

**Serial Meaning: A Semiotic/Narratological Analysis of
Arnold Schoenberg's Third String Quartet, First Movement**

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Declaration

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

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ABSTRACT

The aim of this study is to contribute to the investigation of the methods in which serial technique expresses meaning in the first movement of Arnold Schoenberg's Third Quartet, Op. 30.

It aims to add to the debate concerning Schoenberg's use of conventional forms—particularly sonata form—in his serial music, by investigating how he manipulates the row to play a narrative function, seemingly in opposition to its homogeneous nature.

The analytical section consists of a semiotic analysis based on the work of Jean-Jacques Nattiez. It incorporates a narratological analysis which infers from the semiotic data that Schoenberg's "idea", which is associated with notions of unity, is brought towards fulfilment through his narrativization of the row in the context of sonata form.

Keywords: Schoenberg, Third Quartet, semiotics, narratology, serialism, musical idea, unity, order number, Nattiez, sonata form, musical meaning

OPSOMMING

Die doel van hierdie studie is om by te dra tot die ondersoek na die metodes met behulp waarvan seriële tegniek “betekenis” tot uitdrukking bring in Arnold Schoenberg se derde strykkwartet, op. 30.

Dit poog om ‘n bydrae te lewer tot die debat oor Schoenberg se gebruik van konvensionele vorms—in besonder sonatevorm—in sy seriële musiek te ondersoek, deur middel van manipulasies van die reeks in diens van ‘n narratiewe funksie, oënskynlik in teenstelling met die homogene aard van die reeks.

Die analitiese gedeelte van die studie bestaan uit ‘n semiotiese analise gebaseer op die werk van Jean-Jacques Nattiez. Hierby word ingesluit ‘n narratologiese analise waarin vanuit die semiotiese data afgelei word dat Schoenberg se “idee”, wat geassosieer word met opvattinge van eenheid, tot ‘n slotsom gebring word deur middel van sy narrativering van die reeks in die konteks van sonatevorm.

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INTRODUCTION

Aims

The overall aim of this study is to contribute to the investigation of the methods in which meaning can be expressed by serial music, particularly in the first movement of Arnold Schoenberg's Third Quartet, op. 30 (1927). I intend to explore the potential meaning of serial technique in this work by applying linguistic and literary analogies to the musical structure. This will be achieved by analysing the work using the methodologies and metanarratives of semiotic (linguistic) and narratological (literary) analysis.

I have chosen these methods because I wish to show the means by which Schoenberg "narrativizes" the row. Tonal music expresses a clear sense of narrative, created by the hierarchy inherent in the tonal system, which allows for a strong sense of narrative progression to be created. This sense of narrative is not, however, an inherent feature of serial music, yet Schoenberg uses serial music in conjunction with sonata form, which, as the highest structural level on which the hierarchy of tonality is played out, is controlled by the narrativistic convention which, in its most fundamental form, creates a pattern of rest-tension-rest. I aim, then, to add to the debate concerning Schoenberg's use of conventional forms, particularly sonata form, in his serial music, by investigating how he manipulates the row to play a narrative function, seemingly in opposition to its homogeneous nature.

The semiotic analysis will be based on Jean-Jacques Nattiez's interpretation of Jean Molino's "semiological tripartition", which recognizes three levels of meaning in a work: the "neutral", "poietic" and "esthesis" levels (Nattiez 1990a: 11); thus the narratological analysis will function as a part of the semiotic analysis, playing an important role in the analysis of the esthetic level. The narratological analysis will involve the interpretation of data from a semiotic feature list. This will take place in accordance with A.J. Greimas's model of narrative, and will show how Schoenberg crafts the row to contain signifiers of beginnings, middle and endings, or, in Greimas's terminology, "inchoativity, durativity and terminativity" (Greimas 1982: 18-19).

The focus of the narratological analysis is thus to show how structural aspects of the music are made to function in a narrative fashion, and to play a part in a pre-existing narrative structure. This "illuminates the function of the sonata-form model in the absence of tonality" (Whittall 2005: personal communication). The narratological analysis is therefore concerned

with “introversive semiosis” (Jakobson 1971: 704), namely the interaction of signifiers with each other within the work, rather than with “extroversive semiosis” (1971: 704), namely the allocation of extramusical signifieds to musical signifiers.

Further to this aim is the incorporation of Schoenberg’s notion of the “idea” (*gedanke*) in music, a concept central to his musical thought. The “idea” will be shown to refer to notions of unity, and in this regard I will show that the manipulation of the row into a narrative framework, particularly that of sonata form, represents a move towards the fulfilment of Schoenberg’s concept of the “idea”, as seen in the light of his comments about “musical logic”. Schoenberg’s serial approach to unity in sonata form, however, will be shown to possess a dualistic nature, especially when compared with the type of unity presented by Schenkerian analysis in tonal music (Whittall 2005: personal communication).

Needs analysis

Meaning as expressed by serial techniques is a topic deserving further exploration, the twelve-tone system having often inspired structural, rather than semantic, forms of analysis. Theodor Adorno’s *Philosophy of Modern Music* is perhaps the most famous and thorough exposition on meaning in Schoenberg’s music in general, including his serial works, though its focus is sociological rather than purely musical. Other studies, such as Anne Sivuoja-Gunaratnam’s 1997 work *Narrating with Twelve Tones: Einojuhani Rautavaara’s First Serial Period (ca. 1957-1965)*, deal with their subjects from a semantic perspective, yet are concerned more with the non-serial aspects of the work rather than with the meaning of the work in terms of its twelve-tone nature. My study’s focus lies between the two poles of the straightforward serial note-count and the analysis of a work’s non-serial meaning, being concerned with the structural use of the row in terms of how it interacts with the meaning of the composition.

As far as the particular work under scrutiny here is concerned, previous analytical approaches have varied considerably. Hans Keller approaches the work as an important attempt to continue the symphonic treatment of material in a time of musical crisis (Keller 1974). Christian Möllers’s approach involves an in-depth technical analysis of the row and its interaction with the work’s main motifs (Möllers 1977). Martha Hyde has approached the work in a number of ways in various articles dealing with twelve-tone theory. In the earliest of these (Hyde 1980) she examines how Schoenberg deduces particular phrase structures by manipulating

the row into ordered patterns consisting of statements of the row presented in multiple dimensions. A later article (Hyde 1984) demonstrates how Schoenberg's complex, irregular surface rhythms are formed into larger, regular patterns on a higher structural level, again through features inherent to the row itself. In Hyde 1996 the focus changes to the extramusical meaning of the work, particularly an examination of its potential neoclassical meaning through direct links to an earlier work, examining Schoenberg's "dialectical imitation" (Hyde 1996: 234) of Schubert's A minor Quartet D. 804. Joseph Straus reinterprets the overall form of the first movement as a logical and valid consequence of the work's serial procedures, and shows how those procedures provide a new level of meaning to sonata form in a serial context (Straus 1990). Ethan Haimo examines the work in terms of its role in the history of Schoenberg's development of the twelve-tone system (Haimo 1990)¹.

Methodologies, then, have varied between non-serial analyses of the work's continuation of the traditional treatment of musical material (Keller), examinations of the interaction between serial and non-serial features of the piece (Möllers, Hyde 1980 and 1984, Straus), the positioning of the work in the history of serial technique (Haimo), and the exploration of its potential intertextual meaning (Hyde 1996).

My approach is closest to the second of these, namely the examination of the interaction between serial and non-serial features of the piece, and my goal is most similar in direction to Straus's, namely to illuminate a particular aspect of Schoenberg's twelve-tone technique in order to show how that technique creates meaning. Straus's aim is to show how Schoenberg's use of the row validates the use of sonata form; my aim is to show how Schoenberg makes the row compatible with sonata form and its essentially narrative nature, and how in doing so he moves closer to the fulfilment of his musical "idea".

Content

Chapter 1 presents theories of musical expression. It aims to clarify for the reader the nature of the meaning that one can extract from a piece of music, contextualizing the type of meaning inferred in the analysis in Chapter 5. The information in this chapter is especially pertinent to semiotics, which sets out to be a concrete method of the inferral of meaning from structure.

¹All these writers will be discussed in greater detail in Chapter 4.

Chapter 2 is an explanation of the methods and goals of musical semiotics, focussing primarily on the work of Jean-Jacques Nattiez.

Chapter 3 offers ideas about the narrative nature of music. It explores Schoenberg's concept of the "idea" in music, showing similarities between this concept and a narrative interpretation of musical structure. It also presents narratology as a useful tool for the creation of meaning in certain musical contexts.

Chapter 4 provides a context for the analysis of the Third Quartet by discussing previous analytical approaches to it by other writers. It examines Schoenberg's decision to use three different rows, and the particular way in which he uses sonata form, as well as a discussion of the aesthetics of that use.

Chapter 5 presents the analysis of Schoenberg's Third Quartet in the three sections of Jean Molino's "semiological tripartition" (Nattiez 1990a: 10). The neutral level provides matrices for the three rows, and a row analysis. The poietic level presents a table of semiotic features showing the distribution of row statements into pertinent categories depending on features inherent to those statements; it also presents a syntagmatic graph showing the interaction of those features through time. The esthetic level interprets the data from the table of distribution presented in the neutral level, showing how this data functions narrativistically and how this information is relevant to Schoenberg's notion of the "idea" in music.

CHAPTER 1: ONTOLOGY OF MUSICAL EXPRESSION

Musical expression is an important issue when dealing with music from a semiotic or narratological perspective, regardless of whether these are used to explore musical or extramusical issues. “A narrative is basically a story, of happenings or events, either real or imaginary, which the narrator considers interesting or important” (Wales 1990: 313): in literature, the events that constitute a narrative are expressed verbally; in music this is not possible. Thus if one considers music a form of narrative, it is necessary to have a theory about how the events are expressed. An event can have a musical meaning, and interact with other musical events, or an extramusical meaning, suggested to the listener in some way through the qualities of that event.

If a listener or score-reader aims to interpret a piece as a narrative of “purely” musical events, this must be done by arranging those events according to what we interpret them to be signifying, for instance “closure”, or “continuation”. If he or she wishes to experience a piece in terms of extramusical signifiers, then the same applies, only the expressive interpretation is of a more general nature, applying terms more in line with human experience: “desiring”, “the reluctant beginning of an arduous task”, “the big building came crashing down”, etc. This means that both musical and extramusical narratives are based on the perceived ability of musical semiotic units to “express” something. How this expression takes place is the subject of this chapter. The ideas of Anthony Newcomb, who has dealt extensively with the issue of narrative in music, and of Peter Kivy, whose work on expression is a culmination of theories of expression from the past three hundred years, will form its core.

Anthony Newcomb’s article ‘Sound and Feeling’ sets out to explore two questions relating to musical expression: the first question deals with the “more abstractly philosophical” (Newcomb 1984b: 616) issue of how music, “an art without anything like a normal semantics” (1984b: 616), can be said to express anything at all; the second is more particular, asking how, pragmatically, this expression actually takes place (616). The article aims to review all the then-recent work on this subject, focussing first on Peter Kivy’s *The Corded Shell*, then contrasting this with the earlier work of, particularly, Nelson Goodman and Susanne Langer.

In answer to the first question, Newcomb describes two twentieth-century theories which postulate why we hear emotional content in music: Kivy’s version of what Susanne Langer

called “isomorphism” (Kivy 1980: 60), and Goodman’s theory of exemplification (Newcomb 1984b: 621). Although Newcomb treats them largely as alternatives to one another, in effect Goodman’s theory is something of an elaboration of the isomorphic theory.

The isomorphic theory

The isomorphic theory, although modified in the twentieth-century by Langer, Kivy, and others (Newcomb 1984b: 618), existed in various precursory forms from as early as the seventeenth-century (cf. Kivy 1980: ch. III-V). What these theories, and the isomorphic theory itself (Newcomb 1984b: 618), state is that we feel music to be emotionally expressive because certain musical structures share certain physical qualities with our emotions themselves. In contrast to some of the earlier theories, Kivy sees the music as not expressing the emotion itself, but merely acting as a signifier for particular emotional qualities: in other words, we do not *feel* the emotion referred to, we merely *recognize* it (Kivy 1980: 66).

