnote 21.
[24] Scott's assumption that musical meaning can only be found in the products of high-cultures is misleading. I argue that there is musical meaning even when the people can't read or write, perhaps even more so.

> and these features or entities are then said to be units of discourse in a musical language of pure expression (Scott 2000, 27).[25]

Some personalities propose that music has no meaning beyond its own patterning and structuring of sound. Igor Stravinsky's enigmatic statements that 'music means nothing outside itself' (1962, 65) and that '…music expresses itself' (1962, 101) are often cited in support of this point of view. Scott (perhaps influenced by Stravinsky) confirms this by stating that 'most musicologists… are a little embarrassed by the notion that music is a language whose message is something other than itself' (2000, 27).[26] The sentiments expressed here are grounded in the aesthetic stances which promote the idea of 'absolute music'.

The school of thought that accepts the idea of absolute music suggests that music has no semantic content outside its own particular field of reference, i.e. the phonology itself. This places doubt on the validity of projects which investigate musical meaning. Scruton eloquently defends the existence of musical semantics as follows:

> Once we have recognised that the idea of musical syntax is at best a kind of metaphor, we are bound to conclude that the hypothesis of semantic structure in music, presented as a literal truth, is unsustainable. [However,] the fact remains that phrases, chords, progressions, and harmonic devices seem to acquire a 'constancy' of meaning in the tonal tradition which we can hardly dismiss as accident (1997, 207).

I do not interpret Stravinsky's above statements mentioned above as arguments against the presence of musical meaning. In my view it only advocates the notion that *absolute music* does not rely on programmatical pillars for its

[25] Raymond Monelle's investigations into musical topics connect with what has been said here. The information that he has unveiled in this regard will be explored in Chapter Three; also refer to footnote 21.

[26] It is my understanding that the issue of meaning also involves the question of 'message' and that there is a strong linguistic link with both whenever any aspect of meaning is considered. A 'message' can be viewed simply as the vehicle through which the meaning is conveyed. As a result the relationship that exists between the notions of message and meaning are connected with the concept of encoding (a message needs to be 'encoded' within a certain form or medium before its content can be conveyed).

structure to be successful. I also do not take it to suggest that music 'means' something intrinsic to itself in a way that is beyond our discernment.

Music also resembles language by the mere fact that it is entirely created by rational beings (ibid, 171). It is known that language has been marked by human life, human perception, human action and human desire (imagination and experience). The same has been said with regard to all art in which human concerns find expression.

It is a human characteristic to make meaningful connections between diverse entities and to expect that these convey something about human concerns.[27] Hence, it is logical to accept that any issue of meaning is in some way linked to notions of expression; the concept of expression itself can be viewed as another way to refer to the semantic content. This invites questions about the nature of what music actually expresses.[28]

Whatever can be said to discourage the scholar from pursuing the issue of musical meaning, it is clear that the belief in it remains firm. Leonard Bernstein's ideas in this regard were eloquently expressed in his series of Norton Lectures which were given at Harvard University during 1973:[29]

> Music has intrinsic meanings of its own, which are not to be confused with specific feelings or moods, and certainly not with pictorial impressions or stories…One thing they [respected writers and philosophers on music] have always agreed on, in one way or another, is that musical meaning does exist, whether rational or affective or both. As hard as they have all tried to be logical… they have all had to bow to some nagging truth which insists that those [notes] do emerge from a composer's mind meaning something,[30] nay expressing something – and *expressing what may otherwise be inexpressible* (1976, 131-5).[31]

[27] It is possible to argue that this process is inherently intertextual.
[28] A possible answer to this question will emerge from the information presented in chapters Four and Five of this thesis and a possible answer to the question as to how this is achieved will arise from the considerations presented in Chapter Six.
[29] Subsequently published as the book *The Unanswered Question* (1976).
[30] Bernstein refers to the dialectical arguments of philosophers and analysts around this issue and their attempts to present rationally concrete evidence.
[31] My emphasis.

The old philosophical notion that music is able to express types of content which elude other media of communication surfaces together with the belief that any attempt to identify the meaning which is expressed by music is a futile endeavour - it appears to be fiercely contested that the content expressed in the manner that music communicates, cannot be copied or duplicated by any of the other arts or media and that the manner of accessing meaning in music can only be accessed via the medium of the music itself.[32]

As a result of the above one cannot help but conclude that the main stumbling block for analysts and critics is the situation in which attempts to investigate meaning in music in an analytically rigorous manner have up to the present time not been able to provide unambiguous answers.[33] It is understandable that a level of frustration erupts when we expect musical signs to point towards unequivocal concepts, as exist in the scientific and linguistic systems.[34] Some may argue that this problem persists because we want to access this meaning in the same way that we access linguistic meaning.[35] However, even though worded meanings may not be found in musical compositions, linguistic forms of enquiry provide one of the most rigorous types of analytical examination that

[32] This idea dilutes the relevance of enquiries of an intertextual nature, but it underlines a phenomenological mode of investigation. It is impossible to convey something musically that is akin to: 'Good morning!' The information conveyed via the medium of music is obviously of a different kind.

[33] How is meaning accessed in works of art? For example, how do we define or understand the meaning or message of the St. Peter's Basilica or the Mona Lisa? Is there a parallel in the way that we access musical meaning and the meaning of art?

[34] It seems that language enjoys the status as a system which enables indisputable communications to occur. The number of studies that have been conducted into the operation and nature of meaning in language suggest however, that meaning is problematic in this field as well.

[35] '…musical semiosis is different in kind from linguistic semiosis, and music therefore cannot be translated into words' (Monelle 2000, 8).This is one of the key issues under investigation. Monelle's statement devalues the analogy between music and language and it clearly disregards Benveniste's proposition. In view of this contradiction, I take this quote to be more a statement in support of the notion that musical meaning should be accessed via the music itself, paying attention to a phenomenological frame of analysis. (The concept 'semiosis' will be clearly defined in Chapter Two).

could also be applied to music. Hereby, essentials like grammar, content, emphasis, articulation etc. can be rationally scrutinised.

It is likely that musical meaning is multi-layered and referential on many levels and that this particular quality renders this vagueness to be one if its chief features – the possible reasons as to why this is so this will be revealed in Chapters Five and Six.[36]

The following quote, while obviously colloquial, encapsulates the salient issues presented up to this point:

> Music seems to mean something, but what does it mean? People sometimes say that a certain piece of music makes them think of a desert or flowers or something like that, but surely that's not what music means. There's something that you "get" when you "get" a piece of music, and that you can't "hear" until you "get" it. Sometimes it takes many listenings before you "get" it. Clearly there's something encoded in the music that your brain decodes. Sometimes the decoding happens instantly, sometimes you have to listen a whole bunch until you "see" what the composer "has in mind". When you "get" it, though, you can't say what it is, because there is no extra-musical vocabulary in terms of which to say it. And yet, the thing you hear "in" the music is not mere rhythms, pitches, etc. The content of music is not music. So what kind of "message" do you "decode" when you "understand" a piece of music? What is the "space" in terms of which the "content" of music exists? (http://greenlightwiki.com/lenoreexegesis/Introverted_Intuition_and_the_Meaning_of_Music, 23 September 2007).

The music-language analogy yields many correspondences between the two knowledge systems. Of these, the most prominent parallel components are those of phonology/sound, grammar/logical-form and semantics/meaning. However, attempts to define musical syntax yield results that are as elusive as the search for 'what music says'.

[36] It must be taken into account that culture acts as the sphere of general reference for the individual listener/musical-practitioner and hence, this has a crucial impact on the semantic intuitions of the individual. All our individual ideas about what objects/phenomena mean are directly influenced by how these have been perceived and coded by our respective cultures.

1.2. Making sense of Musical Syntax.

All musical thinkers agree about syntax (Bernstein 1976, 56).

Language possesses a well documented system of grammar and a seemingly unrivalled syntactical surface. The complexities of musical structures suggest evidence of grammar and syntax. However, '…even if music has an apparently rule-guided structure, it is by no means obvious that the rules are comparable to the rules of grammar…' (Scruton 1997, 172). Thus, any attempt to compare music and language requires that the structures of music's grammar and principles of syntax be adequately revealed. Unfortunately, the space available within the scope of this study does not allow for an in-depth investigation of this issue; however, a discussion of the problems it presents as well as the revelation of the two planes informs the current argument.

The possibility exists that the syntactical structure of music is a mere illusion. Moreover, it is likely that musical syntax bears no similarity to linguistic syntax and that it does not operate in the same manner. Having said this, it is important to accept that

> the rule-guided nature of music is too impressive a fact to be dismissed as a mere surface phenomenon… Moreover, the experience of musical meaning… seems to be intimately connected with this rule-guided character: It is afforded only to the listener who is *following* the music, and seems bound up with an awareness of the musical 'argument' (ibid, 172).

Scruton rightly proposes that musical syntax is an audible phenomenon:[37] '…it resides in the experience of music, in our intuitive recognition that this note or chord… is right, and that one wrong' (ibid, 175). This suggests that our perception of musical syntax is based on a sense of a 'context-dependent *affinity* between tones' (ibid, 186).[38] Thus, various musical events and units can

[37]The section about musical temporality in Chapter Six explains how this audible result is accessed in a phenomenological manner.

[38]'Grammatical intuitions [in language] are "context dependent"' (Scruton 1997, 179). Continuing further, Scruton asserts that 'listening to music is clearly a cognitive process in which we attend

be seen to belong together even when they are separated by register, rhythm or have contrasting elements placed between them. *Gestalt* perception obviously plays a role.[39] The sense of musical syntax is thus not merely a system of progressive substitutions of 'syntactically equivalent components'. Scruton asserts that musical organisation is *sui generis*, 'based on variation, imitation, parallels, and the heard distinction between structural and prolonging episodes' (ibid, 186).

However, the mere presence of a syntactical structure in music does not allow the problem of its meaning to be so hastily resolved. This can be attributed to the fact that each musical parameter has an intrinsic structure of its own, which may be completely conflicting with the constitution of another element. It can thus not be assumed that an analytical deconstruction of structure will lead to a revelation of musical meaning or its processes of operation (even though this is often the objective of an analysis). Scruton describes the situation eloquently:

> …music is spread out in several dimensions – rhythmic, melodic, and harmonic. But each dimension has … a [syntactical] structure and the syntax of the whole is like the solution of three simultaneous equations, each musical event limiting the values of the three variables in the next one (ibid, 174).

It is conceivable that the syntactical rules for music would be completely different from those that operate within language. This does not deter Scruton who believes that the important issue is that 'the rules should exist and that they should have the same generative character as the rules of syntax [as found in language]' (ibid, 182).[40] By the same token it would only be possible to define

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to what we hear and in which every element is connected in our hearing with the whole structure' (ibid, 186). A consideration of context is clearly implicit when considering the issue of musical syntax and meaning.

[39] Gestalt psychology tells us that the brain takes our observation of several different phenomena and groups them into one unified concept of an object; the whole is greater than the sum of its parts. Thus perception is to some degree arrived at by means of a holistic process which is often instantaneous and intuitive. This suggests to me that perception is conceptual and not analytic and thus phenomenological to a certain extent.

[40] Generative Theory, which was first proposed by Noam Chomsky, essentially suggests that there are principles according to which basic sentences in language are structured. According to this theory, *Transformational grammar* permits the so-called *deep structures* to be altered in their

music's syntagmatic structure once the manner of its semantic operation has been defined (ibid, 198).

A study of syntax cannot avoid a simultaneous consideration of semantics, as both are intimately connected.[41] The façade of any utterance leads the human cognitive facility to arrive at certain syntactic and semantic intuitions. This means that the average language user can make the distinction between how a possible sentence is structured and what it means. According to Scruton it is the intuitions of syntax which allow us to distinguish 'whether a sentence is a possible sentence of English' whereas semantic intuitions 'tell us whether a sentence has meaning, and what the meaning is' (ibid, 176). It is expected that the same type of intuitions would be generated for a person engaging in musical activities.

One has to accept that semantic considerations generate all intuitions about syntax. As a result, any perception of the linguistic edifice seems to depend on an intuitive understanding of the structure and an appreciation of the generative force of its syntax.[42] It should therefore be acknowledged that sentence structure could be totally determined by the semantic goal (ibid, 176).[43]

Scruton suggests that the distinction between music and language should be made at the level of the intuitive interpretation as 'there is no way that we can

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semantic content by replacing certain linguistic elements with alternative ones. These substitutions can subsequently effect an alteration of the meaning of a sentence without disturbing the foundation or deep structure of an utterance. Syntax thus has a generative function in that it allows the creation of new sentences which could be semantically totally different in its content but which remain structurally similar to its models (deep structure). Thus language can be used to express an infinite number of ideas and sentiments etc. even though it is made up out of a finite number of factors (vocabulary). Leonard Bernstein was particularly excited by the idea of transformational grammar. He believed that 'transformational grammar can provide us with a model of how we think not only in developing speech formations but in all kinds of creative expression' (1976, 71).

[41] 'It is well known that the distinction between syntax and semantics is not hard and fast – a generative theory will almost certainly rely, at some level, on a theory of semantic structure…' (Scruton 1997, 176).

[42] Refer to footnote 41.

[43] See footnote 15.

begin to build a theory of English syntax which did not depend upon intuitions of the meaning of English words' (ibid, 198). Additionally, the process of intuitive interpretation seems to be the most direct manner through which the semantic content in language is accessed. This suggests that there is a common ground of intuitions available to all language users. With regards to music, this intuitive interpretation can be accepted as being similar. Composer Roger Sessions pointed out that '… the very *existence,* the *persistence* throughout out the ages, and indeed the concept of music presupposes to a considerable degree a common basis of experience on the part of all of those who choose to concern themselves with it' (1971, 6).

By the same logic, it is reasonable to accept that any theory of musical syntax cannot ignore the need to define the influence of its semantic intuitions. Even though Scruton makes no apparent effort to narrowly define the nature, origin and operation of the intuitions mentioned above, it appears that these do influence readers' (and listeners') assumptions about what is 'right' and 'wrong' within a given musical or linguistic paradigm.

Thus, the effort must be made to investigate the formation of syntax at the level of semantics. However, whilst attempts to identify semantic structures yield ever-elusive answers, investigations of syntax have revealed tangible phenomena that can easily be manipulated to achieve desired semantic results. The same is true with regards to music: attempts to define, and deconstruct musical structures to find 'rules' are numerous whereas attempts to investigate the semantic structure always fall apart, yet the musical rules extracted help us to create musical phrases and compositions

In view of the argument presented up to this point it can no longer be denied that music has a semantic level, and it is at this level where the syntactical rules of music should be found. However, it does not seem plausible to conduct an investigation of musical semantics if there is no way to establish the rules of

music's syntax. 'The order that we hear in music may be likened to syntax, but it is not truly syntactical …there are rules in music but they are not usually prescriptive. Most of them are arrived at *post facto*' (Scruton 1997, 202).

1.3. Intuition and Semantic Intention.

It should be possible to study semantic structure from a point of view that allows us to regard it prior to the creation of an object. Hence the documented semantic intentions of individuals and composers can be compared with the resultant constructs to ascertain how the former bear upon the latter. It may subsequently be possible to investigate the factors which influence the semantic goal.

Perhaps it is preferable not to define the meaning of a musical sentence in a singular way, but to rather be able to consider the possibilities of its 'intended meaning'. It could therefore be advantageous to examine the issues relating to syntax and musical meaning from the viewpoint of the intention(s) of the composer right from the inception of a work.

As a result it becomes evident that we need to investigate the aspect of semantic *intentions* and its process of operation. The element of intentionality is subsequently revealed as the factor that could ultimately prove to determine the semantic goal and thus by extension, the resultant structure of the sentence or musical composition. This consideration of structure and meaning requires that the distinctions between syntax, semantic and content in music, are clarified.[44]

[44] Scruton voices the opinion that the meaning of a musical composition is worked out in the structure (1997, 198). This implies that structure and content are the same. Moreover, it is not clear what kind of structure Scruton is referring to. The distinction between structure and content will be explored in Chapter Three.

It is likely that semantic intentions spring from the desire to communicate. Looking at the issue of meaning in music from a standpoint of it being a form of communication can be a more beneficial guide towards its understanding. Aspects of Communication Theory should therefore provide a new perspective on the problem of music and its meaning.

The exploration of music as a form of communication is not new. It has been investigated as early as 1956, for instance, by scholars such as Leonard B. Meyer in *Emotion and Meaning in Music*, as well as in Peter Kivy's *The Corded Shell: Reflections on Musical Expression* (1980). Meyer's study centres on the applicability of Information Theory whereas Kivy's study is largely philosophical in nature and more argumentative and anecdotal than factual. My study is concerned with the more concrete theoretical facts about the operation and nature of musical signification. For this reason, it relies on Semiotic Theory, which confronts the cognitive structures of signification in a rational and scholarly manner. Furthermore, its application to areas of music theory has produced tangible results and yielded surprising findings. Semiotic forms of enquiry offer more than mere philosophical speculation and debate; they can be applied to musical works in a number of diverse ways.

In a general sense, the parameters of communication involve a message that is sent from a source to a recipient. A message will be encoded in a particular way at the point of creation. This is done in order for its content to be perceived/understood by the receiver. It expects the meaning to be encoded first; the process of encoding plays a crucial role in the formation of any communicative utterance. Cognitive recognition is involved in the communication process as well.

Similarly, it is important to accept that 'listening to music is clearly a cognitive process, in which we attend to what we hear, and in which every element is connected in our hearing with the whole structure' (Scruton 1997, 186).

However, the processes of musical cognition are by no means clearly understood: 'Unfortunately, there is a wide gap between the progress that has been made in understanding how music is perceived and what it means to listeners…' (Aiello et al 1994, 54-55). Cognition and comprehension are central to any communication process.

In view of the arguments presented up to this point I propose the notion that a better understanding of musical meaning can be accessed via an examination of the way in which musical material is encoded. I propose that a pre-compositional 'intellectual game' is implicit in considering how to communicate via the medium of musical composition – this process is to be termed *encoding* and it involves the theoretical modalities of general communication and cultural encoding. Hence, this thesis engages with theories which connect with and involve the process of encoding.

As a result it would seem that the problems connected with the issue of meaning in music are related to the actual process of encoding and do not merely involve a consideration of semantics and syntax. I argue that a misunderstanding of the process of encoding meaning into music largely accounts for a general lack of understanding. Evidence of this can be easily observed in the general public reception of much twentieth century art music.

The products of dodecaphonic composition schools are a case in point: the communicative impact of these works is not readily accessible. Even by taking the success of works such as *Lulu* and *Survivor from Warsaw* (which rely on the presence of narratives and texts) into account, it is evident that the non-traditional encoding of these works is part of their problematic reception.[45]

[45] Edward Said describes this situation eloquently: 'Aside from the few "postmodern", not to say reactionary, composers like Arvo Pärt and Henryk Gorecki who have made it big with the record-buying crowd, there is supposed to be no real audience for the kind of music composed by Boulez and Stockhausen, music that is neither tuneful nor in any ready-made way accessible to ears that have been sated with recordings of Mozart, Brahms and Beethoven. As a result,

Our verbal descriptions of music rely on symbolic and descriptive analyses but musical perception and understanding is by nature more phenomenological; it is at the latter level where the structures of meaning in music need to be accessed. I hypothesize that it is the manner in which music 'speaks' that conveys the meaning and not only the musical material or the resultant structural edifice itself. This is directly related to the way in which musical phenomena are experienced in phenomenological terms. Chapter Six reveals some of the basics of phenomenological theory.

Stravinsky's declaration that 'music means nothing outside itself' (1956, 79) is implicit in the notion of encoding which requires the presence of initiates who are able to read the codes. Is it possible that Stravinsky refers more to the process by which music encodes meaning rather than to the merits surrounding the inclusions or exclusions of extra-musical content? The concept of encoding encompasses both the programmatic and absolutist views. An examination of the process of encoding in music may thus clarify the mechanisms of meaning in music.

The question of the function and role of a specific or universal process of encoding within cultures is salient to this study and could lead to an illumination and clarification of the nature of meaning in music. It is felt that an examination of a Western and non-Western process of encoding is integral to this investigation as it provides the means by which universal processes of musical encoding can be identified within different cultures.

Any examination of encoding touches on the body of thought made available by Semiotics, as this discipline directly concerns itself with questions of codes and the encoding process.

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musical audiences today are the first in history not principally exposed to the music of their own time' (2008, 208).

1.4. The Value of Semiotics.

Although there are many levels at which one can make the comparison between music and language, one should bear in mind that language may also not resemble music at all (Scruton 1997, 171). There are certain factors which reduce the effectiveness of the analogy between music and language. Scruton regards language as a vehicle that conveys information but proposes that music does not. Thus, even though music is used as a means of communication it does not carry information in the way that language does (ibid, 172).[46]

This is due to the fact that the musical object does not possess only one kind of syntactical structure. Each element such as rhythm, melody, harmony etc. has an intrinsic configuration of its own that operates according to its own internal laws. Scruton's acceptance of the view that 'the semantic structure of a sentence must show how its meaning is generated from the meaning of its parts' (ibid, 198) suggests that the identification of musical syntax should lead to the revelation of musical meaning. However, the complexity of the musical surface does not enable one to ascertain the meaning by regarding only one level of its structure; music can be seen to 'mean' more than just the sum of its parts (*Gestalt*).

For this reason Scruton (ibid, 173) dismisses the validity of semiological approaches to the investigation of musical meaning. The main area of contention lies in Structuralism's insistence on the notion that meaning is encoded at the syntactic–grammatical level: 'This is not to deny syntactic structure… but rather to cast doubt on the Saussurian description of it – and… on the whole project of semiology' (ibid, 176).[47] Scruton's main reason for taking this position is his

[46] Only certain kinds of information can be conveyed musically. Refer to Footnote 32 in this regard.

[47] Structuralism established itself during the twentieth century as an approach to the human sciences where objects were analysed as being a system of interrelated parts or a system of signs. It founded four main principles that served as the basis of its methodologies: (a) structure is what determines the position of each element of a whole, (b) every system has a structure and therefore structuralists were interested in finding (c) *structural laws* which dealt with coexistence rather than changes, and it proposed (d) that structures are the *real things* that underlie the

opinion that: '…Saussurian linguistics gives no persuasive theory of syntax, and no theory as to *how* syntactic structures encapsulate meaning' (ibid, 174).

The whole critique against general Semiotic thought is expressed very eloquently in the following passage:

> The weakness of the semiological approach lay in its inability to combine syntax and semantics into a unitary theory. Music has a quasi syntactic structure; it also has a kind of meaning. But unless the first articulates the second, and is interpreted in terms of it, there is no reason to believe that the [musical] structure is genuinely syntactical, or that *structure* is the vehicle of meaning… (ibid, 198).

This criticism of semiotic enquiries in the field of music does not account for recent developments in the discipline. Scholars such as Eero Tarasti, Raymond Monelle, Robert Hatten, David Lidov and others established the position of music semiotics as an important academic discipline. While each of these individuals has pursued his own views and forms of enquiry, many have revealed investigations which are directly concerned with the issues relating to musical syntax and semantics. These investigations have revealed valuable strategies and theoretical stances with which the problematic issue of musical meaning can be tackled. Some of these are revealed in the course of this thesis.

To retain the validity of the arguments about the operation of the syntactical and semantic planes in the musical edifice, it is necessary that an identification of these planes be adequately made. However, this attempt reveals a number of stumbling blocks. The existence of these properties have been asserted by some authorities and refuted by others. In an attempt to better understand the

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surface or the appearance of meaning. This particular mode of reasoning has been applied in various fields including anthropology, sociology, psychology, literary criticism, architecture and most recently music. The rational elucidation of its theories established Semiotics as an influential cognitive discipline. (The applicability of these ideas is shown in Chapter Two). Post Structuralism was largely seen as a reaction to Structuralism. In direct contrast with its notions, Post Structuralism views the signifier and signified as inseparable but not united entities. It subsequently proposed the idea that semantics inhere to the play of difference. The main proponents of Post Structuralism were Jacques Derrida, Michel Foucault, and Julia Kristeva.

operation and formation of musical meaning, it can be argued that the modalities of the Theory of Communication, with specific reference to the issue of encoding, reveals sites of investigation that allow a new appraisal of this issue.

In the following Chapter, the theories of Communication, Encoding, and Semiosis will be explored to ascertain what they reveal about meaning in general and about the issue of musical meaning in particular.

CHAPTER TWO

Encoding, Communication and Semiosis

2.1 Encoding.

With the notion 'saying it with music' I refer to a creative/intellectual mind-game that takes place as a precursor or preliminary step towards the process of composition in which the artist has a clear intention to make a communicative utterance.[48] I propose that the creative usages and manipulations of established musical codes, which result in the formation of a new work, are actually processes of 'encoding'. An exploration of the relevance of the process of encoding to the sphere of music will certainly reveal how semantic content is woven into the musical edifice. This requires that an examination of the code-structures as well as an identification of the musical codes be made. It is accepted that theories which relate to general culture will have a bearing upon this investigation and will assist in establishing how the encoding process manifests itself in the musical structure and on the surface.

In acknowledgement of the view that artistic utterances are forms of aesthetic expression, it is logical to accept that these also operate as structures of communication. The term encoding is usually used to refer to the manner in which objects gain semantic baggage; this is by itself steeped in aspects of communication.

2.2. Communication

Claude Shannon and Warren Weaver produced a communication model in 1949 which proposes that all human communication inherently relies on six basic

[48] The term 'mind-game' is used in the sense of its application to mathematical game-theory. The latter describes the manner in which ideas, structures and concepts play themselves out in a philosophical space or any other environment such as a culture, ideology or scientific experiment.

factors. These are: (i) a source, (ii) an encoder, (iii) a message, (iv) a channel, (v) a decoder, and (vi) a receiver (http://www.cultsock.ndirect.co.uk/MUHome/cshtml/introductory/sw.html, accessed 7 February 2007).[49]

The model stipulates that any communication has a specific purpose which has to be conveyed in the form of a message.[50] This can only occur when the intended content has been formulated into a code by the encoder (read: **composer**) thereby expressing the source's purpose in the form of a message (read: music) (ibid).[51] The Shannon/Weaver model relies on the roles of encoding and decoding as being integral to the communication (and thus by extension semantic) process.

The model however, conveys the concept of 'message' as relatively un-problematic. This is the result of its tendency to regard communication as a linear one-way process. Communication cannot be seen as being a one-way process. It requires interaction to occur between the encoder, the message and the receiver. With Wilbur Schramm's notion of a 'field of experience', attention is drawn to the numerous shared socio-cultural factors which play a role in the communication process (ibid). It accepts that sociological factors play a vital role in this process thus suggesting that musical communication does have extra-musical/programmatic content present in some way.

As a result, matters such as the social context in which the message is transmitted, the assumptions made by source and receiver when creating (and decoding) the message, their past experiences etc, are all expected to come into play during the communication process (ibid).

[49] They based their model on a similar one proposed by Derek Lasswell.
[50] I relate this purpose to the intention to make a communicative utterance, which leads to the act of creating the message.
[51] The encoder is the person who is responsible for taking the ideas/purpose of the message source and putting them into the appropriate code.

The adjustment of the model to accommodate the notion of a 'feedback loop' accordingly renders the theoretical applicability of the model as being relevant. This concept of 'field of experience' or 'feedback loop' is taken to refer to the sphere of culture within which the message is created and encoded and it can be taken for granted that it exerts an influence on the correct transmission of the semantic content of a message.[52] Importantly, culture is the arena in which norms of encoding evolve.[53]

Schramm's greater emphasis on the processes of encoding and decoding also directs attention to the possibility of a communication breakdown, namely a mismatch between the operation of the encoding and decoding devices. This is referred to as 'semantic noise'.[54] Just as a source needs an encoder to translate a specific purpose into a message, so the receiver needs a decoder to retranslate or interpret it. It is consequently entirely possible for the decoder to posses all the equipment required to *receive* the message and yet be unable to *decode* it (ibid). The practice of decoding involves cognitive processes, which in turn are often subjected to pressures within the broader cultural environment; one's perceptions are fundamentally shaped by the culture in which one grows up.

It appears that a communication breakdown often seems to occur in the area of music semantics. This begs the question as to the exact nature of this breakdown. As the issue of encoding is further examined its connection with semantic structure will become apparent.

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[52] 'In its simplest form the feedback principle means that a behaviour is tested with reference to its result, and the success or failure of this result influences the future behaviour' (Wiener 1958, 55; cited in: http://www.cultsock.ndirect.co.uk /MUHome/cshtml/introductory/sw.html, 7 February 2007). This occurs as part of a general encoding process.

[53] The discussion of general Semiotic theory will reveal this generally accepted notion.

[54] Semantic noise is difficult to define, but it may be anything that interferes with the meaning of a message being carried across. Efforts to find solutions to the issue of semantic noise thus leads to the study of social class, cultural background, experience, attitudes, beliefs and a whole range of other factors which can introduce noise into communication.

It is worth bearing in mind that literate musicians are expected to be able to decode the written musical message since they are equipped by their training to understand the visual (score) as well as other intellectual signals of the musical system. However, it seems that the exact meaning in music remains relatively arbitrary and elusive even for initiates.[55] This indicates from the Communication Theory viewpoint that the code (rule for transforming meaning) for music is perhaps not grasped or not known. Another possible explanation is that this code is dynamic and arbitrary.[56] We labour under the misapprehension that a single code/rule for the conversion of semantic content exists; it is entirely conceivable that a myriad number of codes exist which all come to bear upon a single musical unit when the attempt to ascertain its meaning is made.

The very essence of the study of human communication is to find ways of avoiding semantic noise and thus, by extension, to sift through the possible layers of musical meaning and thereby draw attention to the exact significances (ibid). This notion accepts that the most crucial aspect which influences the transfer of the musical message does not relate to cultural differences alone, but essentially points towards a fundamental quandary of encoding and decoding.

The Shannon/Weaver model assumes that meanings are somehow contained within the signs used in the message and the receiver can, as it were, take them out again (ibid).[57]

The concepts of encoding and decoding as well as the 'field of reference' or 'feedback loop' principle leads one to explore the relevance of the principles of

[55] These initiates are not only people who are able to read music, but also those individuals who are fluent in listening. By taking the phenomenological aspects of musical communication into account it is entirely possible that the latter group of people could be better in touch with the ultimate meaning of a composition.

[56] The revelation of what this dynamic model is occurs in the explorations of Gesture and Intonation Theory in Chapter Five.

[57] Refer to a similar issue raised in Chapter One of this thesis '… It is one of Frege's great insights, that the semantic structure of a sentence must show how its meaning is generated from the meaning of its parts' (Scruton 1997, 198).

semiotics: it is within this particular body of thought that the exact operations of signs and codes have been investigated.

2.3. Semiosis and Encoding.

The modalities of encoding and meaning are examined theoretically in a logically coherent and systematic manner in the two main branches of structural linguistics, namely semiotics and semantics.

Semiotics is a theory which accepts that human communication occurs with the help of signs.[58] It especially traces the

> factors of sign morphology and the establishment of sign-systems: the essential logic and categories of its elaboration in basic relations (relation according to means, object and interpretant), its practical operation [i.e. syntax] (Karbusicky quoted in Monelle 1992, 27).

Explorations of semantic procedures and problems are central to the investigations of semioticians. The study of semantics exist in linguistic study as the

> theory of the conditions (psychological, anthropological, social-historical, cultural and aesthetic) which traces the processuality of the creation of meaning, its metamorphosis and dissolution (ibid, 27).

The principles of semiotics can be generally applied to any knowledge system. Writing in 1964, Roland Barthes declared that

> semiology aims to take in any system of signs, whatever their substance and limits; images, gestures, musical sounds, objects, and the complex associations of all of these, which form the content of ritual, convention or public entertainment: these constitute, if not *languages*, at least systems of signification (1967, 9).

[58] Semiotic theory is grounded in the ideas and communication structures expressed by the Shannon-Weaver model.

Additionally, Umberto Eco asserts that 'semiotics is concerned with everything that can be taken as a sign' (1976, 7). As a result, semiotics not only involves the study of the entities which we refer to as 'signs' but also anything which 'stands for something else' (http://www.aber.ac.uk/media/Documents/ S4B/sem01.html., 8 October 2007).

Ferdinand de Saussure (originator of semiotic theory) initially made a distinction between language and speech.[59] By applying this notion to semiotic systems in general rather than simply to language, it is possible to make distinctions between *code* and *message*, *structure* and *event,* and/or *system* and *usage. This can occur* in any specific number of texts or contexts (ibid).[60]

It is feasible that the concerns relating to the elements of musical grammar and the meaning of music can be investigated through the use of this theory by figuratively placing the composer in a position where he is able to 'speak'. In this manner music can be accepted to operate as a system of signs.

Saussurian nomenclature defines the model of a sign in two parts. The term 'signifier' is used to refer to the form that a sign takes,[61] whereas the word 'signified' is used to refer to the concept that the sign represents (ibid).[62]

[59] Saussure's usage of the word *langue* (language) refers to the system of rules and conventions which is independent of, and pre-exists, individual users. His use of *parole* (speech) refers to its use in particular instances. In reality this distinguishes clearly between the system of language and the shaping of syntax through semantic intentions. Musical utterances seem to operate more like the spoken form of language. There is an element of delivery and inflection involved. These concepts are explored in the course of this thesis.
[60] In the general semiotic paradigm the word 'text' is used to refer to anything that can be 'read' for meaning. It can thus be taken to be any system of signs (in the form of words, images, sounds and/or gestures).
[61] The Saussurian term is '*signifiant'.*
[62] The Saussurian term is '*signifié'.*

The *sign* is the whole that results from the association of the signifier with the signified (Saussure 1983, 67; Saussure 1974, 67), while the relationship between the signifier and the signified is referred to as 'signification'.[63]

Saussure suggested that the relationship between the signifier and the signified is *conventional*. That means it depends on social and cultural conventions for its formation. It is thus embedded in the particular culture in which the sign is typically used and which gave birth to it (ibid).

In logician Charles Sanders Peirce's triadic model of signification, a sign may include anything that stands for something or somebody. The sign (*representamen)* is something that possesses the capacity to represent or communicate an idea. The *object* is the idea which is conveyed by the sign (the latter may be a concrete entity or an abstract idea). The entity that links the sign and the object is the *interpretant* (Cumming 2000, 66). [64]

The ideas of Saussure and Peirce are taken to be the foundations of general Semiotic theory.

Peirce regarded the interaction between the *representamen*, the *object* and the *interpretant* as a process of *semiosis*. This is in reality the route through which the sign is observed, interpreted and the meaning extracted. It is similar to the concept signification. This practice is grounded in the contexts of (socially established) convention.

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[63] Louis Hjelmslev used the terms 'expression' and 'content' when referring to the *signifier* and *signified*. Within this framework the signifier is seen as the *form* of the sign and the signified as the *content*. However, the naming of form as a 'container' is problematic because it supports the equation of 'content' with 'semantics' thereby implying that meaning can be 'extracted' without an active process of interpretation. This renders form to not be meaningful in itself (http://www.aber.ac.uk/media/ Documents/S4B/sem02.html, 8 October 2007). A discussion surrounding the operation of Form and Content in musical surfaces occurs in Chapter Three.

[64] Within Peirce's model of the sign, a window sign for 'open' would consist of: a poster with the words written in large print (the representamen); the people who read the words on the shop window (the interpretant) and the idea that the shop is open for business (the object).

Peircean theory stipulates that any sign may be one of three kinds - these typify how the semiosis occurs. *Iconic* semiosis occurs by means of likeness (pictorial), *indexical* signification takes place by means of 'causal connection' and *symbolic* signs signify by means of 'stipulated convention' (ibid, 67).[65]

Semiotics is in itself not a unified discipline; it covers a vast array of diverse projects which all concern themselves in some way with the process of semiosis (ibid, 67). It is applied to various knowledge systems and in various contexts.

This concept of semiosis was developed further by Umberto Eco. He used the term to refer to the route by which a culture or society ascribes meaning to signs (encoding). In this manner the creation of a semantic sphere is a social and cultural activity which can allow for the subjective influence of the individual in each occurrence of semiosis. This view of the process encompasses on one side the psychoanalytic approach promoted by Jacques Lacan 'where meaning is construed as a subject-effect (the subject being an effect of the signifier)' (de Lauretis 1984, 167), while the other side of this view emphasises the sociological aspects of semiosis and focuses on its 'practical, aesthetic, or ideological use in interpersonal communication. Here meaning is construed as semantic values produced through culturally shared codes' (ibid, 176).

Signs can take the form of words, images, sounds, gestures and objects. In a cultural sphere this includes any kind of cultural practice, ritual or cultural norm (http://www.aber.ac.uk/media/ Documents/S4B/sem01.html., 8 October 2007).