Thus an important aspect of Kivy’s theory is the distinction between “expressing” and “being expressive of” (Kivy 1980: 12): in the former, the content of the creation is an expression of its author’s feelings at the time of creation, for instance, to give Newcomb’s example, “a supremely caustic letter may ... “express” the pain of a rejected lover” (Newcomb 1984b: 617); the latter works on a more abstract level, where emotion is portrayed, but not actually felt by anyone—a representation of emotion (617). The example Kivy gives here is the photograph of a Saint Bernard in the front of his book, whose facial expression may look sad, or “is expressive of” sadness, even though the dog itself may not be feeling sad at that time (Kivy 1980: 12). Schoenberg expressed an opinion akin to this version of the isomorphic theory:

A theory of form would have to aim, first and foremost, at showing the significance of all artistic forms—the fact that they try to endow the artistic product ... with an external and internal constitution permitting us to recognize it as something that corresponds to the qualities of our intellect. Through its relationship, analogy with, similarity to other things we think, feel and sense, we are able to grasp it as similar to us, appropriate to us, and related to us.

(Schoenberg 1984b: 253)

The distinction Kivy makes between “expressing” and “being expressive of” is relevant to the theory of isomorphism because it underlines how, according to this theory, music expresses emotion—namely by being “expressive of”, because it functions for us as a signifier

of particular emotional states, rather than as a direct expression of the emotions themselves.

Vernon Howard, Newcomb tells us, puts forward the principal objection to isomorphism:

That two things are similar in some or even all respects does not imply that one is a sign of [that is, refers to] the other. Exact replicas of coins or pieces of furniture are not usually thought of as symbolizing, signifying, or otherwise denoting each other.

(Howard, quoted in Newcomb 1984b: 618)

This does not really discredit the theory of isomorphism: although two identical items may not refer to each other, they are nevertheless signifiers of the category they belong to; thus two coins both refer to the category “money”, for instance, and in the same way the physical manifestation of sadness on a person’s facial features and the representation of sadness in music, in which we apparently recognize similar characteristics, both signify the concept “sadness”, and as such are related. Both invoke the same response in us in each case, namely seeing them as “sad”. Aside from this, the two things in this case are not exact replicas of each other—they are not identical, but analogous, and as such they would refer to each other, in much the same sense that a painting is an analogy of its subject.

Kivy feels his theory to be unaffected by an argument such as Howard’s because the signification between music and emotion suggested in his theory is not a symbolic one (Kivy 1980: 60). He suggests that we see emotion in music because of our tendency to “animate” inanimate objects, namely to see our own characteristics in anything that could bear a resemblance to our internal or external being (1980: 57). This will be discussed in more detail later on, in “a theory of reception for musical expression”.

On a more particular level, the relation between the literal properties of the music and the expressive elements we may feel apply to it are governed, according to Kivy’s theory, by two forces, “contour” and “convention” (Kivy 1980: 77). Contour involves expression through its intrinsic qualities, for example “rapid tempo expresses agitation or excitement through its contour” (Newcomb 1984b: 619), while the minor mode, for instance, “expresses sadness through convention, since there is nothing intrinsically sad about it” (1984b: 619).²

²This is alternative terminology for the semiotic division of signification into iconic and symbolic signification, where the first shares characteristics with the object or concept it signifies, while the second relies on socially-created signification.

However, as Kivy tries to demonstrate through a comparison with the music of other cultures, even contour is merely convention on a deeper level, and if we are not familiar with the conventions of expression of a particular society, we will be unable to hear if a musical passage is referring, by analogy, to one of those conventions (Kivy 1980: 84-85). Jean-Jacques Nattiez demonstrates this idea with examples from numerous sources. Our spatial representation of music, for instance, where we equate notes in the upper register with a spatially high position, while notes in the lower register are spatially low, he shows to be convention:

“before getting any musical education, children do not in any way situate high and low sounds in space” In Greek, Arab, and Jewish music these associations are reversed.

(Nattiez 1990a: 122)

He also presents examples of the application of emotional expression using conventions totally foreign to our own:

In Plato and Aristotle, each mode reflects a state of the soul: the mixolydian reflected an unhappy and serious soul; the dorian evoked for Aristotle a sense of the grandiose, for Heraclitus of the gloomy and energetic In the Far East, musical scales and their degrees are connected to a cosmology ... in which the D represents the moon, the C Mercury, the B \flat Venus, the A the sun, the G Mars, the F Jupiter, and the E Saturn.

(Nattiez 1990a: 123)

Thus, even given a convincing semiotics of musical expression, one should bear in mind that there is nothing absolute about the expressive qualities of music; it can only express what at one point or another we have decided it expresses. This leads Nattiez to warn that “we should remember that we never believe so strongly in the naturalness of things as when we have become totally conditioned to them” (1990a: 121).

On top of this, one ought to take into account that the analysis of music itself has no absolute or final form (Nattiez 1990a: 182): it is not diachronically directed towards an eventual, perfect system of analysis, but consists instead of a continuous redirection of knowledge depending on cultural and individual ideas about what constitutes the important features of a musical work:

On the basis of his or her personal baggage, ideology, philosophical points of reference, and knowledge, the musicologist is effectuating a particular selection of traits *that he or she arranges according to a plot [intrigue]*.

(Nattiez 1990a: 176)

A good example of a version of the isomorphic theory being put into practice, which is also an example of one type of narratological approach to music, is Newcomb's 'Action and Agency in Mahler's Ninth Symphony, Second Movement' (Newcomb 1997), which explores how musical devices can be interpreted as representations of human action. He compares certain physical features of the music with emotional states that exhibit similar external characteristics. Thus rusticity, for instance, in the form of rough playing, simple harmony and double-drones, is contrasted with "urbanness" and the "corrupting forces of the city" (1997: 141), represented by the waltz and a more complex harmonic language; he interprets this contrast as part of the meaning of the work.

Nelson Goodman's metaphorical exemplification

An earlier important work on the subject of aesthetics that deals with artistic expression is Goodman's *Languages of Art* (Newcomb 1984b: 621), which supplies what Newcomb sees as an alternative theory to the isomorphic theory. Goodman's theory deals with semiotic concepts of reference, having as its basis the idea that two types of reference are possible—denotation and exemplification (Goodman 1976: 51-52). Denotation involves reference from signifier to signified, in other words from a "linguistic label" (Newcomb 1984b: 622) to "the things or class of things which it denotes or describes" (1984b: 622). Exemplification, on the other hand, refers to a two-way process of signification, where as the signifier signifies, so the object signified is also indirectly referring to the label that signifies it (Goodman 1976: 52). The cover of a dictionary, for example, might be blue: the label "blue" denotes the colour of the book, but the colour of the book itself is not denoting the colour blue; it simply is blue. It is, however, *exemplifying* the colour blue, because it is an example of that colour. Thus, if something's purpose is to expressly refer to something, it denotes the thing it is referring to; if the reference is not explicit, it exemplifies. To return to the dictionary example, the cover could just as easily be another colour without affecting the purpose of the book; thus it is not functioning to explicitly express, or denote, something. It is important to note that "while anything may be

denoted, only labels may be exemplified” (Goodman 1976: 57), because as soon as a sign takes on representative features of an object, its reference becomes explicit, and thus involves denotation.

On top of this lies the distinction between “literal” and “metaphorical” exemplification (1976: 68). The example of the dictionary is an example of literal exemplification, involving a concrete signifier and signified. Metaphorical exemplification is the kind found in music, where the signifier—the musical notation or sound—and the signified—what the music is felt to express—are related through metaphor. As Newcomb explains,

[m]usic does not literally possess the property of sadness, although it is often said (especially by philosophers) to express sadness. In Goodman’s theory, expressed properties are acquired from foreign realms of discourse by metaphorical transfer.

(Newcomb 1984b: 622)

In other words, looking for ways of describing music, we apply to it terms not inherent to itself, but borrowed from elsewhere, allowing us to allocate meaning to it through comparison with other, more familiar concepts, just as a poetic metaphor attempts to show a familiar object in a new light by applying the characteristics of a foreign object to it. Metaphorical exemplification, however, is like Charles Sanders Peirce’s concept of the interpretant: in different situations, and under the scrutiny of different observers, the concept being exemplified changes (Nattiez 1990a: 7-8). Thus one listener may have, because of his particular life experiences and associations, a very different expressive interpretation of a piece of music from another listener, as the examples above, showing different allocations of expressive meaning to the same musical material, demonstrated.

In music, then, as in other aspects of life, the problem of intersubjective difference of interpretation arises (Newcomb 1984b: 628), wherein the same passage or piece of music can be allocated myriad expressive interpretations by different listeners, which is seen by some as a refutation of the possibility or value of the expressive analysis of music. Newcomb points out, for instance, that lack of intersubjective agreement “is one of the chief reasons given by such formalists as Eduard Hanslick and Edmund Gurney for the rejection of expressive meaning in music altogether.” (Newcomb 1984b: 628-9). Another such reason is the argument that to apply expressive predicates to music is merely to enforce an irrelevant personal interpretation on to

it, as in the claim that expressive interpretation is

a surrogate language of ignorance and personal affect, derailing attention from the music itself by virtually reducing its complex structures to a kind of auditory Rorschach blot.

(Howard, quoted in Newcomb: 1984b: 634)

Or as the character Roland Michell says in A.S. Byatt's novel *Possession*:

Do you never have the sense that our metaphors *eat up* our world? ... Everything relates to *us* and so we're imprisoned in ourselves – we can't see *things*. And we paint everything with this metaphor [Freudian psychoanalysis] ...

(Byatt 1991: 253-4)

Kivy justifies the expressive interpretation of music by pointing out that “the traditional emotive depictions of music ... are really no more defective than our emotive depictions of each other and the world around us” (Kivy 1980: 149). In other words, we constantly make judgments about the meaning of emotional representation in everyday life, especially in interpreting the actions, expressions and statements of other people, and the application of these judgments to music is “no more whimsical or less defensible than their application to hundreds of other situations in everyday life, where they are readily accepted” (Newcomb 1984b: 620). To believe the application of expressive predicates to require a “strictly rule-governed semantic” is mistaken, Newcomb believes (1984b: 629), because it misunderstands that music creates its own meaning, rather than translating a pre-existent meaning into its own language (629). Verbalizing a musical passage is thus not a process of identifying pre-existent meaning, but is merely one illustration of the “primary musical meaning” (630).

Newcomb tells us that “Goodman proposes his theory of exemplification as a replacement for the isomorphic theory of expression” (Newcomb 1984b: 623). That the isomorphic theory should be replaced is necessary, Newcomb feels, because of the means of representation it implies: isomorphism involves a process of denotation (1984b: 623), where the music, because it “achieves its reference by similarity of shape” (623), is denoting emotional structure by mimicking its design. Goodman's theory of exemplification, on the other hand, relies on approaching the music metaphorically. To create a metaphor involves the application of features from one object or concept on to those of another with similar features, and as such

is itself a process of exemplification. Newcomb suggests that this is a more apt means of describing musical reference, which is a two-way process (624): the labels we apply to the musical surface, such as “sad”, “tense”, etc., denote that surface, while the music itself is exemplifying the label that denotes it. Thus the difference between the two theories in these terms is that the isomorphic theory considers the music to be denoting, while in the exemplification theory the label denotes and the music exemplifies.

However, the theory of exemplification is not in practice very different from the theory of isomorphism, as metaphor still involves the identification of similar structural features with one another (625). Newcomb suggests that the advantage of Goodman’s “metaphorical transfer” idea is that while the isomorphic theory allows only human emotions to be recognized in the music, Goodman’s theory incorporates “a wider range of resonances” (625), where “metaphors *of all sorts* may be presented and appealed to in proposing the relationships with those other aspects of experience in which expression lies” (625). Such things as “physical properties ... , plastic shapes ... , even ... natural phenomena” (637) may be applied metaphorically in Goodman’s theory. Newcomb never explains why these things should not be valid signifieds in the theory of isomorphism, however; one possible explanation is that to refer, in music, to a concrete object or shape through a literal process, as in the manner of isomorphism, is not possible in such an incorporeal art form, while the figurative process of metaphor is capable of reference without the necessity of actual structural sameness. With metaphor, a link can be created between a physical property and an abstract sound idea.

Roger Scruton, while agreeing with parts of Goodman’s theory, finds other aspects problematic:

The burden of Goodman’s theory does not lie in the claim that aesthetic meaning is identified through metaphors.... Rather, it lies in the theory of exemplification, according to which we learn from works of art in something like the way we learn from colour charts.

(Scruton 1997: 141)

What he finds problematic about exemplification is that

The oscillation between transitive and intransitive uses of ‘express’ and its cognates seems natural, almost inevitable. The fact that we are intuitively pulled in these two conflicting directions is also something that a theory of expression

must explain.... If Goodman's theory were correct, we should be tempted to describe a work of art as expressive only in those circumstances where the predicate is available to identify exactly what it is expressing (the predicate that is 'metaphorically exemplified'). Far more usual, however, is the encounter with an expressive work of art whose meaning remains allusive and elusive, resisting any attempt to convey it in words.