The processes of meaning or semantics are closely involved in this process of signification; hence, my enquiry into the semantics of music involves the

[65] The reiterated descending melodic minor third intervals suggesting birdsong that appears in the closing phrases of the slow movement of Beethoven's Pastoral symphony is arguably an iconic form of musical signification. In contrast, the use of a similar melodic figure in Delius's *On Hearing the First Cuckoo in Spring* does not signify birdsong per se, but is more indicative of an indexical reference to the idea that spring season has arrived. Symbolic forms of musical signification are rare but one that comes to mind is the duet-arias for bass and treble in Bach's Cantata BWV 140 *Whachet auf!* Here the voice types are employed as symbolic representatives of a soul having a conversation with the Saviour. Musical sign functions are elucidated in chapters Three and Five.

investigation of the processes of signification in music and thus an investigation of the nature and operation of musical codes and the encoding process.

Contemporary semioticians refer to the creation of texts as 'encoding' and their interpretation as 'decoding' (ibid). The use of these terms obviously emphasises the importance of the semiotic *codes* involved, and thus it also highlights the social and cultural factors that play a role. Semioticians refuse to accept the existence of an uncoded message.

In the context of semiotics, 'decoding' does not only involve a basic recognition and *comprehension* of what a text 'says' but also includes the *interpretation* and *evaluation* of its meaning with reference to relevant codes. This shows a dichotomy between structure and content where 'what is "meant" is invariably more than what is "said"' (ibid). (Both of these form a *Gestalt*).

The ideas hitherto expressed have important bearing on the considerations of musical meaning and are also related to the processes of reception and cognition of a musical work. The interrelationship here implied connects with the previously explored notion that syntax and semantics are closely involved with one another, but are not necessarily the same thing.

Roman Jakobson's concept of the processes of verbal communication indicates an obvious debt to the Shannon-Weaver model and also suggests that there needs to be a field of reference. He outlined these factors as follows:

> The *addresser* sends a message to the *addressee*. To be operative the message requires a *context* referred to ('referent' in another, somewhat ambivalent, nomenclature),[66] seizable by the addressee, and either verbal or capable of being verbalized, a *code* fully, or at least partially, common to the addresser and addressee (or in other words, to the encoder and decoder of the message); and finally, a *contact*, a physical channel and psychological connection between the addresser and the addressee, enabling both of them to stay in communication (1960, 353).

[66] Peirce's nomenclature.

Jakobson proposed that 'each of these six factors determines a different function of language' (ibid.). These ideas will be explored at the beginning of Chapter Three.

The British sociologist Stuart Hall emphasised the roles of encoding and decoding as being part of signifying practices (ibid).[67] He noted in particular that 'decodings do not follow inevitably from encodings' (Hall 1980, 136). He thus gives as significant a role to the 'decoder' as to the 'encoder'.

It is core to this study that, the encoder is seen as being the **composer**, whilst the decoder is the listener, analyst, critic, general audience etc.

Hall referred to the various phases in his Encoding/Decoding model of communication as *moments*. John Corner defines them as: (i) the *moment of encoding*: 'the institutional practices and organizational conditions and practices of production' (1983, 266); (ii) the *moment of the text*: 'the... symbolic construction, arrangement and perhaps performance... The form and content of what is published or broadcast'; and (iii) the *moment of decoding*: 'the moment of reception [or] consumption... by... the reader/hearer/viewer' which is regarded by most theorists as 'closer to a form of "construction"' than to 'the passivity... suggested by the term "reception"' (ibid, 26*7*).

In this study, the moment of encoding with respect to music involves a number of processes which are the object of investigation. These will be revealed in the discussions relating to musical *Affekt*, and musical *Topos* (in Chapter Three) as well as Intonation theory (in Chapter Five).

It is evident that the process of signification or semiosis depends on the encoding of a sign and that the creation of meaning is an integral part thereof. Although meaning is a socially established convention, there is enough freedom in its method of operation to also allow for the subjective interpretation of the individual. It is evident that Semiotic theory places great emphasis on the aspect

[67] Published in a paper entitled: 'Encoding and Decoding in Television Discourse' in 1973.

of semantics and expects that there is a semantic goal, or semantic intention that needs to be conveyed.

2.4. Musical Semiosis and the Role of Codes.

Raymond Monelle declares that it is possible to investigate the semantics of music from a semiotic perspective:

> If music is a sign with an identifiable object …then it ought to be possible to discuss musical semantics, the machinery and patterns of musical meaning. Since music moves forward in time, a systematic semantic analysis is bound to resemble a narrative description (1992, 220).

However, he asserts that the symbolic, indexical or iconic operation of musical sign functions 'are always mixed' (ibid, 214). Thus the underlying processes in music have little to do with grammar or syntax but are closer to semantic processes:

> If a movement be considered not as grammatical syntagm but as discourse, then the ability of music to relate to outside reality – its ability to be about something - is accounted for in a way that is intellectually acceptable…The patterns of linguistic discourse appear to be more of a stylistic matter, while musical discourse-patterns are the basis of music's eloquence (ibid, 222 -3).[68]

His view of the nature of musical semantics is explained as follows:

> the principle reason for taking musical language as semantic rather than syntactic, is that music behaves like the semantic side of language….Music demonstrates the coalescence of [the] expression plane and content plane to an even greater degree (ibid, 237-8).

As a result the aspects of expression and content appear to be the same phenomenon. Thus the question as to how the planes of syntax and meaning can be identified and separated from one another becomes significant. This

[68] The notion of eloquence is important and touches upon considerations of form and expression/content. This issue will be addressed in Chapter Three.

should reveal how the planes of expression and content differ from each other and should by extension disclose the exact identity of the syntagmatic and semantic structures respectively. An identification of the codes used in music will assist in this regard.

Monelle adds that: 'a semantic study of music can take the form of a search for simple reference… It can also imply a narrative view, the conception of music as emotional or moral plot' (ibid, 232). However, no explanations as to the exact manner in which semantic processes operate or how they are recognized, are revealed. Some answers to these problems are accessible when considering the semiotic square, as will be revealed forthwith.

In the attempt to identify the *how* of musical *meaning*, it becomes necessary to be able to reveal the smallest musical unit which can have meaning (designated as a semic code).[69] It is vital to discover how these small elements are used to convey semantic intention and how they influence and generate the micro- and macro- levels of musical structure.

The motive is traditionally viewed (as most books on musical form tell us) as being the smallest musical unit that has meaning and it is true that certain kinds of motive transformations can affect the meaning of musical passages (as for instance Wagner's *Leitmotiv* manipulations). I postulate however, that the system of intonation acts more like a semic code than motive structure. Inflection appears to have a greater impact on the perceived meaning of a passage; motives are usually altered by changing the inflections of certain intervals in any case. Viewed in this manner, the concept of a semic code suggests that there is a semantic process at work which can only be found at a more subliminal level than what is presented by the tones of a musical motive.

[69] Semes: These are the atoms of meaning – the smallest linguistic unit which can affect the meaning of a word or phrase (Monelle 1992, 233).Classemes: these are contextual semes which affect areas greater than a phrase or sentence. Isotopy is a classeme which persists throughout a whole utterance (ibid, 233).

One of the most significant discoveries of this study is the revelation that intonation /inflection is the force that directs musical meaning rather than the motive. This suggests that specific processes of musical encoding arise from cultural and social pressures and seem to involve stylistic considerations as well. Encoding processes also cater to the individual usage of codes in the formation of a composition by a composer. It is subsequently necessary to explore and identify these codes and their exact nature as well as how they function. This task will be undertaken with reference to Topic theory in Chapter Three and Gesture in Chapter Five.

The pursuit of musical semantics needs to take account of the theory of semantics developed by Algirdas Julius Greimas. His model of the semiotic square proposes that meaning is established by means of context and relationships rather than by means of direct relations or references (even when music has illustrated that both processes can occur, especially when taking into account the influences of both Rhetoric (including *Affekt*) and *Topoi*.[70]

It is a widely accepted theory that a musical composition establishes meaning by means of the internal relationships between tones and themes. Thus, aspects such as rhythmic and pitch relationships can be interpreted to have meaning, but an analysis of these does not necessarily reveal the meaning of the composer:

> On the deepest level signification is structured by the logical principles of contradiction, contrariety and implication. The semiotic square is non-syntactic. It is a pattern of terms and qualities related logically (ibid, 246).[71]

[70] More about this will be revealed in Chapter Three.

[71] This leads one to infer that, especially when consulting the model of the semiotic square as created by Algirdas Julius Greimass, that objects are defined not wholly in terms of what they are or appear to be but also in terms of what they do not appear to be. Succinctly put: objects are defined simultaneously by what they are and by what they are not (another Intellectual game called *litotes).* Through this process a sense of the wholeness of the object is gained. It can be said that music offers a wholeness of semantic content that is not easily achieved in other communication forms.

All of these theoretical principles are directed towards investigating the operation of musical semantic systems. Walter Grauer has argued that pre-linguistic language and music has the same basis (2006, 43).[72] In connection with this, Greimas accepts that there can be pre-linguistic processes at work in the semantic system. He distinguishes between the inductive and deductive levels of semantics.[73] In the case where these levels are brought together

> grammar is pre-linguistic; since it deals with levels of meaning which constitute a common structural level, far below the level of manifestation[74]…, it can generate various kinds of manifested meaning in cinematographic and oniric languages, figurative painting and so forth as well as discourse about meaning, that is semiotics (Greimas 1987, 64; quoted in Monelle 1992, 245).

It is logical to assume that the identification of the codes of signification for music is an important step towards establishing a concept of musical semantics. It is from there that an understanding of the processes of encoding may begin.

The concept of the 'code' is fundamental in semiotics. Saussure emphasized that signs are not meaningful in isolation; semantics appear only when they are interpreted in relation to one another. Added to this, the linguist Roman Jakobson perceived that the production and interpretation of texts depends upon the existence of codes or conventions for communication.[75] Since the meaning of a sign depends on the code within which it is situated, codes provide a framework within which signs make sense; it is thus conceivable that there are semantic and syntactic codes in existence.

However, we cannot grant something the status of a sign if it does not function within a code. Furthermore, if the relationship between a signifier and its

[72] The concept 'pre-linguistic language' refers to language as it existed before the formation of words; when it was at the developmental stage of just being vocalised inarticulate sound.
[73] The word 'inductive' refers to a systematic study of meaning itself, whereas the term 'deductive' is the application of basic theory to narrative grammar (Monelle 1992, 233).
[74] These are probably what Chomsky called the "deep roots" of language; it suggests that the cognitive processes for grammar are already hard-wired into the brain before any language is learnt.
[75] Thus communication can occur because existing systems such as tonality and musical form have been culturally instilled as the means by which musical utterances are presented.

signified is relatively arbitrary, then it is clear that interpreting the meaning of musical signs requires familiarity with appropriate sets of conventions. The latter can include aspects such as style and even elements of the common practice of a particular historical epoch. Reading a text thus involves relating it to relevant 'codes'.[76] The conventions of codes represent a social dimension in semiotics: a code is a set of practices familiar to users of the medium operating within a broad cultural framework (http://www.aber.ac.uk/media/Documents/S4B/sem08.html., 8 October 2007).

Marcel Danesi has suggested that 'a culture can be defined as a kind of "macro-code", consisting of the numerous codes which a group of individuals habitually use to interpret reality' (1994a, 18).

The synchronic perspective of structuralist semioticians tends to give the impression that codes are static. But codes have origins and they do evolve in response to the pressures of certain environments. Studying this evolution is a legitimate semiotic endeavour. Guiraud argues that there is a gradual process of 'codification' whereby systems of implicit interpretation acquire the status of codes (1975, 41). Codes are thus dynamic systems which can change over time, and are thus historically as well as socio-culturally situated. Codification is thus a process whereby conventions are established, but these conventions can be altered over the course of time as a code gains more and more semantic baggage (substance)[77]

It is important to remember that codes are socially established norms as well as objects which contribute to the coherence of knowledge systems. It thus becomes apparent that the process of encoding is deeply embedded in culture and that the process of semiosis itself depends on codes having been encoded.

[76] This involves intertextuality at some level.
[77] I mean this in the positive sense.

As a means to progress in the investigation of musical meaning, it becomes necessary to examine and identify music's known semantic and syntactical codes. This leads to investigations into the operation of the notions of content and expression as well as the systems, Rhetoric, *Affekt*, Gestures, and Topics.

CHAPTER THREE

Eloquence and Musical Codes

3.1. Semantic and Syntactical Categories

The various kinds of language functions stipulated by Roman Jakobson (Monelle 1995, 91) can reasonably be accepted to also operate in terms of semantic functions. They are categorised as follows:

a) Referential, with the focus on the context;
b) Emotive, with the focus on the speaker;
c) Conative, with the focus on the hearer;
d) Phatic, with the focus on the medium of communication;
e) Metalingual, with the focus on the code employed;
f) Poetic, with the focus on the message itself.

All of these functions operate simultaneously and probably interact in many diverse ways in any form of communication. When one of these categories behaves in a prominent way it gives a certain character to the communication itself (ibid, 92). Musical structures and surfaces can be said to support all of these functions. It can be added that musical processes probably engender a dynamic interaction of these factors within a single musical work or phrase to an even greater degree.

In this sense it is easy to observe, for example, that the use of 'fanfares' in preparing an opening scene of an opera or large-scale work clearly signify some aspect about the dramatic context of the work (referential). Similarly, it can be expected of dodecaphonic compositions to emphasise the (serial) code employed (metalingual). Recitatives reveal the importance of the 'speaker' (emotive) whereas arias clearly reveal some aspect of content (poetic). The whole genre of opera clearly states something about the medium of

communication (phatic). It is clear that musical compositions focus in some way on the hearer/receiver (conative).

It is possible that Jakobson's categories behave as if in a constant state of flux during the process of musical communication, with the musical edifice fulfilling a different communicative function at different stages of the same composition. One can only speculate if this accounts for the difficulty in identifying the semantic plane of music. It is entirely conceivable that each of these categories can have some applicability in a musical enquiry which is concerned with the aspect of musical meaning. This indicates that we can find all of these functions within the musical edifice and thus examine their mode of operation. These functions do not, however, offer a tangible revelation of the concrete musical codes themselves, but they do reveal aspects of the manner in which musical communication operates in the active sense.

3.2. Content versus Expression.

> In order to deserve the designation "semiotic" system, music must - like any other system so classified - be said to consist of two different levels: a level of content and a level of expression (Christensen 1995, 81).

The concepts of expression and content can be equated with the semiotic notions of signifier (what is used to convey the message) and signified (what is the message). We can accept that the musical content consists of the message sent by the composer, whereas the musical expression refers to the manner in which the message is delivered. This connects the actual phonological result (the sound) and the written instruction (the score) as the 'substance' which constitutes the content planes. In turn aspects such as musical style and manner of writing, as well as the macro structure are to be thought of as 'the expression'. Music's eloquence can accordingly be said to involve an aspect of the plane of expression, rather than the levels of content. However, the distinction is not as clear cut as might be implied. This occurs because the content also influences

the musical eloquence and, as such, it always appears that syntactical manipulations seem to have a greater formative effect on the resultant semantic level of music.[78] Thus, even though content shapes the syntax, the latter influences our perception of the meaning.

This line of reasoning leads us to consider the semantic and syntactic planes of music as separate entities. It can thus be proposed that the content is the semantic plane whereas the expression is the syntactical (structural) plane. Well documented efforts of composers who make the effort to put the content into a suitable musical expression can be taken as confirmation of this hypothesis. It is evident that communication will be marred by a flawed expression. Assumptions made about aesthetics accept that the musical expression must convey the content adequately and in an efficient manner. In this way it should also serve the mechanism of cognitive human information processing in a satisfactory and efficient manner and, by all means, produce an eloquent musical expression. (This is a function of syntax).

The general assumption that music should have coherent form (as defined by Hanslick as 'beautiful') and content (semantic) is of an aesthetic as well as cognitive nature. Although any aesthetic stance operates as a background set of ideas (a code) which guides the composer's artistic manipulations of the musical parameters within his/her idiolect, the musical expression should still obey the logic of the syntactical devices and processes of musical construction. I argue that these are the structures which allow the music to make cognitive sense; to be understood as music without the music itself - there is a level of music that is communicated beyond the notes on the page.[79]

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[78] Here I take syntactical elements to mean the rules which determine the manipulation of musical materials so that coherent form can be arrived at. Thus principles which require leading-notes to be raised, cadences to be at the ends of phrases, and techniques which allow the creation of sensible chord progressions and good harmonic flow, can all be said to fall under the broad definition of syntactical elements. However, the general syntactical code of music is slightly different in concept from these examples. For this refer to Chapter Six.

[79] More about this will be revealed in the discussion of Musical Experience in Chapters Five and Six.

The content is the message which is to some degree guided by the intention of the composer, but it takes physical form as the expression. It was a common aesthetic assumption pre-1900 that music should display beauty of form – this seems to imply that the beauty of music is a syntactical result and not a semantic one, and thus more a result of good compositional technique rather than semantic intention. Thus it becomes clear that a study of meaning cannot account for the beauty of music, but that beauty (which is a subjective value) is a desirable and highly regarded aesthetic quality. Similarly, even though syntax can account for the eloquence of music, it does not imply that eloquence and beauty are the same; it also does not stipulate that beauty is the result of a rich musical content. However, it must be taken for granted that eloquence plays a role in the perception and appreciation of beauty, and that it has an effect on the listener's experience of the musical edifice.

Outside of the context of the arguments presented here the concept 'musical expression' is usually taken to refer to the final result of the composer's efforts; that is, the musical composition in its more concrete form either as score (text) or performance (sound) or both, displaying both the syntactical and semantic planes simultaneously. This indicates that it is more difficult to make distinctions between form and content in music than it is in language. Music seems to posses a higher level of subtlety in its communication as well.

The musical expression can be regarded as being the code which conveys the message whereas the musical content is the code which transmits the meaning. Thus the relationship which exists between the planes of content and expression is the basis upon which the encoding rests as it can allow one to '…conceptually capture how meaning is generated within music' (ibid, 82).

In any act of composition the planes of content and expression come into play when the composer produces the work to resemble the structure of an utterance

(rhetoric). This is the level at which the composer plans how to convey the message by using the communication medium of music. He also decides which of the language functions (as mentioned earlier in reference to Jakobson) will dominate the utterance. At the stage at which content needs to be transformed into expression, the composer's artistic choices of various definable codes are determined by a desire to structure the musical edifice in the form of a rhetorical utterance. It is at this stage that the process of encoding takes place. The composer *encodes* the message for the express purpose of making the message (content) coherent to the receiver (listener); he makes use of the appropriate musical codes to do so.

Thus the adaptation of symbolic figures of speech (syntax) to music may help the composer in his attempt to give affective content an adequate expression through comparable figures (or codes) of music (ibid, 82). It thus begs the question: what are these signifying codes that operate within music?

I distinguish between two different kinds of coding in the musical system. The first kind can be called a syntactical code (expression plane). This encompasses all the technical, rhythmic and melodic devices that engender coherent form in the music, and it is these syntactical constructs and processes through which adequate human information processing takes place. The second kind can be referred to as the semantic code. It is the latter which acts as the force which is responsible for the content of the music and the shaping of the syntactical level to a large degree.

The essential musical material such as pitch, duration, dynamics and timbre, which in turn generate melody, harmony, rhythm, dynamic intensity (and contrast) and instrumental/vocal colour, are all part of the quintessential syntactical essences of music. However, it appears that the structural units in music such as the motive, the sentence/phrase, sequences and larger

sections/segments, as well as manipulations of harmonic and melodic structure also operate in the manner of syntactical devices but on a more macro level.

It is therefore these syntactical *codes* that infuse the synergy between the cognitive (intellectual) and sensual (expressive/phenomenological) faculties of the human psyche. That is, for the receiver to make sense of the intended message and meaning, the one who encodes the music (namely the composer) needs to structure the message into a syntactically logical construct that will reach both the listener's intellect and emotional capacities. This is true in the linguistic sense as well: even though content may be present, incorrect syntactical form will force a situation where incoherent communication of the content takes place. It is also possible that if the syntax is correct but somehow deficient in content, there will be no communicable message. It is thus imperative that a dynamic interaction between the *content* and *expression* planes occurs in the musical composition. It must be kept in mind, however, that the expression plane is formed by manipulations of the semantic codes as well as the syntactical codes. There is an undeniably close relationship between both the content and expression planes for the reason that a single musical surface perpetually presents these planes as a complete *gestalt*.

Investigations of the formative processes of the music of the Ngqoko Women (to be dealt with in Chapter Four) reveal that the semantic code in the melodies of their songs is intrinsically bound up with the tonal inflections of the spoken voice.[80] This parameter is ultimately responsible for emotional expression, feeling, and eventually, the meaning in their music. The power of this kind of voice inflection or intonation on the formation of musical ideas and meaning in the Ngqoko music will be revealed in Chapter Four and the implications thereof in Chapter Five.

[80] This can be attributed to the influence of the 'tonal' language isiXhosa, where voice-inflection has a decisive influence on the semantic result. More information about tonal languages will be revealed in Chapter Four.

Since the semantic code (meaning) supersedes the syntactical code (grammar),[81] I classify the musical semantic code in part as the composer's intention, as that which prompts him to manipulate the syntactical aspects of musical structure to engender certain responses from a listener. It is thus to some degree the *semantic code* which is responsible for each composer's idiolect and manner of encoding but it is the *syntactical* code that is the basis of music's eloquence.

I believe that intelligible music human information processing (cognition) will not take place unless good musical grammar is followed;[82] or in linguistic terms, the message to be presented must be in a coherent syntactical form. This does not necessarily imply a mindless simplicity and artistic poverty on the part of the composer, but rather suggests that the music results from an inner organic coherence which is entirely rooted in the composer's semantic intentions.

An examination of the issues of form and content, and their influence on the resultant communication itself, cannot ignore the precepts given by the ancient disciplines of *oratory* and *rhetoric*. There is in reality a close connection between the formation (and thus encoding) of Western music and the principles established by the ancient masters of rhetoric. Principles of rhetoric were indeed established to allow good communication to occur.

3.3. Rhetoric and *Affekt*.

> The influence of the principles of rhetoric profoundly affected the basic elements of music (Wilson et al 2001, 260).

The term *rhetoric* is usually taken to refer to the art of effective speaking or writing. It was highly regarded as a discipline and cultural and intellectual activity

[81] The influence of semantic intentions on syntactical structures was discussed in Chapter One.
[82] I mentioned in Chapter One that Roger Scruton regards musical grammar to be of a perceptual nature. One can accordingly infer that musical grammar is shaped also according to how music is expected to be perceived. It is the composer who shapes the perceptions of his listener to a certain degree.

in ancient Roman and Grecian societies. By a process of cultural assimilation the concepts and principles of this discipline found its way into medieval thought. Complex interrelationships between music and the spoken arts (*artes dicendi*) were also established during this period.

Because most Western music was for a long time predominantly vocal (and thus text dependent), it is logical to expect that composers would have been guided to some degree by the doctrines of rhetoric. This governed the musical setting of texts (ibid, 260). As a result, these principles also found their way into instrumental music (which was initially based on vocal music). It is entirely possible that the operation of encoding in Western music partially depends on the use of rhetorical concepts, and it is likely that these principles account for a number of the syntactical procedures of musical structure. A discussion of how rhetorical principles affected the technique of musical composition is accordingly justified.

According to Blake Wilson, all the rhetorical concepts which involve music are found in the extensive literature on the subjects of oratory and rhetoric which were written by individuals such as Aristotle, Cicero, Quintillian and others (ibid, 260). During the Middle Ages rhetorical thought exercised an influence that was at once pervasive and diffuse (ibid, 260).The structuralised division of the art of verbal discourse into *inventio* (finding the argument)*, dispositio* (ordering the argument)*, elocutio* (style)*, memoria* and *pronuntiatio* (delivery) exerted an influence on the encoding practices of Western music.

During medieval times, the techniques of memorization (*ars memorandi*) and delivery, as found in the principles of rhetoric, are thought to have played a fundamental role in the activities of performers. Wilson voices the opinion that these 'hold clues to the process by which standard melodic, rhythmic, and even harmonic *figurae* could be retained and variously "composed" in the memory' (ibid, 260-1).

At the point at which aspects of rhetoric and poetry were fused in the *novae poetiae* of scholars such as Matthew of Vendome, Geoffrey of Vinsauf, etc., the rhetorical elements of style embedded in the poetic text were mirrored in the musical settings. These rhetorical elements shared the common idea that stylistic elegance should not be based on the expression of semantic content, but rather on phonological rhetorical figures such as 'repetition, alliteration, assonance, syllable count, rhyme, metrics and rhythmics' (ibid, 261). In reality these figures allowed language to behave as a kind of verbal music that could be reflected in analogous (though essentially different) gestures of the musical setting. This resulted in the alignment of (musical) cadence with (poetic) rhyme, the coordination of tenor repetitions with significant words and the phonological musical and verbal alignment of phonetically matching vowels. In addition, the widespread instances of text-painting of some Medieval and Renaissance musical settings seemed to establish musical figures that projected the semantic meaning of the text (this will be discussed further in the text).

According to Wilson the connection between music and rhetorical theory was entrenched by circa 1525 (ibid, 261). As a result, the writings of European musical theorists (1560) contained the concepts and terminology of classical oratory. German musical theorists subsequently wrote music textbooks which aligned rhetorical principles with the craft of musical composition. This established the new artistic category known as *musica poetica*. Similar developments took place in Italy as well.

Analogies between music and rhetoric seem to have infiltrated all levels of Baroque musical thinking. Wilson voices the opinion that 'the union of music with rhetorical principles is one of the most distinctive characteristics of Baroque musical rationalism and gave shape to the progressive elements in the music theory and aesthetics of the period' (ibid, 262). In reality, the principles of rhetoric and oratory supplied many of the essential rationalised technical concepts which

are fundamental to most compositional theory and practice during the Baroque period.

It is believed that the rhetorical associations of Baroque music evolved out of the Renaissance preoccupation with the 'impact of musical styles on the meaning and intelligibility of words' (ibid, 262). As a result, all the characteristic syntactical and semantic codes of the Baroque musical style came to be connected with rhetorical concepts.

Johann Mattheson's *Der Volkome Capellmeister* (1739) contains, as part of its text, an elaborately organised rational plan for a musical composition. The model borrows from aspects of rhetorical theory, which is concerned with the issue of finding and presenting arguments. The partitions and processes cited are identical to the five-fold division of verbal discourse mentioned above. A separate representation of musical structure which is comprised of *exordium*, *medium*, and *finis* (exposition, prolongation and conclusion) was promoted by the German music theorist, Gallus Dressler. This model was in reality a simplified adaptation of the usual division of the *disposition*. It consisted of sections indicated as *exordium*, *narration* (statement of facts), *division or proposition* (forecast of main points of a speaker's favour), *confirmation* (affirmative proof), *confutation* (refutation or rebuttal) and *peroration* or *conclusion* (conclusion). The implied chronology inherent in this system can in all probability account for the reason that most musical structures are seen as a linear narratavistic process. This does not suggest that Baroque composers rigidly followed the processes that these models proposed; rather, these concepts were handled with extensive freedom, and even Mattheson seems to treat the concepts of rhetoric with a considerable lack of restriction (ibid, 263).

It is significant that composers presumed that these principles were available as 'routine techniques in the composition process' (ibid, 262). The belief that rhetorical principles came to be regarded as aids to the act of composing music

and were employed as rules which informed the composition process seems to be well founded. Whether this allowed both the content and structure of the music to be fashioned by these principles needs further investigation. At most, rhetorical principles can be taken as mental attitudes towards the shaping of musical elements to achieve a coherent structure. Rhetorical devices can subsequently be seen as types of encoding techniques that operate on the syntactical plane.

The most important aesthetic project of the Baroque period centres on a desire to achieve stylistic unity by using music as a means to communicate a number of 'emotional abstractions'. These were called *Affects*. Composers were expected to arouse these idealised emotional states in the listener. As a result 'every aspect of composition reflected this affective purpose' (ibid, 269). The production of a musical work that achieved this goal was considered to be a completely rational, and thus by extension, technical enterprise.

A composer rationally planned the affective content of each composition (encoding), and used the appropriate principles of rhetoric and compositional techniques in the pursuit of this aim. As a result, he 'expected the response of his audience to be based on an equally rational insight into the meaning of his music' (ibid, 269). Incidentally, all the elements of music such as scales, rhythm, harmonic structure, tonality, melodic range, forms, and timbre could be interpreted as an aspect of *affect*.

The ideal process of listening, from the point of view of Bach/Rameau and their contemporaries, consisted of the listeners being conscious of the principles of musical creation. This awareness permitted listeners to form a judgment of the character of the music being listened to, and to abandon themselves to the kind of affective states activated through this process. Hence, *Affekts* are rationally determined emotions (Christensen 1995, 84).

Otto Christensen voices the opinion that the sensual register in man is usually regarded as closely connected with his emotional life (ibid, 89).[83] Thus when one speaks of emotional meaning in the responses to music, one can also refer to the stimulation on the sensual capacity. From the Baroque point of view, meaning may consequently be considered as a kind of semantic deposit left over from the process of connecting the levels of content and expression. Here the *Affektenlehre* served as an 'intersubjectively accessible framework' (ibid, 87) helping to connect sensual stimulation with emotional content into an adequate expression;[84] its intersubjective status guaranteed a reasonably stable connection between levels of content and levels of expression. As a result, the framework of the *Affektenlehre* established a common understanding of the meaning deposited in music - a meaning which the listener was able to receive and interpret.

However, although a Germanic theory of musical figures was gradually named and established, it must be mentioned that there is not only one systematic theory of musical figures for Baroque and later music (Wilson et al 2001, 263). Thus the idea of the *Affektenlehre* as a unified set of commonly used musical units (melodic figures) with clear semantic connections is a complete misapprehension: 'More recent research has shown that a concept of stereotyped musical figures with specific affective connotations never existed in the Baroque composer's mind or in rhetorical explanations' (ibid, 269).

A set of technical and structural procedures has been codified, but these are in fact *rhetorical* in nature and not necessarily affective in function. Several writers have identified and classified a number of categories of *rhetorical* figures that were expected to be used musically during the Baroque period. They could easily

[83] The 'sensual register' is the cognitive awareness of what is experienced through the senses.
[84] The term *intersubjectivity* explains that communication between infants and their care-givers in the absence of language takes place by means of gestures and facial expressions. These are part of the developmental processes in young children and are (probably) the beginnings of semantic encoding (Gritten 2006: 1). The concept of intersubjectivity reports on any means of communication that is easily understood even though it occurs without the use of language/speech. In this regard refer to Chapter Five.

be manipulated by a composer to achieve any number of affective results. Most required some level of manipulation of musical structural elements, such as melody or texture, for them to be noticeable in the music. It is not known whether composers intended the use of these figures to be of an overt or subtle nature. However, it is reasonable to expect that composers infused their music with both obvious and subtle uses of these figures.

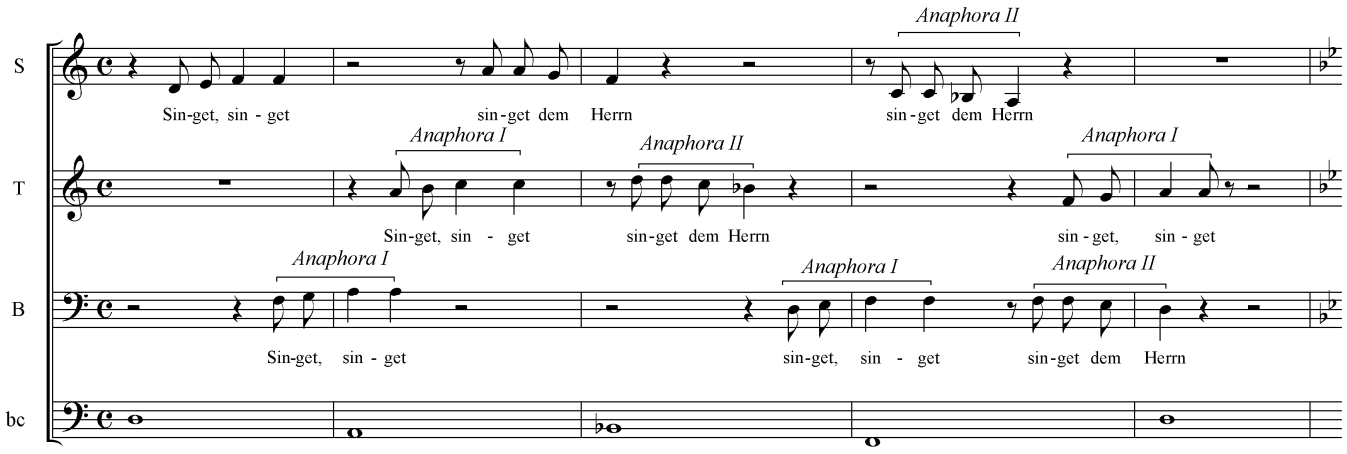
Most rhetorical figures were supposed to be used as decorations, in the same way that figures of speech enrich prose or poetry. The most complex and systematic transformation of rhetorical concepts into musical equivalents originated in the *decoratio* of ancient Greek's rhetorical theory and were expected to function in the same manner as figures of speech in oratory (ibid, 263); this would serve to embellish the rendering of the musical 'argument' and increase its affective effectiveness.

The following list reveals a group of seven categories into which some musical rhetorical figures were classified. In each instance, the categories are cited with an illuminating musical example to show some of the notable devices that are to be found. The list, however, is by no means exhaustive. I cite a selection that includes some aspects of musical structure that are still relevant today.

3.3.1. Figures of Melodic Repetition.

1. *Anaphora* – the repetition of a melodic section in different parts in different pitches. Example 1 is extracted from *Freuet euch des Herren iht Gretchen; Symphonium sacarum 2a pars* by Heinrich Schütz (ibid, 264):

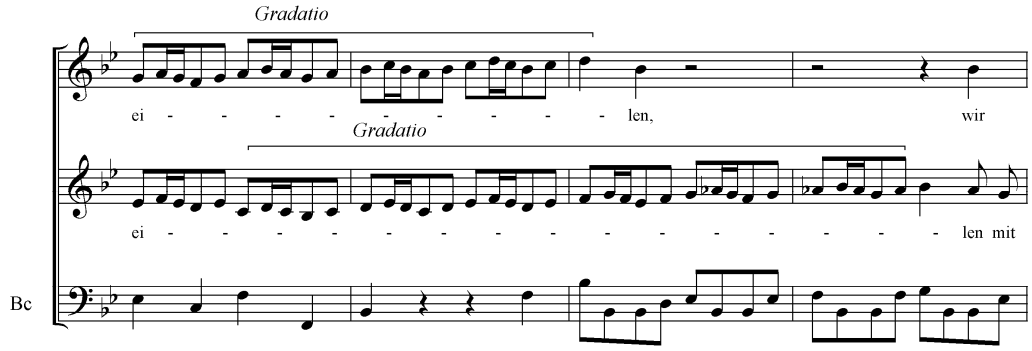
Example 1:



The music in Example 1 reveals that the use of the rhetorical device has a decisive impact on the structure of the music: the texture is entirely based on principles of imitation.

2. *Climax* – the repetition of a melody in the same part a second higher. Example 2 is extracted from Cantata no 78, *Jesus der du meine Seele,* 'Wir eilen mit schwachen, doch emsigen Schritten', by J.S. Bach (ibid, 264):

Example 2:



The melodic lines shown in Example 2 are completely based in sequential patterning which is underpinned by an ascending linear driving force.

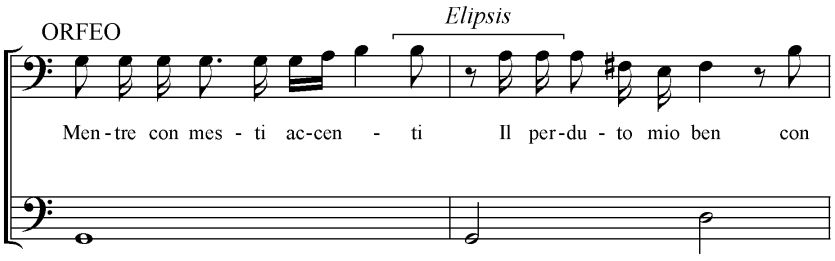
3.3.2. Figures based on Fugal Imitation.

1. *Apocope* - Fugal imitation in which the repetition of the subject is incomplete in one part.
2. *Hypallage* - Fugal imitation in contrary motion.
3. *Metalepsis* - Fugue with two (multiple) subjects.

3.3.3. Figures formed by Dissonance Structures.

1. *Ellipsis* - The omission of an otherwise essential consonance which alters the normal formation of a suspension or passing tone passage. This term also refers to the unexpected direction taken by a passage that has led up to an expected conclusion. Example 3 shows an extract from Peri: *Euridice,* 'Fiuneste piaggi'(ibid, 266):

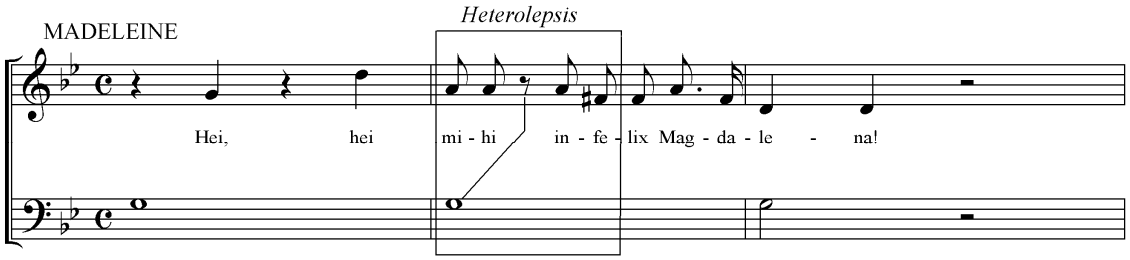
Example 3:



The music shows the use of a rhetorical device that is specifically intended to influence the listener's perception and expectation.

2. *Heterolepsis* - A leap or stepwise movement into a dissonance from a consonance, similar to an accented passing note or *appoggiatura*. Example 4 is extracted from M.A. Charpentier: *Dialogue entre Madeleien et Jésus* (ibid, 266):

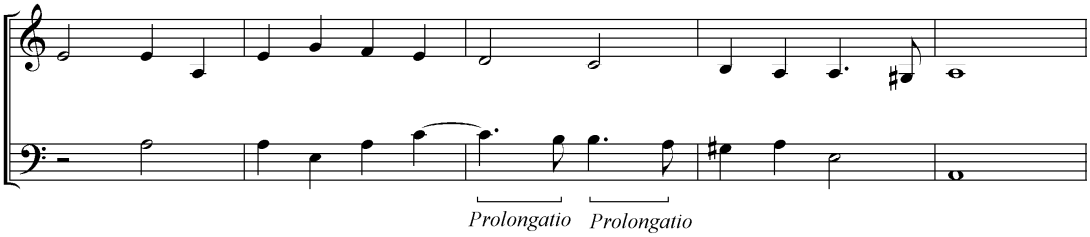
Example 4:



The texture reveals that this device generates a situation where a second voice arrives on a pitch that would have ideally been reached by the first voice in the form of a passing tone – the second voice thus 'replaces' the note that was expected in the first voice.

3. *Prolongatio* - The extension of the normal value of a dissonance, whether a suspension or a passing note. Example 5 is taken from Bernhardt's *Tractus compositionis augmentatis,* (ibid, 266):

Example 5:



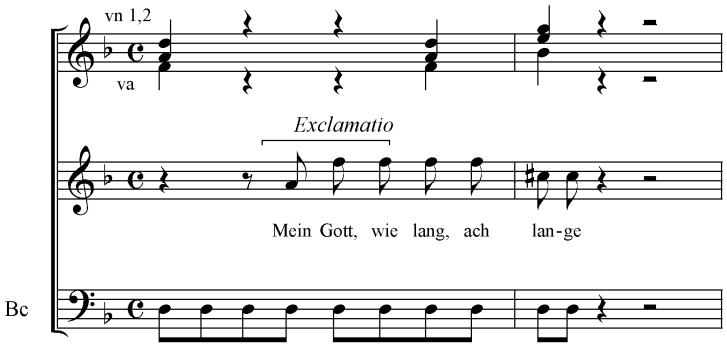
4. *Syncope*. An ordinary suspension.

3.3.4. Interval figures.

1. *Exclamatio* – Usually an upward melodic leap by a minor sixth. In general practice, however, it is defined as any sudden upward or downward

melodic leap by intervals larger than 3rds. The character of the exclamation is determined by whether the leap is to a consonant or dissonant interval. This kind of dissonant leap was also known as *Saltus duriusculus*. Example 6 is extracted from Cantata no. 135, *Mein Gott, wie lang, ach lange*, by J.S. Bach (ibid, 267):

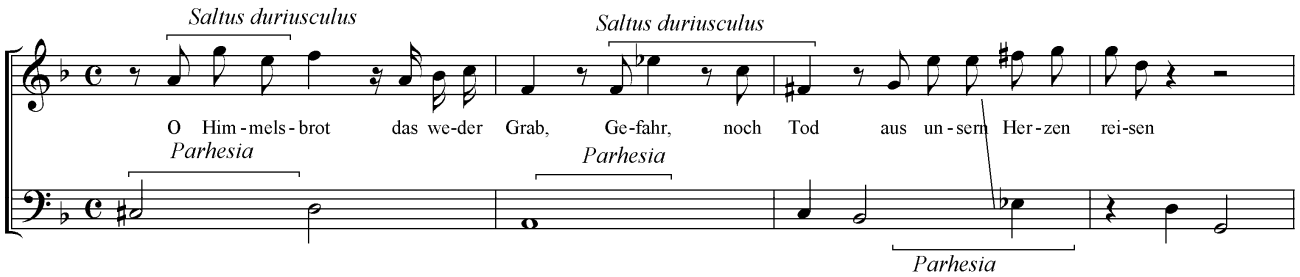
Example 6:



The example above shows the textural edifice being adjusted to make the leap more noticeable to the listener. This suggests that composers valued the aural effect engendered by certain rhetorical devices.

2. *Parhesia* – The use of a cross relation or a harsh dissonance such as a cross relation or tritone between two parts. More specifically, a mixture among other consonances of a single dissonance half the value of a bar. Example 7 is extracted from Cantata no. 1, *Wie schön leuchtet der Morgenstern* by J. S. Bach (ibid, 267):

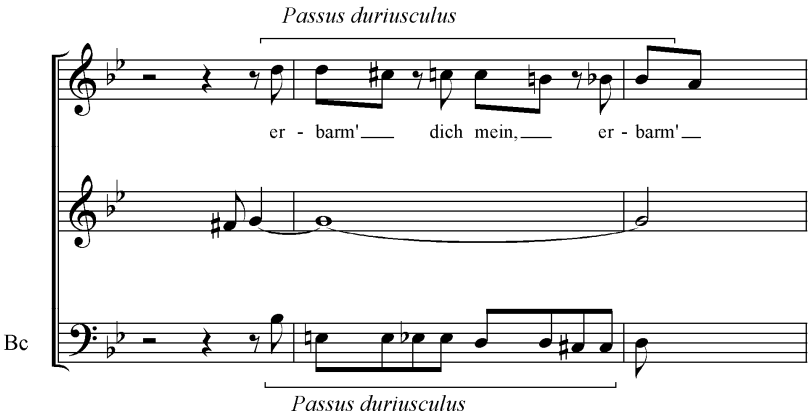
Example 7:



This example illustrates the use of the rhetorical device to add another layer of meaning to the sung text. The musical texture functions as a means by which an 'interpreted' meaning has been added by the composer. The highly chromatic structuring of this passage fittingly connects the concepts of danger (*Gefahr*) and death (*Tod*) with a dark *affekt*.

3. *Passus duriusculus* - This device engenders the descent of a melodic part by the distance of a minor second. It was seen to be used more generally where a part moved by an interval too large or too small for the scale. This device is related to the *pianto* figure used in much music of the Classical era but seems to favour a descending chromatic linear usage. Example 8 is extracted from Cantata no. 23, *Du wahrer Gott und Davids Sohn* by J.S. Bach (ibid, 267):

Example 8:



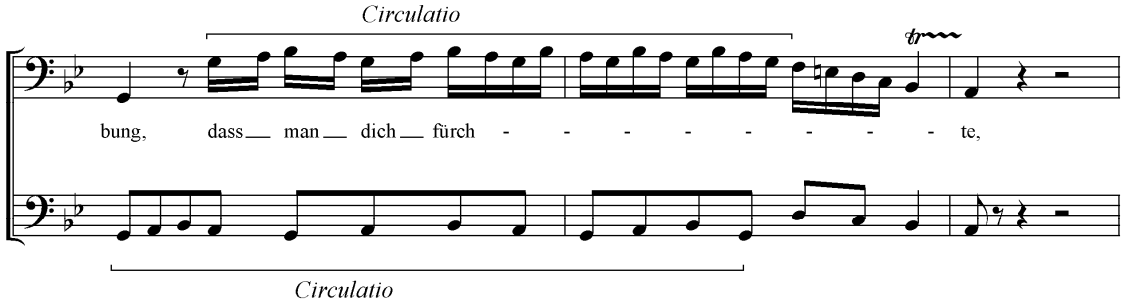
The melodic line in the soprano part displays clear characteristics of the *pianto* figure. This characteristic falling of a minor second interval, used to suggest sighing or weeping, was used widely during the Classical period. (The description *pianto* is taken from the Italian *piangere* meaning 'to weep'.) In this instance, Bach uses the rhetorical device to give the music an entreating quality, and infuses his own interpretation of the text by means of a musical rhetorical device.

3.3.5. Hypotyposis figures.

Hypotyposis figures constitute a large class of musical-rhetorical figures which are all used to illustrate words or poetic ideas in a text. Although many are found without distinctive names, they are specific devices which were frequently used to stress the pictorial nature of the words. According to Wilson, the rhetorical term is more accurate than the more commonly found terminologies of 'madrigalism' and 'word painting' (ibid, 267). All of the figures listed next are devices whereby the text is directly connected with a characteristic melodic shape or structural/textural movement.

1. *Anabasis* - The voice part or musical passage reflects the textual connotations of ascending.
2. *Catabasis* - The opposite of *Anabasis.*
3. *Circulatio* - The melodic description of circular or crossing-over motion. Example 9 is extracted from Cantata no. 131, *Aus der tiefe rufe ich, Herr, zu dir* by J. S. Bach (ibid, 268):

Example 9:



Noticeable in this example is the distinctive use of repetition, generating an almost static quality in the formal and harmonic progression of the phrase. This staticity adds to the idea of a circular movement (one that is continuous and seems to end where it began, not having any direction). In

this instance Bach utilises the rhetorical device as a means to describe musically how the singer is held captive by his fear (*fürch*).

4. *Metabasis* - The overlapping or crossing of one part by another.
5. *Variatio* - A passage in which one finds an abundance of vocal embellishment emphasizing aspects of the text. Forms of melodic ornamentation such as *accento*, *cercar della nota*, *tremolo*, *trillo*, *bombo*, *groppo*, *circolo mezzo* and *tirata mezza* could be found frequently in this kind of passage. It was viewed as the means by which the text could be 'amplified' in a musical manner, thus again adding an extra layer of meaning. The aria 'Possente Spir'to' from *Orfeo* by Claudio Monteverdi illustrates the use of this device.

3.3.6. Sound figures.

1. *Antitheon* – The clear use of a direct musical contrast. Employed to signify things contradictory and opposite. The contrast could occur successively or simultaneously (as in different voices of the texture). It can be characterised by juxtaposing contrasting registers in a voice part, adjacent contrasting thematic ideas in a contrapuntal texture, contrasting musical textures as well as contrasting tempi usages. (The pacing contrasts between the recitatives and *turba* choruses *in the St. John Passion* are indicative of this rhetorical device).
2. *Congeries* - This device can be found where a root position chord moves to a first inversion chord and then back to a root position chord, up and down.
3. *Fauxbourdon* – This term designates parallel motion between parts in thirds and sixths; traditionally interpreted as the use of successive first inversion chords.

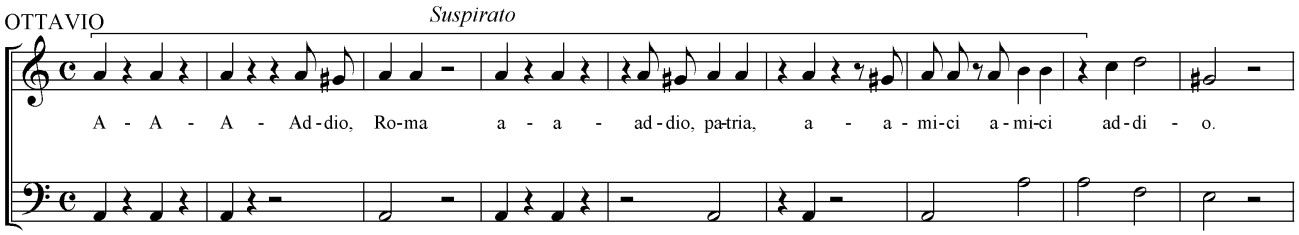
4. *Mutation toni.* The sudden change of mode, from major to minor, for expressive reasons (a favoured characteristic of Beethoven's music).

3.3.7. Figures formed by the strategic use of Silence.

1. *Abruption Aposiopesis* - A general pause or silence within a musical texture where silence is not expected. Haydn was known to make use of this device.

2. *Suspirato* - Usually the breaking up of a melody by rests to highlight the emotional state of the text. Example 10 is extracted from *L'incoronazione di Poppea*, Act 3 scene vi, by Claudio Monteverdi (ibid, 269):

Example 10:



In summation, it becomes evident that rhetorical devices had an impact on how aspects of musical structure and texture were handled. These appear in the most cases to be the means by which features of the sung text are made to aurally stand out in the musical texture. While some rhetorical devices had an implied referential level (as the *pianto*) the use of these devices seem to be more syntactical in function in the sense that they contribute to the listener's perception of the verbal (sung) message, but are not the message itself. These features are thus used more in service to semantic intentions. Viewed in this way, rhetorical devices are more the means by which musical structure has been manipulated to

highlight or clarify meaning. Their consistent usage, however, still gave them the status of codes.

Musical topics also seem to operate as both syntactical and semantic features. We shall see, however, that each topic displays an element of extra-musical content which works as a means to establishing meaning, while it simultaneously assists to establish certain syntactical parameters of the musical macro- and micro-structure. The use of rhetorical devices in music can be seen as a precursor to the founding of musical topics.

3.4. Musical Topics.

Heinrichen extended the relationship of music with rhetoric in *Der Generalbass in der Composition* (1728) to include the *loci topici* (ibid. 263). In the rhetorical disciplines of ancient cultures this was a technique employed to assist an orator to uncover topics (ideas) for a formal discourse. The *loci topici* are actually rationalised categories of topics from which ideas for invention could be drawn. Although a complete unified set of semantic codes did not seem to exist in the Baroque period, it appears that, at least from the point of view of general eighteenth century musical practice, there existed pervasive codifications which were definable in their semantic content. These resulted in the establishment of certain musical topics and, as such, furnished composers during the latter half of the eighteenth century with a rich vocabulary of musical material that had definable semantic content (Ratner 1980, 9).

Leonard Ratner suggests that expressiveness was a constant pursuit of eighteenth-century musical endeavours, as it pointed towards the means by which the composer could provoke an emotional response from a listener. As such, the term expression (which is used here with reference to human feelings) seems to have covered a wide assortment of ideas and technical procedures. These could range from clear iconicism or pictorial representation to extremely

subtle atmospheric evocations (ibid, 1). Notions of expression were regarded as a key musical value that was assiduously pursued by composers:

> The evidence that a piece of music was expected to move the passions of the soul by expressing a ruling sentiment is impressive. It is found in treatises, journals, and letters... In vocal music, the connection between feeling and figure was explicit. In instrumental music – which imitated opera, church music, and ballet – this connection could only be implied, but it was unquestionably present (ibid, 8).

Expression was regarded with such importance that 'without it no piece was fit to be heard' (ibid, 1). It was taken that feelings were suggested or symbolised by musical figures linked to poetry or pantomime. These emotions were classified in various codes but they seem to be intrinsically linked to musical parameters which involved tempo and rhythm.

In this way, slow tempi generally indicated emotions such as languor, sadness, fear, and even pride (ibid), whereas fast tempi were characteristically employed to portray states such as joy, anger, courage etc. This allowed Johann Mattheson to classify dances according to their qualities of feeling (ibid, 8).

There were other musical connotations established as well. The topic of 'joy' for instance, seemed to be connected with lively rhythmic features and clear textures within a context of a flowing and rather rapid style. In the same manner, feelings of 'hope' were connected with proud exultant music, whereas 'malediction' had connections with the use of tremolo and many dissonances in the texture.[85]

In a similar vein, Johannes Kirnberger (eminent pupil of J. S Bach) assigned specific expressive qualities to certain intervals. These are set out in the table below:

[85] It is interesting in this regard that the 'Confutatis Maledictis' movement (textually based in images of fire (flammis) and woe from the *Requiem* K.626 by Mozart, does not use the musical figures connected with fire. In contrast the movement entitled *Dies Irae* does rely on the use of tremolo in the texture (suggesting fire). This suggests that topics, though useful to composers, were not strict categories of musical material to indicate meaning.

Rising intervals:	Signification:
Augmented prime	anxious
Minor second	sad
Major second	pleasant, also pathetic
Augmented second	languishing
Minor third	sad, melancholy
Major third	happy
Perfect fifth	spirited
Minor seventh	tender, sad, undecided

Falling intervals:	Signification:
Minor second	pleasant / sigh
Major third	pathetic also melancholy
Augmented fifth	frightening
Octave	restful

However these may be classified, the distinctive use of an interval might not necessarily have the desired emotive effect. This can be attributed to the fact that a melody itself is composed of many intervals: can one really assign the number of emotional states present in a single melody to each interval that makes up its structure? There is a wider force at work here: – it surely means that intervals which were highlighted by the use of rhetorical devices were expected to have these affects. It required a structural and textural highlighting, but it could also mean that certain structural aspects were made to stand out of the prevailing context. Furthermore, it means that certain specific features of the musical texture be adjusted to make the rhetorical or topical device noticeable for the listener. It can be argued that the signification would be unsuccessful in a case where the listener is unable to perceive the music being shaped for a certain device and purpose.

It is questionable whether these interval associations prevail in the present time. They seem to have been absorbed by a larger cultural flow in our time, and it is logical to accept that they acquired additional layers and contexts of meaning and no longer prevail (in the way that was set out above). As such, these interval

states require a clearly defined harmonic rhythmic, textural and structural context to be effective.

Ratner accepts that 'topics appear as fully worked out pieces, i.e., *type*s [genres], or as figures and progressions within a piece, i.e. styles' (ibid, 9). These provided a number of musical structures that could function in a number of ways, thereby establishing a clear semantic content within a particular musical composition while it remained easy enough to manipulate and shape into numerous musical compositions.

A superficial investigation of these topics reveal that, even though they provided a rich source of available musical structures to composers, they were made up in such a manner that allowed easy connections to be made with other topics. Topics were malleable in their use in any kind of musical work. Thus it is easy to understand why certain topics seem to have features that were shared with other topics. This quality enabled composers to mix *topoi* to achieve instrumental forms constructed as a discourse of topics. [86]

In reality, a superficial perusal of Mozart's keyboard sonatas reveals that *topoi* were not the subject of discourse. It was rather the musical characters presented by topics that seemed the subject of the discourse. This was the means by which the composer could infuse some level of meaning into the music, but it was also a measure that was employed to make the listening experience pleasant.

Ratner distinguishes between two distinct types of musical topic: On one side there are the topics based in numerous *dance forms* and on the other there are a number of distinctive musical *styles* that were employed for different purposes at the time.

[86] This idea is not contrary to Charles Rosen's view that instrumental forms in the Classical era were constructed as a discourse of keys (*The Classical Style* -1971).

3.4.1. Dance Topics.

The adoption of dance-inspired features had an important influence on the encoding and subsequent decoding of Western music from the Renaissance period onwards. Typical dance rhythms served as basic rhythmic formulae and template-structures upon which early instrumental music could be based. By examining the choreographically patterned dance movements, we can relate musical units back to the symmetrical rhythmic actions which the human body makes as it expresses semantic intentions in physical space. These gestures constitute perhaps the oldest code that shapes musical meaning. Roger Sessions believes that,

> our feeling for rhythm… derives from the subtle and more expressive nervous and muscular movements, such as occur in speech, song gesture, and the dance… The association between music and dancing is probably even older than that between music and words… (1979, 9).

In the Classical period dance-related topics were actually the remnants of the standard movements included in Baroque instrumental dance suites. These movements furnished several distinct musical characters and provided a rich repertory of accepted rhythmic structures and existing melodic figurations. Social classes were specifically connected with certain dances. Thus, the *Minuet*, *Sarabande* and *Gavotte* were indicative of a *high* musical and societal style and were regarded as being elegant and courtly. In contrast, the use of musical features pertaining to the *Bourreé* and *Gigue* were accepted as referring to a more middle class society; while the more rustic and buoyant *Contredanses* and *Ländler* were associated mostly with the peasant class (Ratner 1980, 9).

A general trend towards the end of the eighteenth century saw the *Minuet* and *Polonaise* growing livelier in character, eventually leading to the substitution of the dance movement in large scale sonata type works with a *Scherzo*. Ratner proposes that dances represented feelings by virtue of their pacing, rhythmic features and phrase structure (ibid, 9). As a result, these dances engendered

strong gestural connotations which were known to be linked to specific movements of the body (as in the form of dance steps and hand and arm movements).[87] As such, they were used as models for composition as well as in the teaching thereof.

Each Baroque-inherited dance delivered a number of sub-topics within the general usage of dance elements. Thus, one finds for instance an assortment of types of *Minuets.* These specifically came to be described as being noble, charming, and lively in character and expressed moderate cheerfulness by virtue of their triple time (ibid, 9-10). They covered a wide range of expression from humorous to deeply pathetic (pathos). They were used as a specific style in large-scale works such as symphonies and sonatas. The additional dances like the *Passepied* were simply regarded as more lively versions of the *Minuet*, whereas the *Sarabande* gained a reputation as a slow minuet of a deliberate and serious character. This latter form especially represented the 'high style' (ibid, 11-12). These associations prevailed especially if the slow tempo and emphasis on the second beat were retained (ibid, 11-12). The general topic (which included the *Polonaise*) involves a dance form in triple meter with a certain kind of phrasal and rhythmic structure. In reality, the rhythmic features of each of the Baroque dances were absorbed into the dance topic, as it provided already established musical codes that could be used by composers.

Large-scale instrumental forms also allowed for speculative treatments of dance forms. In this instance, the typical dance rhythms are employed, but the length of phrases and sections do not conform to the patterns of choreography; they are thus removed from their normal context and could be used as part of the topical discourse found in sonatas, concertos and symphonies (ibid, 17).[88]

[87] This so called 'art of gesture' was freely commented upon by writers such as Mattheson and Kirnberger (Ratner 1980, 17). Aspects of Gesture Theory will be touched upon in Chapter Five.
[88] The slow movement of Mozart's Piano Concerto K.488 in A major is clearly composed as a *Siciliano*. However, the sheer scale of this movement removes any choreographic connotations and allows the movement to become a self-sustaining instrumental structure.

3.4.2. Topical Styles.

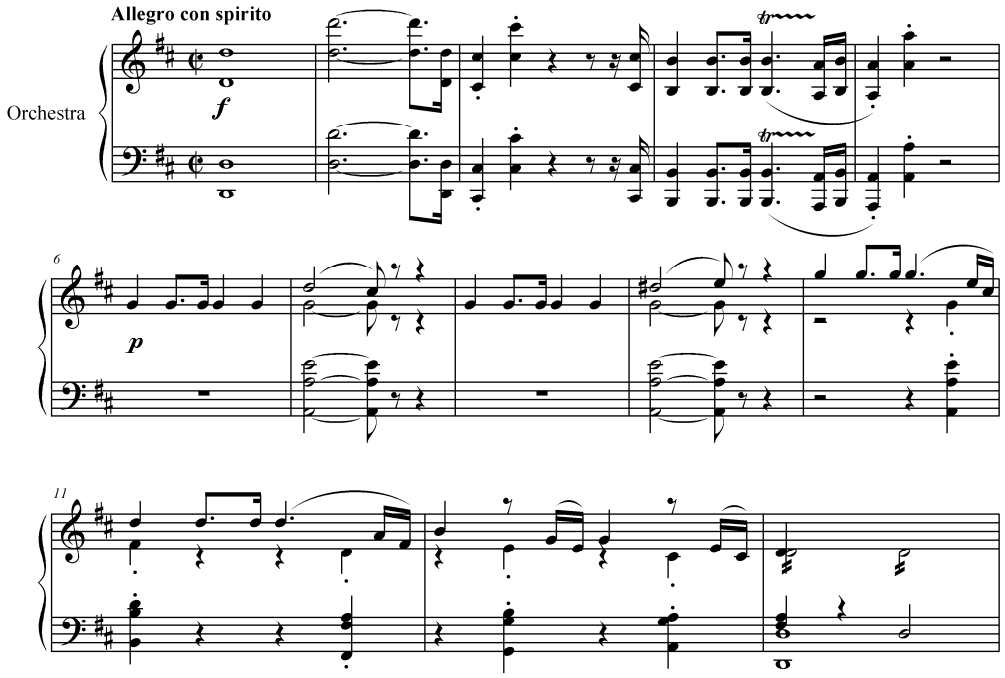
It is the deliberate use of certain musical styles as musical *topoi* that are interesting, particularly with regard to its associations and semantic content. Each of these styles had specific rhythmic and textural features which were coupled with certain kinds of melodic and harmonic usages. In general, these carried clear associations and connections with aspects of cultural life. Certain styles could even be associated with the conventions and usages in the theatre. Thus, styles could be associated and connected with certain activities and social station,[89] and be performed in different social settings while always invoking the reference to their original contexts.

3.4.2.1. Military.

The easily recognisable features of the Military style were trumpet fanfares, dotted rhythms and typical dominant-tonic melodic figures. The Military topic could also easily be linked to the French Overture and the March (also a dance topic). Because of its association with the grandeur of the processional march, the military topic could easily be linked with the Turkish topic. Example 11 reveals my reduction of the opening 12 bars of the first movement of Mozart's *Haffner Symphony* (K. 385). Observe the use of dotted rhythms and repeated notes that are indicative of the military style. (The military topic is also reflected in the timpani rolls of the original orchestration and the emphasis on dominant and tonic harmonies).

[89] This suggests that an extra-musical level of content is fundamental to these topics. Thus class distinctions and programmatic references could be encoded into the music and be heard as such during the eighteenth-century. At some stage however, these topical references seem to have been absorbed into the cultural consciousness and gained status as absolute musical material. Even though we listen nowadays to these dances as music removed from their topical references, the study of topics is nevertheless important for what it reveals about music's semantic level.

Example 11:

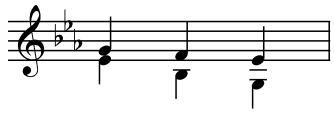


The military topic is also displayed in the music of the opening scene of *The Magic Flute.* After the three ladies have slain the monster chasing the prince, the use of the topic signifies the idea of being victorious (at the words 'Triumf!').

3.4.2.2. Hunt (*Jagd*).

The Hunt (*Jagd*) is a topic that is widely associated with the idea of hunting and the hunting horn. It covers a legion of musical references within itself and a number of musical elements connected to it. These contrast with those that typify other musical topics. Typical horn calls used when hunting deer or foxes were employed by composers to establish (encode) the "hunt's" characteristic melodic patterns. In addition the 'horn-fifths' figure came to be associated especially with this topical style. Example 12 shows this figure:

Example 12:



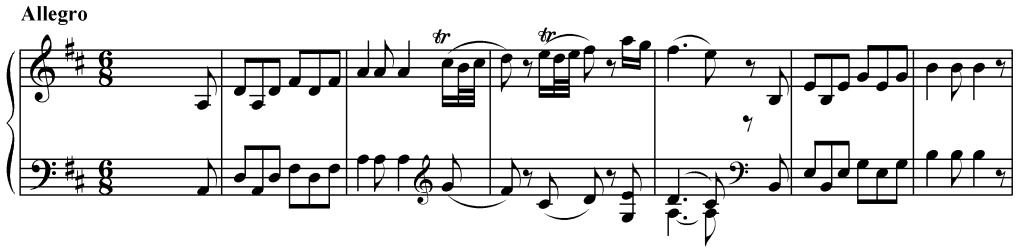
Like the Schenkerian “Ursatz”, this figure displays the perfect holism of melodic, harmonic and contrapuntal unity. The three rising (or falling) melody notes in the upper part accompanied by the characteristic harmonic intervals of a third, followed by a perfect fifth, and then a sixth, contained within the two part texture (which could be inverted), as well as the arpeggio-like melodic contour of the bottom part are all part of this figure’s topical content. Because of its rustic associations and characteristic use of compound metres, the Hunt topic could easily be connected with the lively *Gigue* dance topic and the more pastoral *Siciliano* dance topic.

The musical features of the ‘hunt’ topic are easily recognisable but much depends on the context the composer creates for its characteristic elements. The simplest topical reference could be just a quotation of the horn-fifths figure (as in the last movement of Haydn’s *Drum Roll Symphony* – no. 103 in E-flat major). Romantic composers often used horn calls as musical references to forests (indirectly implied by the hunt itself), as in *Der Freischütz* by Weber. The more pastoral associations of the hunt topic were often employed to portray emotional states of wistful longing for times gone past. It seems that almost every use of the horn as a solo instrument in Romantic orchestration portrayed evocations of the ‘hunt’ topic or that of longing, which is suggested by the sound of a faraway horn call.

The topic as such does not only depend on the use of the horn-fifths figure, but also certain kinds of melodic figurations and very often the use of compound metre. Example 13 displays the opening bars of Mozart’s Piano sonata in D major (K. 576), as an illustration of a characteristic hunting horn fanfare. The opening ten notes signify the hunt topic. (The subsequently appearing

ornamented melodic units leading to the half cadence, using an almost *pianto*-like melodic drop, shows the Gallant style.) The whole phrase with the hunt motive as head figure is then reiterated at a different pitch.

Example 13:



Hunting fanfares were different in character, melodic shape and pacing from military fanfares and could be used for lyrical or poignant expressions (as in Mozart's sonata K. 570). Whereas hunting topics were naturally associated with flat keys (especially the keys of E - and A flat major) military topics seem to appear in brighter, more 'optimistic' keys such as D major or C major.

Military and hunt figures were often used to convey good humour, and seem particularly associated with *opera buffa*. 'Non piu andrai' from *Le Nozza di Figaro* is a prime example (ibid, 19). The last movement of Beethoven's Sonata for piano Op. 31 no. 3 exemplified the characteristics of *the Jagd* to such a degree that the entire work gained the nickname 'The Hunt'.

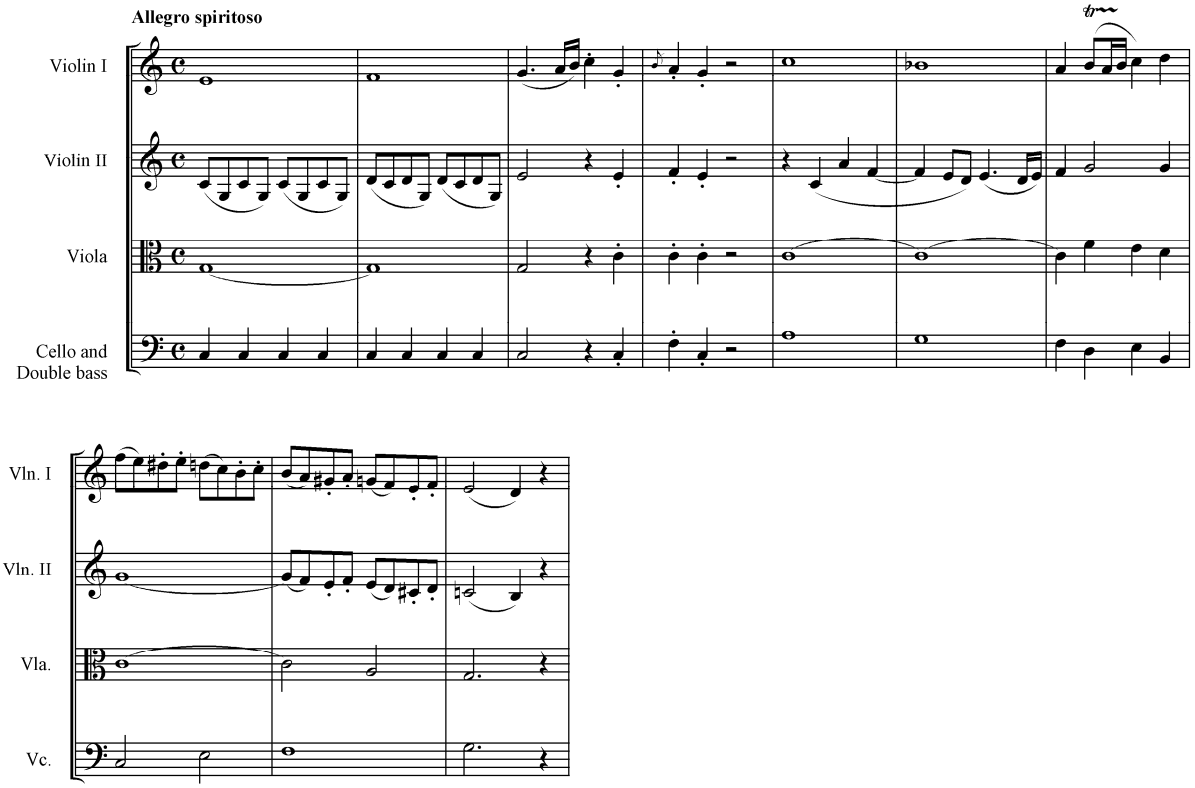
The reason for the distinction between military and hunt topics is not clear. In general the hunt was viewed as an activity in which aristocracy indulged as a means of passing time in a relaxed manner (fox-hunts or deer-hunts often occurred during weekends or holidays when affairs of state were laid to rest). It is easy to connect the use of 'flat' keys (less bright, rounder sounds) as musical encoding that suggests recreational activities (as in laid back, 'letting the hair down' and not standing on formalities etc.) In contrast the military topic was more serious and grand with associations of war and imperial/aristocratic reign -

these could easily be connected with high pitched trumpets and bright keys signifying pomp and status.

3.4.2.3. Singing Style.

This style topic consists of music of a lyrical character. It is usually structured within a moderate tempo and it displays a noticeably song-like melody. This frequently comprises the use of relatively slow moving note values and a narrow range of intervals. Ratner cites 'Che faro senza Euridice' from *Orfeo,* Act III of Gluck's *Orfeo ed Euridice* as indicative of this category (ibid, 19). In addition to slow music within this topic, one also finds the Singing Allegro. This designates a song-like melody set in a quick tempo. Example 14 displays bars 20-29 from Mozart's *Linz Symphony* (K.425) as an example of this style.

Example 14:



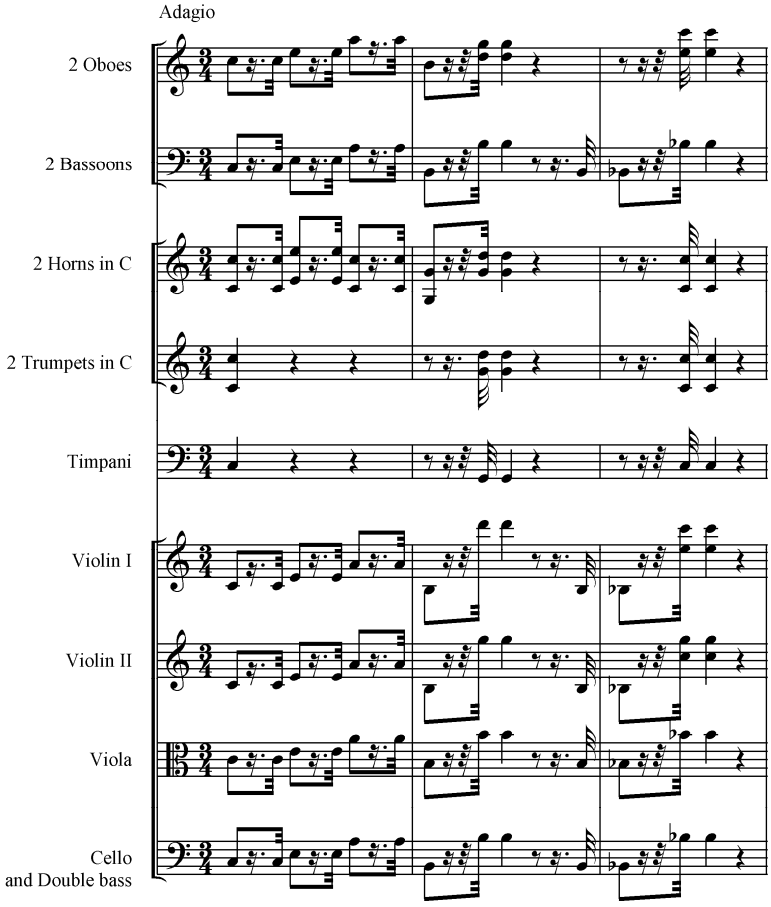
3.4.2.4. Brilliant style.