(Scruton 1997: 159)

Therefore, according to the constraints of Goodman's theory a work of art would not be capable of expressing at all unless the interpreter of that work knew exactly what was being expressed by it. As this is hardly ever the case, Goodman's theory is in this respect inadequate. Unfortunately, Scruton himself can suggest no alternative, as he finds himself "in a position to define the concept of expression, not positively, but negatively, in terms of the tests that a theory must pass" (Scruton 1997: 169).

A theory of reception for musical expression

Newcomb lists four possible locations in which the expressive qualities of an artwork may reside (624):

1. in the process of creation itself, for instance "when we say that the dance expresses the pent-up rage or the youthful vitality of the dancer, or when some critics interpret Jackson Pollock's action painting as a kind of physical catharsis for the artist" (624).
2. in the listener's interpretation of the artwork, "what [the listener] brings to or takes away from the experience" (624).
3. in a communication between the creator and the receiver (624).
4. in the artwork itself, "independent of the intention of the maker or the impression carried away by the perceiver" (624).

For Newcomb, expression in music involves a mixture of points 2 and 4, because to create musical expression involves not only examining the "intrinsic properties" of an artwork (625), but also the application, by the listener, of the "metaphorical resonances" these properties may invoke in him or her (625). He looks down on the plausibility of point 3 (629), as does Nattiez, whose use of Jean Molino's concept of the "semiological tripartition" (Nattiez 1990a: 10), a concept which will be discussed in Chapter 2, expressly denies the possibility of direct communication between the creator and the receiver: for Nattiez the "producer" creates the work, or the "symbolic form" (1990a: 17), which is then reconstructed by the receiver in "a

complex process of reception” (17). Because the receiver has only the “material trace” (17) (the score) as guidance for interpretation of the creator’s possible meaning, his reception of this trace involves not a communication from creator to receiver so much as an allocation by the receiver of his own personal meaning to the work (17).

Kivy’s point in this regard involves his concept of animation. He points out that we tend to animate, or apply human characteristics to, inanimate objects (Kivy 1980: 57). We do this not merely with physical objects, but in describing music, too (1980: 58), for example:

A musical theme is frequently described as a “gesture”. A fugue subject is a “statement”; it is “answered” at the fifth by the next “statement” of the theme. A “voice” is still what musicians call a part in a polyphonic composition, even if the part is meant to be played on an instrument rather than sung by a voice A good woodwind is said to “speak” easily. And it is an age-old observation that instruments in musical ensembles seem like partakers in a conversation.

(Kivy 1980: 58)

Thus we find music expressive of the emotions “because *we*, for whatever reason, tend to animate our perceptions, and cannot but see expressiveness in them” (Kivy 1980: 62), much as the quote of Roland Michell pointed out. Music seems to have emotional content not just because it resembles our emotions, although resemblance is a necessary condition for the applying of expressive meaning in the first place; but also because viewing the world anthropomorphically is one of our natural traits. This would imply that the emotional content of music is not inherent to it, but is merely the interpretation that we naturally lean towards—were it not for the fact that the music was also written by a person, with a similar set of priorities, who is likely to organize his musical material in a way suggesting human emotion. But as Kivy says, “[f]or beings who do not do this [animate music], music will no more be expressive of the emotions than expressive of the stock market or the spirit of capitalism” (1980: 62). Thus for Kivy, point 2 is the most important. An account of Kivy’s ideas about the location of expressive properties can be found in chapter IX of *The Corded Shell*.

The agent of expression

A question which concerns Newcomb in ‘Sound and Feeling’ and also in the later article ‘Action and Agency in Mahler’s Ninth Symphony, Second Movement’ is “[i]f music is expressive, then who is expressing?” (627). The differentiation between the concepts “expressing” and

“expressive of”, discussed above, is important here (627): for Newcomb music is “expressive of”: the idea that a composition expresses the emotions of the composer at the time of creation “is a view that today’s aestheticians hold no longer” (628). He sees the re-enactment of the composer’s emotional intent as neither necessary nor relevant. As far as music’s ability to be “expressive” rather than “expressive of”, Newcomb explains a concept developed by Jan Broeckx:

... some works are expressive in ... a reflexive way—that is, that they express psychological states that the creator imagines but not necessarily that he experiences at the time of creation or has ever experienced. This is one way for returning some element of “expressive,” as opposed to “expressive of,” to expressive meaning.

(Newcomb 1984b: 628)

This view can be contrasted with Adorno’s description of the type of expression found in the music of Schoenberg’s atonal period:

The actual revolutionary moment for him is the change in function of musical expression. Passions are no longer simulated, but rather genuine emotions of the unconscious—of shock, of trauma—are registered without disguise through the medium of music.

(Adorno 1973: 39)

Adorno sees Schoenberg’s early atonal works as making conscious reference to particular emotional states, “of shock, of trauma”. Whether Schoenberg was experiencing these at the actual moment of composition is a moot point, though in the light of the Richard Gerstl episode it may well be,³ “elimination of the conscious will in art” (Hahl-Koch 1984: 23) was after all a central tenet of Expressionism, which would suggest the composing out of presently-felt emotions, though presumably this could as well lead to “of boredom, of lethargy”, which lends support to the possibility that even this music is “expressive ... in a reflexive way”.

Large-scale expression and Schoenberg’s “idea”

At what structural level in music does one find expressive meaning—in the “individual musical

³Schoenberg’s wife Mathilde left him for their friend the painter Richard Gerstl; when she returned to him Gerstl committed suicide. See e.g. Reich for an account of the story (Reich 1971).

image—the small-scale musical detail, be it interval, motive, theme, or phrase” (Newcomb 1984b: 626), or “in process or overall form” (1984b: 626)? Newcomb believes the latter to hold the key to relevant expressive reference: for him “[e]xpressive interpretation must ... concern itself with the way the piece presents itself to the listener as successiveness, as a temporal unfolding, as a large-scale process” (627). Musical expression does not lie in an isolated musical sound, but in the process of continuation between these sounds. He quotes Monroe Beardsley:

... music, we might say, is in essence *continuation*: the question is always where it will take us next, and every happening is marked by the sense that possibilities are opening or closing, that there is development or retrogression, that there is continuity or abruptness, doubt or decisiveness, hesitancy or determination, building or disintegration.

(Beardsley, quoted in Newcomb 1984b: 627)

This concept of expression residing in large-scale form is particularly critical for serial music, where processes of continuity can no longer be derived from the hierarchical nature of tonality, but must be designed anew by the composer; this will play a crucial part in the analysis in Chapter 5, where continuation will be shown to be an important aspect of the narrative nature of music, and thus to be an important player in the application of musical expression. Furthermore, expression as a feature of large-scale formal aspects will be shown in chapters 3 and 5 to be an important aspect in Schoenberg’s concept of the musical “idea”.

CHAPTER 2: ONTOLOGY OF MUSICAL SEMIOTIC ANALYSIS

Nicholas Cook gives a lucid explanation of what lies at the heart of musical semiotics:

... what does it mean to study music in terms of signs? One way, of course, would be to concentrate on what music means and the way in which musical structures embody or communicate meanings; but the whole business of musical meaning is so difficult to handle that in practice a different approach is required. This approach is rather like how linguists analyze speech: first, by deciding what the building-blocks of linguistic meaning are; and, second, by investigating how these building-blocks are related to each other in any particular example of speech.

(Cook 1987: 151)

This chapter, then, will examine how music semioticians themselves have taken this approach, both theoretically and in practical application, starting with Jean-Jacques Nattiez. It presents a general methodological model for my own analysis in Chapter 5.

Jean-Jacques Nattiez

The analysis of music has focussed, in different time periods, on one of three aspects of the musical work (Nattiez 1990a: 136-7), Nattiez explains:

... the history of musical analysis, at the beginning of the eighteenth century, was displaced from the poietic vantage point (how does one produce a work?) toward the esthetic (how is a work perceived?). Attention later shifted to the immanent level, with Hanslick taking the aesthetic tack ... and Riemann developing formal technical analysis.

(Nattiez 1990a: 137)

In other words, musical analysis has either concentrated on how the composer created the work, what the work means for the listener, or purely on the score itself, treating the latter as inherently containing meaning, without considering the composer's intention or the listener's response necessary to an interpretation of the work.

Nattiez's version of semiotic analysis attempts to account for all three of these levels of analysis, using Jean Molino's concept of the "tripartitional model of semiology" (1990a: x). This "semiological tripartition" (10) suggests that a musical work—or, indeed, "all human

symbolic productions” (174)—can be explained through the use of three categories of interpretation: the poietic, the esthetic and the “immanent”, or neutral, level. (11-12). On the poietic level information pertaining to the creation of the work is examined; on the esthetic level the meaning created by the receiver of the work is taken into account; and on the neutral level the actual work, or “material trace” (15) of the poietic process—the score—receives attention, understood as “not in itself the bearer of an immediately decipherable meaning, but without which meaning(s) could not exist” (15).⁴ Nattiez has described the neutral level as “a descriptive level containing the most exhaustive inventory possible of all types of configurations conceivably recognisable in a score” (Nattiez 1982: 244).

Thus such an approach “does not constitute a revolution in analysis” (Nattiez 1990a: 136), insofar as each of the levels has at one time or another been the preferred focus of analytic scrutiny; the tripartition’s novelty lies in the interaction of all three of these elements in the analysis of a single piece of music (1990a: 138). Nattiez sums up the purpose of this approach, and the nature of the interaction between the three levels, succinctly:

... if the objective of semiology is to show how poietic and esthetic interpretants are linked with the work’s material presence, we must first have a *description* of that material’s constituents.

(1990a: 139)

As a model for the practical interaction of these features, Nattiez has drawn up a list of six “analytical situations” (140) from which the analyst can approach the work in question, allowing him or her to deal with each category comprehensively. Five are relevant to the topic under discussion here, though only numbers i, ii and iv will play a part in my analysis, while number v applies to some extent to Chapter 4:

- i. Immanent analysis**—analysis of the work’s structure, or “immanent configurations” (140).
- ii. Inductive poietics**—the recognition of structural features in the score so frequently recurring that the analyst must consider them motifs consciously used by the composer as elements meaningful to the music (141).
- iii. External poietics**—the use of a “poietic document—letters, plans, sketches” (141) as a tool

⁴A lengthier summary of these categories, complete with other writers’ descriptions of them, can be found in Pauw 1996: 29-31.

for understanding the creative process of the work (141).

iv. Inductive esthetics—description of the analyst’s “perceptive introspection” (142) as applied to structural features of the music (142).

v. External esthetics—the collection of listeners’ interpretations of the work “to attempt to understand how the work has been perceived” (142).

What type of analysis should be used in the analysis of each of these levels? For the neutral level, Nattiez classifies analytical techniques into “nonformalized” and “formalized” types (Nattiez 1990a: 161). The former refers to verbalizations of the musical events, in one of three forms: emotive, personal descriptions, which he calls “impressionistic” analysis (1990a: 161); “paraphrases” (161), where the musical events are described technically, in the order in which they appear (“An anacrusis, an initial phrase in D major. The figure marked (a) is immediately repeated ...” (162)); or a “hermeneutic reading”, of the sort made famous by Donald Tovey, where the analyst not only describes events, but also offers interpretations of those events in the context of the work’s structure (162)⁵. In the case of emotive descriptions or hermeneutic readings, the analyst is of course already getting on to the process of esthesis.

The second type, “formalized” analysis, refers to methods applied uniformly to a piece of music that involve substituting the conventional musical symbols of the score for symbols intended to clarify its structure—“*simulating* music with sufficient exactness, so that (in principle) it would be possible to use the model to reproduce the natural configurations of the original object” (163). Nattiez distinguishes two subgroups of formalized analysis, namely “global models” and “linear models”, the former referring to methods relying on statistical evaluation, for instance taxonomic analysis or “trait listing” (163), the latter to methods concerned with how parts of a whole interact, by means of “a system of rules encompassing not only the hierarchical organization of the melody, but also the *distribution*, environment, and context of events” (164). Boulez warns, however, against analysis which is simply “a summary transposition of results already established with the help of a far better system of symbols [the score]” (Boulez 1971: 17). For him, this is still “a long way from a true analytical method. Inventory and description are, at best, only the first step” (1971: 17).