The Brilliant style makes use of rapid passages of virtuosic display for the expression of intense feeling (ibid, 19). Example 22 (in section 3.5.1 below) shows the use of this style.

3.4.2.5. French Overture.

The French Overture topic is a distinctive style of slow instrumental music, usually within a heavy march tempo (emphasising beats rather than metrical stresses) with characteristic dotted rhythmic figures that was inherited from the Baroque period. According to Ratner it was specially used when a serious elevated tone was called for, as in the introduction to the first movement of Mozart's Symphony no. 39 (1980, 20). A particularly striking example of this is in the opening of the Linz symphony. There is another example in the *Rex tremendae* movement from the *Requiem* K. 626. Example 15 (next page) cites the introduction of the first movement of Mozart's *Linz Symphony* (K. 425):

Example 15:

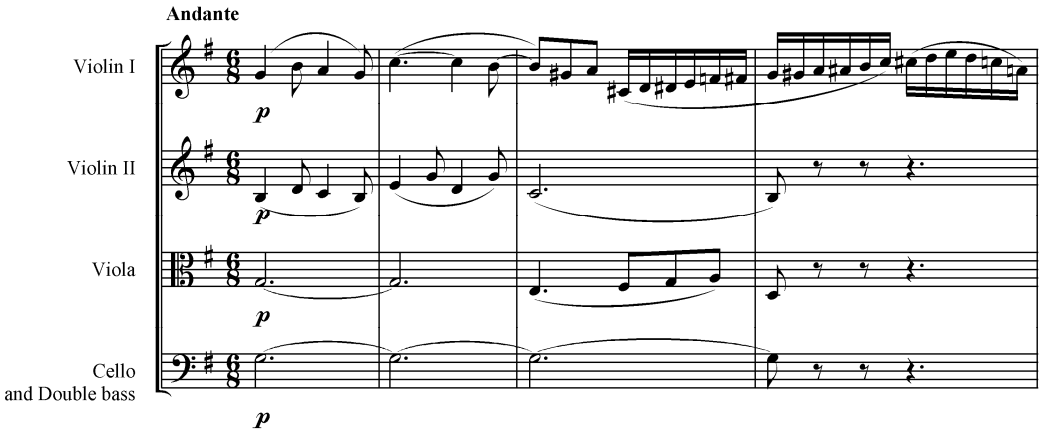


3.4.2.6. Pastorale.

This is one of the larger classes of topics. The term 'pastorale' refers to music suggestive of traditional rustic life. In this way, the pastorale is also related to the *Musette* dance topic. This music makes noticeable use of drones. The pastoral topic includes the use of a slow compound metre and melodies which could be said to resemble those idiomatic of the shepherd's pipe. As a result, the oboe as a pastoral instrument has strong connotations with this topic. The use of pastoral evocations as a topic has its roots in the Baroque. Consider the Pastoral Symphony from Handel's *Messiah,* or the Sinfonia from the second cantata of Bach's *Christmas Oratorio*. In this music, there is a sought-after simplicity, the

appearance of drones (often in the form of pedal points or held fifths), and the prominent use of oboes. Compound metres and *Siciliano* rhythms furnish much of the musical material of this topic. Example 16 is taken from the slow movement of Mozart's *Prague Symphony* (K. 504). The drone in the form of a G pedal is found in the lower instruments with the slowly moving melodic line (moving in parallel sixths) in the first and second violins. The chromatic continuation of the line is not part of the topic.

Example 16:



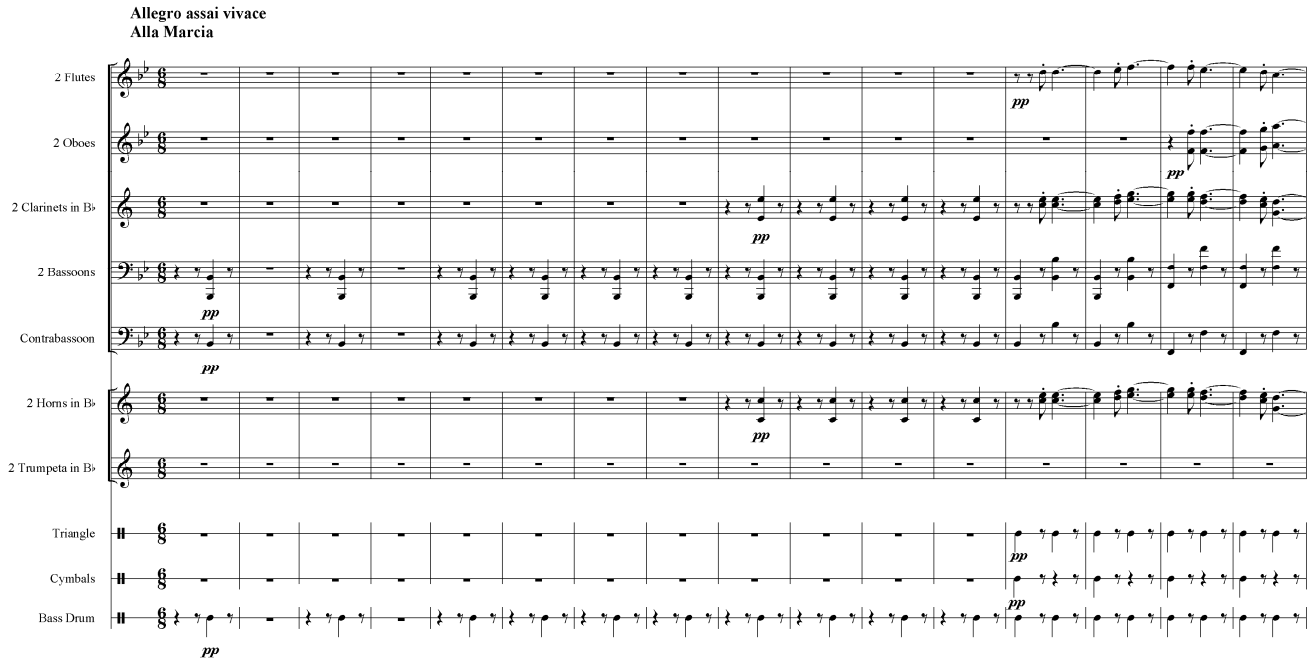
The second movement of the Symphony in C major K. 425 (*Linz*) shows similar features. In this instance the pastoral topic is indicated by the compound meter, the *Siciliano* rhythm of the main melodic line, as well as the drone like repetitions of the bass line in the lower strings.

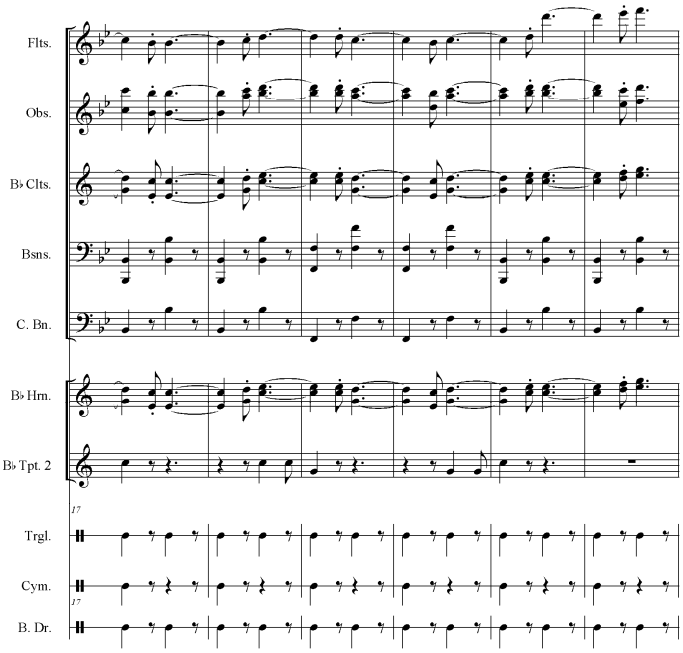
3.4.2.7. Turkish music.

According to Reinhard Pauly, the use of Turkish characteristics in music can be considered a 'fad' of the eighteenth century (1988, 130). This is in remembrance of the Ottoman armies which had advanced with their military bands across Europe to eventually lay siege to Vienna. The characteristics of this topic involve the use of a static harmonic rhythm, frequent modal interchanges between major and minor which do not coordinate with the melody's demands for harmonic

change, the use of a heavily scored bass line, as well as 'jangling bass chords suggestive of a Janissary band' (ibid, 130). The Turkish topic has close associations with the military topic. Notable usages of this topic include passages in the last movement of Mozart's Fifth Violin Concerto, as well as in the overture to the opera *Il Seraglio*. This topic is mainly related to the use of march-like music. According to Pauly, European field band music was played by two each of oboes, horns and bassoons. To this, the characteristic Turkish element that was added involved the use of 'two clarinets, trumpet, triangle, piccolo, large drum [most likely a bass drum] and small drum [most likely a snare drum] and two cymbals' (ibid, 130). Example 17 shows the opening of the 'Turkish March' in B flat major (at approximately bars 227-389) from the last movement of Beethoven's Ninth symphony. While the piccolo does not yet enter into the texture in the example below, there is a place provided for it in the score.

Example 17:





3.4.2.8. *Sturm und Drang*.

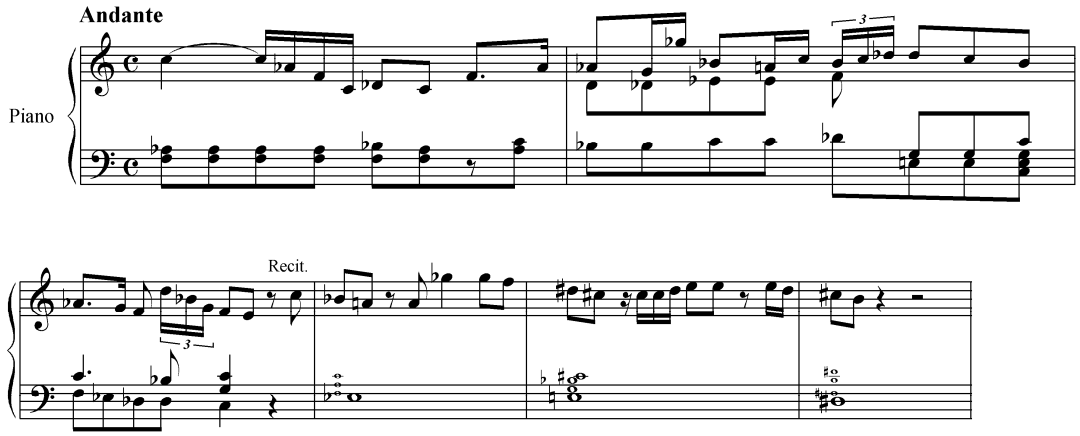
According to Ratner the nomenclature *Storm and Stress* denotes the expression of intense personal feelings via the medium of driving rhythms, full-bodied textures, a notable use of minor mode harmonies, chromaticism, sharp dissonances, and impassioned styles of declamation. Here, the behaviour of the music in a stormy manner appears as the focal point for expressions of a dramatic and intensive nature (1980, 21). In reality, the term derives its use from a play by Friedrich Maximillian Klinger (1776). According to Pauly 'great emotional intensity, and passionate, violent outbursts characterise the literature in both drama, and prose' (1988, 30).[90]

[90] Goethe's *Götz von Berlingen* (1773) and Schiller's *Die Räuber* (1781) exemplify this in drama and Goethe's work *The Sorrows of Young Werther* is an example of a prose work of this kind (Pauly 1988, 30).

3.4.2.9. Empfindsamkeit (Sensitivity).

The word *Empfindsamkeit* can be translated as sensitivity, sensibility, or sentimentality (Pauly 1988, 25). Ratner believes that the style is similar to *Sturm und Drang* but slower in tempo and structured with even greater contrasts in musical material (1980, 22). Thus, the music displays an intimate style that has a sentimental quality. Herein, the use of plaintive melodies, sighing gestures (*pianto*), and frequent mood changes occur. The musical structure is characterised by broken figures, interrupted continuity in the form of a wide number of different rhythmic patterns that are used, the free use of chromaticism, pregnant pauses, and rapid changes in mood. The style also propagated the use of a liberal amount of ornamentation. Example 18 is taken from Pauly (1988, 28). This particular extract, from the first *Prussian Sonata* by C. P. E. Bach is cited as showing a number of these characteristics.

Example 18:



3.4.2.10. *Stile antico*.

This nomenclature ('strict' or 'learned') style denotes the use of strict counterpoint that reflects the use of long note values and overall asceticism of Renaissance counterpoint. In this style the melody retains its serious character and is controlled by closely bound progressions which do not allow excessive

ornamentation. The use of contrapuntal and fugal techniques as well as those of 'controlled' dissonances such as suspensions are characteristic techniques of this topic. It carried associations of purity and profundity and was connected with religious use and funeral music. The opening of the last movement of Mozart's *Jupiter Symphony* is an example of this style. Mozart also uses brass instruments and certain characteristics of the style to signify the 'ghostliness' of the *Commendatore* in Act II of *Don Giovanni*.

3.4.2.11. Fantasia.

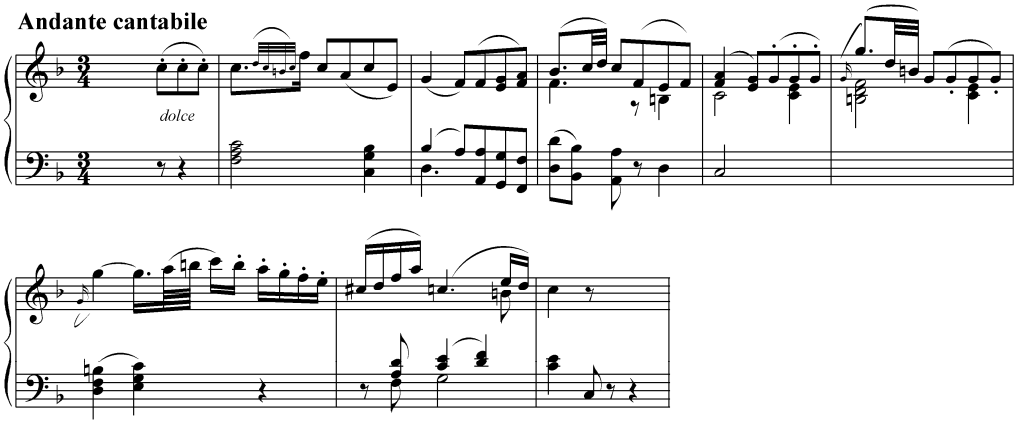
This style represents a certain kind of approach to structure which is less formal and more freely sectional and non-discursive. It usually contains elaborate virtuosic figuration and makes use of shifting harmonies, chromatic conjunct bass lines, sudden contrasts, full textures and a feeling of disembodied melodic figures. All of this is used to generate a sense of improvisation, and as a result, one finds loose structural links between phrases (Ratner 1980, 24). Fantasia style was often used to evoke the supernatural in opera. The example which Ratner cites is the opening of Don Giovanni which has a distinctive sense of foreboding achieved by the use of chromaticism. This style also has a subtle link with *Sturm und Drang*.

3.4.2.12. Style *Gallant*.

Pauly asserts that the *Gallant* style was intended to provide music that is pleasing and entertaining (1988, 16). It was considered to promote music of a light and graceful character which contained freely ornamented melodic segments. There seems to be an abundance of free elaborations on melodic lines and free changes in rhythmic elements. This was contained in a textural frame which consisted of melody and accompaniment. The harmony was often

not overly interwoven with contrapuntal progression of parts. Example 19 is extracted from the second movement of Mozart's Sonata for Piano (K. 330).

Example 19:



3.5. Structural usage of Topics.

As a result of the clear codifications of musical figures, the theory of musical *Topoi* can be regarded as a refinement of a number of semantic theories about music (Monelle 2000, 14). It accepts as a universal underlying principle that musical expression should be appropriate to its subject, and thus considers that form and content are inherently related: '…the content of a musical expression can only be known from the expression itself, which it perfectly motivates; and for this reason it is senseless to speak of musical content, since at every point it coincides with musical expression' (ibid, 16). Hence, topical theory encompasses gestures as well as rhetoric, and arrives at a viewpoint of music's semantic structure that is intrinsically complex and subtle (ibid, 79).

The theory of musical topics clearly suggests that there exist certain musical figures and structures which are definable in their semantic content to a certain degree. The latter is evident from the descriptions of style and dance topics as well as rhetorical devices. The theory does not, however, explain how these are

formed into a composition. An investigation is subsequently launched to ascertain how topics were used to create a musical structure.

Ratner believes that the compositional ethos of the Classical era promoted the formation of an elaborate musical structure by mixing, contrasting and juxtaposing various topics within the same movement (1980, 26). It has been assumed that average listeners during that period understood instantly what composers were doing, and that they took great delight in engaging aurally with this kind of musical edifice. This allowed classical instrumental forms to assume the role of a discourse or rhetoric of topics which were governed by the guiding force of tonality. This differed markedly with the Baroque way of doing things where the development of one feeling or mood and topic per movement of a composition was insisted upon. Topical discourse was thus also the chief technique through which the extended instrumental forms such as sonatas and symphonies were shaped.

The use of topics assisted in providing much of the material of a composition. Whilst topical dances and styles provided clear characteristics, they were flexible enough to be manipulated by the composer for his own ends. Thus, even though topics provided clear associations between certain dances and styles in terms of references to object and occurrences in society, the composer could infuse his use of a topic with additional layers of meaning.

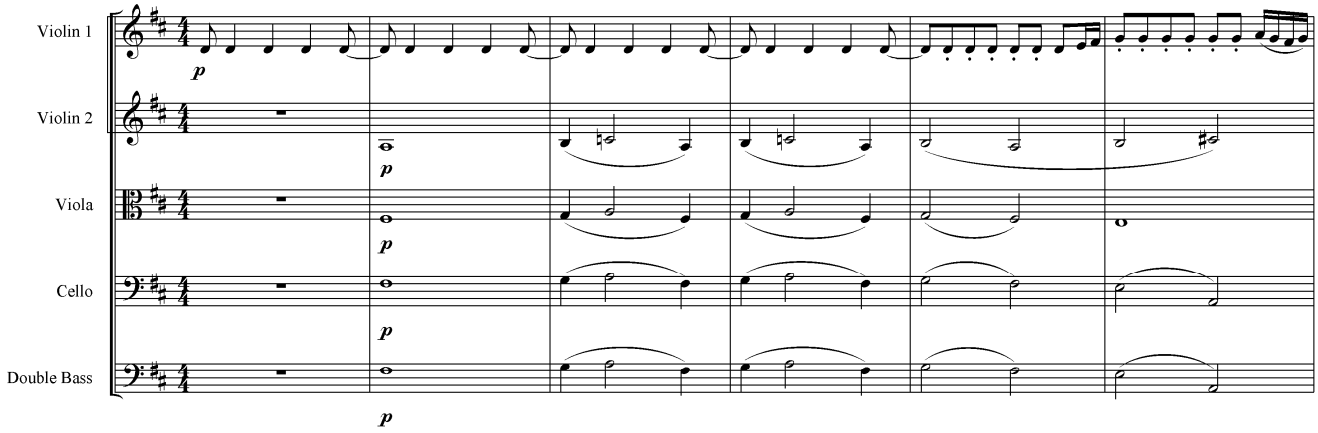
Mozart was greatly adept at mixing and coordinating topics, often within the shortest space of time and with startling contrast and the most unexpected results (ibid, 27). For the purposes of observing how topics are mixed, I offer a modified version (with musical examples) of the analysis which Ratner presents regarding this issue (ibid, 27-8). It is testimony to this composer's skill that this almost arbitrary mixing of topics does not disturb the musical flow.

3.5.1. Topics in Mozart's Symphony K. 504 '*Prague*' - First Movement.

The whole analysis cites from the first movement of the *Prague symphony* (K. 504).

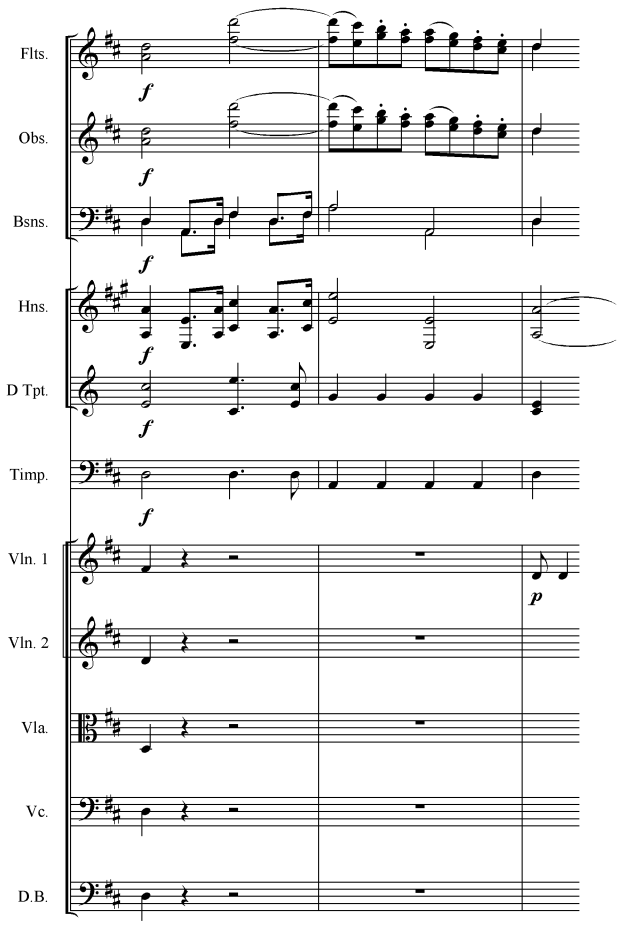
Example 20 (bars 37 – 42), displays the Singing style (*alla breve*) (bars 37-40) in Violin II and the lower strings. The Brilliant style appears in Violin I (bars 41-42).

Example 20:



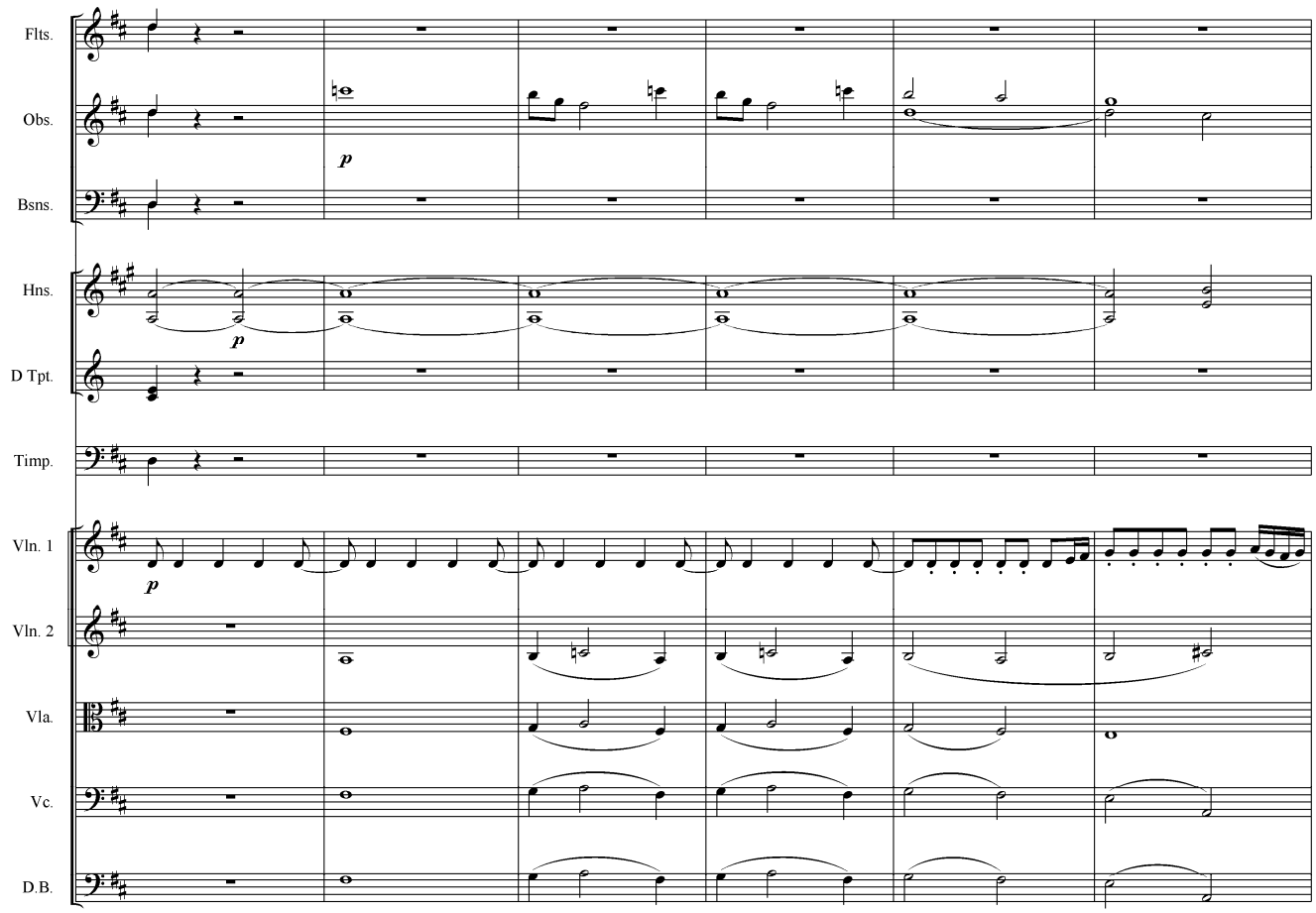
Example 21(bars 43-44) on the next page, shows the use of a fanfare in the horns and bassoons. This indicates the use of the military style (rhythm and the instrumentation). The exclusive use of wind instruments and drums for this passage refers perhaps to the field band of the eighteenth century. The melodic line found in the Horns and Bassoons is clearly based on an arpeggiated chord pattern. This in combination with the dotted military march rhythm is clearly evidence of the use of the military topic, which is grounded in the melodic figures of trumpet fanfares.

Example 21:



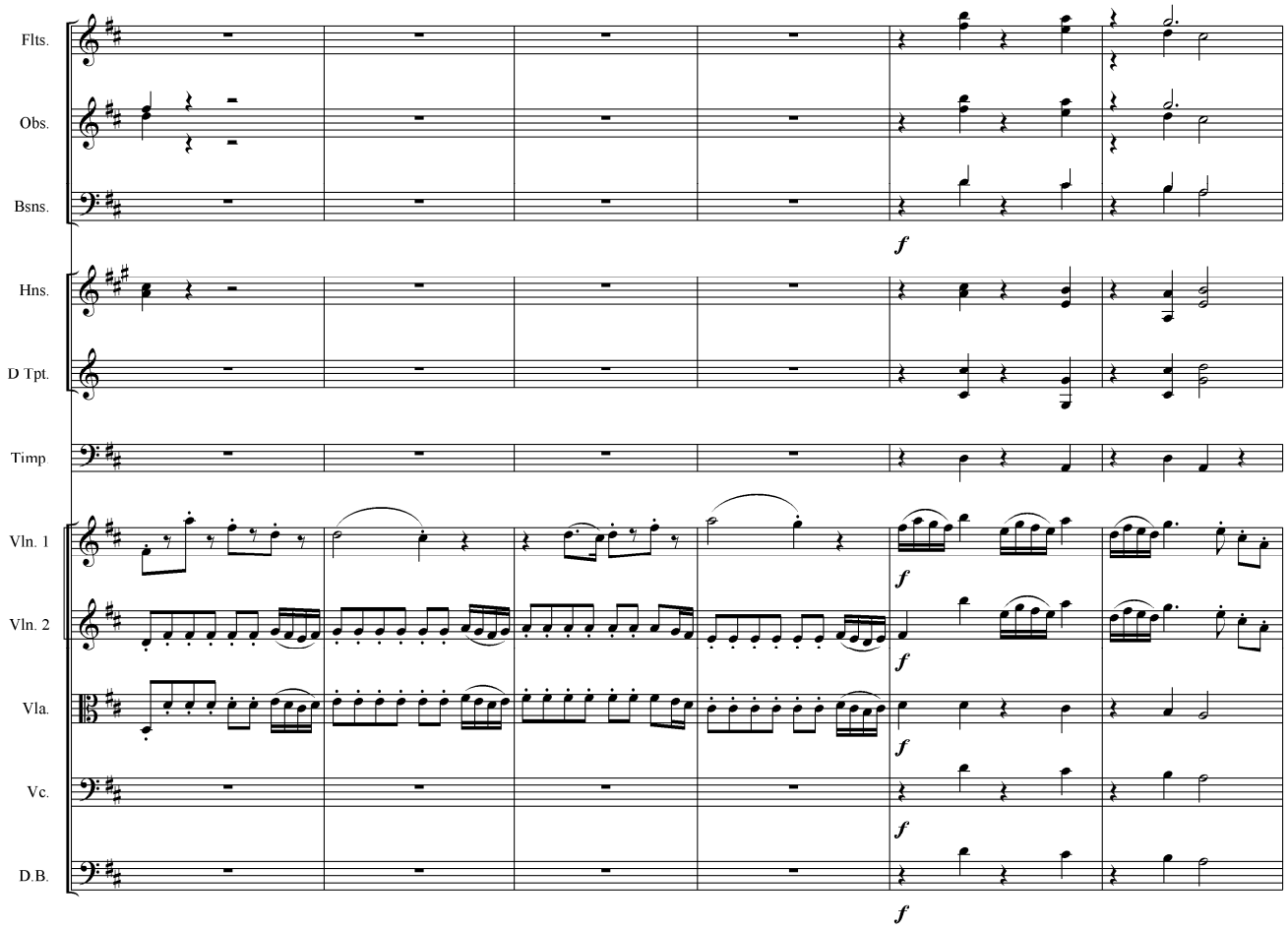
Example 22 (bars 45-50) on the next page, illustrate a return to the Singing style (*alla breve*); however, the addition of the oboe counter-melody in long rhythmic values is clearly reminiscent of Palestrinian counterpoint. This suggests a combination with the 'learned style' topic. – Ratner takes the increase in melodic activity in the subordinate parts (Violins II and Violas) in bars 49-50 as indication of the latter topic.

Example 22:



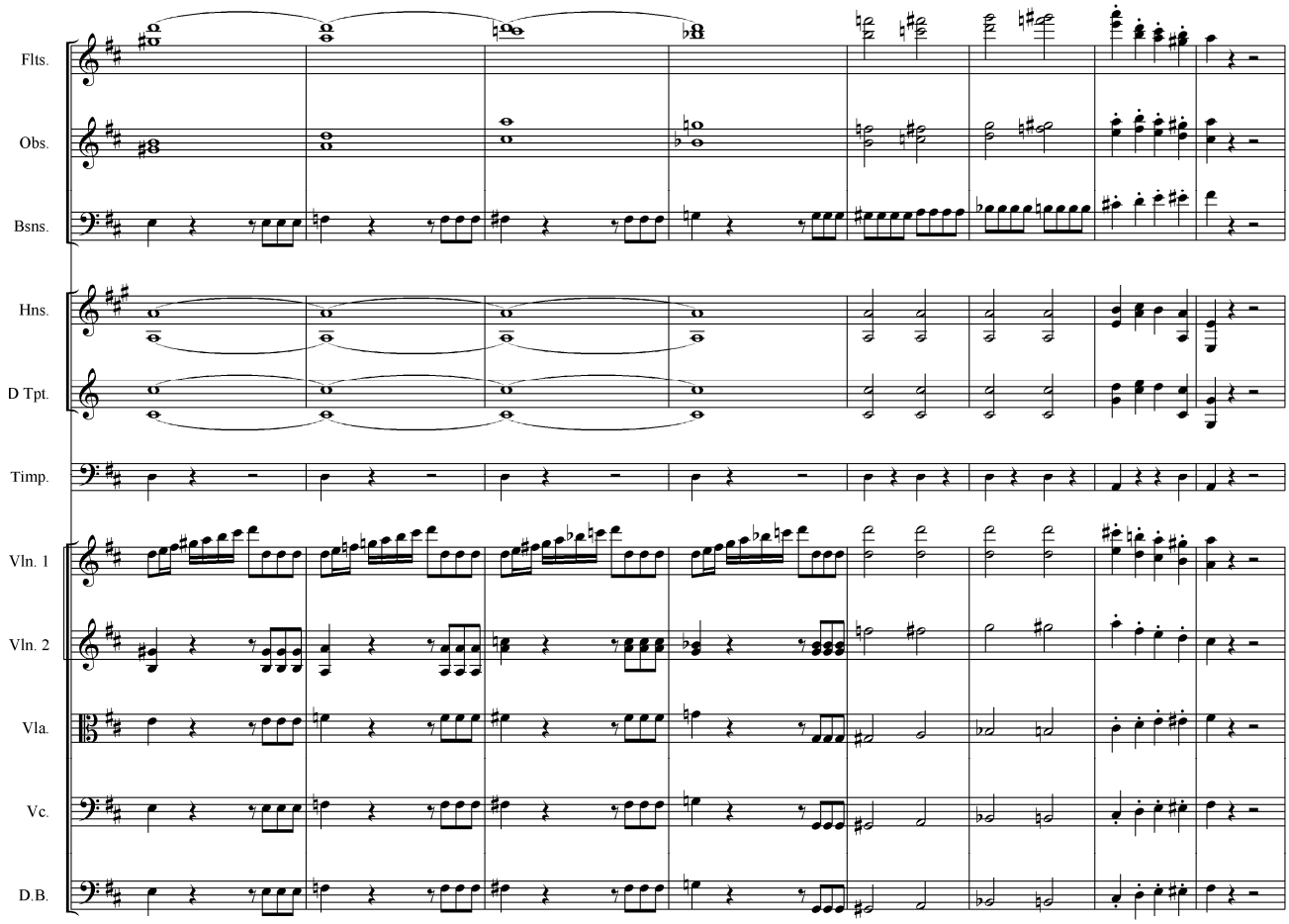
In Example 23 (bars 51-56) on the next page, we see the use of the Brilliant style structured in the learned manner (thus with counterpoint). It appears in the overall design as a transitory passage. The Brilliant style in bars 51-54, is changed further on (bars 57-62 - not included here) to allow *stile legato* elements to inhabit this movement. Ratner sees the dotted rhythm (in Violin I in the third bar) as hinting at the military topic or fanfare. In my view, however, this is done to achieve melodic and rhythmic interest in the texture.

Example 23:



Further on in the movement, the *Sturm und Drang* topic can be located. Here, Mozart employs the dramatic qualities of rapid ascending scales free use of minor- and diminished chords to generate momentum in the structure. Example 24 (bars 88-94), on the next page illustrates the use of these elements.

Example 24:



In this structural-topical analysis the various topics were easy to find and categorise. However, one is at a loss for exactly how this structure is to be interpreted. Should this discourse of topics be read as a message in the narrative sense or is the whole movement a communication of a different nature? The ensuing discussion and chapters propose to provide an answer.

3.5. Problems encountered in Topical Semiosis.

> In describing a musical topic, it is not enough to identify a motive, give it a label, and then move on to the next. Each topic may signify a large semantic world, connected to aspects of contemporary society, literary themes and older traditions (Monelle 2000, 79).

Topical references in literature may even bypass the local or contemporary, sending the reader back to antiquity. It thus becomes necessary that a topical analysis carefully considers all the possible semantic references that can have bearing upon even the most basic function of a musical unit. Only then should the analyst proceed to construct a semantic assessment. This should be based entirely on the contexts of the work presented; these can be multi-factorial.

Topical theory differs from other theories about musical meaning: it accepts as a fundamental condition that certain musical portrayals have become *conventions* within certain stylistic and cultural contexts, and historical epochs. It thus proposes that certain musical figures can suggest 'objects that are not merely contingent, but are part of a semantic universe within which the music is composed'. Thus, there is no need to give a textual designation for the music to carry signification. 'It show[s] that signification [in music], at its most effective, [i]s symbolic as well as iconic' (ibid, 14).

General semiotic theory accepts two basic modes of musical sign-functioning; iconic and indexical (symbolic sign-functioning has limited applicability to music). Iconic sign-functioning occurs when a shape or representation resembles the object that it refers to; for example, when a drawing of a tree resembles the tree itself and is thus a pictorial representation of what it refers to. Indexical sign functioning is, on the other hand, non-literal and far more complex. For it to be able to render signification it requires the use of certain previously established codes.[91] This occurs especially where the signifier and signified are remote from each other as in, for example, a language where the word 'bear' is used to refer to the fairly large animal with thick brown fur. The indexical reference is thus partially obscured as there is no resemblance or indication in what the word itself is referring to other than the meaning already ascribed to that particular word in a language – the signification rests on the word 'bear' having been encoded with

[91] This occurs within the cognitive learning of the individual but also takes place in culture at the meta-cognitive level.

that particular meaning. The relationship between signifier and signified thus relies completely on association within a specified cultural context.

> Iconic signs resemble their object…symbolic signs depend on learned codes… An indexical sign is thus a sign that signifies by virtue of contiguity or causality (ibid, 14- 15).

Attempts at defining the semantic content of a musical structure have involved the concept of representation. In most cases, this refers to iconic forms of musical signification such as imitations of bird calls, or the evocations of atmosphere, the use of trumpet and hunting horn calls etc. While there are certainly instances of these to be found in the musical repertory, it can be accepted that there are far more examples of indexical musical signs:

> The characterization of topics as culturally enshrined icons or indices is the vital point. In its most typical form, expression is interpreted with reference to a convention, which is either a rule effective for the whole contemporary culture or a trait of the composer's idiolect (ibid, 15).

However, in the case where there are no conventional signs present in the music, it should be accepted that the signification enters a realm of abstraction; the expression takes place in an indexical manner. It is accordingly important to remember that 'musical topics are general types, capable of being represented by particular tokens' (ibid, 15).

The topic is thus essentially a symbol, whereby the iconic or indexical features are governed by culturally accepted and established conventions or rules within a specific cultural paradigm. *Topoi* are intrinsically defined by one feature that seems common to them: a focus on the indexicality of the content, rather than on the content itself (ibid, 17).

The musical topic is thus governed by learned conventional codes where items of expression are connected to items of content according to the learned communication principles/rules of a system (such as a musical style). These categories are immediately interpreted as indicative of a whole class of

expressions corresponding to a complex world of content, related to certain definite occurrences and epochs in a specific culture (ibid, 16).

Accordingly, the interpretation of the most commonplace musical icons such as portrayals of waves, clouds, storms and horses, are ultimately dependent on well-known conventions of a particular culture or style, as well as a specific aesthetic and historical context.

However, the indexicality of musical content can sometimes be mistaken for musical indexicality itself.

> It is possible for a musical syntagma to signify iconically an object which itself functions indexically in a given case; the cuckoo's call for the heralding of spring is indexical function of the cuckoo, not of its musical representation. However, if it is culturally prescribed that the imitation of a cuckoo by an orchestral instrument *inevitably signifies the heralding of spring,* then this icon has been transformed into a topic (ibid, 17).

The *pianto*, (commonly known as the 'sigh motive') for example, is iconic as regards to its object. This occurs because it originally imitated the vocalised sound of a person crying.[92] However, it is indexical with regard to its ultimate signification (indexicality of the object), because it also came to mean the emotions associated with one kind of weeping (ibid, 17).

It is important to bear in mind that musical topics (with the exception of a few) are not iconic signs; they signify indexically. Thus the fanfare motives, as well as the topics of French Overture and Turkish music, do not signify simply by virtue of resemblance. Semiosis occurs because these styles and repertoires from other cultural contexts have been reproduced within a musical structure that could historically be far removed from the original associations of the topics themselves (ibid, 17). This occurs for instance in the exotic 'borrowings' of composers of the Nationalist Russian school of the latter nineteenth-century.

[92] It has also been associated with anguish, exhaustion, desire, sexual longing and other states of ennobled emotional suffering.

Topics are able to establish certain syntactical (rhythmic, melodic, harmonic) features of the music. In this respect musical syntactical codes are 'proper' to music (ibid, 19),[93] in the same way that syntactical codes from other semantically charged systems belong to their respective spheres. Thus it is possible to say that music is its own signifier when taken at the level where topics generate syntactical features. Stravinsky's statements to this effect are thus in alignment with a theoretical stance that regards musical topics as a force that generates syntactical codes. However, one cannot expect music to be able to signify a society, literature or reality by concentrating on its syntactical structure only. Topics should be viewed as being more part of a semantic universe than a syntactical one. As a result the semantic associations contained within the syntactical edifice of a musical topic can direct one to a cultural context from where the signification can spring.

> In the case of instrumental music, the relation to social and literary codes is even more complex. When music reflects a social code, the society evoked is not always contemporary with the music. For example, the topic of the military fanfare, ubiquitous in eighteenth-century music, appears to combine traditional heroism, the medieval association of warfare, with a slightly theatrical and unreal flavour proper to the age (ibid, 19).

A situation subsequently arises where syntactical codes can signify semantic codes, which could have been independently formed in literature, society and life itself. Each of these has a number of semantic associations that allow it to be linked one with the other. Despite this 'mixing', the different topics were still recognisable.

> Thus, in relating musical topics to literary topics …we are not translating them…this kind of error has led to the idea that music is a poor and imprecise signifier. But music is perfectly transparent; it is admirably efficient in signifying its own semantic level (ibid, 19).

[93] It is possibly within this particular context that Stravinsky remarks: '…music expresses itself' (1962, 101).

When a composer uses signifiers from the past, he brings them in to the present to establish a timeless parallel. But a new signification is also created, especially once the historical and cultural contexts of the present society enter into play.

When the codes of music and poetry are brought together in a song, another type of signification is created altogether. It appears that the semiosis 'jumps the wires from code to code' (ibid, 19) within the relations of codes, which are themselves culturally established. In this situation the 'meaning' of a particular musical unit always casts a shadow in literature, society, and the world. This results in the creation of a general kind of cultural signification. 'Topics in different media are never wholly synonymous, so there is always a residue of discrepancy between music and text and the relation is metonymic.[94] Nevertheless, the compound semantics of poetry set as music forms a new level of signification' (ibid, 19).

Central to topical theory is the notion that certain musical styles and figures were understood to signify particular cultural units, wherever they occurred (ibid, 28).[95] Thus topics 'come into being by development out of other signs, particularly from icons, or from mixed signs partaking of the nature of icons and symbols' (Pierce quoted in Monelle 2000, 19).

Not all signifying objects can be taken to be topics. Salient issues in the identification of a topic are also keys to its process of encoding: The sign must have passed from a literal imitation (iconicism) or stylistic reference (indexicality) into signification by association; or as Monelle states, 'the indexicality of the object' (ibid, 80). Thus one can only identify a topic if there exists a culturally established conventionality of the sign, wherein an object, gesture, *Affekt* or style

[94] Metonymy is a figure of speech where one object is replaced by another associated with it. Thus when people speak for instance of the 'crown' it is actually a way to refer to the reigning monarch i.e. the queen (Weber et al 2004, 370). This kind of signification is associative and indexical.

[95] This is in direct contrast with Stravinsky's ideas. However, we have established that topics can generate syntactical features which are proper to music. References to Stravinsky's remarks should be made in awareness of this process.

has generated a semantic field with its own associations, sets of syntactical conventions and finer distinctions within its own semantic context.

Rhetorical devices provide a syntactical dimension to musical structure, whereas musical topics provide some level of content and thus a level of semantic (that comes with its own forms of syntax) that is definable beyond a reasonable level of doubt.

However, even though *topoi* point towards a more clearly definable semantic edifice than has previously been found, it seems that the precise semantic content of a composition can still not be identified. Musical topics remain relatively vague and open to interpretation in what they signify. This is in part due to the common practice of composers from the Classical period onwards of mixing and inter-relating topics for their own purposes (or seemingly at their whim). Thus, even though certain musical phrases and segments might have definable semantic content, this does not state anything about the semantics of the structure as a whole. How can one access the meaning of the structure as a whole?

It would be possible to identify the semantic intentions (and by extension semantic universe) of a composer to a certain degree should a comparative study be made between two different musical compositions by different composers that make use of the same or similar topics. This could be used as evidence to point towards the semantic intentions of the composer.

However, even the idea of a discourse of topics has its contradictions. The use of topical styles as part of a structural discourse, at times, presents more of a communication of the different musical characters engendered by the topics than a single unified message. Although an awareness of the topical content allows one to come close to an explanation of the discursive meaning it is not certain whether this reveals the complete message of a structure or movement.

In this regard Kofi Agawu fittingly suggests that:

> We need to acknowledge the inadequacy of topics as ontological signs, and replace that formation with structuralist notions of arbitrary signs, for it seems clear that even those listeners for whom the referential elements are real and substantive would agree that the individual gestures derive their importance less from their paradigmatic or associative properties than from their syntagmatic or temporal ones (1991, 171).

This would reveal that the listener experiences the music holistically and not analytically. There is evidently a level of musical meaning beyond the use of topics founded in the syntactical and temporal interrelationships between the tones of the composition itself. In turn, this signifies a greater semantic intention on the part of the composer.

Viewed from this very critical standpoint it appears that musical topics are only superficial indicators of a semantic content even though they present the scholar with something that is more tangible and concrete in its semantic associations.

One can conclude, therefore, that the musical structure 'says' something beyond the mere associations of a certain style or characteristic melodic units or rhythmic figures that are presented by a musical topic; there is a deeper essence that is presented and accessed.

The next chapter searches for a possible source of this by investigating a theoretical stance derived from music out of a very different cultural sphere.

CHAPTER FOUR

Tonal Language, Speech-tone Melody and the Ngqoko Women

4.1. The Evolutionary Origins of Musical Signification.

The surviving groups of hunter-gatherers in Africa, the Bushmen of the Kalahari and the Pygmies of the tropical forests, are perhaps the most intensely studied population groups of recent genetic anthropology. Some studies have shown that these groups have certain specific and definable genetic links,[96] and that both the Bushmen and the Pygmies may well be the oldest (and even original) inhabitants of Africa (Grauer 2006, 8-9). The latter conclusion is made by researchers in an attempt to find reasonable explanations for the remarkable and intriguing similarities in the musical (and dance) structures and practices of these two very different and geographically widely separated population groups.[97]

One of the more stirring possibilities that this evidence proposes, is that music itself may also stem from a single source and that it is associated with the invention or discovery of certain basic principles of communication and expression. (This possibly dates back to about 1,000,000 to 2,000,000 years ago). These events evidently took place in Africa. It is reasonable to conclude from this evidence that that all population groups have a universal ancestor (gene pool) and a common cultural heritage (ibid, 10 and 52).

Some authorities suggest that music is perhaps older than language (speech). Roger Payne (2001) stated that:

> Music is far, far older than our species. It is tens of millions of years old, and the fact that animals as wildly divergent as whales, humans and birds come out with similar laws for what they compose suggests to me that there are a finite number

[96] Suggested by recent genetics based DNA research (Grauer 2004, 6).
[97] This implies that the cultural development of these groups would have been frozen in time for a period longer than any other ethnic group. When considering that the Bushmen seem to deliberately isolate themselves, it is possible to argue that the various life-styles of these groups could have had this result.

> of musical sounds that will entertain the vertebrate brain (quoted in Barker 2004, 68).

In view of the fact that singing practices are fundamental to the musical traditions of most cultures 'it may be reasonable to accept that our primary voice is in fact the singing voice, and that singing may never be developed from speaking, which is our secondary voice' (Barker 2004, 68).

Victor Grauer also proposes the idea that music existed before speech (language). The insights he presents are worthy of being quoted at length:

> …music may well have set the stage for language by providing a kind of laboratory for phonological and semantic experimentation. It is perhaps only a short step from the play of sung "nonsense" vocables and the construction of tuned pipes to the birth of signs…the "phonology" of music is, apparently already given to us …we ourselves may already be "native speakers" of any and all (traditional) musical "dialects"…This suggests that language might have had its start simply as a more or less free interplay of sung vocables that developed into a more or less free interplay of words. The production of a verbal phrase or statement, requiring some sort of syntax, might have been a later development (ibid, 53-54).

Adherents of genetic anthropology and musicologists (perhaps influenced by the former) seem to suggest that pre-historic music and pre-linguistic speech are two polarities of the same phenomenon:[98] communication by means of vocalised sonic signals. This implies that a mythical 'tone-separation' occurred at some point whereby music and language diverged into two different and perhaps even mutually exclusive forms of communication.[99]

Language seems to have developed as a means by which *more* precise semantic distinctions and warnings could be communicated clearly. In light of man's origins as hunter-gatherers and the probable environmental dangers that

[98] The concept pre-linguistic speech refers to the means of human communication that existed before the formation of speech and language. Viewed from the point of view that it is pure sound (most probably open vowels), it is evident that music and language can appear to have the same source. It is illuminating to consider that this means of expression still exists today as the newborn's ability to express semantic intentions by means of cries and other kinds of vocal sounds at a developmental stage before language and speech is learnt.

[99] My own nomenclature for this seemingly important cultural watershed.

the species faced on a daily basis, it is reasonable to accept that language developed as a response to the needs engendered by these evolutionary pressures. There was a direct need for a more specified form of communication than what was offered by pure sound alone (music).

Even though the original functional imperatives of language and music seem to be grounded in different evolutionary pressures, I find it interesting that musical activities were retained even though there was no apparent evolutionary need for it in the survival of the species. Moreover, it is illuminating to consider that music gained more complexity in its expression and execution along a comparable evolutionary path to the development of greater levels of semantic specification in language. These evolutionary trajectories probably occurred at the same time. This suggests that music attained a level of importance in human cultures even though there was no evolutionary pressure for this to occur.

The basis of Grauer's hypotheses about the common ancestry of the Bushmen and Pygmies lies in the Cantometric similarities inherent in the musical styles of these two peoples even though they are geographically widely separated.[100] Thus, because of the common ancestry of human culture, it is logical to accept that we also inherited the musical structures and practices of this common ancestor as prototypes.

The characteristics of this inherited musical style are quite complex and fairly evolved. Its most dominating features are the high degree of social interaction that takes place during music-making, the fact that group performances are interlocked with maximal vocal blend (ibid, 8), the presence of free polyphony, precisely coordinated rhythms, yodelling with open relaxed throats, the absence

[100] Cantometrics is a controversial form of musical analysis which compares cross-cultural musical styles of folk singing only in the broadest of terms. This is done in order to establish the notion that regularities of musical style have a relation to social organisation. Thus style factors such as vocal quality, tessitura, melodic contour etc., are correlated with class stratification, gender relations and sexual mores. It is believed that evidence gained in this manner could better define similarities and/or differences between various cultures.

of embellishment of musical units, a structure based on short phrases, the use of meaningless vocables, and in particular 'the production of a continuous flow of sound, based on the dovetailing and hocketing of repeated or slightly varied motives' (ibid, 8). These characteristics are found in the music of the Kalahari Bushmen (*KhoiSan*) even in the present day.[101] They also form part of the whole gamut of materials, techniques and processes inherent in ethnic African music as a whole, even if the diversity thereof is taken into account.

The implications of these perspectives are staggering, even though they seem to border on the purely speculative. What can be retained of this view is that both music and language existed at some time as exactly the same thing (thus music and speech have a similar starting point before diverging). This in turn developed into two different forms of signification. At some stage of the evolutionary process one kind of signifying sound became music while it also evolved into another kind, namely speech, and thus by extension language. It also remains clear that the latter, by its very nature, became more specific and precise in its ability to carry *semantic intentions*.[102]

Certain writers about African music and culture offer, however, a different more commonly accepted perspective. They propose that music's basis lies in the formation of the African tonal languages, that music's melodic structures reflect the intonation curves of speech, and that rhythm is derived from the sonic proportions in words. Numerous writers (Dargie, Hansen, Agawu) have focussed on the relationship between language (speech) and melody (song) (Herbst et al 2003, 127).

[101] The *Khoi* are the original 'Hottentots' (a race now extinct) and the *San* are the 'Bushmen'. The *Khoi* were pastoralists and the San mostly hunter-gatherers. The term *KhoiSan* is used to refer to both of these tribes taken together as it is believed that both had a lasting influence on the development of tribal cultures south of the Sahara (Dargie 1988, 4).
[102] Refer to Chapter One of this thesis regarding the concept 'semantic intentions'.

Western languages are not *tonal* per se, but it is conceivable that, at some stage of the evolutionary process, they could have been.[103] Aspects of intonation are still part of the Western sphere of expression. It is common knowledge in Western theatre that situations exist where a skilled actor can deliver two different meanings to a Shakespeare sonnet merely by altering certain intonations (Barker 2004, 46). Vocal inflections certainly had an impact on the delivery of rhetorical speeches (oratory) in ancient Greek cultures. All aspects of voice-inflection involve intonation.[104]

4.2. Tonal Languages and Music.

A tonal language may contain a limited number of possible meaningful phonemes. These may be rearranged and re-ordered into different words, although the sonic images (phonology) of the language units remain the same. Semantic distinction and the delivery of semantic load are achieved in the vocal inflections that a speaker gives to a particular sound; the semantic intentions are thus conveyed in the manner in which the phonemes of the language are phonologically intoned. Thus, this kind of *tonal* language uses pitch inflections to signify a difference in the meaning between words that *sound* the same. These tonal fluctuations are an important part of this category of language on which even grammatical categories such as tense can be dependent. Mandarin and all Chinese dialects, Cantonese and Vietnamese and most of the languages of sub-Saharan Africa (with the notable exception of Swahili in East Africa) are tonal languages.

The idea that music is based on the inflections of a tonal language is of particular relevance to this study. Since the Xhosa language is a tonal language, the theoretical conclusions gained from its study are crucial to this thesis. My

[103] There are many kinds of language, but the primary ones that exist can be classified as tonal languages (those mentioned above) and stress languages (such as English).
[104] The issue of intonation has important implications for this study. It will be examined in greater depth in Chapter Five.

investigation will focus particularly on the manner in which certain 'special devices' of musical signification operate in the songs of the Ngqoko.[105]

The relationship between music and speech/language/text in the Western sphere has been well documented. The combination of words and music into songs has taken place in all cultures and can perhaps be used as evidence of the common cultural heritage for all peoples. In the Western sphere vocal music has been dominated for the past three hundred years by the development of *Bel Canto* singing.[106] In this regard emotional expression relies completely on vowels,[107] and 'an uninterrupted continuation is its most concentrated and powerful exploitation' (Barker 2004, 21). Paul Barker explains that

> mythically or historically, the high altar of the Bel Canto school was expression. Technically, this meant that singing was based on the use of exclamatory vowels to produce colourings appropriate to the mood or emotion that the music and text were meant to express. Manén (1974, 11) [an influential singing teacher] explains, "For expressions of pleasure, the natural expression is 'ah". The exclamation 'ee' denotes disgust and hatred, whilst 'oo' denotes fear and horror. These are the basic exclamatory vowels" (ibid, 29).

When taken within the context that each word contains numerous vowel sounds, the notion proposed by Manén seems ridiculous. It suggests that a single word containing numerous vowel sounds would change mood (and signification) several times. The subsequent semantic confusion that could arise from this kind of sentence would be a source of great amusement! However, in situations where long melodic lines are sung using only single vowels (as in vocalises and operatic arias) it is possible that the composer could conceive the music to exploit the innate expressive associations of certain vowels. Thus I take Manén's statement only as suggestive that – within the context of Western Art Music and

[105] The Ngqoko women are a small group of Xhosa (Thembu) musicians who practice the traditional forms of Xhosa music and attempt to present it in a relatively unsullied form.
[106] While the concept *bel canto* refers specifically to the style of singing required in the operas of Bellini and Donizetti, Paul Barker (2004) uses it to refer to the practice and development of all manners of singing technique within the paradigm of Western Art Music in general. In this instance I make use of that appropriation.
[107] A remnant, perhaps, of pre-linguistic speech?

the Italian language – something as simple as a sung vowel (basic sound material) already possesses an encoded meaning.

With respect to musical contour and emotional expression, the axiom that 'a rise in pitch indicate[s] a crescendo and increase in tension, while a fall in pitch suggests a decrescendo and decrease of tension', can be accepted as a general practice in the music making of most cultures. Thus, emotional climaxes and catharses may 'occur at the summit of rising phrases, and releases are descents from these summits' (ibid, 31). These can be accepted as a basic humanly-coded response that also occurs in speech. Here for example,[108] the excitement or tension increases when there is a rise in the pitch (and thus intonation level) of the speaker's voice.

Roger Sessions believes that the encoding of these basic responses to musical stimuli occurs at a very early stage in human development:

> If we instinctively respond to a rising melodic pitch by a feeling of increased tension and hence of heightened expression, or a falling pitch by the opposite satisfaction; if an increase in intensity of sound intensifies our dynamic response to music, and vice versa, it is because we have already in our vocal experiences – the earliest and most primitive as well as later and more complicated ones – lived intimately through exactly the same effects. A raising of pitch or an increasing of volume is the result of an intensification of effort, energy, and emotional power in the crying of the child just as truly as [it is] in the highly evolved artistry of a Fedor Chaliapin or a Marian Anderson (1979, 8-9).

The operation of cognition is affected by the simultaneous appearance of music and language as it is found in song. By taking into account the unique relationships that exist between music and text in opera (which operates in a similar way in a song), Barker asserts that

> it is often suggested that listening to words and hearing music are two very different and not necessarily complementary skills. Certainly there is scientific evidence showing that the processes occur in two different areas of the brain (2004, 54).

[108] This intimately relates to the discussion of 'gesture' in Chapter Five.

This suggests that verbal communication targets the left (analytical/quantitative) brain-hemisphere, and that musical communications aim at the right (intuitive/emotional) brain-hemisphere. . As a result it is easy to understand that, for example, the structure of an opera into the often used *scena et aria* can be seen to reflect a composer's attempt to prevail over these cognitive boundaries.

This fittingly implies that recitative, (with its emphasis on speech rhythm and the subsequent absence of clear melodic and thus musical content), places greater emphasis on the intelligibility of the text, whereas the *arioso* that follows (with text repetition but continuous musical development) prepares the listener for the aria.

From this it is evident that

> single words elongated on a single vowel predominate perhaps over several lines or pages (melisma), or words are even eschewed altogether in favour of "Ah"…Even the Baroque *Da Capo* aria exhibits this same basic structure in the embellishment of music with a text from the first section repeated as the third (ibid, 54).

Therefore 'the infusion of words and music at the highest level…appears to create another independent form [of signification] where the two elements become inseparable or symbiotic' (ibid, 49); a symbiotic relationship between language and music is certain to have existed at some stage (ibid, 12).

Regardless of one's view of this debate, however, I accept as axiomatic that which was said by Eisenstein (1946): 'Intonation, i.e. the 'melody of speech' is the foundation of music' (quoted in Barker 2004, 12). Questions concerning which came first (music or speech) seem to be of little importance if one takes into account that music and speech were at some point the same.

An examination of African music uniquely elicits an opportunity where the formative influence of tonal language on the musical structures of a culture can

be observed. My investigation into this area is underpinned by my examination of the music of the Xhosa.

4.3. Xhosa Music and Speech-tone Melodies.

The Xhosa are descendants of the Cape Nguni. The Xhosa language and its dialects have been deeply influenced by the inflections of the *KhoiSan* speech at some stage in its development (Herbst et al 2003, 127).[109]

> There is a large inheritance of KhoiSan genes among the Cape Nguni, of KhoiSan languages in the Xhosa language and its dialects and of KhoiSan practices in Xhosa music. There is also much KhoiSan influence on Xhosa music (Dargie 1988, 4).

David Dargie declares that the Xhosa are a population group consisting of twelve tribes (1993, 1). One of these is the Thembu (which include the Ngqoko women), who have resided in Southern Africa for over a hundred years. The wars that were raged by the Zulu-king *Shaka* appear to be the catalyst for the migration of peoples that took place in Southern Africa during the first half of the nineteenth-century. Of these, the Thembu moved west across the *Tsomo* river 'into an area until then inhabited permanently by the San' (ibid, 1). They finally settled to reside permanently in the Glen Grey district - also called the Lumko valley.

The British established a magistracy in *Cacadu* in 1880 and concurrently renamed the area as Lady Frere (Dargie 1988, 22 and 1993, 1). It is situated just an hour's drive outside Queenstown in the Eastern Cape, South Africa. This area, also known as the Lumko district, comprises mainly two villages. One is called *Ngqoko* (or Lumko village) and the other *Sikhwanankqa* or *Sikhwankqeni*. The people who live in this valley are mostly descendants of the *Gcina* clan of the Thembu, but they view themselves as Xhosa, call their language *isiXhosa*

[109] Refer to footnote 101.

and call their songs *iingoma zesiXhosa* (songs of the Xhosa culture) (Dargie 1988, 4). Nearly all of the people that live in this district are Thembu.[110]

In this district the Thembu lived in close proximity with the San with the resultant effect of certain intermarriages between Thembu men and San women. Dargie cites documents that record the marriage of a Thembu chief with a San chief's daughter (1993, 1).

It is thus probable that of all the African tribes, the Thembu had most contact with the culture of the *KhoiSan*. As can be expected, a cultural exchange took place in which elements of the San language (most notably the characteristic 'click' consonants) and their music making was absorbed into the cultural practice of the Thembu. Dargie suggests that the Lumko district reflects this heritage in the names of the rivers *Cacadu, Cumakala, Ngcuka, Ngqok*o*, No-qham,* and *Xonxa* (ibid, 1). (All of these names feature the click consonants of *KhoiSan* speech.)

If it is considered that children are educated into the cultural traditions by the women of the tribes, then the intermarriages immediately placed a direct matriarchal influence on all of the cultural practices of the Thembu. (It can thus be suggested that the process of cultural-encoding is given its initial impetus by the feminine sector of a particular culture). This contact evidently seems to have had a decisive influence on the music of the Thembu culture in particular.

Music making (*iingoma*) plays an 'intrinsic role in the daily lives of *amaXhosa*' (Herbst et al 2003, 127) via the singing of work songs, initiation songs and others. It serves as an important vehicle for the transmission of certain kinds of 'indigenous knowledge that comprises musical, societal and moral values' (ibid).

[110] The examination of African culture in this study centres on the people of the Lumko village in Lady Frere and in particular on the music of the *Ngqoko* women.

In Africa, the composer is an individual who is often perceived as a conduit through whom the spirits of the ancestors speak by means of the medium of music. Thus, a composer may create music for the sake of self expression, for the pure joy in the act of creativity, or to impart significant cultural information and histories. The music in itself plays a vital role in ensuring that the cultural identity remains intact. It is for this reason that music is frequently employed as an accompaniment to important tribal festivals and rites of passage. Thus, the situation in which the music is to be performed, the place where it is to be performed, and the question of whether dancing or singing will be present, will help to determine details of the text that is to be sung; this will ultimately also affect the encoding of the music.

The text is perhaps the most significant aspect of the music, as it will determine what the music will do. For this reason the creator of the text is often regarded as the composer.

Music is a system of socially accepted prototypes and conventions and because its role is to create a shared experience for the people in the tribe, the composition of it is ultimately a communal affair. Here, the song can be sung and subsequently modified during the course of trial performances and by its progression through the oral tradition.[111] The melody is sung by a group of people and if necessary, it can be altered if the musicians find something that works better. African musical composition is a dynamically changing sound production, and is structured on the agreed sound usage established by the culture and the interplay between individuals and the tribe. It is primarily an oral

[111] Tisani defines this concept as follows: 'Oral tradition is a body of information that belongs to a particular group of people. Its continued existence is by word of mouth that is passed from generation to generation. What is passed and how that is done is decided by what the communal mind deems important to preserve. Further, the vehicles of transmission are formats that have been fashioned by the community itself. Oral tradition, therefore, is group property, reflective of the collective mind to which it belongs. It is public property, as it is the story that the people have carried from the past, and are responsible for passing on to future generations. It is therefore out of the question to be seeking the creator of a tradition' (1994, 169 quoted in Herbst et al 2003, 127).

tradition where community input is as vital as the role of the composer. Thus, a composition contributes to the preserving of the past while assimilating a continuously changing environment (ibid, 125).

The *encoding* process possibly occurs in any cultural sphere as it is described here: The child makes sounds according to his vocal ability and gradually learns which of these have an effect on the people around him. This ability later grows to a point where he learns what constitutes 'acceptable' music-making for the society; a process then begins in which the individual assumes various responsibilities in the music-making of the tribe. In this manner, the child's knowledge and repertory of what is accepted as music is constantly developed.

The most salient feature of Xhosa (read Thembu) music is that it is entirely based in song. Solo songs and songs performed by large or small groups feature as the dominating genres. Most songs are accompanied with either the use of body percussion, or instruments, or both. Added to this, certain bodily movements (a characteristic shaking of the upper arms and shoulders as well as certain kinds of foot movements and dancing) are considered to be a spontaneous response, as well as a contribution, to the music making.

The Thembu have developed a number of musical instruments to accompany their singing. Of these, the influence of three bow-based instruments is of particular significance in the technical foundations of Xhosa music itself. The *umqangi* - nowadays called the *umhrubbe* (mouth bow) (Dargie 1993, 2-3) – *inkinge* or *ikithala* (friction bow) and the *uhadi* (calabash bow) feature predominantly in the music of the *Ngqoko* women. In addition, two types of drums are also used, namely the *ugubu* (two-sided drum) and the *umasengwane* (friction drum); these are particularly specific to the Ngqoko women.

The bow instruments are played by means of two methods of sound production: 'friction bows' are played by 'raking' the bow string with a stick or a lengthy and

robust leaf of grass. This kind of bow is held in the player's mouth, so that the mouth cavity acts as a resonator and it subsequently picks up the harmonics produced by the vibration of the string. 'Percussion bows' are 'struck' rather than 'raked' to produce vibrations on the instruments' single string. The *uhadi* is a bow instrument to which a gourd resonator is attached. It is played with percussion technique and a unique movement of the player's arm can 'open' or 'close' the gourd resonator, which is placed on the musician's chest. This produces a rhythmic accompaniment to the singing voice and it also generates a slight *timbral* change. (This movement also effects a slight change in pitch).

The pitch on these bow instruments can be altered when the performer presses her thumb at the base of the string to produce a note that is a tone higher than the fundamental one. The sounds produced by the bow contribute to the sound world of the songs where the capabilities of this instrument perfectly reflect what Dargie describes as the most striking characteristic of Xhosa music: a two-chord harmonic basis (1988, 7). The two major-chords thus produced are typically the interval of a major-second apart rising on the second chord. In the Western sense this results in a typical structural oscillation between chords I and II of a key (modalities of individual chords correctly implied).

Thembu music rests on the creation of a highly complex polyphonic musical texture in which the cyclical repetitions of complimentary (and contrasting) melodic phrases are overlaid, interlaced, overlapped and interlocked to produce a continuous musical flow.[112] Call and response techniques are also evident. The overall musical form of a song gives the impression of a living organism, as beginnings and endings, and the song grows in a manner in which no sectional divisions can be heard. This kind of process-structure can best be described as one of 'continuous unfolding'. Even in the most 'simple' seeming song (though

[112] The descriptions given here are grounded in my own observations of performances of this music.

never ‘simplistic’), the solo song together with body percussion is, to a certain degree, typically polyphonic and polyrhythmic.

In this music in which the phonological result is texture-dominated, the most significant formative force is that of melody and especially *speech-tone* melody.[113] Dargie asserts that ‘songs grow out of speech’ (ibid, 68).

The complex symbiotic relationship that exists between language and the creation of melody involves the composer initially thinking about the words/lyrics of a song. The melody is subsequently ‘born’ when the words as they are meant in the tonal language are said with appropriate inflections (Herbst et al 2003, 127). When the relationships between pitch and rhythm that exist in speech-tone are intensified they become ‘adopted’ as a sung-melody. This resultant material then serves as the basis for a song. Exactly how this (unconscious) process occurs remains an impenetrable cognitive mystery, but it is clear that the resultant melodic curve follows the speaker’s voice-inflection pattern as the text would be spoken. This material is known as speech-tone melody, meaning that the melody gained shape from the speech inflection.

Deidre Hansen (unpublished PhD thesis - 1988) has pursued in-depth research into the effects of speech-tone melody and the relationships that exist between music and language in Xhosa music. She established that the speech-tone pattern specifically determines the beginnings of melodies and melodic phrases, but that a purely abstract musical development takes place in the extension of the phrase into a song. Speech–tone also seems to influence (but does not entirely determine) the melodic curve within the subsequent phrases.

Hansen noticed in this regard that although the speech-tone melodies are generally used, they are also occasionally modified to create a balance between

[113] ‘Speech-tone melody’ is a ‘melody’ of semantically directed pitch inflections of a spoken phrase in a tonal language. This is used as the basis for a musical composition.

the pitch and rhythmic structures of successive phrases in a song. Thus 'musical preferences are equally important and even paramount in some songs, and [may even] override speech-tone patterns' (1988, 228). Accordingly, it can be reasonably concluded that the melodies 'do not slavishly imitate the speech-tone and intonation patterns of the spoken language' (ibid, 222). Sometimes the polyrhythmic and polyphonic nature of the musical texture may obscure the relationship between speech-tone and melody (Herbst et al 2003, 129). The relationship between speech and music thus evidently appears to be in a continuous and dynamic state of flux, but it is clear that the basis of Xhosa music lies in speech-tone melody, giving strength to the argument that the discovery of meaning is to be found in the relationship between words and resultant melody.

The fundamental difference between speech and music in Xhosa culture is metrical. Here speech possibly achieves greater 'flow' while music is more 'static' and 'regularly' patterned in time.[114] The basic speech-tone melody is therefore 'modified' as it transforms into music and this raw material can subsequently be manipulated in an almost 'abstract' manner to obtain any number of desired effects that may be used specifically for their musical or aesthetic value. At this point the composition process of Xhosa music described here is akin to what occurs in the Western paradigm where a composer shapes raw materials to obtain certain kinds of effects which are used for their intrinsic musical and artistic value. The composition process of Xhosa music as elucidated here was confirmed by members of the Ngqoko Women's Cultural Group during interviews that were conducted as part of fieldwork research.

[114] With the use of this term I accept that Xhosa music's poly-rhythmic practices are by Western comparisons non-regular in type. In the context of the rhythmic patterns of a spoken African language, the rhythmic dimension in music is relatively more structured. It is more akin to that found in poetry as opposed to that found in free speech. It is thus conceivable that the creator of a Thembu song rather writes poetry and that the words on which these songs are based are not just pure 'speaking'. (The focus of prior research into this music has been predominantly on the music and far less on the poetry. An examination of the tribally produced poetry could render significant insights into the formation of African music.)

Of special interest is the characteristic practice of *over-tone singing*, otherwise known as split-tone singing or throat-singing. Anri Herbst describes it as a 'type of legato singing style where overtones are produced over two deep guttural fundamental tones to generate a melody of partials' (ibid, 127). In the Lumko district in South Africa, it is practiced by the *Ngqoko* Women in a manner that is both aesthetically pleasing and technically polished.

4.4. Codes and Overtones: Songs of the Ngqoko Women.

Overtone-singing is found in several cultures. It features significantly in some Tibetan chants and Mongolian prayer-singing and has also found its way into some forms of Japanese music. This particular technique comprises the production of a fundamental tone and the subsequent delivery of a high-pitched melody by amplifying some of the overtones by means of a characteristic shaping of the mouth cavity in several vowel or whistling profiles (Dargie 1988, 56). As these forms of expression are believed to have been unique to Asia, it may have come as a surprise when David Dargie discovered that some of the women in the Lumko district produced similar effects when singing certain songs.

> The technique being used by that young girl was to produce unnaturally deep tones by singing in a forced manner in the back of the throat. These deep, gruff tones are rich in overtones, and it was these patterns of overtones of which I became aware. Later it became clear that singers using this technique are in fact following a pattern of melody, by using overtones (ibid, 56).

Although there is evidence that this kind of singing is used by other Thembu people - and that it is widely known and practiced amongst the *amaXhosa* - Dargie asserts that no documentation of this kind of singing in Africa existed before December 1980 (ibid, 56).

The Ngqoko Women's Cultural Group (founded by NoFinishi Dywili) is a unique body of people who dedicate themselves to the practice and performance of the

older traditions of Thembu music.[115] At the time of writing, the group consisted of about eleven women of varying age groups; although most are over the age of 60, some recently recruited members fall into the age range of 30 and under. The group performs regularly at various cultural events in the Lumko district and occasionally at public concerts in South African and various European cities. As a result, the Group and their music have gained considerable status in areas surrounding Lady Frere; women who desire to gain entrance to the group are expected to pay an up front fee in cash. The Group is managed by Mr. Tsolwana Mpayipeli (a teacher/administrator), who acts as general liaison officer and agent and also guides them during performance. Most of the women are residents of the Ngqoko Village near Lady Frere, which is the central assembly and rehearsal place for the group.

NoSumthing Ntsese, NoLinet Ntsese, NoFirsti Lungisa, NoKaya Mvotyo, and NoPasile Mvotyo are some of the older ladies in the group who demonstrate a decisive technical mastery of the techniques of *Umngqokolo*. A younger member of the group named Thandi Ntese from *Encobo* is being trained by NoSumthing to be able to produce this kind of singing. (There are other elderly ladies in the area who are also capable of producing this kind of singing. These ladies however, are not part of the Ngqoko Women's Cultural Group.) As such, this type of singing is practiced mostly by elderly women and it may well face extinction because of the younger generation's apathy towards traditional cultural practices.