Nattiez’s choice of analytical technique is none of those mentioned above in its purest

⁵Although these categorizations seem intended to be comprehensive, they differ in name and type from Peter Kivy’s four types of descriptive analysis offered in Kivy 1980: 3-9.

form. He desires an “intermediary model” (Nattiez 1990a: 165), combining “elegant hermeneutic reading” (1990a: 165) with

discovering and describing configurations that (without possessing the rigor of a collection of formal rules) nonetheless constitute the germ of some systematic organization, one whose force and cognitive value should not be denied.

(Nattiez 1990: 165)

Analysis of the poietic level seeks to place the work in its historical and social context of creation, and to explore the “authorial a prioris” or the “underlying aesthetic approach” (168) of the creator. Changing the subject and object in a statement by Nattiez about the analyst and his or her analysis so that it talks about composers instead, we can say that the reasons for a composer having created a particular work in a particular way are that composer’s, or that work’s, poietics (173). “Behind his [composition] lurks a philosophical project that we can reconstruct by reading his text in its entirety” (173)—in other words, the composer’s metanarratives, which Nattiez calls the “transcendent principles” (173). Thus to a certain degree poietic analysis can be likened to deconstruction in function, although Nattiez claims to be more interested in “(more or less) conscious assumptions” (173), rather than unconscious ones. Semiotic analysis has one other similarity with postmodern theory, namely a self-questioning nature, asking such questions as, “how do we define those phenomena considered relevant [sic] in the work? What exactly are the models that explain the organization of those phenomena?” (178).

Jonathan Dunsby

The example of semiotic analysis by Jonathan Dunsby in his editorial ‘A Hitch-Hiker’s Guide to Semiotic Music Analysis’, which he claims “can be called a classic example of the best-known aspects of semiotic procedure in music analysis” (Dunsby 1982: 241), sets out explicitly the analytical goals and techniques of a particular type of musical semiotics, and is thus worth examining. Taking Brahms’s *Intermezzo in B minor*, op. 119, no. 1, he decides on the single note as the unit of signification; his method is to count the number of occurrences of each pitch class, and arrange them in descending order of frequency, which yields the information—perhaps not very surprising—that the notes diatonic to the home key of the piece are those heard most often, corresponding in frequency as well to the chordal hierarchy set out

by harmonic theory, where the notes of the hierarchically higher chords are heard more often. He then repeats the test, this time using only the notes of the melodic line, which he tests against the frequency of their occurrence in important metrical positions. The frequency of notes in the melodic line yields a similar distribution of “pitch class attacks” [occurrence of notes] (1982: 240), and when tested against the last parameter, he discovers that the more common pitch classes are more likely to occur at the beginning of an odd-numbered bar, namely the “strong” bars in the $\frac{3}{8}$ metre; so “what appear to be the most important harmonic notes are also the most important notes metrically in the melody” (241). He can thus conclude that “periodic metre enables us to identify units of the melody alone, deprived of registral and of actual durational value, representing harmonic values of the entire music” (241). He has shown, then, that a significant link exists between metre and the harmonic implications of the melody.

He has thus completed an analysis of the neutral and poietic levels, and applied an esthetic conclusion. He points out, however, that his conclusion is just one application of a set of interpretants to the data:

perhaps we do not actually have to hear this music in B minor with its related tonal areas. If the Brahms were an ethnomusicological object, for which we had no culturally authorized code, the analysis could just as well suggest that the right-hand bunching of question marks and of void entries [used in the analysis to represent a zero count of particular pitch classes during the counting of the number of occurrences of each pitch class] in the two figures identifies the signification of the music, identifies what it ‘means’ ...

(1982: 242)

Dunsby’s next esthetic comments suggest the more unusual types of data semiotics can generate:

Schoenberg, as is well-known, had a theory about the evening-out of the number of pitch-class attacks in his composing It is a theory which has been somewhat undervalued in its implication for the study of nineteenth-century music, where the role of pitch quantity in pitch structure is not exactly a burning issue. Could Schoenberg have been more or less right and most accounts of tonality, especially Schenker’s, more or less wrong, or making a compositional rather than a perceptual point: that is, ... could it be that Schoenberg hinted at an ‘esthetic’ account of tonality, more analytical in its concern with how many notes the listener deals with, and that Schenker’s was a ‘poietic’ one, more compositional in its concern with how voice-leading hierarchies arise to give shape to pitch material ...?

(1982: 242)

Dunsby's semiotic analysis has allowed him to draw conclusions of an unusual kind, supplying information of a sort not normally associated with an analysis of a short piano piece by Brahms. Semiotics has thus enabled him to gather a novel type of data from a piece one might have expected to be exhausted as a supplier of new information. Dunsby's reference to Douglas Adams's *Hitch Hiker's Guide to the Galaxy* is illuminating:

[it] has two remarkable characteristics. First, it can tell you everything you need to know about anything. Second, everything it tells you—and it is all true—is rather odd. Semiotics is not far from this, with its limitless field of enquiry and the strange aspects of social activity it can so easily uncover.

(Dunsby 1982: 242)

The data Dunsby generates is not strictly about the meaning of this particular piece, but rather about its style, which of course would be shared to a greater or lesser extent with other pieces by Brahms, by composers of the same period, geographical location, etc. This is an aspect of semiotics that Nattiez considers important (Nattiez 1990a: 11).

Semiotics and musical meaning

Semiotic analysis of the sort described in this chapter involves a more comprehensive analysis than the strictly formal analytical procedures which are often applied to serial music. It treats formal analysis as the first step in a process which will investigate how music creates meaning. In semiotic terms, the musical work functions as a sign, the meaning of which is “the constellation of interpretants drawn from the lived experience of the sign's user—the ‘producer’ or ‘receiver’—in a given situation” (1990a: 10). The “interpretants” are the meanings which a sign can carry—an infinite value, due to the differing meanings which individuals apply to the same sign.

Jenefer Robinson points out that

[i]n recent times formalism has had distinctly the upper hand, alike in composition, music theory, and philosophy of music Over the past twenty years or so, several important musicologists ... have argued that music is not just structures of sound but can express feelings and thoughts that may be of profound human significance. They have also rejected timeless mathematical models of musical meaning in favor of closer attention to the historical context in which a piece is composed and listened to.

(Robinson 1997: 2-3)

Formalist analysis versus analysis of expressive content can be considered to be diametrically opposed to each other. Alternatively, they can be considered hierarchically, so that the one forms a first step towards the other, which looks for additional layers of meaning in a musical text. Analysis of musical expression must necessarily be interested in the “analysis of the neutral level”, but also in why a musical work should have the potential to encourage the involvement of its listeners. Newcomb concurs with this:

The ideal difference between expressive and structural interpretation is that the first goes beyond the second in pointing out, through metaphor, relationships between the structures of the artwork and those of other aspects of experience.

(Newcomb 1984b: 637)

Joseph Kerman’s call for a critical approach to music analysis calls for a similar approach:

Criticism deals with pieces of music and men listening, with fact and feeling, with the life of the past in the present, with the composer’s private image in the public mirror of an audience. At worst criticism is one man’s impressionism—like bad art—and at best it is an uneasy dialectic.

(Kerman 1985: 123-4)

Semiotic analysis also questions ideas which were inherent to Schoenberg’s musical thinking, for instance that a composition is the communication of an absolute meaning created by the composer. In place of the latter is the type of approach discussed from page 19 onwards, which considers meaning to be attributed to a form by both the creator and the receiver—a meaning which differs depending on its reception. However, in the next chapter I will show that narratological analysis—which, as I said in the introduction, will form part my semiotic analysis—shares with Schoenberg’s mode of thinking certain fundamental concepts about the nature of meaning in music.

**CHAPTER 3: A NARRATOLOGICAL
APPROACH TO SCHOENBERG'S MUSIC**

Narrativity in Music

Gerald Prince defines the various goals of narratology in his *Dictionary of Narratology*:

1. ... Narratology studies the nature, form, and functioning of narrative (regardless of medium of representation) It examines what all narratives have in common ... as well as what enables them to be different from one another, and it attempts to account for the ability to produce and understand them
2. The study of narrative as a verbal mode of representation of temporally ordered situations and events In this restricted sense, narratology disregards the level of story in itself ... and focuses on the possible relations between story and narrative text ...

(Prince 1989: 65)

Thus narratology concerns itself with the structure of narrative as formulated through the abstraction of narrative frameworks from various sources potentially exhibiting narrativity; it examines these narratives in terms of how they relate to the surface material, and how they function temporally, in terms of techniques used to create methods of continuation.

In using Greimas's "aspectual configurations" of "inchoativity, durativity and terminativity" (Greimas 1982: 18-19) in my analysis, I will be elaborating one narratological technique out of a number of "narrative episodes" (Pope 1998: 208) that can be involved in narratological analysis. There are various others, which Rob Pope lists, along with the "aspectual configurations":

beginnings, middles and ends—points of opening, development and closure;
essential ('kernels', 'nuclei'), i.e. episodes which substantially advance the action;
optional ('catalysers', 'satellites'), which elaborate but do not advance action;
kinetic—concentrating on movement and transformation;
static—concentrating on state and atmosphere.

(Pope 1998: 208)

These could all be applied usefully to this movement or to music in general; my particular focus will be on "beginnings, middles and ends" because of the type of category chosen in my semiotic analysis. Space and choice of topic prohibit me from exploring them further here.

Nattiez, in his article ‘Can One Speak of Narrativity in Music?’ discusses whether applying literary narrative to music creates a useful analytical tool, or whether it is simply a metaphor “to which human language, with its meagre means, has to resort in order to attempt to define the specificity of the unfolding of music in time.” (Nattiez 1990b: 241). He concludes that

I have tried ... to show that *in itself* ... music is not a narrative and that any description of its formal structures in terms of narrativity is nothing but superfluous metaphor. But if one is tempted to do it, it is because music shares with literary narrative that fact that, within it, objects succeed one another: this linearity is thus an incitement to a narrative thread which *narrativizes* music.
(Nattiez 1990b: 257)

He feels it is mainly the temporal aspect of music that makes a listener wish to hear it as narrative, and the examples he suggests of narrative in music are to do with the application of a verbal story. However, other writers, for instance Anne Sivuoja-Gunaratnam (cf. Sivuoja-Gunaratnam 1997: >), suggest that the value of a narrative analogy lies not in a one-to-one relationship of meaning between a text and a piece of music, but in seeing music as consisting of its own narrative conventions. Nattiez believes this approach, which he discusses in terms of the concept of “musical discourse” (Nattiez 1990b: 245), to be another shibboleth:

If, in listening to music, I am tempted by the ‘narrative impulse’, it is indeed because, on the level of the strictly musical discourse, I recognise returns, expectations and resolutions, but of what, I don’t know. Thus I have a wish to complete through words what the music does not say because it is not in its semiological nature to say it to me.

(Nattiez 1990b: 245)

Clearly for Nattiez a narrative is only a narrative if it tells a story with clear subject-predicate relationships: he uses “narrative” as synonymous with “story”.

However, “musical discourse” is itself a narrative—a purely musical narrative. As narratology analyses literary narratives to uncover tacit narrative conventions, so it could be expected to do exactly the same for music. “Causation”, Seymour Chatman says, “may be overt, that is, explicit, or covert, implicit” (Chatman 1980: 45); the analysis of causation explores the issue of how a narrative deals with its material in terms of the assumptions it makes about

methods of continuation. The analysis of these assumptions is equally applicable to music.

What seems the most valuable concept that narratology can offer music, then, is not an exploration of its ability to explain abstract concepts in the manner that spoken language does; if this were the case, then music, as Nattiez says, “would speak directly to us and there would be no difference between language and music” (Nattiez 1990b: 242). Rather it is the exploration of music in terms of Beethoven’s concept of the “underlying idea”, or Schoenberg’s concept of the “idea” in music, both of which deal with issues of the meaning of musical material in terms of the successful interaction between different aspects of a musical work to form a coherent whole. These concepts are discussed in the section “Schoenberg’s idea as narrative structure”. In *Playing with Signs*, Kofi Agawu luculently describes the meaning found in spoken language versus the sort of meaning relevant to music:

The recurring question for me ... concerns *meaning* in Classic music—not “what does this piece mean?” but, rather, “*how* does this piece mean?” In other words, it seems more useful, in the face of the multiplicity of potential meanings of any single work, to frame the analytical question in terms of the dimensions that make meaning possible semiotics provides a useful searchlight for understanding the nature and sources of meaning, even if it ultimately evades—or declares irrelevant—the “what” question.