Overtone-singing can be defined as a 'vocal style in which a single performer produces more than one clearly audible note simultaneously' (Pegg 2001, 821). It can also be practiced in forms which produce 'a rich tapestry of harmonics without the presence of a drone' (ibid). Distinctions are subsequently made between melodic forms of overtone singing and non-melodic styles.

[115] The honorific 'No' meaning 'mother' is gained when a girl marries. It is customary for women to be renamed in this manner by the father-in-law as a sign of acceptance into the groom's family.

In the former ‘a drone is produced on the first harmonic or fundamental and a flute-like melody [is] created from a series of upper harmonics or overtones’ (ibid, 821-22). Non-melodic styles of overtone-singing are the result of overtones which occur when the pitch of the fundamental is combined with the vocal sounds that are enunciated. It is the opinion of the authors Kerryn Tracey and Jeanne Zaidel-Rudolph that the Ngqoko Women practise a non-melodic form of overtone singing and that it is possible that all forms of overtone-singing practiced by the Xhosa are of the non-melodic kind (2009, 3). This classification is due to the characteristic ‘combination of the “fundamental” and the sung melody rather than as a high melody occurring on the upper harmonics of the fundamental’ (ibid).

The forms of overtone-singing consistently practiced by the Xhosa are called *Ukungqokola* (verb) or *Umngqokolo* (noun) in the Xhosa language, and are classified by Dargie with other forms of gruff singing. The word *ukungqokola* itself focuses on the gruff quality of the sound produced while it also reflects the idea of ‘singing in a hoarse bass voice’. The performance of this kind of singing by a male is called *umbhayizelo* while the form used by women is called *umngqokolo* (1988, 56).

The Ngqoko Women appear to employ two distinct types of non-melodic overtone-singing. The ‘ordinary’ form is used by women and girls, and another kind was used by the (late) apprentice diviner Nowaileti Mbizweni. The latter is called *umngqokolo ngomqangi* (ibid, 57).

In both forms, the performer produces gruff sounds well below the normal female vocal register by using a forced voice, well back in the throat (this has given rise to the naming of this kind of singing as throat-singing). These deep sounds (which are naturally rich in overtones) are used as fundamentals that serve as the spring-board for amplifying the partials. For this the singer manipulates the shape of her mouth when performing the melody. The technique is similar to playing the *umhrubbe* bow - Dargie regards this overtone-singing as another

form of Xhosa bow music, implying that it is conceived of as being more of an instrumental than vocal form of music (ibid, 57).

In 'ordinary' *umngqokolo* the singer lifts her tongue towards the front of her mouth while her lips are kept open. The over-tone melody is heard faintly in comparison with the fundamentals. There are usually three or four fundamentals which roughly correspond to F, G D and F^1. The melody produced is usually Xhosa-*hexatonic* although the fundamentals are acoustically different from those that would have been produced on a bow (ibid, 57).

In the production of *umngqokolo ngomqangi* only two fundamental tones are used (as in *umhrubbe* playing) and the resultant overtone-melody has the same volume level as the fundamentals. In this style of overtone-singing the tongue is not raised. While the tones are resonated between the tongue and hard palate in the usual manner, this specific style of singing exploits the back of the throat as a resonator (ibid, 57).

The term *umngqokolo ngomqangi* means to sing *umngqokolo* with, or like, *umqangi* (another word for the *umhrubbe*), implying a higher level of roughness in the sound. The word is also used in the Lumko district to describe a certain type of beetle. Boys impale the beetle and hold it in the front of their mouths while shaping their lips to produce a melody from fundamentals formed by the beetle buzzing as it tries to escape (ibid, 57). Nowayileti was inspired by this to invent her type of overtone singing, a style that bears a remarkable resemblance to the sound produced when playing the *umhrubbe* (friction bow).

Authors Tracey and Zaidel-Rudolph argue that the form of overtone-signing practiced by the Ngqoko Women is better defined according to the definitions of various scholars as being a kind of 'throat-singing'. In the typical Ngqoko usage 'the sung melody is accompanied by a low growling throat drone' (2009, 5). The resultant sound is created by

> forcing exhaled air through the lower part of the larynx… When the throat drone is performed together with the sung melody, notes can be heard occurring between the two sound components. These are heard as harmony tones and these overtone notes may be slightly modified through the use of various vowel sounds…The overtones are fairly alike in timbre to the melody note but do contain some audible vibration relating to the fundamental note. Despite this *slight* timbral similarity with the fundamental note, the overtones may be quite difficult to distinguish from the melody note. Two overtones are sometimes audible, and if an overtone rises from one to a subsequent overtone it sometimes sounds as though the sung melody note is rising instead (ibid, 5-6).

Tracey and Zaidel-Rudolph accept that the formal structures of songs which use this form of signification are similar in each of their case studies. Exceptions were observed in instances where the technique was employed as an expressive outburst as part of a song employing normal signing. The formal design of the songs that employ *umngqokolo* tend to exhibit a phrase structure of ‘‘A’ with a repeated ‘A’, followed by a ‘B’ which acts as a bridge back to (a modified) ‘A’’ (ibid, 6). Information which confirms that this pattern is universal among the Xhosa is not available at the present time of writing.

Umngqokolo is often used to lead songs, as in ‘call and response’ based forms. When performed, it is often sung in interlocking patterns with other singers singing in the same manner, and it is also used in ordinary group songs where certain of the members of the group sing normally while others sing using *umngqokolo.* Sometimes a coordinated *umngqokolo* with normal singing and instrumental accompaniment is also found. This kind of ensemble singing can also be accompanied by instruments to generate an impressive ‘symphonic’ effect. The overtone-singing technique used mainly by the Ngqoko women is of the ‘ordinary’ variety.

The unique sound produced by this technique of singing appears to be a valued device of musical signification for the Ngqoko women. Tracey and Zaidel-Rudolph assert that *Umngqokolo* is an encoding device that is ‘simultaneously rhythmic, harmonic, and melodic in nature’ (ibid, 20).

When asked in interviews conducted during fieldwork research whether there are specific reasons or occasions for its use, NoSumthing Ntsese explained that it does have its specified roles in event-connected cultural festivals and rites of passage. She continued to explain that if the singer may feel the desire to 'spice up' the music and make it more beautiful (an analogy drawn with doing something to make food taste better when cooking), that the singer would subsequently use *umngqokolo* to achieve this desired effect. NoFirsti Lungisa added that she enjoys singing in this manner as it helps her to remember the past and the people that were with her during her youth. It brings back specific emotions associated with her attendance at certain cultural events.

This device thus encodes the music for the women in a very specific way. Using *umngqokolo* brings about personal remembrances and feelings of nostalgia for the old cultural forms. This occurs especially when the performer participates in the experience of the music. *Umngqokolo* thus operates as an indexical sign which triggers memories of events and situations experienced during the performers' own youth. This form of singing is thus used as a mnemonic device; a cultural indexical sign referring to times long past. In this it is particularly revealing that certain topical references are engendered by the use of *umngqokolo*.

The *topoi* employed in Western Art Music are the products of extra-musical connotations. These have infused musical structures to a large degree because of their inherent reliance on rhythmic formations; topics can have a formative influence on the macro-structure of a composition. In the Ngqoko music, by contrast, it is more the sound (timbre) of the overtone singing itself that serves as the trigger which releases the topical connotations. The sign-functioning of *umngqokolo* is thus intra-musical in the sense that it pervades the raw sound material itself. There are no specific rhythmic devices that govern its use. (Interlocking and hocketing patterns are basic compositional techniques which

are not restricted to *umngqokolo*). However, the topical references produced are extra-musical – they refer to social concerns/situations/experiences in which the music is ordinarily used. The use of topics in Western Art Music and the use of *umngqokolo* generate connotations of meaning which refer to either programmatic, narrative or sociological content. This suggests that there is a similarity in the encoding processes that occur in the Western and African cultural spheres. The music refers to emotions and objects of a social and personal nature as one engages in the totality of the experience of the music.

The Ngqoko Women explained that the use of this kind of singing inspires them to use the 'ancient Xhosa language'. The latter is a poetic form of *isiXhosa* that is mainly used when writing words for songs. It brings back cultural memories which serve as a means of confirming cultural identity (especially at a time when the 'old' practices have been diluted by the youth and their contact with the technology of our age). This kind of singing is also significant of their cultural identity. In addition *umngqokolo* is often employed specifically within the diviner's songs as a means to communicate with the ancestors and to invoke their spirits in religious ceremonies.

Umngqokolo's importance as a device of encoding which assists the recall of personal memories, cultural identity as well as communication with the ancestral spirits, cannot be underestimated. Tracey and Zaidel-Rudolph emphasize that the 'occurrence of these simultaneous parameters, as well as the timbral quality of the sound, is what differentiates this throat-singing technique from other vocal techniques' (ibid, 20-1).

All the music of the *Ngqoko* Women is grounded in the practices of Xhosa music, which relies on speech-tone melody for its creation. This clearly suggests that intonation is the means by which semantic levels of content are encoded into this music. It is revealing to consider that the narrow pitch range of medieval plainchant is comparable to the pitch spectrum of inflected speech. It is thus

possible that speech inflection could have had a similar influence on the encoding of meaning in Western music. In the next chapter I examine Gesture and Intonation theory to determine the role that speech-inflection plays in the formation of musical structures and culturally embedded vocabularies of raw source material for music.

CHAPTER FIVE

Signifying Musically

5.1. Gestural Interpretation.

The study of human gesture and how that maps on to the musical structure is a relatively new area of research. It has yielded a number of interesting theoretical ideas and findings which have a clear connection with the issue of musical semantics and of encoding. The perspectives gained about the manner in which the parameters of musical structure such as ascending and descending curves in melody and macro structure, and the generation of tension and release in harmony and rhythm embody the semantic intentions of composers and their perception thereof, is of particular pertinence.

Essentially, gestures are basic units through which communication between individuals takes place; this is common to all cultures. The relevance of a brief examination of certain of these theoretical ideas lies in the subtle truth that even the figures of rhetoric and the musical topic are gestural in their origin and function to a certain degree.

Robert Hatten accepts a gesture as 'any energetic shaping through time that may be interpreted as significant' (Gritten 2006, 1).[116] He finds that a gesture conveys information with regard to 'affect, modality and/or communicative meaning' (ibid, 1). Hatten emphasises the fact that a gesture directly involves 'any sensory perception, motor action, or their combination' (ibid, 1).

This definition accepts the perception of all permutations of human motion that are viewed as being significant as well as the '"translation' or energetic shaping through time into humanly produced interpreted sounds, ranging from the intonation curves of language, to song, instrumental music and (indirectly) the

[116] A discussion of musical time and how that affects music's semantic level occurs in Chapter Six.

representation of sonic gesture in notation' (ibid, 1). However it must be understood that gestures are 'essentially indivisible, and while we can, obviously, note certain of its elements, we must nevertheless remain constantly aware of the fact that we are not thereby revealing its whole or even its essential meaning' (Sessions 1979, 12).

Thus a study of how gesture works as a possible means to unravel musical meaning must be viewed in broad terms. I argue that this kind of interpretation is particularly applicable when certain large-scale structural musical phenomena accumulate to generate an overall affective or communicative effect.

The study of gesture is useful particularly in what it suggests about how encoding takes place and also in how it merges numerous separate topical, rhetorical or affective phenomena into a cohesive musical whole. Hatten states that a

> gesture involves the coordination of intermodal synthesis, based upon the functional coherence of movements as events, and their emergent meanings.[117] These gestural events are affectively loaded, and they typically [initially] appear in response to the demands of intersubjectivity (Gritten 2006, 3).[118]

It is therefore essential to understand that encoding occurs as fulfilment of the human need to communicate.

In the musical system, gestural perception depends on a background or canvas of previously established context which functions as a comparative basis. It is from this platform that any gestural movement can thus be interpreted as being significant in some way. As a result, '… oppositionally marked gestural types,

[117] The concept *emergent* accepts the notion that meaning is not only singularly definable but that it perpetually continues to define and re-define itself. This occurs by means of the dynamic motion inherent in the interaction and evolution of changing contexts. This means simply that even though a gesture may be viewed as a basic sign, it acquires levels of meaning depending on the context in which it is used, as well as the shape and speed of a gesture. As a result, various contexts have an effect on the meaning of a single gesture. Time is an important factor in this instance – refer to Chapter Six.

[118] Refer to footnote 84 for a definition of this term.

such as grief versus elation, may be correlated with structural oppositions among musical elements' (ibid, 3).

Hence, one needs a perceptual framework in the form of a field of gravity or 'vectoral space' to be musically established. This is similar to the environmental forces that affect the human body in the physical reality. It enables the 'motivated opposition of downwards grief versus upwards elation'. Such a field of reference creates a sense of reality by which phenomena can be compared. These can subsequently be experienced as being analogous to gestures of the human body. 'As soon as that happens, we can speak of a kind of agency, especially when a series of gestures appear to cohere as an intentional or goal-directed sequence, progression or discourse…' (ibid, 3-4).

There exist two basic forces in Western music which generate these necessary fields for perceptual reference. They provide fundamental contexts through which gestural interpretations and gestural creation can occur.

The first of the two dynamic fields that allow gestural interpretation to occur (in Western Art Music) is created by the kind of impetus generated by metre. Here, the imminent sense of the strong downbeat and the perception of musical time moving towards this gravitational point (first beat or strong beat) gives metre the force of an 'active, qualitative field that provides virtual orientation with respect to up versus down and to a sense of relative weight' (ibid, 3-4). This generates a background to which any rhythmic patterning can be gestural in character.[119]

The second of the two forces that generates the vectoral space by which musical phenomena can be interpreted as gestural expression is provided by tonality and harmony. Roger Sessions suggests in this regard that there exists a

[119] This suggests that musical topics which have largely been defined by rhythmic characteristics have a gestural connotation. This is especially evident in the dance topics which imply certain choreographed physical movements of the human body.

> psychological need which the principle of tonality, or key, fulfils; the necessity for a unifying organisation in the sphere of sound, just as tempo and meter constitute a unifying principle in that of rhythm. Movement becomes expressive only if directions are clear. To this end points of reference are necessary… Without them, music would hardly be possible. One of the most vivid and effective means by which this is accomplished in music is harmony, with all that this implies (1979, 11).

As a result, tonal structure, which adds its own stylistically generated conventions and semantic connotations, provides much material by which a characteristic shaping of musical time in up or downward movements can be measured against a gravitational basis of comparison. The context that allows gestural comparison is often provided by the clear implications of a tonic, but in more complex situations it can be provided by the listener's intuitions about what is 'correct' for a given musical syntax (relating to the pitch structures or rhythms which do, or do not fit into a given musical circumstance).[120]

> Together, metrical and tonal forces constitute what I call a virtual environment in which we can trace the presence of an animating force (implying an independent agent) by the constraints that weigh in on (deflect, deform, or resolve) otherwise freely motivated energetic movement (Gritten 2006, 3-4).

As a result, we are empowered to see the body's effort to overcome or coordinate with physical obstructions, which is analogous to musical phenomena that act with or against the gravitational forces of metre and tonality and further, 'through an analogy with the effort of our own bodies to overcome physical (or other) forces on earth in order to achieve [a semantic] intention' (ibid, 3-4).

> The basic or default level of gestural interpretation in music is motivated by both indexical (dynamic, association by contiguity or connection) and iconic (imagistic, association by similarity of properties or structures) correlations with gestures in other modalities (ibid, 3-4).

Because of the connections made between gesture theory, musical tonality and metre, one gets the impression that the ideas surrounding gestural interpretation or creation are not equally applicable to music that is non-tonal. The only

[120] Refer to the arguments in Chapter One that discuss the rule-guided nature of musical structure as well as the outsider's perception of musical syntax.

difference is that the composer of non-tonal works generates the perceptual fields and gravitational forces necessary for gesture to be interpreted by other means. He achieves this in his manipulations of musical elements so that conditions of tension and stability are still present, even in the absence of tonal harmonic vocabularies. (Within these circumstances it is still possible to ascertain whether a pitch is syntactically correct, and thus perceptions of tension and the release thereof are still found).

> Gestures are richly informative and perceptually immediate; … it is the immediacy of biologically typed gestural meanings - anger, grief, joy, disgust, surprise – that allows us to connect viscerally at a basic level with music that may be culturally or historically quite distant from our own time, even as we struggle to decode symbolic levels of gesture or ritualised movement that may have meanings far different from our own cultural expectations (ibid, 10).

Because of its characteristic shaping and shading, a gesture may thus assist in the definition of a topic (ibid, 10). Thus, the impact of gestural intentions on the formation of musical topics, along with the way in which this process engenders the musical structure itself, cannot be underestimated.

The field of topical and gestural investigation interrogates historical and cultural encoding. It suggests and promotes an underlying theme that musical signification and syntax is a result of the composer's play of musical topics, gestures, and affects within the cultural sphere and the virtual sound environment. Central to the consideration of topical theory is the assertion that signs develop meaning through a process whereby certain associations become attached to certain cultural units/objects. These associations develop culturally - it is ultimately a process of encoding. However, it has not been established in what manner the more basic level of musical signification is formed. It seems that this is inextricably linked with the fundamental cognitive assessment of music. The following section presents arguments that elucidate these processes by which these basic levels of signification and cognition are formed.

5.2 Artistic Cognition and the Intonation Process.

In an article entitled *Intonation as a specific form of musical semiosis* (Tarasti 1995, 155-185), Jaroslav Jiranek proposes that the artistic cognition process is a 'dialectic unit of immediate and mediated moments'. He suggests that this manner of information processing operates differently from the way in which it operates in science: In the latter, cognition occurs as a process in which direct sensual perceptions are negotiated with mediated and discursive thought processes; these thought processes operate by means of abstract logical systems. In artistic cognition, the generalisation process is 'never separated or broken off from a sensual, concrete form of world cognition and acquisition'.[121] As a result, works of art generalise the reality that is to be accepted 'by presenting types of that reality's sensual images...'. This cognitively acquired reality is not reduced in its perceptual immediacy and does not depart in any manner from what is sensually concrete to the perceiver. 'In its totality, however, it is accessible only in a mediated way because no art is pansensory' (ibid, 155).[122]

One other way in which artistic cognition differs from that of the scientific kind is that it requires an element of subjective evaluation to occur in combination with the assessment of the reality. This needs to take place so that the brain can achieve and maintain imaginative transformation and fictitious acting.[123] A widely

[121] The term 'generalisation process' suggests that the human mind forms perceptions of a reality by means of a gradual and general non-intentionalised acquisition and processing of external phenomena. Thus the person does not focus on one object to the exclusion of others but forms a generalised view of an object or phenomenon which is used as a background against which certain specific phenomena are placed. The concept 'generalisation process' refers to the mechanisms of perception itself. This theory clearly relies on Gestalt principles.

[122] The term 'pansensory' means of all the senses. This implies that no art makes use of all the human senses simultaneously. A form of hierachisation takes place whereby the mind finds one important thing to focus on and perceptually adjusts all other present elements to be complimentary to that one object. In essence, a process of perceptual prioritization occurs. The theory suggests that it is impossible to attain levels of physical ecstasy as was suggested by Scriabin.

[123] 'Fictitious acting' refers to the cognitive 'acting out' through which the human brain engages its faculty of imagination.

accepted idea about art is that it communicates by using and stimulating the human imaginative faculty.

All forms of art address themselves to a specific human sensory organ. For example, music is primarily aimed at the auditory sense. Because spoken poetry also falls into this category, it is logical to accept that spoken language is perceived in a way that is similar to the way that music is perceived. Thus artistically accessed impressions represent 'a dialectical unity of immediate, direct sense perceptions (specific to the given art discipline) and of mediated ideas (non-specific to the given field of art)' (ibid, 156). This allows the associations of intertext to play a role in the perception of the meaning of a work of art. The latter is the aspect of the work that is often mediated upon.

Because music is an art form that relies on the continuous motion of sounds in time, '…the continuous and relational side of reality is directly accessible…' (ibid, 156).[124] It is within this sphere that the phenomenological decoding of the musical messages takes place.[125]

This implies that at first, the individual directly experiences the meaning of a work of art in a sensory experiential manner, and only after that finds additional layers of meaning upon reflection. Thus the phenomenological experience of the work of art is part of its meaning and can be said to be one of the most direct ways in which the semantic content of music is accessed.

Every form of art has its own individual way of granting a perceptual 'reality' to its perceiver.[126] This normally depends on the synthesis between the subjective and

[124] The topic of how music operates in time and how it pervades the listener's sense of constantly being in the present will be taken up in Chapter Six of this thesis.
[125] The phenomenological decoding of music takes place in time – music is a temporal art. This issue is discussed in Chapter Six.
[126] The reality that I am referring to here occurs in the event with which the art work is engaged. During this time it seems to occupy the viewers'/listeners' minds to such a degree that the experience of the work and its message is perceptually and experientially real; the person perceives this object as existing. Music thus grants a *reality* to the listener because it contains

experiential orientation of the particular art discipline and the differences encountered between the factors of 'immediacy and mediation' (ibid, 156). All of these are in turn related back to the particular cognitive-world that is established by the particular art form. Thus the subjective aspect involves the sensory and experiential orientation of the viewer's/listener's perception while that person remains aware of the fact that they are currently engaged in artistic activity.

This means that any form of musical cognition relies on the differences between the direct auditory perceptions and the outside (or pre-encoded) auditory ideas that are noticed by the listener. These differences are in turn inspired by those perceptions, as well as the unity between the relational and moving side of musical reality as it unfolds. This manner of cognition is reached in a way that is also influenced by external factors: 'With other fields of art, music shares the preference for indexical and iconic representations of reality' (ibid, 156).

This form of cognition also differs from other arts in a) its objective sphere of represented reality,[127] b) the specific manner of its perception,[128] c) its specific rate of reality evaluation and d) the particular method of its artistic sign-representation.[129]

According to these arguments there is a hierarchy in the kinds of realities that can be accessed and presented through music. The primary one is lyrical representations which illustrate the 'immediate state of the artistic subject' (ibid, 157). The secondary one is dramatic illustration. The latter provides a 'present-

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certain signifiers that allow a person to make cognitive sense of the object presented (these involve the parameters of music's syntax and the intuitions thereby engendered). But music also grants a reality to the listener in a way that is similar to what a person undergoes when reading a fiction novel. In this instance the reader experiences the milieu and characters of the book as being real whilst engaged with the reading activity. This happens because the writer stimulates the brain in such a way that events and objects mentioned in the book become real in the mind (imagination) of the reader. Music generates a similar sense of reality in the listener's brain in an analogous way. One can 'live oneself' into the music!

[127] The phonological result of the created sound as opposed to the realities in space and colour as is presented by, for instance, visual art.

[128] This is rooted in the human aural capacity.

[129] In music the manner of representation is mostly indexical and iconic.

day dramatic action together with epical and objectified lyrical factors'. 'Epical description of past objective actions and events' (ibid, 157) is regarded as the weakest kind of representation that could be achieved in music. With this, Jiranek suggests that there are certain types of content that are more suited to musical communication.

In all of these representative functions there is a hierarchy in which either indexical, iconic, or symbolic signs take dominant and auxiliary roles in the process of cognition. As a result of this, the existence of a musical composition as either lyrical or dramatic representation will determine the kind of signs that will operate within it. These in turn take dominant roles in its creation (or encoding) and perception (cognition). It will also determine the kinds of signs that will assume the auxiliary roles. Jiranek's suggestion that it seems that music rests more on indexical and iconic sign function is corroborated by Raymond Monelle's investigations of musical topics.[130]

All of this suggests that the kind of content that is communicated will determine the type of sign function of any particular musical work. I take this as confirmation of the idea that the composer's intentions are what establish the content. This will, in turn, determine the kinds of signs that will achieve dominance in its coding for the sake of communicating a particular kind of content. It will also have bearing on the specific aspects of the sign that will function in the communication of the content. This means that the semantic level of musical composition will communicate via that one particular sign, even though the contexts of its signification may differ from the conventional ones. The composer shapes these as he desires.

Jiranek regards music as being similar in structure and form with the dynamic structure of human emotions. This is due to its active nature as moving and sounding forms. Thus, for artistic cognition to occur there has to be a connection

[130] See Monelle 2000 pp, 15-80.

with the object that is to be cognisised as well as an objective critical awareness of the object. This results in the operation of a constant process of objective evaluation and subjective experience in the mind of the observer of art. The connection experienced by an observer has an exceptional importance when it comes to music, 'since it generates the "emotionally infectious function of music" and feelings brought about and controlled by music' (ibid, 158). Thus, music emotionally affects the listener by engendering a response to the connections of the iconic or indexical signs it creates in the listener's mind. In this regard, Jiranek states that:

> Music is an art of representation that conditions the specific method of sign representation. The artistic artefact as a super-sign of the aesthetic object of a music work of art is coded by the composer in the score which is its meta-sign (ibid, 158).

As a result of this, the performer's (or analyst's) decoding of the score (where the meaning was interpreted as a meta-sign) takes place in relation to his own background knowledge and his own individual understanding of the representation.[131] In contrast, the listener is tasked to begin his interpretation of the semantic content of the work from what has been presented by the performer. He thus receives a message that has been encoded twice: firstly by the composer and subsequently by the performer. The listener thus decodes the meaning of a musical work as a super-sign, but this also takes place according to his own individual background and individual understanding of the representation. This operation of cognition is similar to what is described by the literary theory of intertextuality. As a result of this complete process one finds the reality where the

> existential field of a musical work of art is conditioned and determined by an objective interaction of the composer, interpreter, and listener. The objective form of such an interaction changed during the course of history, and the very fact of its existence is a *condito sine qua non* of music as an interpretation art (ibid, 158).

[131] This occurs in an intertextual way: each reader brings his own background to bear upon the meanings suggested in the written text.

Music's existence depends entirely on the operation of a sign system which occurs over time. Such processive signs make great demands on the human memory and it engenders one of the most specific characteristics of musical sign structure: a certain kind of 'double-oneness' or 'double-polarity' (ibid, 159).

This causes a situation where both the semantic and the communicative (syntactic) fields operate simultaneously. Thus the means by which the meaning of the musical content is accessed is closely ingrained with how it is presented. This implies that the form and content of a musical work are intimately intertwined, where the one resembles the other.

It should be accepted as axiomatic that the successful operation of any communication requires the fulfilment of two basic conditions: It must have informative value and it must present some kind of significance (meaning). In music, the meaning is directly conveyed through the 'sensory sound' (ibid, 159). For this reason, the requirement of informative value necessitates that music constantly derives new and special arrangements of the available sound material. Thus, even though the major scale consists of seven diatonic pitches, it is constantly expected that these pitches should be placed in different and new configurations for it to become meaningful as music.

The second condition of significance is engendered by the 'continuity of musical forms generally stabilized in their significance…' (ibid, 159). My understanding is that Jiranek refers here to musical forms that have become conventions in themselves, i.e. clear musical formulae that have been established in their semantic content.

This means that musical communication only takes place when a general type of content is individualised in the form of the 'dialectic[s] of generally accepted, socially verified intonation procedures and special procedures intoning new significances and new communications whereby in music the unity of the

semantic and of the communicative poles is expressed in a very specific way' (ibid, 159).[132] I take this to refer to the manner in which musical material constantly gains new significances and the need to always produce new melodic configurations out of existing scalar material. It appears that this is a desirable effect gained from the manner in which composers continually give old musical formulae new contexts and thus new significances.

This suggests that all musical significance is carried by a basic pattern of intonation as found, for instance in a speech-tone melody. However, it is not clear how Western music came to develop its structures of harmony, texture and form from these basic intonation patterns. It can be argued that the basic directional imperatives such as 'up' and 'down',[133] and the psychological effects engendered by these have parallels in the manner in which harmony can give rise to feelings such as progression, tension and the release thereof, as well as closure and catharsis.

The two poles of musical communication can thus be said to be 'mutually synergistic'. These exist simultaneously and they do not neutralise each other 'because without fulfilment of the communicative message of a musical act, its semantic content cannot be implemented'. The Russian born music theorist Boris V. Asafyev called this dual layered communicative implementation of content (semantic) and expression (form) in 'sound time' the '*intonation process*' (ibid, 160), which is, in itself a process of encoding.

> Intonation in speech represents a direct, sensory and emotional reflex relatively independent of the intellectually mediated significance of the word; in music, intonation represents a dialectical unity of the emotionally immediate moment and of the intellectually mediated one[s] which are in music inseparable. Intonation in music is therefore an "implemented sense of sounding tone

[132] The use of the word 'intoning' implies two simultaneous meanings which are both valid in the context of this chapter. The first refers to intonation as discussed in connection with speech-tone melody in Chapter Four. The second use of the word intoning occurs in the sense that I have used encoding. The intonation process as identified by Jiranek and Asafyev is analogous to the process of encoding that is investigated in this thesis.
[133] This is also suggested by Gesture Theory.

> relations" (Asafyev 1965a: 209) of this or that musical context. Music itself appears as an "art of the intonated sense" (Asafyev 1965a: 370), i.e. art implementing its significances (contents) in tones (ibid, 160).

It is thus evident that 'signs in music are existentially inseparable from the subject of their creator' (ibid, 161). In this way the intonational sphere grows out of the sounding processive signs-system of music itself as it is operated within the time dimension of music.

Thus, according to Jiranek, the most basic musical intonation procedure requires that two moments are called into existence. These are namely, the sound expression (or specific pitch shape) and the latter's 'relation to another expression' as in a musical topic, or melodic figure such as a *pianto*. It is expected that this sound expression 'enters into a number of relations with the preceding one'.[134] This in turn forms a whole complex of relations and partial relations which eventually transform into 'a sound unit capable of carrying significance'. However, this can only occur if 'at least one of the elements of the relations is made sensorially obvious and generalized in its meaning (as a product of another relation)'. Thus, the creator of music cannot generate anything entirely new (or truly original) 'but only the individualization and concretization of the paradigm, i.e. a new and extended [re]composition, of the current *universum* (ibid, 161)'.

The codification of an 'intonational vocabulary' that could explain all the significances communicated by music is an unattainable theoretical utopia but it is certain that such a vocabulary exists in the music of most cultures. Because musical semiosis has a dynamic character (in its basis on the dialectic of simultaneous subjective and objective processes of cognition), each use of a particular musical form (or intonational shape) evolves in its character as it passes from individual to individual, from composer to interpreter, and from interpreter to listener. This occurs because each individual brings his or her own

[134] Jiranek takes this information from the writings of Boris Asafyev (1965a: 201).

personal auditive contribution to the music. Thus, each person's viewpoints, moods, habits and preferences shape the basic intonational forms into ever more individualized usages. This has the ultimate result in that musical significance becomes more and more generalised and less specific. I do not suggest that musical meaning becomes more vague; 'it is just that music is accessible through the multi-process of individualization and specification more than any other work of art' (ibid, 162). This ability of the musical sign system to freely evolve bestows upon music the ability to achieve only a relative end or level of meaning. In other words, the vagueness of musical signification is a by-product of the musical system's ability to freely shape itself to fit the needs of the composer. Thus, music is by its very nature, fluid in its ability to establish various levels of signification; music can easily adapt to any context within which it is used.

Jiranek regards every intonational form as 'an open micro system of signs and sub-signs (forms which by themselves have only potential significance) and a micro system of elementary signs (with implementable significance)'. Music can therefore not simply be regarded as a 'language of purely spontaneous emotional reactions and intuitions' (ibid, 166).

Certain musical/intonational intervals which liberated themselves from ordinary daily pre-artistic phonological practice kept their practical significance 'in an abstract intellectualised form' (ibid, 167). These became stabilised and generalised musical signs, and the raw material from which most musical forms arise. Such generalised musical signs, which have for instance the potential of a sudden ascending melodic gesture to signify surprise/optimism/ heroism, sustain the intonational system's ability to constantly create potentially new musical significances. These intonational figures

> inevitably entered into co-relation with the new, till now semantically-labile elements …which, however, by the logic of the relation of the stabilized and

> already known elements, gradually obtained new and special significance (ibid, 167-8).[135]

By means of the 'dialectics of the specific and of the general', musical intervals that were at first stable in their semantic associations led to a general system of musical intervals which could establish connections to specific and general levels of meaning. The subsequent semantic correlations that were established in this manner led in turn to the establishment of other basic musical structures such as keys. Thus, the potential of melody to carry meaning 'penetrates into other, intonationally constrained and "measured" parameters of sound' (ibid, 167-8). All in all, one finds the crystallization of chords, harmony, polyphony and timbre to be outgrowths of musical intonation processes.[136]

There is thus sufficient argument to contend that musical intonation is the main vehicle through which musical signification is conveyed. It is at this basic perceptual level (which I believe occurs unconsciously) that the listener connects with the semantic plane of a musical composition. It can be argued that the listener's most basic response is a reaction to this rise and fall of the basic pitch pattern; it occurs in the same way as an individual's divination of the meaning of a verbal sentence from its speech-tone melody.

As a result of the whole intonation process and the additional musical structures it generates, one finds the situation where 'musical form becomes more and more a product of ever higher intellectualization: its structure is more and more complex while the content is mediated by an ever broader context…' (ibid, 167-8).

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[135] Jiranek's use of the word 'special' is taken to mean 'specific'.

[136] It is easy to understand how Scruton's assertion that the basic guiding principles of harmony, namely aspects of progression (forward movement and progressive gradations of chordal tensions related to the tonal gravity point or tonic) and resonance (which involves the placement of certain tones within certain registral areas), can be shaped by intonation processes (2009, 185). Register is an important by-product of intonation. It is from this point that the blurring and amplification of certain overtones have determining influence on the shaping of timbre.

Thus, the acceptance of certain models of music behaviour within a specific culture creates an intonational consciousness of a certain community and of a certain historical era that provides the composers, interpreters, and listeners with sub-intonational material. These serve as a store of raw musical signs which are then used, interpreted and which eventually evolve into specific musical usages such as styles and musical topics.

It is probably for this reason that one can discover multiple levels of sign articulation in any musical art work. On one level, one finds the signs whose meaning has been determined before the birth of any particular work – these exist in music as the sub-intonation store of the intonational consciousness of a particular historical period or epoch. On another level, one finds the signs that are generated by a particular work of art. On yet another level, one can find the 'highest genetic layer of musical semiosis: *the layer of content–integrated significances of musical works of art*' (ibid, 168).

Hence, musical content consists of specific intonations that are cognitively hierarchised within a definite and individual context and 'used in an adequately individualized sense' (ibid, 168).

> The sub-intonational and intonational levels behave mutually in every musical work of art as the general to the specific... Even in music the borderline between the sub-intonational and the intonational store dynamically changes and shifts all the time. The long-term process of the intellectualization of individual tonal relations led to semantically more sophisticated sound complexes. Together with the growing complexity of the signifier (the sounding material), this intellectualization led to a gradual deletion of significances from the more simple relations which used to be semantically independent and which, however, turned into partial components (atoms) of complex meanings-relations…This situation is reflected today in a certain 'expression wear' of the intervals. It led musicology and music theory to an ahistorical separation of the outside formal nature of the phenomenon from its proper historical substance. Consequently, the notion of intonation was reduced to a mere *quantitative rate* of the standard (pure or impure tone presentation)… (ibid, 168-9).

The process of artistic creation thus carries out a selection of musical signs necessary to the topical needs of artistic communication. The field in which the

intonational store exists is smaller than the 'total paradigmatic field of a given culture' and so does not encompass any form of a purely symbolic form of reality expression. This 'vocabulary of intonations' is 'a socially generalized selection and accumulation of individually well-proven, concrete intonation procedures… even the most elementary, specific intonation is never a mere element or sum or mixture of several elements, but rather those elements' dynamic structure (or microstructure)' (ibid, 169).

This adequately explains how musical encoding takes place at a fundamental level. In the context of 'intonation process' the concept of intonation can be defined as a

> …set of the smallest specific (i.e. concretely sounding) musical sound-contexts which, for a certain historically determined subject (or something in the role of this subject – a social class, layer, surroundings) have the relatively same significance and expression. Intonations refer to the same social and life situation and to the same range of extramusical reality characterized by a specific *probability* structure of the relations within and among all the components of the sound expression: melody, rhythm, harmony, timbre, dynamics, tempo, and performance directions (ibid, 169).

We can arrive at the conclusion that intonation constitutes an open system which behaves as a generative stereotype of musical significance, one that retains its identity to a certain degree when placed within different musical contexts. According to Jiranek this can be explained by the tendency that individual elements of the intonational microstructure or sub-signs (and elementary signs) also display intonational sense.

In this manner, musical parameters such as melody, rhythm and metre, as well as the dynamic rise and fall of the overall expressive trajectory of a macro-structural musical form, can all be viewed as stemming from a basic intonational shape in which mutual semantic interchanges take place. This happens especially when certain elements in the hierarchy of signs are pushed back or temporarily deleted, and then transformed in favour of a different signification. When one element is substituted for another, no change within the overall

system of available intonations for a particular culture will take place. Thus, a certain level of tolerance for the transformation of a signifying unit is permissible within this system (ibid, 170).

Additionally, a certain 'uniqueness of every concrete intonation as a product of this [process] and no other structure of relations with different typological polarization' is also found. Thus music can operate as an exceptionally sensitive marker of a perceived reality in its ability to allow a certain level of dialectic variability. Consequently, the reality of the inner spiritual life of man is never 'black-and white' (ibid, 170). It is this inner spiritual life that can use music as the ideal vehicle of its communication and expression.

> The open system of intonation leaves space for typological shifts along the respective axes of its dynamic stereotype. The "mechanism" of these shifts is based on different hierarchical combinations of synergic elements and, by their content and 'concentricity' in relation to a certain value, on elements that are in this respect neutral or opposite in content and that are 'eccentric'. The topical proportion of these relations, on different polar axes having different values, gives every concrete intonation its inalienable uniqueness (ibid, 170).

Consequently, the dynamic character of an intonational structure allows 'morphologically different musical forms (different themes and motifs) to be used in a relatively identical intonational sense and, vice versa' (ibid, 170). This also allows the morphologically identical musical units to be re-intonated or updated in their significance.

In order to understand the significance of the notion that intonation operates as the chief musical signifier, it is necessary to explain the importance of intonation in the context of the individual musical work as well as in the general semantic field of music-cultural-sphere in general. This can be achieved when the individual intonations that a composition presents are determined by the relations between the micro and macro intonations systems. Here, the signifying complex is created by the intonations themselves, which are partially determined by the signifying context of the whole musical composition itself (ibid, 181). Thus, one

finds the situation whereby form and content becomes one edifice; the musical content is the form and vice versa.

One can consequently suggest that there exists 'centralization and distribution or partial meanings as well as of a double articulation tending to the complete shaping of the content levels' of a particular musical work. This in turn allows for the creation of a context of significations to take place. Thus, 'the overall role of individual intonations in a composition is determined by their place in the higher level of structural hierarchisation integrated within a complete artistic content' (ibid, 181). It becomes evident that:

> …intonation is a specific method of indexical and iconic representation of reality through artificially adjusted and adapted sounds passing in time. Intonation creates its own *specificum* of semantic possibilities and limits of music (ibid, 181).

In music one finds a continuous shifting and combination between the three basic types of signs. 'This suggests that the dividing line between the musically specific (intonational) and musically nonspecific (symbolic) representation of reality changes in the course of history' and it can have as its outcome the assimilation of one kind of sign into different kinds of sign functions. As a result, the 'transformation of live intonations endowed with unique and highly active significances may be assimilated into rigid signs (symbols)' (ibid, 181) as well as into different musical *Affekts*, topics, and styles.

It is reasonable to conclude that the whole open system of intonation (as defined by Jiranek and Asafyev) is the basic structure that governs the most fundamental and influential aspects of musical signification. Acceptance of this idea can subsequently assist one in reaching a deeper understanding of how the semantic field of music operates within a particular cultural sphere, musical style, composer's idiolect and specific musical composition.

Intonation is the means by which musical meaning can be accessed in its most fundamental form; it is the musical equivalent of speech-tone melody. Jiranek

and Asafyev's arguments that intonation has had a formative influence on the development of key-systems, harmony, melody, and most of the musical parameters that involve the parameter of pitch are speculative, but convincing. The following section presents arguments from a theorist that supports the view of the aforementioned theorists. Basing his approach on the ones established by Jiranek and Asafyev, Viatcheslav Medushevsky presents arguments and ideas about musical cognition and signification that are worth mentioning.

5.3. Role of the Right and Left Brain-Hemispheres.

Medushevsky condemns semiotic approaches to the issue of musical signification as showing a 'rationalist distortion and overestimation of such principles as analyticism, segmentation, [and] linearity…'. He states that these methods (which include historical musicology, aesthetics, philosophy, psychology and even neurosemantics) are motivated entirely by left brain-hemisphere spheres of activity which are mathematical,[137] analytical, scientific, language orientated and rational. These are considered to be inherently flawed as they 'fail […] to illuminate what might be considered the most profound aspects of human communication'. As such, the aforementioned analytical approaches force the individual to operate in a mode of thinking that is 'alien to all art' and it does not allow the individual to achieve 'a deeper penetration into its essence' (ibid, 189).

It should be accepted that these highly developed analytical methods cannot accurately assess the exact relationship between sound (as found in the parameters of music and style) and human thought, and they cannot examine how thought is signified in (non-linguistic) sound. Thus, an analytic process of thought that takes all of the possible characteristics of sound material into account is redundant as the left brain-hemisphere can only access musical phenomena in terms of pitch and rhythm.

[137] The neurosemantic approach is also known as Neuro-Linguistic Programming.

However, when employing a syncretic thought-process, it is possible for the brain to assimilate structures of pitch,[138] rhythm as well as timbre, texture, register, dynamics and in addition 'agogic subtleties' (ibid, 190). This kind of thought process is a mode of cognition that is mainly located in the right brain-hemisphere. For this reason, Meduchevsky proposes that we accept a binary view of musical form as being simultaneously analytic and syncretic (ibid, 189). This echoes the discussion of Jiranek, which refers to the subjective and objective modes of though operating simultaneously when musical perception takes place.

> On this basis, a still more imposing edifice could arise – that of *intonational* form, consisting of what we call intonation, plastic and descriptive signs, various melodic profiles, plot and [the] dramaturgy of a musical piece (ibid, 190).

It can be argued that these can be united in terms of a gravitational field where the force of gravity is the initial point of perception. Thus, a discourse of opposing forces can easily assume properties of a sonata form, and it can also work rhythmically; the latter is seen as a law of physical movement (as explained by the investigations of Gesture earlier in this chapter) and one full of cultural-historical associations (as explained by investigations of Topical Theory). It is even possible that the modal and harmonic attributes of a musical texture may ultimately form an intonational pattern as well (this is easy to see when regarding chord structuring as a means to generate varying levels of horizontal and vertical tension).

> The dynamic unity of a musical form is thus based upon the decisive role of its intonational organisation, which serves both as its immanent and manifest basis. We can express this dialectical relationship as follows: the intonational form and its structural analytic core can be designated as intonational organization (ibid, 190-191).

[138] Syncretism is a holistically conceived unifying process. It attempts to reconcile disparate schools of thought and thought processes by asserting that there exists an underlying unity between the elements.

This author believes the issues discussed above are in alignment with what we understand about the function of the brain whilst engaged in the process of making and listening to music. Here, even though both of the brain hemispheres are engaged, it is the right hemisphere that dominates the process. Medushevsky proposes that the way in which this latter part of the brain conceives the world is 'manifested by means of the intonational-metaphoric languages of a culture' (ibid, 191).

Each brain-hemisphere deals with the pitch and temporal modes of musical sound in different ways. The left brain-hemisphere processes information in an analytical and deconstructive manner, whereas the right brain-hemisphere achieves cognition by 'uniting and connecting' phenomena. According to Meduchevsky this generates a binary situation through which musical form operates. This is evident in the elementary sources of all music and also in the two basic types of intonating, namely the *logogenic*[139] and *pathogenic*[140] principles (ibid, 192).

According to Meduchevsky these forms of intonational organization are directed by the following principles. The thoughts he presents in this regard are worthy of being quoted at considerable length:

> (a) The sign systems of the intonational (and protointonational) organisation are motivated in the direction of 'from the content towards the sound': such factors as pitch, rhythm, dynamics, timbre, and other articulations are completely determined by *what* is being *expressed* at a given moment. Also in the musico-linguistic process of intonation certain types of metaphoric logic and plot exist only in relation to the content or idea, but not to the sound itself (for instance in the intonations of lament, anger, exhaustion, lyrical melody, musical drama, meditative plot etc.)….
>
> (b) Content and sound are united by means of the body:[141] a musical idea or "content" is considered susceptible to the vibrato of vocal chords, to ideo-

[139] This term refers to a word-created, word-dependent, and word-supporting system of musical expression.
[140] From the Greek word relating to pathos and suffering, thus indirectly referring to emotional states.
[141] This is related to the study of Gesture Theory that was mentioned in earlier in this chapter.

> motoric and …also to real movements – to the heartbeat and living emotions. From this connection emerge all the effects caused by transmission, contagion, identification, projection and catharsis of the whole person listening to music.
>
> (c) The right hemisphere, not specialized in the reception of isolated and abstract schemes, brilliantly utilizes the process of abstraction and identification: related intonations are considered sensorially identical and conceived as one object. This enables generalized intonations to emerge from concrete ones, i.e. intonations characteristic of a given work, genre, or style: ballad-like, poetical, elegiac, heroic, Beethovenian, Brahmsian, romantic etc. (ibid, 192-193).

Musical cognition is accepted to operate in a processive manner, where the continuous change between focused and non-focused observation allows the brain to solve the contradiction between the concreteness of the musical existence and its intended idea and meaning. Thus, the brain constantly assesses the sound that it is hearing and compares it to what it perceives to be the intended meaning as related to the store of intonations for a particular culture.

> Thus, a protointonation which a composer creates first…already constitutes a whole as such, but still remains quite vague. However, from the very beginning, this intonation consists of a unity of musical idea and sound, and allows a great variety of concrete realizations…On the other hand, in every concrete and real intonation, one sees or hears many…generalised intonations. A congenial intonation is a condensation of the infinite store of intonations in a culture, and provides us with a feeling of inexplicable beauty and artistic 'secrecy' …Thus with all of the semantic and concrete sound aspects of an intonation emerge all the processes with which the human being interacts with the world (ibid, 194).

It is accepted by brain theorists that left-brain activity is analytical, verbal, and rational, whereas right-brain activity is intuitive, irrational, imaginative and subjective. It is also believed that each brain hemisphere operates in a mode of thought that is alien to its counterpart. Thus, we can only conclude that the individual response to hearing music is a complex one in which sign functions of the various intonational stores of a culture have been subconsciously assimilated.

Meduchevsky proposes in conclusion that, because of the fact that 'the direction of the intonational process goes from idea to sound', that 'this process should be investigated in the same direction' (ibid, 194). Thus, one should look at the process from the inside outwards; from the point of view that intentionality shapes the musical content and structure. The thought process of this research report, which theoretically explores the notion of encoding and how semantic intentions can lead to the sound and structure of a musical composition itself, reflects the above view. It has led to a number of interesting revelations about the relationship between music and language. It necessitated an investigation of the concepts of rhetoric and *Affekt*, musical topics and styles and resulted in defining a whole system of intonation, where the latter can arguably account for musical signification at its most fundamental level.

Therefore Jiranek and Asafyev's theory of intonation suggests that musical parameters such as harmony, rhythm and macrostructure are all intonationally informed as the expressive trajectory of a whole musical composition.

However, expressive trajectories are constructed out of the large-scale manipulation of musical effects. In this way the progression of the macro-structure allows for the accumulation of a rich web of mnemonic associations (rhetorical, topical, affective, and gestural) and expectations (intuitions) which continuously build up in intensity (tension) over large spans of time. It is the perception and experience of these effects that move us deeply and they ultimately constitute the evocation of the non-verbal kind of experiences that music elicits. It is thus easy to conclude that

> the basic elements of our musical sense, of musical expression, hence of music itself, have their sources in the most primitive regions of our being In this sense music is the oldest, just as in a quite other sense it is the youngest, of the arts; the primary sensations on which it is based antedate in human experience those of visual perception and, to a still greater extent, those of language (Sessions 1979, 9).

Thus the composer cognitively directs his creative intentions to achieve a closer proximity to the intended meanings and desired emotional responses in the music's reception.

The parameters of intonation, timbre, register and harmony do not take one of the most important characteristics of the musical edifice into account: it is an art form that develops over the progression and flow of time. Thus, syntactical devices such as voice-leading and harmonic progression generate an artistically poor result if the element of rhythm is not present to direct the motion. This seems to be confirmed by examinations of plainchant. Even though the flowing quality of the latter engenders a certain kind of temporal state it remains by all appearances semantically neutral in its operation as a communication and form of expression.[142] The presence of the rhythmic system allows musical structures to experience moments of intensity and repose and it helps to punctuate the formal gestalt with points of closure and catharsis.

The following chapter explores the manner in which music's utilisation of time can be viewed as the primary syntactical code of music. In this final chapter I return to some of the arguments presented in the first chapter of this thesis. This is an attempt to define the two most fundamental codes responsible for musical structure: the syntactical and semantic levels of the musical edifice.

[142] Within certain contexts, this is not of its own accord a negative quality.

CHAPTER SIX

The Temporal Syntax of Experience.

6.1. Musical Syntax as Time.

In the book *The Unanswered Question* (1976) Leonard Bernstein shares his exuberance at discovering the Generative Theory of Linguistics as formulated by Noam Chomsky. This linguistic field of study, which focuses on locating the tenets of transformational grammar, led Bernstein to illustrate how musical syntax operates in the opening eight bars of Mozart's Symphony in G minor K.550.[143] Bernstein's main objective was to use the opening musical phrase of Mozart's symphony to identify the deep structure of the music. By doing this it was hoped that certain characteristics of the nature of musical syntax would be revealed: '… we can now race forward toward devising a putative deep structure for these opening bars' (1976, 91).

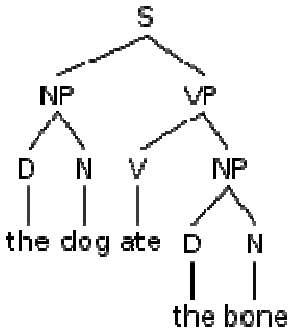
I am alluding to Bernstein's argument to support my contention that musical time (rhythmic structure) operates in the manner in which syntax functions in language, and that pitch functions at the levels of content/meaning. Bernstein focused on clarifying Mozart's intentions by only scrutinising the issue of symmetry. This in turn could serve to reveal the syntactical level of the music and subsequently unearth the deep structure (and possible meaning). Essentially, he aspired to reveal some of the rules that govern the creation of musical phrases.

The illustration shown in Example 25 below is a representation of an analysis of the syntactical construction of the rudimentary sentence 'the dog ate the bone'.[144]These so-called *derivation trees* are for linguists the chief objects by which Chomsky's hierarchies (and subsequent deep structures) can be identified.

[143] This analysis is found in the second chapter of the book *The Unanswered Question* (1976*)* and is entitled Musical Syntax.
[144] The sentence is constructed according to the following parameters: S is a sentence, D is a determiner, N is a noun, V is a verb, NP a noun phrase, and VP a verb phrase.

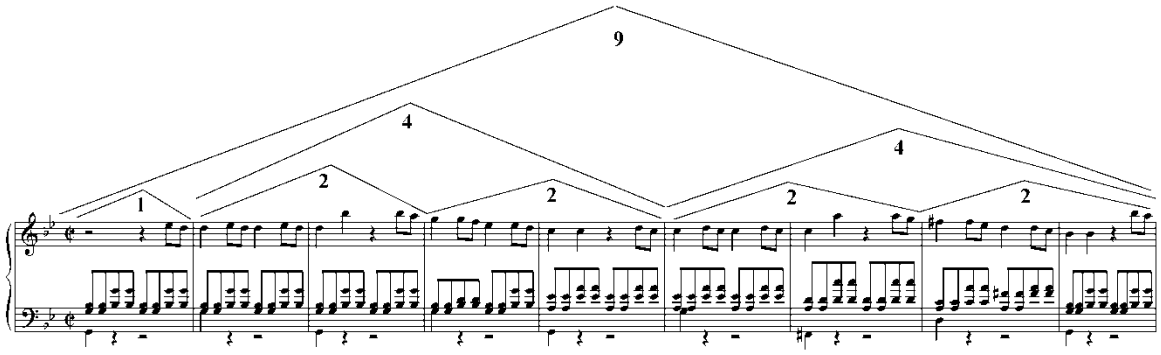
As a result, sentences are revealed as objects which are not simply a number of words strung together, but rather function as a 'tree with subordinate and super ordinate branches connected at nodes' (http://en.wikipedia.org/wiki/ Generative_grammar, 13 December 2010).

Example 25:



By co-ordinating a 'Chomsky-graph' (as shown in Example 25) with musical analysis Bernstein attempts to find clarification of Mozart's expressive (communicative) intentions. This is to be achieved by looking specifically at how the composer has used musical parameters to compose the various levels of rhythmic accentuation at the 'bar-to-bar' and phrase levels. After a lengthy verbal description in which musical units are re-defined in terms of linguistic nomenclature, Bernstein arrives at the diagram shown in Example 26 on the next page (1976, 102). The resemblance between Chomsky's syntax tree (Example 25) and Bernstein's graph is striking.

Example 26:



The numbers 9, 4, 2, and 1 are indicators of the individual lengths of the small-scale structural units which make up larger phrase units. The combination of these ultimately constitutes the complete utterance which is the length of nine bars.

Bernstein discusses how the analysis reveals the rhythmic accents of this musical passage that occur at the bar-to-bar level. These are subsequently viewed as phenomena which contribute to the listener's perception of the musical structure (ibid, 113). In reality, they are the elements that generate the listener's perception of the passing of the musical time. This ultimately influences how the small-scale details of note-to-note successions are heard (and perceptually grouped together) as generating a field of temporal experience. As a result, Bernstein's analysis reveals that listeners' perceptions of the tonal centre, movement, closure and other elements of musical form rely heavily on the various levels of rhythmic accentuation in the phrase. This shows that pitch alone cannot define structure; the ability of rhythm to define structure is innately more effective than the parameter of pitch in shaping one's perception of the musical construction. Hence, pitch and rhythm ultimately operate in a symbiotic relationship.

This compellingly implies that musical syntax (structure) is largely an outgrowth of certain properties of musical rhythm. The implications of this assumption require an investigation of the edifice of musical temporality, i.e. the way in which music uses time.

6.2. The Nature of Musical Temporality.

> One could hardly exaggerate the importance of temporality – cultural time - in musical decisions, because music is predominantly an art of time. Although we live in the "monochromic" west, where time is imagined to be uniform and linear, we nevertheless possess a musical culture that reflects several forms of temporality (Monelle 2000, 81).

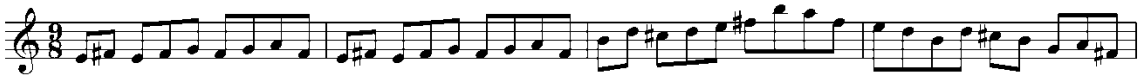
Mary Louise Serafine formulated clear distinctions between the temporal and non-temporal aspects of musical time in her book *Music as Cognition* (1988). She takes temporal processes to be the mutual relations that exist between different musical events within a composition. These can be related to each other as the tones in an intonational pattern (speech-tone melody), or as the formal relationships that exist between successive phrases and sections within a movement. In making these distinctions, it is accepted that a single event can occur before or after another. Musical events (such as the entrance of an important thematic idea or instrument, a climax or end of a section) may also happen at the same time (Seraphine 1988, 231). These factors reveal the appearance of musical events either as units of succession or simultaneity. They are deemed important considerations when reflecting on the issue of musical time.

The processes of succession and simultaneity can be taken to operate at both the micro and macro levels of musical structure. In general, it involves mostly the larger formal units that have lucid and distinctive identities within themselves. The identities of these units depend mostly on the rhythmic character of these

structural units.[145] The cognition of musical temporality thus occurs as a result of the large-scale formal and rhythmic procedures that make up the musical edifice. One must bear in mind, however, that the identities of these large-scale structural units seldom depend upon the smaller details of pitch successions (intonation patterns); nevertheless, it is possible that they can be shaped by them. The intonational shape of a particular motive is in some respects a contributing factor in the generation of the identity of a rhythmic unit. This is shown in Example 27 which cites the opening bars of my own composition entitled *Rituals in Salutation of the Rain Goddess* (2005, 1).

In the example below, the quaver groupings into 'two - three – four' have no definitive identity by themselves. With the addition of the melodic curve, the identities of each of the rhythmic units are more clearly defined, especially where the rhythmic set is re-ordered in the fourth bar.

Example 27:



Perceptions of musical temporality are thus not directly affected by the operation of intonational grammar but manipulations of pitch (and register) certainly play a role in the identification of structural units at moments of catharsis or closure.

The aspects of temporality that affect the larger syntactical elements of the musical structure involve manipulations of the large-scale formal constructs such as phrases, sections and movements. Here, the factors of cyclicity as established by metrical repetition and periodic phrase successions play an important role in the generation of the feeling of a continuous musical 'time-space'.

[145] Refer to the section in Chapter Three which deals with Musical Topics; there is an obvious parallel.

As a result, the temporal frame of music generates a cognitive field of perception through which musical events function as experiences of a sensorial kind. Thus, music's use of time is an essential parameter of its experience and syntactical flow as well as a crucial condition of its cognition:

> Whether the events in question are construed to be longer melodies succeeding one another (phrasing) or are shorter motives or simultaneous timbres (motivic chaining or timbre synthesis), the understanding of temporal relations seems to be an obvious necessity in listening to music (ibid, 231-2).

Whereas temporal events are only accessible during the actual performance or listening of a musical work, there are also elements which are accessible outside of this paradigm. Serafine identifies these as the *non-temporal* aspects of a musical structure:

> Non temporal processes, on the other hand, concern the internal, abstract, and formal properties of musical passages and are not tied to temporal relations per se. The notion of hierarchic levels [as in formal analysis and harmonic and textural syntax], for example, describes not the temporal relationship between two passages but rather how a single passage is structured from within. Similarly, closure concerns how a passage is finished, transformation describes how a passage bears a similarity relation – not temporal relation – to some other passage, and abstraction concerns some commonality of rhythm or motive that is unrelated to the temporal order of the passages themselves (ibid, 231-2).

As a result of these considerations, it becomes important to accept that investigations surrounding the identification of musical semantics should centre on the phonological result as opposed to the abstract structural analysis of a score that is often directed at generating commentary about composition techniques, use of topics, rhetorical devices, formal processes, etc. This occurs because any analysis of these structural phenomena can occur outside of the temporal frame of the musical experience: one does not, for instance, need to listen to or perform the music to make a harmonic, formal or motivic analysis because the experience happens outside of time. It is also possible that an abstract musical analysis will reveal a different kind of meaning to that which is

accessed by the phenomenological experience of the music itself accessed when engaged with listening activity.

Thus, it is imperative to accept that the meaning communicated by a musical composition cannot be accessed by the senses outside of its own temporal frame. In other words, one cannot access the meaning of music beyond its temporal realm when it is either being played or being listened to. Structural and topical analyses are thus only reductions of musical content in abstract, intellectual and scientific terms.

I thus propose the notion that, in order to directly access musical meaning, it is imperative to consider how the music is experienced in time, as it is most likely this very occurrence that is meaningful to the average listener. This assumption is supported by the idea that the temporal flow of a musical composition is essential to its experience and thus to its communication and meaning.

As a rule, the phonological edifice is not realised or accessed without engaging in a listening or performance-related activity. This requires that the temporal state of the musical composition be invoked. As a result, the meaning and message is accessed in the sound itself as it plays out the musical structure. Thus, even though an analysis of a score can reveal things about meaning (especially about topical references and cultural associations), it is the flow of the music in time that is the main code through which the musical message is transmitted. Non-temporal processes are formal only in the sense that they can be accessed from the score without the music being played.

The exception, however, is the ‘schooled’ musician with an excellent musical ear who can access the same experience by invoking the temporal sphere in his inner ear from the visual score. Serafine’s distinction between temporal and non-temporal is applicable in this regard.

The ultimate accessing of musical meaning occurs because it is quintessentially found in the manner by which the composer and performer shape the listeners' experience of the movement of sound, an experience that takes place within a sphere of temporality. Even though aspects of intonation, topic, rhetoric and gesture have bearing upon this, the experience of the accumulative effects which music generates in a phenomenological way is ultimately more tangible than an abstract analysis of a composition's construction.

As a result of the debate around temporality, it is essential to perceive the notion of *time* as defined by the music itself and hence, I will define and examine the factors that engender musical temporality. It subsequently becomes necessary to make the distinction between actual time and temporality. In line with this way of thinking, Monelle makes a clear distinction between 'cultural time' and 'natural' or 'clock time'. Natural time is

> continuous and irreversible, the present always poised between past and future. It is an object of cognition; it is known rather than lived… it is the time in which events can be placed, the *tabula rasa* in which the temporal forms of life are written… It is argued nowadays that natural time is itself a cultural convention (Monelle 2000, 81).

This model of time is linear and is characterised by the objective perception of a number of sequentially positioned events that allow us to imagine and be cognisant of time as a series of related or unrelated moments. It is based in the assumption that time is something that exists independently of human endeavour and is gauged by the clock, measured in terms of seconds, minutes, hours, years and so forth. 'Clock time' is different from 'lived in time'; it cannot be experienced as deeply and directly as the kind of time presented by a musical composition: '…clock time is…an abstraction.' (ibid, 82).[146]

The other model of time, also termed 'cultural time', 'experiential time', 'lived in time', 'musical time', or 'musical temporality' can be said to occur when a musical

[146] The description 'clock time' is Susan Langer's concept.

composition is played or listened to. This kind of time is not measured by means of abstract mathematical formulae, but rather in terms of experiential sensations and perceptions of successive and related events and the transitions between them. It engenders a perception of time which is experienced as a continuous present. Here the

> present is as long as it needs to be for the activity that we are pursuing… The past takes the form of memory; between the present and remembered events there is a clear division. The bits of the present … which are not actually contained in the actual instant are retained…; the past is *invoked*…The unifying imagination which enables us to grasp time is furnished by culture (ibid, 82).

The musical edifice thus generates two distinct uses of time which evidently function in different ways: that which can be measurable by the clock and the 'time as meant by the composition' (Clifton 1983, 51).[147] The latter is the time of experience and is the temporal sphere in which the music operates and conveys its message. This occurs when music

> …invites us to step out of time into its own timeless state… it gives us an experience of movement, passage, orientation… Musical continuity always 'melts' into an intuitive unity or it is not perceived as music... For us the insight that music naturally expresses a present temporal ensemble, made up of parts that are simultaneous yet distinct, is of overwhelming importance. Music, then, can subsist in time without taking time; the temporal signified may be a seamless present, even though the musical expression is full of events (Monelle 2000, 86-8).[148]

A sign system may operate and proceed in time but it is not necessary that the levels of content and expression be found within the same temporality, or that both occur at the same time level. Thus even though music uses time and occupies it, the time represented by the musical composition and the time measured by the clock are not necessarily one and the same; it certainly does not feel the same. As a result, the musical content and expression can be

[147] I take this to mean the kind of time expressed by the composition itself; the time in which the music 'means'.
[148] It must be understood that there is a fundamental difference between perceived time (which is created by musical temporality) and measured time (which is measured by a stopwatch).

'temporally nonconformal…' (ibid, 83). This is true in the sense that the meaning of the total experience only emerges once enough of the music has been heard for the listener to respond to it, and then to follow it to its conclusion. The composer's message may even be understood only when the entire composition has been heard.

Each historical epoch may have its own semantically intoned use of 'experiential time' and may even employ different techniques to attain and sustain it. During the eighteenth century when this particular usage of time was encoded, music was expected to enhance the moment

> by filling it with sensations; but it also joined the present to the past in the form of memory, by placing these sensations in a frame in which time passes (ibid 2000, 96).

This resulted in the establishment of a cultural convention where this kind of temporal edifice purposefully generates a frame or field of experience. The living through of this kind of 'aesthetic time' does not serve the function of accurate time measurement and is not meant to. Music has to establish this kind of temporal reality in order for it to be able to function as a medium for communication. I argue that it is within this temporal sphere that the semantic plane of music is accessed.

A phenomenological understanding of the concept *passing* (musical) *experience* is elucidated by understanding the semantic differences between the German words *Erlebnis* and *Erfahrung* (Clifton 1983, 7). Both these concepts are covered in the English language by the word *experience.* However, the word *erlebnis* refers specifically to the experiences of an 'individual living through of an event'. The notion of 'living through' is significant in this regard because the word *erfahrung* simply means experience in the sense that someone has work experience, or life experience; the latter concept refers more to experience in general (ibid, 7).

The concept of musical experience which is discussed here refers specifically to the meaning associated with the word *erlebnis.* Thus, according to Thomas Clifton, it is possible to say that: '…the *erlebnis* of a twelve-tone composition is different from the *erfahrung* of deducing its set' (ibid, 7). It is in the sense of *erlebnis* that a piece of music is engaged with and experienced in a phenomenological way. I argue that the time continuum thus established is the syntactical plane of the musical edifice; this *erlebnis* of music's time frame is found to be meaningful.

Therefore we can conclude that the temporal plane presents musical meaning to the listener as a field of passing experience where manipulations of temporal events are experienced as being meaningful whereas the continuous passing of musical time is syntactical.

It is therefore evident that different composers are able to shape the individual experiences of time in various ways as they occur in music even though a composition may take the same amount of 'clock time' to be realised.

> Music is by definition a present participle. What we hear, what we sing, or what we play is not the formed form, or the *forma formata*, but the form forming itself, or the *forma formans* (Noske 1976, 45 quoted in Monelle 2000, 96-7).

Spoken language generates a sphere of temporality within which it operates but music needs to occupy a larger temporal space. Musical structure (when it is realised as a performance or listening activity) plays with the individual's experience of the passing of time in a manner that is completely different from the way that it occurs in language; 'saying' it in music takes longer than 'saying' it in words.[149]

[149] While most comparisons between music and language centre on aspects of structure and content, syntax and semantics, they seem to have disregarded a very important fact: the spoken form of language bears a closer resemblance to music because both operate within a sphere of temporality.

Considerations of these ideas require that the manner in which music creates its temporal frame be examined.

6.3. Musical Temporality as Syntax.

> The ordinary components of musical time are tempo, meter, rhythm, implication and realisation, phrasing and closure (Monelle 2000, 84).

The structure of music's temporal frame is inherently complex; it is essentially generated from a time-continuum. This is established at the outset by the cyclicity or periodicity that is provided by rhythmic metre and the tempo within the phrase in which the musical event happens.[150] Here, the constant repetition of the cycle of beats (metre) generates in the listener's mind the feeling of time's flow and also an expectation of its continuity. However,

> metrical time is cyclic in a trivial sense, since it involves a cyclic patterning of accents. Its cyclicity permits it to serve as the foundation of non-progressive semantic time (ibid, 90-1).

The flow of time is extended at a larger level into bar and phrase patterns. On top of this basis all the other structures that support musical temporality are subsequently formed. The device of repetition may thus be employed not only for its unifying characteristics in terms of musical form, but more significantly because it has an effect on the listener's perception of the flow of musical time.

As a result, the typical structures such as rhythmic patterning, formal pacing and phrasing each support the flow of time while they simultaneously make use of it

[150] Monelle's statement to the fact that 'meter and rhythm may contribute to an expression of temporality, but there is no direct connection' (2000, 84) is in direct contrast with what I have defined. It must be made clear however, that without the guiding forces of meter and rhythm, the musical edifice has little to assist it in establishing the temporal flow. Monelle does not offer any alternative suggestions about what generates the time continuum of music. Even though aspects of repetition play an important role in this regard, it should be taken that, to a considerable degree, the rhythmic system remains the structure that provides the temporal element for music.

to achieve certain semantically and gesturally intoned musical effects. While metre and tempo can be seen as the fundamental elements that generate the syntax of temporality, any rhythmic or phrasal imposition or manipulation of this basic flow beyond mere continuity should be taken to be semantically charged in some way. One finds numerous instances in a composition where a sudden repetition of a phrase has the effect of an interruption; the latter is an indication of some kind of demarcation in the temporal sphere.

The rhythmic patterns which make use of metre for their proportioning then become a semantically-intentioned structure in itself which is grafted upon the time flow. However, it is apparent to me that there is a clear difference in which the parameter of rhythm conveys a semantic intention. It seems that most semantically intended manipulations of rhythm are directed more at generating a specific kind of musical character than pure continuity. This can be viewed as the music's rhythmic 'texture', or rhythmic *'gestalt'.*

Larger formal units also contribute to the perception of music's temporal flow. The (listener's) perception of the shaping of phrase, section, and movement contribute to the way in which musical time is generated and experienced. 'In music, structural factors come through as movement. They are time factors, affecting our experience of time' (ibid, 97).

Certain aspects of temporality have been identified by phenomenological theorists as having an influence on the experience of musical flow. Formal processes such as beginning and ending, contrast and continuation, continuity and interruption, acceleration and deceleration, interruption, insertions, extensions, expansions, contractions, overlaps, temporal intercut, time strata, and closure are also factors which can be clearly heard as defining musical temporality (Clifton 1983, 82). Of those mentioned, closure is an important syntactical signifier as it demarcates the listener's perception of the time flow at a larger structural level. However, even the use of closure is complex.

Closure usually signifies the end of a structural unit: '… most linguistic and musical syntagms in traditional styles end with closure, the grammatical completion of a phrase' (Monelle 2000, 83).[151] Whilst this occasionally indicates an ending on the semantic plane, it often does not. It is conceivable that there exist varying levels and several kinds of closure that operate in music (and language).

As a result, a hierarchisation process occurs cognitively in which the mind is left to decide for itself what kind of closure is presented to it. This is to some degree intellectually and experientially created because the individual is easily able to perceive the difference between semantic and syntactical closure; moreover, it is even possible that an ambiguity between this may be perceived and even created by the composer to signify something else entirely. A pertinent example is found in the phrase endings in the first movement of Mozart's Piano Concerto in A major, K.488. Here the composer specifically employs ambiguous levels of closure as a means of giving momentum to the structure.

Closure is a universal phenomenon in Western music that usually implies the end of a musical phrase or idea. It is found in plainchant, recitatives, dances, marches, symphonies etc. According to Monelle, closure took on a new role around 1800. In Beethoven's music the harmonic resolution or movement towards the tonic is not only the working out of formal dissonances but also a 'sphere of affirmation, of firm conviction' (ibid, 83-4). In this music, time factors have been intoned with some kind of psychological significance. This is an indication that a temporal device such as closure could become meaningful and still retain its syntactical function and value. A syntactical device can therefore gain a meaning beyond is syntactical function.

[151] Syntagms are syntactical units.

With regards to closure, one must bear in mind that within the sphere of music, there is an inference that movement has taken place. The message intention by the composer is often evident in his "encoding" of a structural device like 'closure'. It gives the listener a sense of something that is past and that is ending. It engenders the perception of movement having occurred rather than movement taking place in a continuous sense.

> The feeling that music is progressing or moving forward in time is doubtless one of the most fundamental characteristics of musical experience; yet it manifests such a remarkable range of variation in its prominence and its quality that at times it seems to be absent altogether… (Lippman quoted in Monelle 2000, 91).

It seems for Edward Lippman that the very notion of forward progression, 'when imagined to take place in the ordinary course of phrasal regularity, is merely syntactic' (ibid, 91) in its function. In essence, this means that movement is a syntactical feature of musical time.

From this Lippman suggests that there exists three different kinds of progressive time in music – one is mere neutral continuity as can be found in the opening Prelude of *Das Rheingold*. The second kind of progressive musical time is found in the 'phenomenon of motivation or impulsion'. It may be associated with 'any repeated pattern that is short and rapid enough to become a perceptual unit' (ibid, 91). (An example of this is seen in the short motives used to generate momentum in the first movement of Beethoven's Fifth Symphony) Thus, progressive musical time may show some kind of regularity which can include the resolving force of harmonic progression, especially if the latter occurs by means of root relationships of a fifth. The third kind of progressive time is merely syntactical, as in the repetitive works of minimalist composers like Philip Glass.

Sensations of propulsion may be suggested by the simplest of musical means. An increase in loudness or textural density or the movement of rapid scales and arpeggios towards a climactic point of arrival such as a chord or end of phrase, can give a feeling of forward motion. Feelings of propulsion are especially

tangible when the element of closure is involved and when the listener perceives that the end of a phrase is about to be reached.

The role which temporal factors and the feelings of movement play in musical communication cannot be underestimated. Roger Sessions emphatically states in this regard that

> …the essential medium of music, the basis of its expressive powers and the element which gives it its unique quality among the arts, is *time*, made living for us through its expressive essence, *movement*... In speaking of musical movement… we do not refer to rhythm alone, but rather to music as a complete and essentially indivisible whole. In this connection it is relevant to compare our ordinary experience of sound, the medium of musical movement, with the experience of space … Time becomes real to us primarily through movement… and it is easy to trace our primary musical responses to the most primitive movements of our being – to those movements which are indeed at the very basis of animate existence (1979, 5-7).