(Agawu 1991: 5)

In showing the “how” of meaning, however, a “what” of meaning is created—any “how” involves the adoption of certain metanarratives, inseparable from the creation of meaning in the work under scrutiny. In other words, the method in which meaning is presented partially determines the meaning of the work.

This still does not fully answer Nattiez’s charge of musical narrativity being a “superfluous metaphor”. Methods of musical continuity, after all, can be uncovered without comparisons to language. But what Nattiez calls “metaphor”, which implies a purely poetic, non-literal connection, I call “analogy”, which implies a larger degree of actual sameness. Analogy is a means of creating knowledge: knowing about something involves categorizing it, and the essence of categorizing knowledge is to find and abstract similarities between concepts. Analogy is a means of drawing similarities between concepts, and thus has a similar purpose to categorization: both find and abstract similarities. One of the purposes of criticism is to categorize, and the ideal end of criticism is that everything, in a particular field of knowledge

and between different fields of knowledge, could be found to be analogous to everything else; to be reduced, by analogy, to one controlling concept. Therefore a musical analysis incorporating the terminology of narratology has the advantage of potentially strengthening ties between linguistic and musical forms of narrative, showing them to work according to the same principles, and providing music with a valuable tool for the exploration of meaning. At the same time it serves as another source of narrative, with its own methods of continuation, and is thus worth exploring narratologically for comparative purposes.

Literary and musical narrative are linked by their common possession of relationships of continuation on the level of structure which create a sense of logical progression and unity, and which, in the case of music particularly, are not fully explored, or possibly not fully explorable. In literature, the structural elements are presented as a substrate to, and a summary of, the concrete explanation of the interaction of things and events, this interaction taking the form of subject-predicate relationships, for instance *I (subject) went home (predicate)*, while in music a similar process is enacted, though the interaction of things and events is no longer concrete, lacking obvious signifieds and seeming to work on a higher level of abstraction. Thus while literature can signify its denouement, for instance, by the closure of a concrete problem described literally, music must substitute this with an abstraction, such as a return of the central key or of the principal material, which may “express” a sense of ending. Thus both possess a superficial level of representation which obscures a more fundamental structural layer.

That they are similar in this regard can be proved by the application to both of the word “anthropocentric”—in other words the surface layer of both is concerned principally with human activities, thought and emotion, which is necessarily but more opaquely the concern of the deeper structural level as well. While all artistic endeavours must contain both these levels of narrative, in non-musical examples the more fundamental layer is more easily subsumed by the level of concrete representation, while in music the former is frequently made to play a more transparent role, as, for instance, in the use of standardized forms, the presentation of which in certain eras particularly is brought to the fore by the composer as an important element in the listener’s understanding of the music.

A simple example of narrative structure in music, and the manner in which it relates to narrative in other situations, is given by Nicolas Ruwet:

soit un fragment musical tonal composé de deux parties A et A'; A se termine sur une cadence rompue, A' commence de la même manière que A et se termine sur une cadence parfaite. Dans le cadre du système tonal, il est clair que la première partie sera interprétée comme un mouvement mené jusqu'à un certain point et interrompu ou suspendu, et la seconde comme la reprise du même mouvement, cette fois mené jusqu'à son terme. On voit dans ce cas que la simple description permet de dégager une certaine structure—mouvement esquissé et suspendu, puis repris et mené à son terme—qui est homologue d'un ensemble indéfini d'autres structures qui peuvent se retrouver dans le réel ou le vécu.

(Ruwet 1972: 14)

[Suppose there is a fragment of tonal music made up of two parts, A and A'; A ends with an interrupted cadence, and A' begins the same way but ends with a perfect cadence. Within the framework of the tonal system, the first part will obviously be interpreted as a movement, directed toward a certain point, but interrupted or suspended; the second as repetition of the same movement, this time continued to its end. We see in this instance that simple description enables us to extricate a certain structure—movement, sketched then suspended, then repeated and continued to its end—that is homologous with an indefinite set of other structures that might be found in reality or lived experience.

(Ruwet, translated in Nattiez 1990a: 113)]

Ruwet's concern here is not to create a story, but to show that particular impressions created by harmonic effects can be thought of as analogous to the way we interpret other structures, in life or literature.

On another level, music does in fact have the ability to create a verbal narrative, namely sociologically. As Adorno has most famously shown, a composer's choice of material is very closely linked to his social context, and to an extent the material can be read as a sociological discourse. His critique of Berg's *Wozzeck* in *Philosophy of Modern Music* is a case in point:

With experimental boldness, Berg before any other composer tried out such modern means over long periods of time Nevertheless, *Wozzeck* negates its own point of departure precisely in those moments in which it is developed. The impulses of the composition ... rebel against the work proceeding from them The dream of permanent artistic possessions is not only destroyed from the outside by the threatening social conditions; the historical tendency present in musical means renounces this dream.

(Adorno 1973: 31-2)

A sociological analysis, then, supplies another level of narrative convention for a text to follow, namely the idea that a musical work is, or should be, a direct result of the received ideas of the

social conditions in which it was created.⁶ The material therefore creates a sociological narrative, and follows the narrative rules which enable it to be read as such.

Utilising the terminology developed by Roman Jakobson and exploited by Kofi Agawu, the levels of narrative I have recognized (“what does it mean?” versus “how does it mean?”) can be divided into two semiotic levels. The first level is that of “extroversive semiosis” (Agawu 1991: 23), and denotes “the referential link with the external world” (1991: 23): it includes “referential signs”, whose signifiers refer to extramusical signifieds, for instance Agawu’s “topics” which will be discussed shortly. It deals, in other words, with “the domain of expression” (24), treating the musical text almost as a literary one, as a document whose signs refer to something other than themselves. The second level is the level of “introversive semiosis” (23), which Jakobson defines as “a message which signifies itself” (Jakobson 1971: 704), and which is described by Agawu as “the reference of each sonic element to the other elements to come” (Agawu 1991: 23). Agawu calls these “pure” signs (1991: 51), and defines them as “signs that provide important clues to musical organization through conventional use, but not necessarily by referential or extramusical association” (51). I interpret “conventional” use to mean signs used in a structural, rather than expressive, way.

Thus narratology involves the analysis of semiotic units through time, their interaction together and the patterns they form in comparison to existing narrative models. It can do this in one of two ways, depending on the nature of the semiotic units the analyst chooses: if structural features of the piece are chosen as the categories into which the various appearances of the unit of signification are divided, then the analyst will end up with a table of introversive semiotic elements, namely interactions of a particular structural feature of the work with itself over time. If, on the other hand, the analyst chooses extramusical categories, which are chosen to catalogue aspects of musical expression, a table of extroversive semiotic features will be generated. Such categories could include human emotions, Agawu’s “provisional universe of topic” (Agawu 1991: 30), or anything else certain musical elements may conventionally be held

⁶I say “received ideas” because a work of art must always interact with its social surroundings, and the idea of a “wrong” or “right” interaction can only be applied after the fact, when a necessarily simplified historical account of the era has been created; as Hans Keller pointed out, “[other than] historical necessity ... as it manifested itself within the composer’s mind ... there is no other historical necessity, except for musicologists being wise after the event” (Keller 1974: 14).

to express. This will generate features that might more easily be made into a narrative in the conventional “story” sense, as in Newcomb’s analyses of Schumann’s (Newcomb 1984a) and Mahler’s symphonies (Newcomb 1997).

The semiotics of serialism

In his discussion of Kivy’s *The Corded Shell*, Newcomb tells us that

Kivy rejects the earlier idea that music *arouses* or stimulates our emotions directly, espousing the later idea that we *recognize* emotional expression in music because the music bears some resemblance to the structure of our emotions.

(Newcomb 1984b: 617)

This, or at least some similar theory, like Goodman’s “metaphorical exemplification” for instance, is the basis for the level of “extroversive semiosis”, which relies on recognizable correlations between musical structures and our experiences in the non-musical world to allocate expressive meaning to musical signs: thus musical signifiers can be connected to particular signifieds because they seem analogous to other, extramusical signifiers.

As suggested above, the musical signifier can refer to more than just emotional states: Agawu’s “provisional universe of topic” suggests a list of signifieds, or topics, which may be linked to signifiers in the music of the Classical period. These signifieds, Agawu explains,

can be grouped under two broad categories: the first consists of musical types, and includes various dances, such as minuet ..., passepied, sarabande, polonaise, bourrée, contredanse, gavotte, gigue, siciliano, and march The second broad category consists of styles of music, under which Ratner lists a heterogenous [*sic*] collection of references to military and hunt music, fanfares, horn-calls, singing style, brilliant style, French overture, musette/pastorale, Turkish music, Sturm und Drang, sensibility or Empfindsamkeit, the strict or learned style, and fantasia.

(Agawu 1991: 32)

He explains that the nineteenth century saw the beginnings of a move away from “public” or “stylized” signs towards the use of “private” signs:

When a composer prefers ambiguously defined topics to precisely defined

ones—such as dances—the “romantic” tendency becomes quite pronounced in his music [A]long with the nineteenth century comes an emphasis on topics that are increasingly less concerned with stylized identity and that therefore take one aspect of a work’s discourse out of the public realm into a composer’s private world.

(Agawu 1991: 44)

The nineteenth century move away from “public” referential signs towards “private, biographical realms in which the cryptic sign holds the key to meaning in a musical work” (Agawu 1991: 138) means a semiotic approach must expand its “universe of topic” to incorporate a new world of signs for each individual composer.

As Agawu points out, however, the meaning of a work’s topical discourse is influenced by “the supreme source of hierarchy in tonal music, ... the tonal-harmonic structure” (Agawu 1991: 50). This structure and the extramusical analogies we have attached to it play an important role in topical discourse and enclose it in a unifying whole, providing a framework conducive to the comprehensive discussion and interaction of diverse topics. One need only examine some specific examples from Agawu’s “universe of topic” to see what an important role tonality plays in its existence: “fantasy” implies a free approach to musical material, especially with regard to free and unstructured key relationships; “learned style”, its opposite, refers to strict counterpoint, namely a highly ordered approach to harmonic relationships; “hunt style” involves arpeggiation on basic triads; and categories like “amoroso” would be very hard to produce without access to the harmonic conventions one would instinctively fall back on if called to compose in such a style.

Semiotics must encounter problems, then, when it reaches serialism, a system which incorporates an intensified version of the individualism encountered in romanticism, yet at the same time works outside the hierarchy of tonality, functioning to some degree like another language with a different set of referential signifiers, and referring to an expanded or different set of signifieds. As a start to addressing this issue, I devote a section to the examination of Schoenberg’s Third Quartet in terms of features it has in common with its tonal antecedents, thus contextualizing the work’s more unusual features. This issue will form part of Chapter 4, in the section entitled “interaction of the old and the new”.

Schoenberg's "idea" as narrative structure

Schoenberg says of analysis that, "The only sort of analysis there can be any question of for me is one that throws the idea into relief and shows how it is presented and worked out" (Schoenberg 1964: 165). A clear, concise statement—were it not for the ambiguity surrounding the term "idea", which Schoenberg uses at different times to refer to various levels of the compositional process. To clarify Schoenberg's concept of the "idea" I will discuss some examples of his use of the term in reference to different levels of meaning. To understand these meanings is useful in understanding what Schoenberg felt to be important about music, which in a music-critical context is important to the analysis of his compositions.

The concept of the "idea" in music did not originate with Schoenberg: Beethoven spoke of the "poetic idea", and of the "underlying idea" (Dahlhaus 1991: 143), which, as Carl Dahlhaus points out, refers to formal aspects of music but "seems also to concern the emotional content expressed in a movement" (1991: 144). In the context of Beethoven's music, Dahlhaus sees the "underlying idea" as

the manner in which a specific association is made between the development of the thematic material, the design of the tonal ground plan, the disposition of the formal functions, and the succession of the aesthetic characters: a manner of connection which can be traced back to a problem, to which the finished movement is the solution. Analysis achieves its goal if it succeeds in the reconstruction of the question to which the work represents an answer.

(Dahlhaus 1991: 145)

In other words, he sees it as the means in which the various formal features interact to express an idea, concretely expressed as a musical idea and possibly metaphorically expressed as an extramusical one. We will see below that this is an integral part of Schoenberg's notion of the "idea".⁷

In semiotic terms the "underlying idea" could be explained as a collection of signifiers which relate to the same signified. The problem, as always in music, is to deduce signifieds from the signifiers; in the present case, the signifiers would seem to refer to structural, or musical, signifieds, and thus to be the domain of introversive semiotics. In such a case they can,

⁷Dahlhaus's statement about analysis is similar to Schoenberg's statement quoted at the beginning of this section, possibly suggesting a Schoenbergian influence to his notion of the "idea", or a Beethovenian influence to Schoenberg's.

in theory, more easily be “narrativized” through placement along an axis of meaning such as Greimas’s “aspectual configurations”, or interpreted in terms of “actoriality” (Prince 1989: 38-39), where an “agent” in the form of theme or motif is seen to undergo transformation in interaction with its environment.

Schoenberg gives a clear statement of his meaning of “idea” in a comment dating from 1946:

In its most common meaning, the term idea is used as a synonym for theme, melody, phrase or motive. I myself consider the totality of a piece as the *idea*: the idea which its creator wanted to present.

(Schoenberg 1984b: 123)

In these terms, Schoenberg’s “idea” seems similar to Dahlhaus’s description of Beethoven’s “underlying idea” in that it is constituted by “the totality of a piece”, namely the various features that make up its total material interacting as a whole to express an “idea”.

Schoenberg’s notion of the “idea” is further clarified by a comparison of the notion of “idea” with that of “style”, a comparison he made in 1934:

To listen to certain learned musicians, one would think all composers did not bring about the representation of their *vision*, but aimed solely at establishing a style—so that musicologists should have something to do. As far as I myself am concerned, I allow that one can try to detect the personal characteristics of the finished work from the score, from its more or less remarkable figures or turns of phrase. But to overlook the fact that such personal characteristics follow from the true characteristic idea and are merely the symptoms—to believe, when someone imitates the symptoms, the style, that this is an artistic achievement—that is a mistake with dire consequences! A sensitive ear hears characteristics, even invisible ones, where the deaf sees at most style.

(Schoenberg 1984b: 178)

Style, then, is the surface manifestation of a concept, or “idea”. Or, style is “how is it expressed?” and idea is “what is expressed?”. Thus, for example, developing variation⁸ is the

⁸My reference to developing variation is only in passing at this point, but I refer to it in more detail later on, so I will define it now.

Haimo points out that although Schoenberg’s various definitions of developing variation “were subject to many changes of emphasis and nuance during the course of his career” (Haimo 1997: 350), the following definition is generally applicable:

“idea”, which could be applied by numerous composers in different ways. The particular way that Schoenberg applies it, by means of his process of “liquidation” (Schoenberg 1967: 58-9), is his style. Style is not merely a superficial by-product of “idea”, however—it plays a part in the presentation of the “idea”. Schoenberg himself wrote, “A truly new idea—at least as musical history reveals—is hardly imaginable without significant changes in musical technique” (Schoenberg 1984b: 269). The ideas presented in atonal music, for instance, could not be expressed in tonal music. Style, then, is itself part of the meaning, or “idea”: the manner in which an idea is expressed is an important part of the message.

In 1922, Schoenberg, talking about bird song, writes that

nature’s piece of music is condemned to a certain stagnation because of its rhythmic, motivic, and perhaps also tonal complexity; it must either remain short, or repeat itself incessantly; the idea, once formulated, remains as it is; on the other hand, a piece of art-music can extend in all directions, unfold, develop and work out its ideas.

(Schoenberg 1984b: 310)

Schoenberg is referring here to natural music, behind which there can, presumably, be no consciously envisioned extramusical “idea”. However, that bird music can express an idea, by, for instance, being evocative of a particular environment, adds credence to the theory that meaning in music does not arise from a communication of the composer’s ideas to the listener, but rather through the listener’s subjective interpretation of what he hears. The “idea” in this case is static: in “nature’s piece of music” the “idea” created is a closed structure which allows no further development of the information presented.

By contrast, “art-music” presents ideas which require elaboration. As Schoenberg said in 1934,

Every tonal progression, every progression of even two tones, raises a problem which requires a special solution. Yet the further such tones are brought into

One can distinguish *two methods of varying* a motive.

With the first, usually the changes virtually seem to have nothing more than an *ornamental* purpose; they appear in order to create variety and often disappear without a trace. (seldom without the second method!!)

The second can be termed *developing variation*. The changes proceed more or less directly toward the goal of allowing new ideas to arise.

(Schoenberg 1994: 39)

relation and contrast with each other and with rhythm, the greater is the number of possible solutions to the problem, and the more complex are the demands made on the carrying out of the musical idea.

(Schoenberg 1984b: 269)

and in 1946:

Every tone which is added to a beginning tone makes the meaning of that tone doubtful and the addition of other tones may or may not clarify this problem. In this manner there is produced a state of unrest, of imbalance which grows throughout most of the piece, and is enforced further by similar functions of the rhythm. The method by which balance is restored seems to me the real *idea* of the composition.⁹

(Schoenberg 1984b: 123)

As a chord progression which reaches the dominant creates a psychological desire for resolution to the tonic, so other musical features require resolution of their own. The opening of Schoenberg's Second Quartet, op. 10, for instance, requires elaboration: the reason for the large number of clearly stated tonal centres in the opening theme group; the reason for the tentative beginning, followed by the recasting of the material in a surging *accelerando*; these features, and others, require explanation in the ensuing material, and it is this explanation, "the method by which balance is restored", that Schoenberg here calls the "idea". That elaboration is required suggests the narrative structure of such music: the "idea" is a musical argument, narrative in nature, where information is presented, problems are stated—or created—and are subsequently solved, in the same manner as literary forms, be they comic books, novels, or academic essays.

The musical argument is not necessarily confined to the piece of music in which it is presented, however: its solution may be found by seeing the piece historically, as an intertextual discussion of musical form. Beethoven's op. 95 quartet, for instance, which starts in F minor and almost immediately restates its main theme in G \flat major, could form a potential premise for Schoenberg's enigmatic musical statement which forms the opening of his Second String Quartet, as could the simple fact that no one had previously made such a statement. Alternatively, and in support of my first point, Catherine Dale offers a possible explanation using

⁹Note again the similarity between Schoenberg's and Dahlhaus/Beethoven's thought: the "idea" as unifying (balancing) feature of disjunct (imbalanced) elements compared with the search for a question to which the arrangement of elements in a work is the answer, viz., the "idea".

features within the quartet itself, where the tonal centres referred to become the main tonal areas in the movement (Dale 1993: 97-131).

Just as Schoenberg talks of the problems created by “[e]very tonal progression ... of even two tones”, so this progression of tones is the basis for the creation of a narrative structure. For any progression, there is a reason why the composer formulated it as he did, namely the desire to express a particular urge or idea, and that reason, which can be musical or extramusical, is what forms the creation of a musical or extramusical narrative. In reality the reconstruction of the composer’s “idea” in these terms is always qualified by the theories presented in “a theory of reception for musical expression” in Chapter 1 explaining meaning to be a creation of the listener, who interprets for better or worse the information he finds in the score into relevant meaning, which may or may not coincide with the composer’s “idea”. Aside from the fracture in the communicative properties of a piece of music, Newcomb explains another reason why the “idea” cannot simply be interpreted or translated:

Both [Deryck Cooke and the “strict constructionists” (1984b: 629)] assume that there must be a preexistent meaning concept which the music sets out to translate, or to realize in its own “language” According to both, the task of musical interpretation is simply to find the proper system of links between the musical artifact and the meaning concepts which lie behind it and which it attempts to render in musical terms. This view misconceives the essential nature of musical meaning, which is created by music itself and exists in its own terms. Language may attempt to give an example of this meaning by bringing the structural patterns of music into relation with other aspects of our experience; this is the enterprise of expressive interpretation. But to do this is not to identify a preexistent verbal meaning, which music only realizes.

(Newcomb 1984b: 629-30)

That the “idea” is narrative in nature on the level of form is further suggested by Schoenberg’s description of Brahms’ *Variations on a Theme of Haydn*:

No one, at first hearing, can grasp all the fine points of Brahms’ variation technique, the harmonic and contrapuntal combinations, the many ways in which he treats the unevenness of his five-measure sections. Perhaps all this is not absolutely necessary for an adequate response to the music. But it is certainly a good approach to what the composer himself wants to tell us.

(Schoenberg 1984b: 381)

This is an important statement about how Schoenberg listens to music, and about how he envisages the communication of the “idea”: interpreting the “idea” of the piece entails scrutinizing the composer’s response to the challenges presented by his material—how effectively he arranges this material in relation to received ideas about the tendency of musical material, and what that arrangement tells us. “[W]hat the composer wants to tell us” is, he suggests, embedded in the composer’s technique, which is a narrative of musical elements, rather than in the series of emotions which the music seems to be expressing; it is a message to be interpreted through introversive, rather than extroversive, semiosis.

Schoenberg was himself aware of the possibilities of analogy between musical structure and language. In ‘Connection of Musical Ideas’, he points out that

The technique of the connection of musical ideas is as manifold as the same technique in our language; one would, accordingly, best proceed along the line of *grammatical* principles.

(Schoenberg 1984b: 287)

He goes so far as to recognize programmatic qualities in instrumental music, suggesting a close link between the narrative conventions of music and of language:

Such connectives as the word ‘and’ admit addition only if one does not try to add six apples and five pears, i.e. if there is enough in *common* to permit addition. ‘On the other hand’ or ‘in contrast to that’ and ‘however’ suggest the contrary: ignoring the *absence* of a common factor which might, or might not, show up, but only later.

(Schoenberg 1984b: 287)

That connectives can have these meanings obviously implies that what they are connecting can have meanings which supplement or contradict each other, in other words programmatic meanings.

Schoenberg comes close to showing a narratological turn of mind in the following statement:

Music is the emanation of the soul and its governing forces are the same that govern all manifestations of the soul. Thus psychology might succeed in analysing: why what follows what; why what has such consequences; why that is long and this short; when everything has been told, or what is still missing;

why that subject was spoken too often or with too much emphasis; why a more concise language should be used here, a more loose one there. However, whether it will be possible to formulate this in such a straightforward manner as our rules of harmony and counterpoint were formulated – this is difficult to predict.

(Rauchhaupt 1971: 52)

It is clear from these statements that Schoenberg's meaning of the "idea" is not quite the same as Beethoven/Dahlhaus's. While Dahlhaus describes the "underlying idea" as the signification of one controlling concept by (ideally) all the musical elements, which can be seen as a form of unity, Schoenberg's "idea" incorporates this and something more: it is concerned with how the musical elements interact together temporally, and it is this interaction, the "restoration of balance" through the narrativistic treatment of material, that he calls the "idea".

Unity in music

Musical narrative functions on a number of different levels, and that music is narrative can be demonstrated in a number of different ways: "narrative" is a concept that can shed light on many methods of listening to music. The idea of unity in music is one such case. In his essay 'concepts of musical unity' Fred Maus asks, "when one has an experience of musical unity, *what is it* that is unified? Or, to put the same question differently, what is the bearer of musical unity?" (Maus 2001: 178). One of his explanations is that "the association of music with a story is a way of attributing musical unity ... and in associating music and story one is, somehow, transferring that unity to a musical context" (2001: 183). However, another approach to musical unity can be created by reversing this statement: that the desire for unity in music has played such an important role in our musical understanding and criticism, has at its heart the metanarrative that a piece of music should be a coherent statement—a story, or a narrative—which notion suggests that musical material implies extramusical meaning, and that the form of a piece of music is dialectical in nature. In other words, that we desire unity, or that unity can exist, suggests that music is a semiotic form of communication; the signs, however, consist of many signifiers but only a few consciously recognizable signifieds, as Imberty tells us:

the musical signifier refers to a signified that has no exact *verbal* signifier ... musical meaning, as soon as it is explained in words, loses itself in verbal meanings, too precise, too literal: they betray it.

(Imberty, quoted in Nattiez 1990a: 9)

The notion of unity should be explored not just by saying “comfortable things” (Maus 2001: 183) about the union of material, but in terms of how we experience unity; the subconscious desire for narrative seems to be one way of explaining our desire for unity. Expectations of musical material are dependent extramusically on the sociological narrative of the material, and musically on the expectation of the sustaining of the level of musical complexity—or the style—introduced at the start throughout the duration of the piece. The question of unity, and of its different forms according to different compositional systems, will be explored in chapter 5.

CHAPTER 4: CONTEXTUALIZING AN ANALYSIS OF THE THIRD QUARTET**The three rows**

The work is based on three rows, all three of which share the first five pitch-classes. The information in table 1 corresponds with Schoenberg's own presentation of the rows, which can be found in Schoenberg 1984a: 23-24. The format of presentation used here, including the labelling of the rows, is adapted from Haimo 1990: 150.