Western musical thought is largely teleological in nature. The listener or performer therefore expects that musical events will lead to some form of catharsis or resolution of musical tension. This has traditionally been achieved by using two different kinds of musical temporality. One kind is constructed out of sections where one would find important thematic material. It engenders a kind of temporal stability that allowed for the communication of important melodic or thematic content. It seems to be rhythmically regular in character and tonally stable, as is the archetypal first-subject of a sonata form movement.

This kind of temporality has been named 'lyric time'. Lyric time is most often articulated in regular metre, which portrays the movement of walking and/or dancing. It is often expressed in passages of pure structural periodicity. These include the periodic stresses that depend on weight and momentum. Monelle insists that all cultures possess various types of metrical time associated with the dance (2000, 90).[152]

[152] Chapter Three of this thesis demonstrates that dance characteristics provided much rhythmic material for the development of classical instrumental forms in the form of topics. One can

This is the kind of time that is found in the sections of movements constructed of important thematic material. These sections are usually tonally stable and rhythmically regular in structure: lyric time thus does not move, develop, or accomplish anything; 'it just *is*, like a single gesture of the hand' (ibid, 90). Lyric time is the temporality of presentation within a stable framework. The German term *Satz* can be employed to identify this kind of temporality.[153] It is a temporality of relative rhythmic and tonal stability.

In contrast, one also finds moments in which there is a sense of movement taking place. These are passages in which 'goal directed time' or 'progressive time' occur. In reality, the intuition that there exists some kind of movement or progression in music is very common; the latter is actually a desirable and highly valued quality. There may be a logic of continuation that operates in musical time but this is by no means an indication that there is clear forward propulsion – continuity does not mean that the music is moving forward; there are other elements at work that contribute to the sense of movement.

During the evolution of sonata form and other large-scale instrumental forms in the Classical period, progressive time engendered the creation of musical forms 'which move from motive to motive, creating a remembered past and the possibilities of reprise, narrative structure, climax and dénouement' (ibid, 99). It generated a situation where 'the passage through time to new moments of sensation' could occur. It was especially characterised by 'the lengthening of modulatory phrases, the highlighting of points of tonal arrival, the constructing of chains of sequences' – this is to be found, for example, in a "bridge" passage made up of symmetrical shapes. 'All these devices were installing progressive

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conclude that these are partially syntactic in function because they generate certain features of the temporal sphere. Topics operate simultaneously as semantic and syntactic devices.

[153] This term links with the words *Hauptsatz*, *Seitensatz*, *Schlusssatz*. Monelle takes his terminology from A. B Marx's *Die Lehre von der musikalishen Komposition* (first edition published 1839; second edition published 1841) (2000, 104 and 108). *Satz* is considered to be the 'theme' in this context.

time in the midst of lyric time' (ibid, 100). As such they were able to encode various levels of meaning into the musical edifice because of the perceived temporal relations between musical passages and events.

The idea of movement or progression through time can be connected with the German term *Gang* (ibid, 104).[154] This kind of time facilitates a temporal change to occur within the same movement or composition. Musically it consists of passages constructed out of pure passagework. 'The essential ingredient of temporal change seems to be athematic passagework' (ibid, 103). It typically makes use of scale or arpeggio figures, the construction is often asymmetrical and it leads to phrases which consist of 'running passages'. One usually also finds the occurrence of modulation, which is frequently achieved by means of sequential devices. This kind of musical syntax presents the passage of time and it engenders a perception of time moving forward towards some kind of aesthetic goal.

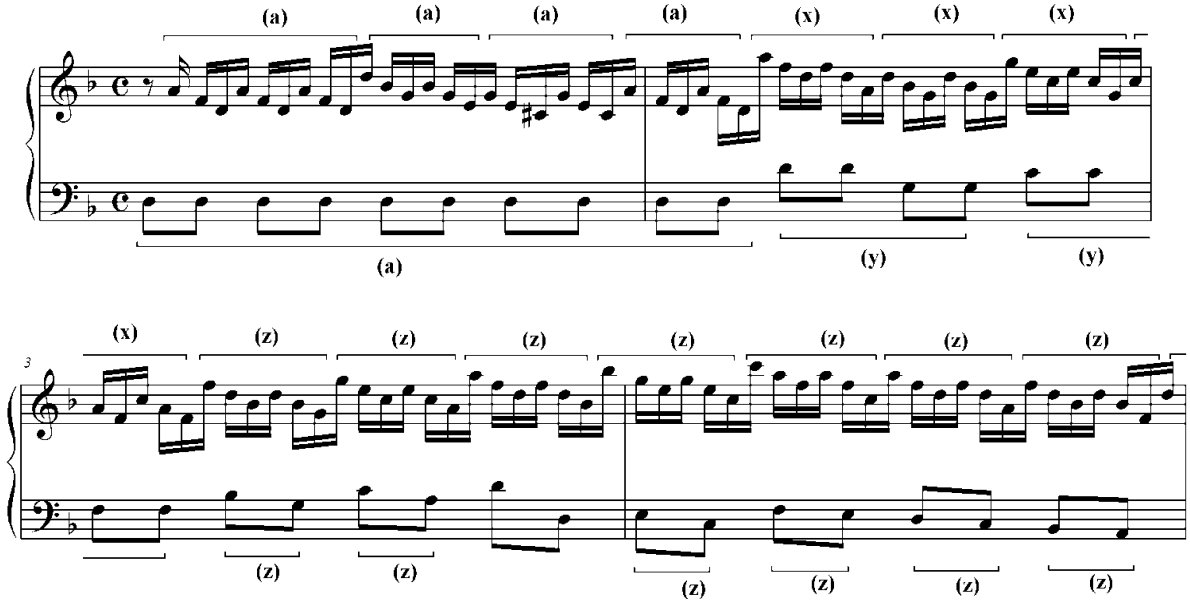
These syntactical devices tend to confuse the ear in its perceptions of the semantic weakness of the particular passage and this creates an illusion of time's passing. When thematic passages return, the listener pays attention to these 'and lets go of the rushing or running passages' (ibid, 103). This establishes the perception that movement between structural sections has taken place thus causing the ear to immediately hear the newly arrived passage as being more important than the passage that has preceded it. It occurs because this technique changes the phrasal accentuation of certain pitches and previously heard structural units. Sequential passages generate a feeling of a different phrase rhythm where the arrival of a cadence seems to confuse the ear in its expectation of the temporal flow.

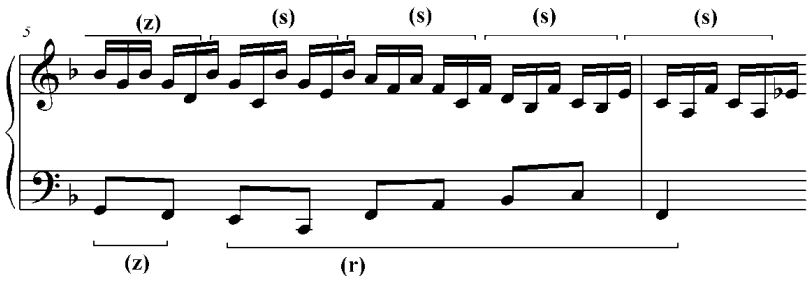
[154] Linked to this term are musical structural elements named as *Durchgang* (passage), *Vorgang* (antecedent passage) and *Übergang* (transition). The semantic root of the word is *gehen* with which concepts such as movement, progress and development etc. are associated.

Example 28 cites the opening six bars of Praeludium VI from the *Well Tempered Clavier Book 1* by J. S. Bach. The construction of the phrase illustrates how one's perception of the established temporal frame is altered by the appearance of sequential passages. The passage as a whole shows a large-scale progression towards a cadence in the sixth bar. Notice how the temporal frame is altered at the preparation of the cadence. The construction of this passage shows a remarkable saturation in the use of both melodic and harmonic sequences.

The units employed to establish the temporal frame, labelled as (a) defines a simple chord progression which establishes the tonal centre of the composition. These melodic units, labelled as (s), reappear later at the preparation of the cadence. The melodic sequences which initiate the change in the temporal frame are labelled as (x); the harmonic sequences which support this movement are labelled as (y). At a certain moment the temporal frame is altered again, this time by a further shortening of the sequential units. These are labelled as (z), and the progression towards the cadence is labelled as (r).

Example 28:





One's perception of the sudden changes in structural movement at the places labelled as (x) and (y) is a direct result of the temporal context established at (a), and the sudden increase in pacing at the places marked as (z). At the point where the preparation of the cadence occurs, one notices another shift in the temporal frame, resulting in the 'confusion of the ear' mentioned earlier by Monelle. The listener's overall experience of this passage is shaped by the palpable sense that there is a beginning, movement, climax (catharsis) and arrival in this passage.[155]

This pervading sense of time in motion is aided by the directional trajectories of the 'voice leading' of the upper part. The ascending pitch curve at the place where the time frame is made to gain momentum (the places marked as (z)) seems to support a perception of increasing intensity. The listener's experiences of impending arrival and repose generated by this passage are labelled respectively as (r) and (s). One's perception of repose is supported by the descent of the pitch level. (This shows that aspects of pitch and time work together in seemingly unfathomable ways.)

[155] 'In Bach's music[,] time can be manipulated to move variably and to diversify in the moment. There are lyric times, retardation and acceleration, times of variable lapse, temporal simultaneities, and stabilised time. Directioned, goal-oriented time is embryonic' (Monelle 2000, 99). I believe that it is above all other aspects the incipient use of this latter kind of musical time that sets Bach's works apart from that of his contemporaries. This accounts in some way for the fascination with which the music was treated and rightly justifies the reverence in which the works of this composer is commonly held. Goal-directed musical time is a fundamental feature of the master works of the Western Art Music canon from the Classical Period onwards.

The example above shows how the temporal changes can be seen to occur. In this particular case it has been used to establish a perception of movement or progression. Monelle asserts that when a composer wishes to progress, or to cancel the sense of non-progressive temporality, he resorts to the use of material which is semantically empty and conventional, merely the use of scales and/or repeated notes.[156] This is frequently encountered in Beethoven's music, where scale passages often display a purely syntactical function in the linking of thematic ideas and sections. Monelle reinforces this summation by stating that: 'At the same time, the chime of four-measure phrases in pairs is interrupted and the ear is "confused"' (ibid, 104). As a result, the structural units of music are communicated as movement. 'They are time factors, affecting our experience of time' (ibid, 97).

It must be kept in mind that it is possible for music to also signify different kinds of time. Thus, there exists a 'temporality of the signified as well as a temporality of the signifier' (ibid, 83), which means that music can signify the passing of time as well as the standing still of time and also the fact that it occurs in time. Monelle asserts that every temporal aspect of music is available to signify some kind of temporal meaning. It generates a subliminal sense of time passing as musical events. Perceptions of past and present musical events as well as expectations of future musical events are generated in this flow of time – this gives the listener a complete experience. Here, it is impossible to distinguish between the syntactical temporal plane and the semantic temporal plane. Thus, formal processes such as beginning, prolongation, development and closure may in some cases not necessarily carry any kind of semantic weight, and may be purely syntactical in their function.

Due to the fact that these procedures usually behave in a manner that assists in achieving the macro-structure of the composition, it seems logical to accept that

[156] This implies that the meaning is in the thematic material not the material that signifies 'ascent' or 'peroration', in Schenkerian terms.

the elements which generate music's temporal sphere are more of a syntactical than semantic nature. 'Formal progression when imagined to take place in the ordinary course of phrasal regularity is merely syntactic' (ibid, 91).

It can therefore be conclusively stated that the experience of musical time is an important aspect of music's manner of operation. This suggests that the visceral experience of the musical time flow is what is perceived as being meaningful. Thus, the ultimate meta-syntactical structure of music can be identified as being that of temporality; i.e. music's syntactic level is also its temporal sphere.

This in turn leads to the conclusion that the semantic plane of music consists of the ways in which the temporal experience has been made interesting to the listener. This is corroborated by Ratner's notion, which states that musical topics were used to sustain large-scale forms and make the listening experience interesting. (This idea is similar to Robert Hatten's concept of the 'strategic mixing of material types' (1994, 120). It seems that musical topics do not necessarily provide a basic form of signification, but rather, it provides a repository of musical material that is defined in its semantic content to a certain degree with various associations relating to specific cultures. These are subsequently used to trigger various cultural, emotional, and sociological associations.

Therefore, features of the temporal syntax of music may not necessarily carry semantic weight. The features of starting, progression, prolongation and closure, which are found to be articulated in successive phrases, cannot be taken to indicate any details on the semantic level although they are manifested within the perceived temporality of syntax (Monelle 2000, 83). It is when aspects of the temporal essence are wilfully altered beyond mere continuity, periodicity and repetition that the listener's experience is altered and a meaningful effect is achieved. Thus, one finds evidence of the semantic plane of music in the manner

in which the temporal aspect of music has been altered to go beyond mere periodicity and continuity.

> …unlike language, music usually signifies indexically, and every temporal feature of its syntax is available to signify some temporal meaning. We are apt to find often in music… that syntactical features acquire semantic load, by indexicality. But musical syntax does not necessarily carry semantic weight; the failure to distinguish syntactic and semantic temporality has led to much confusion in the temporal theory of music (ibid, 83).

While my discussion in this chapter has centred mostly on music of the Classical era it must be understood that each historical epoch established its own unique usage of the temporal sphere of music, which adequately suited the needs of the individual aesthetic objectives of each historical era. Thus, musical temporality can act as an important *social signifier*. It will tend to articulate the dominant temporality of the society that births it – it is for this reason that we find such different aspects in the syntactical operations of beginning and closure in tribal music of Africa (compared with Western Classical music). The former is based more on synchrony than 'successivity' (ibid, 83).

Considerations of temporality thus make one of the most profound differences between Western Art Music and musical utterances of other cultures evident. The Western perspective is narrative: it relies on a successive presentation of elements. It gives musical structure the appearance of a linear (and logical) presentation of facts for an argument (as in rhetoric) which is expected to be presented in a teleological way. In contrast the African perspective of musical time is centred in the moment; a constant experience of the 'now' which is not necessarily goal directed.

Another point of distinction arises from these considerations: African music does not display clear devices of closure. Instead the music is allowed to gradually come to an end allowing its energy to naturally run down; neither chord nor cadence figure or tempo or voice inflection is actually used to signal that a

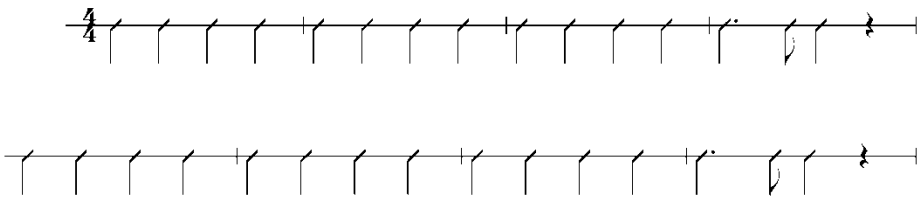
composition has come to an end.[157] The clear sense of organic completion that African music engenders is actually the manipulation of musical or cultural time and reflects the experience that the perceptual present is ever continuous.

6.4. Intoning the Temporal Sphere.

In the revelation of musical temporality as being the meta-syntactical code of the musical edifice it emerges that the intonational sphere could possibly act as the semantic plane. It thus becomes necessary to examine the extent to which both of these planes potentially function in the manner suggested and also how they bear relationships to each other.

Example 29 reveals a temporal frame. By examining it, one notices that there is a slight implication of a symmetrical periodic phrase structure (4 + 4 bars) and as such, it displays a clear level of pure syntactical (temporal) continuity. The material displays a character of such neutrality however, that one can hardly expect it to convey any form of meaningful or semantic content. The only feature that shows a wilful manipulation beyond mere continuity is the dotted note values in the fourth and eighth bars. The overall musical effect is very neutral, unimaginative and by all appearances 'meaning-less'.

Example 29:

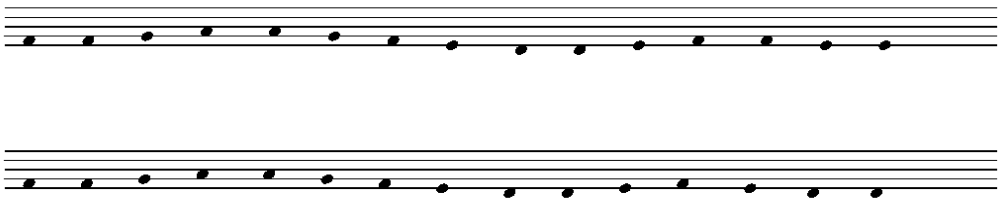


The pitch structure of Example 30 shows a clear expressive trajectory in its gestural rise and fall of pitches. There is limited use of pitch content but a clear sense of movement towards a climactic pitch apex suggests some intuition of a

[157] The marking and measuring of time seems to be an inherently Western concern.

goal directed intention. The movement away from it occurs on a downwards path that could indicate some level of closure. There are clearly different pitches at each 'ending' point. This can be interpreted as an implication of a periodic phrase.

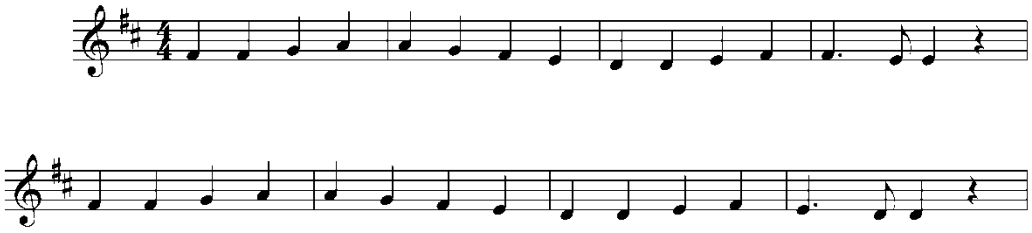
Example 30:



The musical result of both examples cited are structurally (syntactically) sound, but it seems that both are equally neutral and thus to some degree semantically weak. At least, there is no indication of any form of intended meaning or any intuition of an intention to communicate. Evidence of a semantic manipulation can only be seen at the end of each four-bar unit in the temporal plane. The musical content in Example 29 represents a temporal frame and the musical content in Example 30 represents an intonational form.

With the addition of a gravitational reference point (based in D major), both the pitch and temporal planes are combined as demonstrated in Example 31.

Example 31:



The musical result that is achieved is staggeringly familiar! Moreover, the combination of both planes has given the overall result an unmistakable identity. The pitch gives shape to the rhythm and vice versa – whilst it is an obvious conclusion that music uses both pitch and rhythm the examination of how these two planes relate to each other in a musical expression clearly shows the level of intimacy at which the syntactical and semantic planes are intertwined.

What has in effect occurred is that the temporal frame presented in Example 29 has been given an intonation which progresses over a rising and falling gestural axis. As a result, the listener experiences the sense that the temporal frame seems to be better defined and that it has gained a level of content from the rise and fall of the intonational pitch-shape. In a similar way the pitch curve has gained a level of individual identity because the temporal frame has now defined it in terms of a beginning, prolongation and closure; it is no longer a random set of pitches moving up and down some gestural axis. From this it is clear that a level of communication has been achieved that would not have been possible without connecting both the temporal and intonational spheres. The resultant melody shown in example 31 is in fact the main theme for the last movement of Beethoven's Ninth Symphony. With the addition of a gravitational reference point in the pitch spectrum, it is possible to find a harmony for this melody. At the same time, the registral placing of this melody suggests and influences its timbral plane.

This process by which the relationship and contribution of temporality and intonation to the final edifice have been examined is a semiotic one. It demonstrates at a micro structural level exactly how codes intertwine to generate a communication and by extension illustrates in a very basic way how musical semiosis can occur. This ultimately reveals the nature of musical "meaning". The elements are greater than the sum of the parts, but the one shapes the perception of the other.

By examining how these elements work together to achieve the composite result it is possible to interpret the musical signification to a certain extent. Beethoven's first announcement of the theme in the middle cello register signifies a possible vocal connection (string instruments, and especially the cello and violin have strong connotations with the human voice). The instrumentation (timbre) and dynamic level gives the melodic contour a colour through which a sense of brightness or dullness is portrayed. The instrumentation gives the melody a 'hummed' quality by its unison doubling of celli and double basses at a medium dynamic register in the cello's medium registral space. This in turn is significant of the composer's mental state of introspection; later in the movement the higher level of pitch and changes in the orchestration and narrow tessitura of the choir give the melody an almost giddy, drunken/ecstatic quality. This suggests that as the structure unfolds, a reserved optimism evolves into a resolute affirmation which confirms the work's status as an affirmation of optimism in the face of adversity and a common humanitarian connection between people.

The simplicity of the analysis presented above shows clearly how the temporal and intonational spheres work simultaneously to achieve a musically evocative result. That is perhaps the one clear difference between music and the spoken language: In music, the temporal frame is much more structured, defined and quantified. It allows the intonational form to take shape as a melody, and will by extension allow an intonational form to take shape as the expressive trajectory or large-scale formal outline of an extended musical composition.

With the addition of a gravitational reference point (in this case a tonal centre) one finds an implied temporal sphere, an intonational sphere and an implied vertical harmonic basis working together. The harmonies which are employed to support the musical structure give the utterance a greater level of depth and emotional definition.

This analysis suggests that any basic musical communication exists upon the interaction between a temporal frame and an intonational frame.[158] This leads us to conclude without doubt that the general syntactical code of the musical edifice is the sphere of temporality. By the same logic it shows that intonation, in the form of a rising and falling gestural pitch axis, operates as the general semantic code.

In other words, the temporal structure of rhythmic continuity generates the basic syntactical structure upon which music rests. This is informed by the use of the rhythmic characteristics of musical topics, which are important signifiers by themselves. The syntactical framework thus established is subsequently filled in with pitch content. While the level of pitch is by itself relatively neutral in its signification, it is clear that the up/down gestural axis of a pitch structure adds an element to the temporal frame that cannot otherwise be achieved.

In this sense the pitch intones the temporal framework with a level of signification. The pitch level informs the temporal sphere and shapes our perception of the passing of musical time in such a way that it holds a meaningful experience for the listener when he engages with it. Thus, the manner in which our perception of the musical flow is shaped generates our perception of the musical form itself; in the same manner our perception of the pitch content is shaped by how it is disseminated in units of musical time. Time shapes our perception of the pitch content, and allows us to cognisise it as melody, theme, transition, closure, development etc., whilst the pitch shapes the flow of time and enables us to become aware of its fluctuations and continuities at the same time.

It is evident that our perception of musical form arises from our interaction with the question of how the time shapes the pitch. In contrast, the perception of musical content arises from our interaction with the question of how pitch shapes

[158] Harmony, texture, and timbre act as additional stimuli through which the experience of the communication can be enriched for the listener.

the musical time. However, by the same token it was revealed that neither of the structures alone achieved any form of musical communication.

Both of the so-called syntactical and semantic planes are required in order for semiosis to occur which in turn allows one's perception an appreciation of the musical communication. This can be taken as a confirmation that the syntactical and semantic levels of a musical form are intimately intertwined and that the one can operate and function as the other.

Thus the composer shapes the experience of the listener by manipulating pitch and time (rhythmic) to such an extent that the *erlebnis* of these parameters generates a number of associations and expectations in the mind of the listener which accumulate to generate musical effects which move us deeply – it suggests how the composer goes to work in order to encode meaning. This obviously depends on where the level of cognitive interest is located. The pitch curve of Example 26, whilst relatively simple, is clearly more interesting than the rhythmic frame which merely presents a mostly continuous flow of crotchets punctuated at certain points by a dotted rhythm.

The truth, however, is that neither intonation nor temporality can account for being exclusively the semantic and syntactical planes of the musical edifice at any given point. In reality, it revolves around the possibility that each of these paradigms can be used as either a syntactical or semantic device, at any given moment, as dictated by the subjectivity and needs of the composer and the musical system. Given the temporary focus of one of the parameters, the scholar needs only to decide which aspect is more dominant at a given moment – that would be the semantic plane whereas the underlying plane is the syntactical.

It is interesting that human perception allows for a hierarchisation in its faculty of perception – it thus does not allow humans to easily perceive simultaneously without allowing one element to enjoy dominance. This is clear in the opening of

the ‘Sacrificial Dance’ from *The Rite of Spring* by Stravinsky. Here the parameter of rhythm distinctly dominates over the musical style in so much as the listener accepts rhythm as being the main bearer of the musical content and message. For this to occur, the pitch content of the same passage has been reduced to sparse melodic utterances and dissonant blocks of chords. This manipulation and staticity of the pitch level subsequently forces the listener to focus on the rhythmic structure. This is how the music has been encoded with the primitive quality that Stravinsky intended (physical movement/dance). By ‘irregularising’ the rhythms, Stravinsky emphasises the idea of primitivism/crudity.

It must be stressed that both the content plane and the syntactical plane are required to make the structure ‘work’ as a piece of music. The same is true for language: meaningless sentences make no communicative impact and cannot function as messages. A balance between both the temporal and intonational spheres needs to be maintained for music to be able to ‘speak’. It is in the *erlebnis* of this balance that the music’s meaning is accessed. By considering how the basic levels of continuity and rise and fall of pitch have a relationship to one another, and how the mind groups these elements together, the analyst will observe evidence of the kind of semantic ‘tampering’ that allows semiosis to occur. The analyst should thus not refer only to the technical usages of rhetorical or topical devices but should rather continually relate his/her analysis to the experience of the music as it occurs in time.

CONCLUSION

To Glimpse the Emperor's Clothes

> There is no musical [passage] for which the musician cannot find a meaning (Dunsby et al1988, 214-5).

The theories extrapolated in this thesis have not only enhanced my own understanding of the meaning of music; they have also enabled me to present my findings in the most intra-musical sense as opposed to an extra-musical sense.

Enquiries of a semiotic nature are predicated on the basis that we understand what things mean because of the way they relate to other things (ibid, 211-2). This does not mean that we should ignore the intrinsic qualities possessed by the object of a study because, as the theories impart, meanings do reside in these relationships and associations – meaning is ultimately the product of convention.

In my exploration of musical encoding and meaning, I have brought together several disparate theoretical perspectives in an attempt to unravel the challenging and elusive issue of music's meaning. So I strove to obtain a view of these 'Emperor's clothes' by means of enigmatic postulation and speculation, opulent arguments, ostensibly naive assumptions, and it seems, dubious analytical proofs; the relevance of which only 'clever ones' are supposed to understand or see. In fact it appears that, in the words of Jonathan Dunsby, 'the argument so far simply defines [yet] another set of questions rather than providing an answer to what analytical and synthetic meaning might be in music' (ibid, 215).

When conceiving music as an encoded object, it cannot be denied that 'the most probing and objective analysis is a matter of proceeding from message to code, not the reverse' (ibid, 222). However, it is never clear with regards to music exactly what the message is in the first place. However, certain alternative

vocabularies, languages and theories *can* and *do* enhance one's deeper understanding of this mystery. Thus one must ask: how do all of these theoretical fragments interrelate, engage and fit together and what is the final picture that this conceptual mosaic yields?

Musical meaning is more complex than we imagine it to be because music is by itself a complex art and multi-dimensional by nature; it is the least tangible of all the arts as it passes in time which cannot be physically taken hold of and kept back. Therefore, each of the different theories reveals a semantic element that is to be found in the different dimensions encountered; each theory offers its own truth, and the combination of the amassed insights gives us a glimpse of what it is that music communicates (which cannot be conveyed in words).

The semiotic distinction between language and speech is an important metaphor for the question of meaning in music. Music operates on a level far closer to the spoken form of language than the written form, and should therefore be analysed within that paradigm. Thus, Rhetorical Theory explains that the manner in which information is delivered is crucial; it is after all the basis of music's eloquence.

Both music and speech (rhetoric) are forms of expression that make use of time, and both use time as a strategic tool that assists in driving their respective points across. Thus, distinctions between the temporal and non-temporal characteristics of musical structure offer additional insights and answers to the question of *how* music speaks and *what* it says: Music *talks* by offering a certain kind of temporal experience from which our cognitive faculties generate a reality-perception based in tones.

As a result, Temporal Theory explains why it is so easy to view and describe the progression of musical form as being of a narrative nature, and thus why it is so easy to structure musical material in a teleological-programmatic way. The main reason for this lies in the conception of time in the Western paradigm; it is

sequential, rooted in the idea that events should (logically) follow one another and that our perception of time itself is essentially driven by the occurrence of events.

Temporal Theory elucidates how music makes use of time, why music uses cyclicity, meter, repetition, and also why, in the larger formal constructs, it is important to have movement and staticity, development and presentation, closure and catharsis. The function of syntax in music is consequently assumed by its presentation of this kind of experiential and aesthetic continuity.

Time is in itself an important social signifier; different conceptions of musical time can reflect (and account for) the differences in the music of diverse cultures. A prime example of this is the application of time in African music as opposed to Western music. The cyclical nature of African music situates it in another temporal framework in which nuanced repetition becomes the code for meaning.

It subsequently becomes possible to clarify the distinction between musical form and content. Simply put, time-shaping constitutes musical form. The content is that which is used to make our experience of this temporal structure interesting and enjoyable. However, this kind of time shaping is gestural when viewed in broad terms; it generates several accumulative effects which contribute to our sense of the way in which the music *moves*.

Topical Theory enters into the encoding game at this point. Each topic provides raw material that can be used as a gesture to generate a temporal shaping. It has the added bonus of a semantic level already infused; a topic contains all sorts of associations and signifiers of a social nature. Musical topics are thus highly evolved cultural constructs - evidence of a high degree of sophistication in our culture.

In this sense, Topical Theory explains how musical form can exist as a discourse of several temporally shaped characteristics (topics) and thus operate as a message. Topics provide both a syntagmatic and semantic scaffold to the musical edifice and brings across an important point: Topical Theory explains why the semantic and syntactical planes of the musical object coalesce into each other to such an extreme degree.

'Meaning' in speech rhetoric is conveyed by the vocal inflections of the person speaking. When considering that both music and speech have a common origin, it becomes easy to understand why speech-tone forms the basis of music's most obvious characteristic, namely melody. The intonational form of an utterance is, after all, crucial for the understanding of the verbal message and it is thus evident why melody dominates the musical traditions of various cultures. Through various culturally motivated processes a vocabulary of intonations (and fundamental melodic figures) is developed. These resultant products evidently serve as the basis of musical signification.

Speech-tone (intonation) can account for the emotional power that music exerts over us. It explains that we respond so readily to various ascending and descending melodic trajectories because we remember our own vocal efforts used to achieve similar effects in our infancy. As a result, Intonation Theory leads us to an understanding of the manner in which harmony and timbre function in strengthening the communicative power of the utterance, thereby also laying bare some of the most unfathomable intricacies of the tonal system, with its insistence on a gravitational centre. Intonation Theory thus helps to explain some of the basics of musical content: semantic intentions related to pitch shape the overall formation of the expressive trajectory of complete movements.

Gesture Theory unifies the specifics of meaning as examined by the considerations of temporality, intonation, rhetoric, affect and topic in a broad sense. As a result we are able to make semantic connotations relating to

physical gestures out of the expressive trajectories of complete movements. Thus manipulations of musical time are evidently interpreted as being of a gestural nature in which inflections of this continuous space become meaningful for us in a rhetorical, affective, and topical sense.

Gesture Theory explains that cultural encoding processes initially occur at a deep psychological level according to the demands of intersubjectivity (non-verbal communication between care-giver and infant). Meanings (which are deeply embedded in our respective cultures) are thus already encoded for us in our infancy and it appears to be something which we are powerless to control.

Common to Temporal, Intonation and Gesture Theory is the suggestion that our perception rests on the dialectic of immediate and mediated moments as experienced in our artistic perception. Cognition is based in contexts generated out of our realisations regarding the placement of phenomena against a perceptual gravitational reference. Thus, any rhythmic shaping that works with and against the force of metrical accentuation can be interpreted as being of a gestural nature relating to physical movements of the human body as it exerts its influence in physical space against real gravity. In a similar way, manipulations of pitch and harmony are regarded as energetic shapings, generating tension and release as related to the tonal centre.

Both Gesture Theory and Intonation Theory suggest that the brain tends to view the most dominant element in a communication as the vehicle that conveys the message. By being aware of this process of cognitive hierarchisation a composer can, at his will, make certain aspects of the musical structure prominent. This explains why certain passages in the ‘Sacrificial Dance’ of *The Rite of Spring* have static dissonant harmonies which are orchestrated in such a way that the rhythmical aspect is in the foreground. Stravinsky wanted to convey something primal, primitive and un-sophisticated and thus did not want the listener to

engage with the subtleties offered by an intonational pitch spectrum, rather one in which the pitch parameter is neutralised.

All in all, we arrive at the conclusion that there cannot be any meaningful musical communication without the cooperation of the temporal, gestural, rhetorical, topical and intonational spheres. These elements contribute to the process that generates the accumulative musical effects which move us so deeply.

This brings us to what the theory of encoding ultimately reveals: the whole intention of the composer is based on a desire to shape a certain kind of cognitive *erlebnis* using sonic paradigms.

One may finally ask what an examination of encoding has contributed to the study of meaning in music. I answer in the words of Jonathan Dunsby:

> In describing the semiotician's analytical and synthetic models, it has become clear that their direct application to music is problematic. However, some believe that the problems at the heart of traditional music analysis are even more unsatisfactory, and that the clarity and perspective provided by semiotics is worth the trouble it brings - trouble in defining just what kind of meaning is considered (ibid, 216).

The study of encoding encourages an alternative view of the understanding of music and its meaning. It cannot account for music's eloquent beauty or for any of the other highly valued aesthetic qualities that the art may possess, but it explains in a roundabout way how music shapes the perceptions of those who engage with it, however individual these may be.

Encoding offers a holistic approach to the problematic issue of music's semantic level and attempts to explain not only what the meaning is, but also how music communicates. Thus, as with any other form of musical analysis, the exploration of encoding proposes to enrich the musical activities and appreciation of the individual, whether in the realm of performance, composition or listening. In this

way one may be empowered to engage in these activities in a deeper way, with a clearer understanding of the codes that music employs to be able to perform its function as a medium of communication.

> It would be unthinking and injudicious to deny the many questionable aspects of semiotic analysis... Yet the field may be considered central to the student's development of an intellectual sensitivity that is relevant to any analytical work (ibid, 231).

Music is an expression of a certain kind of sentiment, or for want of a better term, *truth*, inaccessible to other forms of communication. Every piece of music 'says' something different and different types of music 'say' different things. But there is an underlying commonality in the type of content that is expressed via the medium of music.

Roger Sessions suggests that it is impossible for music to express and communicate feelings of love, frustration, anger and even longing. Instead it reproduces 'both qualitatively and dynamically, certain gestures of the spirit which are, to be sure, less specifically definable than any of these emotions, but which energize them and make them vital to us'. Thus music is able to penetrate deeply into the 'energies which animate our psychic life'. From these it generates patterns of temporal experience (*erlebnis*) which have its own existence, 'laws and human significance'. Music is therefore able to reproduce 'the most intimate essence, the tempo and the energy, of our spiritual being; our tranquillity and our restlessness, our animation and our discouragement, our vitality and our weakness – all… of the fine shades of dynamic variation of our inner life' (1979, 19). The power of music to communicate these in the viscerally direct way that it does goes beyond the ability of any other means of communication to do the same.

It needs to be emphasised that the composer sees the notes and intervals, chords, melodies and rhythms that create music as being 'far more real, far more expressive, than words'. Thus constructs such as a ''leading tone'' or a chord of

the subdominant are for [the composer] not only notes, but sensations, full of meaning and capable of infinite nuances of modification; and that when he speaks or thinks in terms of them he is using words which, however obscure and dry they may sound to the uninitiated, are for him fraught with dynamic sense' (ibid, 20-1).

It thus becomes clear why Stravinsky states that 'music expresses itself' (1962, 101). It is so because the structures of musical communication are inherently bound within music itself – verbal descriptions cannot give a satisfactory account.

Hence, the exploration of encoding shows us that one would most likely be unable to access any form of musical meaning as long as one's thinking process remains of the verbal kind. Instead, by engaging in a phenomenological manner directly with the sound itself it becomes clear that music endows a certain kind of temporal experience which is charged with emotionally and culturally-coded units.

This experience (*erlebnis*) is viscerally direct, in a way that is perhaps more instantaneous than anything found in other art forms since music makes use of the very time we use to imbibe it and so generates accumulative effects which move us deeply.

As debated theoretically throughout this thesis, it is indisputable that music contains meaning. Yet it is the very theories that I have presented that demonstrate that the specificity of that meaning is ultimately left up to the listener according to his/her individual cognitive and emotional response. All in all, we can obtain a glimpse of the 'Emperor's clothes' at last - but the power still resides with the music!

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Appendix A

Compact Disc of Ngqoko Music