Row	Pitch-class number/ pitch-class											
P-0	0	9	8	2	5	10	11	4	3	6	1	7
	G	E	E \flat	A	C	F	F \sharp	B	B \flat	D \flat	A \flat	D
P-0(a)	0	9	8	2	5	6	1	10	4	11	7	3
	G	E	E \flat	A	C	D \flat	A \flat	F	B	F \sharp	D	B \flat
P-0(b)	0	9	8	2	5	6	3	1	10	11	4	7
	G	E	E \flat	A	C	D \flat	B \flat	A \flat	F	F \sharp	B	D

table 1: the three rows

Ethan Haimo suggests that Schoenberg's motivation for using multiple rows might have been a "continuing concern that he might not be able to build up an entire composition from a single set" (1990: 150), which is supported by Schoenberg's own comments:

The introduction of my method of composing with twelve tones does not facilitate composing; on the contrary, it makes it more difficult The restrictions imposed on a composer by the obligation to use only one set in a composition are so severe that they can only be overcome by an imagination which has survived a tremendous number of adventures

In the first works in which I employed this method, I was not yet convinced that the exclusive use of one set would not result in monotony At this time, I used complicated devices to assure variety.

(Schoenberg 1984b: 223-224)

Martha Hyde, on the other hand, suggests that Schoenberg uses these three rows to enable him to create a particular texture at a certain point, namely at the second theme in both the exposition and recapitulation: as an example she shows that the start of the recapitulation, namely the

recapitulation of the second theme, presents “six different row permutations” (Hyde 1980: 15), and from each of these “permutations”, two pitch-classes are allocated to the melody in the cello part, the twelve pitch-classes together forming a linear statement of P-0 (bars 174-180). Hyde notes that Schoenberg consistently allocates the pitch-classes in order numbers 5 and 6 or 10 and 11 to this line, and argues that were it not for the presence of the three different row-forms, all of which Schoenberg makes use of here, he would have been unable to do so. Why it should be important for him to use these order numbers is because, she explains, “they allow him to partition each row form into two five-note segments and one two-note segment, a partition which characterizes and dominates the entire movement” (Hyde 1984: 38).

Such an argument would, however, involve a trade-off on Schoenberg’s part: he would have to sacrifice the unity of a composition created from a single row simply so that he could create a linear statement of P-0 from the same order positions in a group of row permutations, thereby keeping the row partitioning as 5-2-5. The characteristic division of the row is a technique for creating unity as well, of course, and this is an issue that is pivotal to the interpretation of data from the semiotic analysis, which will necessarily illuminate the importance of order-number presentation.

Had Schoenberg composed using only the first row, he would have had to make do with only four of the six interval-classes, namely interval-classes 1, 3, 5 and 6; interval classes 4 and 2 are only present in variants (a) and (b) respectively. Schoenberg does allow the juxtaposition of order numbers that are not adjacent in the normal ordering of the row, creating unfamiliar interval patterns; but to do so too often would, as Steven Peles describes it, undermine his use of

[the] 12-tone set as ... a sort of “super motive”: not necessarily as a motive in itself but at least as a common denominator relating and hierarchically organizing its sub-global thematic interpretations into a comprehensive global structure encompassing and saturating the piece.

(Peles 1983: 303)

Thus to give himself the use of all the intervals in the chromatic scale on a consistent basis without constantly deviating from a recognizable interval pattern, the two secondary rows are necessary; the alternative would be a remanipulation of the first row to contain all the interval classes.

The use of sonata form

The overall form of the movement is sonata form, but modified to a kind of arch form: the order of themes in the recapitulation is reversed, so that the second theme is recapitulated before the first. The large-scale form is shown in table 2, which identifies the same formal sections as a similar formal scheme in Straus 1990.

Exposition			Devel- opment	Recapitulation			
1 st theme	transition	2 nd theme		2 nd theme	transitio n	1 st theme	coda
1-32	33-61	62-94	95-173	174-206	207-238	239-277	278-341

table 2: main formal features of first movement

In noting that the sonata form of the first movement is untypical, Joseph Straus is able to supply a reason why this should be so, namely to allow for the loss, along with tonality, of dramatic direction (Straus 1990: 121): the traditional polar opposite of first and second theme, the former in the tonic and the latter commonly in the dominant key, instantly creates problems for the use of sonata form in a non-tonal environment; Schoenberg confronts this difficulty with the use of arch form, where the first and second theme groups swap position in the recapitulation. How does this solve the problem? As Straus points out,

Schoenberg's reinterpretation of sonata form in this string quartet depends above all on his concept of inversional symmetry and balance. At the local level this principle provides a way of linking series forms and building up phrases and sections. At the highest level it brings about a thorough reinterpretation of the sonata form itself.

(Straus 1990: 121)

In other words, the use of an arch form is merely an example, on the highest structural level, of a feature that is central to the movement on various levels of structure, namely what Straus calls "inversional balance" (1990: 121), a concept originally described by David Lewin (Lewin 1968: 1). For Straus, the loss of "dramatic polarity" (Straus 1990: 121) between the first and second

themes is replaced by “the symmetrical balance of exposition and recapitulation around a central development section” (1990: 121). Why this should be able to replace the former process satisfactorily is because it is not an arbitrarily applied system, but one which, as we shall see, is both derived from serial technique and also plays an important role as a compositional determinant on numerous structural levels.

Inversional balance, Straus explains, plays an important role in Schoenberg’s choice of row forms, a choice which he feels is central to the large-scale form of the movement (1990: 121). The theoretical basis of inversional balance is that in two rows related by a particular inversion, a particular pitch class in one row will have a “partner” in the other row which it always corresponds to. Thus between row forms P-0 and I-6, for example, pitch-class number 0 in the former will always correspond to pitch-class number 6 in the latter, while pitch-class number 8 in the former will always correspond to pitch-class number 10 in the latter, and so on. The relationship between them is such that the two pitch-class numbers from each row, added together (and subtracting 12 if the sum of the numbers is greater than 12), will always equal the transposition number of the inversion; thus, in this case, 6 (1990: 200). These “partners” of pitch classes—0 and 6, 8 and 10, 2 and 4, etc.—will partner each other not just in these two rows, however, but in any two inversionally-related rows whose transposition numbers sum to 6 (1990: 123). Thus between rows P-7 and I-11, for example, the same pitch-class number correspondences will be found, so that pitch-class numbers 0 and 6 will still be paired, as will 8 and 10, etc. Table 3 shows the pairs of pitch-class numbers for inversionally-related rows with transposition numbers summing to 5, which Straus recognizes as an important relation in the Third Quartet.

P-0	0	9	8	2	5	10	11	4	3	6	1	7
I-5	5	8	9	3	0	7	6	1	2	11	4	10

Table 3

Schoenberg exploits this inversional, and thus polar, relationship as an alternative to the harmonic polarity of traditional sonata form, Lewin tells us:

The ‘balance’ of the total chromatic induced by the functioning of such an

inversion was treated by Schoenberg, throughout his career, as something quite analogous to the balance induced by a tonal center.

(Lewin 1968: 2)

Thus an area of the music can be governed by a particular inversional relationship—or “axis”, as Straus calls it (1990: 123)—by the juxtaposition of any row and its inversion whose transposition numbers sum to the number of the axis involved. If, for instance, ten row forms in prime form are used in a hypothetical exposition, then in order to give these forms coherence and relate them to the large-scale structure one need only make the recapitulation consist of all the inversions of those prime forms at a fixed inversional relationship. Thus if P-0, P-2, P-5, P-10 etc. were used in the exposition, then I-5, I-3, I-0, I-7 etc. in the recapitulation would create a relationship of inversional balance between the two sections. Table 4 shows axis 5 expressed in pitch classes rather than pitch-class numbers.

B \flat	B	C	C \sharp	D	D \sharp
A	A \flat	G	F \sharp	F	E

Table 4

(adapted from Straus 1990: 123)

The axis of inversion for axis 5 can be described by its first and last pairs of elements, namely A / B \flat —D \sharp / E (1990: 122).

Straus demonstrates the important role that inversional relationships play in the movement as a whole; he shows that Schoenberg focusses especially on three such axes: axis 5 in the central role, with axis 1 and axis 9 playing supporting roles (1990: 123). The actual presentation of the axis takes place not in the form of hexachordal inversional combinatoriality—a technique which Schoenberg first used systematically in the cantata *Der Neue Klassizismus* at the end of 1925 (Haimo 1990: 8-9), thus two years before the Third Quartet—but through isomorphic partitioning, the rows being stated one after the other, their elements dispersed throughout the four voices rather than presented linearly, and the patterns of dispersion being to some extent uniform through a number of row statements. Straus shows that Schoenberg often displays the pitch-classes that characterize the axes of inversion, such as A / B \flat —D \sharp / E for axis 5, in a manner that makes them prominent (1990: 124).

While a tonal exposition would present a first theme group in the tonic key and a second theme group most commonly in the dominant key, the latter being resolved in the recapitulation, where all the themes would be presented in the tonic, Straus sees Schoenberg's entire exposition in this movement as being based on a homogeneous harmonic structure (Straus 1990: 126). Axes 5, 9 and 1 are presented in the first theme group (bars 1-33). The transition presents a somewhat more varied set of inversional relationships, analogous to the greater tonal instability one would find at this point in a traditional sonata (one may note, however, that Schoenberg retains the pattern of the alternation of prime and inversional forms (bars 33-61)). The second theme group, as Haimo, Hyde and Straus all point out, presents row forms in two dimensions: various forms of the row are used, in quite strict block patterns, with the notes of the row distributed in each case between the four instruments, while simultaneously two notes from each row form are allocated to the first violin (the *hauptstimme* in this case), these notes combining linearly to produce four new row forms, played one after the other, namely I-5—P-0—P-0(b)—I-5(b). The second theme group, then, is also concerned with the presentation of axis 5 (1990: 126).

Charles Rosen, in his book *Sonata Forms*, interprets this information somewhat differently:

A substitution for tonal orientation is sometimes devised in serial works: Schoenberg's String Quartet no. 3 ... uses a transposition of the row a fifth down for the second theme of the exposition, the relation of the fifth being derived directly from the row invented for this work.

(Rosen 1988: 403)

Rosen's description likely refers to the linear presentation of I-5 in the 1st violin, starting on C, a fifth lower than the prime form's first note of G. The importance of this relationship was pointed out a number of years earlier by Arnold Whittall, who explained that the work puts "emphasis on two sets"; these "are P-0 and I-5" (Whittall 1972: 46). "[T]he relation of the fifth being derived directly from the work" is explained in Rosen's earlier publication *Schoenberg*: "[t]he relation of the fifth is drawn from the series invented for the work, which contains two successive fifths and another slightly later" (Rosen 1976: 99). This serves as a basis for Straus's somewhat more comprehensive explanation, which accounts for the nature of the material in both exposition and recapitulation, as we will shortly witness, and explains Schoenberg's use

of sonata form as a reinterpretation of the form rather than a mere fitting of material into a historical template.

Straus shows that the relationship between the exposition and the recapitulation is one not just of inversionsal balance, but of inversionsal balance around axis 5: in the recapitulation, the second theme—which is recapitulated first—inverts the row order of the exposition around axis 5 (1990: 126), presenting the rows so: P-0—I-5—I-5(b)—P-0(b). Straus points out that “[t]his large-scale inversionsal relationship extends to the accompanying series as well” (1990: 126): the transposition numbers of the accompanimental rows in the second theme in the exposition and their corresponding counterparts in the recapitulation all sum to 5 (126), with the exception of just three out of the twenty-six row-forms used. This applies to the start of the recapitulation of the first theme as well (126). From small-scale row choices to the large-scale form, then, inversionsal balance, particularly around axis 5, is shown by Straus to play an important role in Schoenberg’s compositional decision-making.

Interaction of the old and the new

A picture of Schoenberg’s own notions about the “idea” in his serial music can be, if not painted, at least outlined, through comments he made about the relationship between his earlier and later works. Thus an important frame of reference is created when Schoenberg, in 1934, claims of twelve-tone composition that “[i]t is only to follow the basing-set, but besides you may compose in the same manner as before” (Spies 1974: 89). He also claims in *Style and Idea* that “I have not discontinued composing in the same style and in the same way as at the very beginning. The difference is only that I do it better now than before; it is more concentrated, more mature” (Schoenberg 1984b: 30); he then compares a section of the Third Quartet with one from *Verklärte Nacht*. In a letter from 1927 he writes:

I usually answer the question why I no longer write as I did at the period of ‘Verklärte Nacht’ [1899] by saying: ‘I do, but I can’t help it if people don’t yet recognise the fact’. In the case of some works about which I have been asked this, e.g. my 2nd String quartet ... , people are actually beginning to recognise this even now and to forgive me for composing not only as beautifully as before but also very much better than then.

(Schoenberg 1964: 124)

Thus an exploration of the “idea” in his serial music would likely approach the problem more

accurately from the point of view of how the “idea” in his tonal works is enhanced through the application of serial technique, rather than searching for a new “idea” on the basis that a new technique is being used.

A quote from Schoenberg himself does in fact provide, if not an extramusical meaning for the movement, at least an image that he found himself associating with it:

As a little boy I was tormented by a picture of a scene of a fairytale “Das Gespensterschiff” (the Ghostship), whose captain had been nailed through the head to the topmast by his rebellious crew. I am sure that this was not the “program” of the first movement of the third string quartet. But it might have been, subconsciously, a very gruesome premonition which caused me to write this work, because as often as I thought about this movement, that picture came to my mind. I am afraid a psychologist might use this story as a stepping-stone for premature conclusions. Being only an illustration of the emotional background of this movement, it will not furnish enlightenment of the structure.
(Rauchhaupt 1971: 53)

Despite Schoenberg’s fears concerning psychologists, the story does seem a promising subject for psychoanalytical scrutiny: one interpretation could be as a metaphor for tonality versus atonality, represented respectively by the captain, who is destroyed by his rebellious crew, and the crew themselves, who mutiny against the order he represents. From this point of view the image can be seen as a subconscious metaphor for Schoenberg’s lingering doubts over his much-attacked and little-understood atonal output, especially when seen in light of his frequent comments that revolution was never his intent. It also suggests an interesting line of investigation for the “idea” in music, namely a subjective, highly personal and programmatic (or narrativistic, as the basis for an exploration of senses of “extroversive semiosis”) interpretation of the concept. Focussing on it here would, however, involve straying from my presentation of the “idea” as a musical rather than extramusical concept, more in line with Schoenberg’s notion of “musical logic”.

A common feature of serial music is the sense that something is being expressed, but what that something is remains unfamiliar and difficult to describe; what is clear, however, is that with the advent of Schoenberg’s serial works not only the language has changed: the nature of the expression has changed as well. Schoenberg’s comments about the consistency of his compositional aims are pertinent to a deeper level of meaning referring to the “idea” of the work

as a whole, but the surface level of expression can hardly claim to have undergone no change. Comparing, as Schoenberg did, *Verklärte Nacht* and the Third Quartet, the sound quality of the two works is clearly different: the former has a strong Wagnerian influence and is based on a highly Romantic text; the latter is apparently concerned with Romantic ideologies only insofar as it continues to make use of certain compositional features from the period. Nor, for instance, is the topic of the Second Quartet visible in the Third: the Second Quartet outlines the Romantic-Expressionist narrative template of the struggle through increasing adversity to eventual resolution, a topic visible from at least as early as Beethoven's Ninth Symphony. A look at the end of the Third Quartet's last movement—which has the character more of a transition section about to lead into another thematic area than the traditional Romantic unambiguous, often triumphant, closure—is all that is needed to establish this. Whittall comments on this passage in a way that illuminates the hermeneutic difficulties inherent to Schoenberg's music:

Schoenberg's twin roles as 'aesthetic theologian' and 'pure' musician are similarly difficult to disentangle, and it is as unsatisfactory to impute nothing but extra-musical significance to the gently dissolving endings of the String Trio, or the Third and Fourth Quartets—at the opposite extreme from the tumultuous affirmations of *A Survivor from Warsaw* or the *Violin Phantasy*—as it is to claim that both types of ending are nothing more than demonstrations of formal rightness.

(Whittall 2003: 86)

An exploration of some of the features that this music has in common with the music that preceded it will thus be constructive in establishing what characteristics are carried over from the preceding tradition and what is novel. Most of this section will discuss Schoenberg's choice of a traditional form, namely sonata form, in the movement. This was discussed in "the use of sonata form" in terms of the mechanics of his use of the form; here it will be discussed from an aesthetic point of view.

The appropriateness of Schoenberg's use of sonata form in this and other serial works has long been a topic of debate, instigated by Boulez in his article 'Schoenberg Is Dead'. For Boulez

Since the pre-classical and classical forms which predominate are historically unconnected with dodecaphony, a yawning chasm opens up between the infrastructures of tonality and a language whose organizational principles are as

yet but dimly perceived. Not only does the actual intention fail, since the language is not supported by the architecture, but the very opposite happens: the architecture annuls any possibility of organization that the new language may possess. The two worlds are incompatible: and yet he has tried to justify the one by the other.

This could hardly be called a valid way of working ...

(Boulez 1952: 212)

Straus, however, believes that Boulez has misunderstood Schoenberg's intention (Straus 1990: 131): the latter's use of inversional balance in particular, he feels, invests the form with new meaning using a method derived from serial technique (1990: 131-2). Martha Hyde has likewise supported this view with her study of Schoenberg's creation of higher-level metrical structures through his use of twelve-tone syntax in the Third Quartet and other works (cf. Hyde 1984).

Nevertheless, an important feature of the twelve-tone row, especially compared to the system of tonality, is its homogeneity; as such, its interaction with a form which relies on the juxtaposition of contrasting sections poses an interesting problem. The various formal sections of the Third Quartet are characterized extensively by features adscititious to the row itself: thus the character of the second theme, for instance, appears to be created more as a result of dynamics, texture and tempo than through inherent qualities of the row. This can be felt when listening to the music: in order to highlight the different sections, Schoenberg separates the form clearly into its component parts, with *molto ritenuto* markings before the second theme group, before the recapitulation and before the coda, and a *ritenuto* before the development. Only the recapitulation of the first theme group has no *ritenuto*, but is still marked by a bar's silence in the bottom three instrument. In Chapter 5, in the sections "interpretation of the semiotic feature list and syntagmatic axis" and "the arch form of the graph", I will explore Schoenberg's differing use of the row in the various sections, through the interpretation of the semiotic table of distribution, which highlights the techniques he used to ensure the interaction between sonata form and serialism, with the intention of supporting the arguments put forward by Hyde and Straus which are dealt with in this section.

Hans Keller is highly critical of arguments like Boulez's. In his article 'The Future of Symphonic Thought' Keller argues that the Third Quartet is the successful continuation, at a historical stage of crisis, of the tradition of symphonic development (Keller 1974: 15). For Keller, Schoenberg's return to the use of sonata form was not a compromise, but a necessity for the survival of what he clearly considers one of music's most important features, namely the

development of material according to the methods found in the German tradition of Bach, Beethoven and Brahms; a composer like Schoenberg could appreciate this, he suggests, while a composer like Webern—of whom Keller is critical—and all the avant-gardists for whom Webern was a central figure (Boulez, for instance), were unable to do so (1974: 13). The argument used to criticize Schoenberg's use of sonata form in a non-tonal environment is, he feels, based on its own conclusion—in the terminology of logic, a "*petitio principii*" (1974: 9):

symphonic structure depends on the juxtaposition of keys for its contrasts and on modulations for its developments. Proof: Schoenberg's twelve-tonal symphonic structures, his would-be traditional sonata forms. In what sense do they fail, then, why are they a proof? Because they don't depend on the juxtaposition of keys for their contrasts, nor on modulation for their developments.

(Keller 1974: 9)

Thus a treatment of material which Boulez would feel was appropriate, namely the manner in which Webern would have proceeded, Keller feels is inadequate:

Webern was never a symphonist anyway: not only did he renounce extended structure, but he was a stater and varier rather than a contraster and developer ...

(Keller 1974: 13)

Keller points out that Schoenberg's Third Quartet had to achieve, in a dodecaphonic context, three characteristics of successful symphonic treatment, namely "contrapuntal symphonism without textural monotony ... , definition of wide-ranging contrasts in these totally keyless circumstances ... and, of course, unification with little harmonic help" (Keller 1974: 15). The adaptation of sonata form, Keller argues, is thus perfectly acceptable "in atonal circumstances, in which ... you need genius or near-genius in order to invent the necessary contrasts and achieve their necessary unification" (1974: 20).

Alexander Goehr considers Schoenberg's return to historical formal principles to be pertinent, an essential part of the composer's presentation of his "idea" (Goehr 1985: 67); Schoenberg's use of forms from the tonal period, but more importantly his method of motivic development, should not be seen as "a kind of retrogression into, if not a neo-classicism, at least a neo-academicism" (1985: 67), because what is important for Schoenberg is the expression of the "idea" (67), which serves as the basis for an entire composition. In Schoenberg's words,

After that [1915] I was always occupied with the aim to base the structure of my music *consciously* on a unifying idea, which produced not only all the other ideas but regulated also their accompaniment and the chords, the ‘harmonies’.

(Slonimsky 1938: 574)

“Everything is there to create clarity” Goehr states (Goehr 1985: 67), and for him this seems to be the “idea”, “[t]he idea of clarity and restraint” (1985: 67). From this point of view Boulez’s argument is perhaps asking Schoenberg to be interested in one thing when he is in fact interested in something else: Schoenberg did not abandon historical formal principles at this stage because his intention was not to say something about dodecaphonic music, but rather to continue a philosophical exploration of the nature of the musical “idea”, an exploration in which the unity and devices supplied by serialism were tools which helped to further that debate.

For some writers, this movement does more than merely utilize certain musical devices from the past: it consciously refers to them, and especially to one particular work, namely the first movement of Schubert’s A minor Quartet D. 804; Keller spoke of features in common between the two (Keller 1974: 15), and was followed by Rosen (1976: 98), Straus (1990: 161) and Hyde (1996: 223-235), all of whom have elaborated on the connection.¹⁰ For Hyde, the connection is

so integral to op. 30 that to dismiss it as an ornament for initiates is to ignore an intense and far from comfortable dialogue with the past that accounts for much of the later work’s structure and should deepen anyone’s appreciation of its achievement.

(Hyde 1996: 223)

The introductions of both works, Straus notes, present a static accompanimental figure, over which the melody enters in the 1st violin (Straus 1990: 162); the two works, he claims, also show analogous motivic connections between accompaniment and theme (1990: 162).¹¹ Similarly, both pieces present their main themes in the form of two complementary four-measure phrases

¹⁰A similar type of investigation involving a tonal and a serial work, namely Schoenberg’s Fourth Quartet and Beethoven’s Quartet op. 59, no. 1, can be found in Milstein 1992 98-118.

¹¹The melody and accompaniment of Schubert’s work both use arpeggiation, while in Schoenberg’s quartet pitch-class (016), which forms the second, third and fourth notes of the accompanimental figure, also appears at the end of the first phrase and the beginning of the second.

(164).¹² An additional link which Straus highlights lies in the importance Schoenberg attributed, in a discussion of Schubert's quartet (cf. Schoenberg 1983: 156-7), to the relationship in the development section between the tonic, A, the submediant, F, and the "submediant of the submediant", D \flat (Straus 1990: 166). The relationship between D \flat and F respectively to the central tonic A is in each case a major third, or interval class 4: this is the same relation that axes 1 and 9 hold relative to the central axis 5, a relationship which Straus feels is important in Schoenberg's quartet, both in the development section and elsewhere (1990: 166-8).

Schubert's quartet, Hyde notes, could have provided Schoenberg with answers to some of the problems of writing a twelve-tone sonata-form movement (Hyde 1996: 226); as she points out, "Schubert's first movement, unconventionally for a Romantic sonata form, is not based on contrast between principal themes" (1996: 226-7): the first theme in its lyricism exhibits characteristics one would normally associate with a second theme, with the result that the dramatic polarity of the two themes is not present in this movement. This leads Hyde to the insight that

If Schubert could build a conventional sonata form using themes too similar to provide the conventional contrast, why could Schoenberg not compose a sonata form using a compositional method that precludes such contrast?¹³

(Hyde 1996: 227)

Given the legitimacy of these intertextual references, they can in themselves be seen as a drastic change from Schoenberg's earlier compositional philosophy, namely the Expressionist belief that the subconscious mind should provide direction for one's ideas. For that earlier style, the idea of an intellectual reference to preceding music would be anathema: where all is based on feeling and one's inner impressions of the world, reference to earlier stylistic traits through recomposition is out of place. Functioning as signifiers, the unironic signification of the past by these intertextual references must act as proof of Schoenberg's nonrevolutionary intentions:

¹²Straus explains in some detail the serial techniques with which Schoenberg creates a phrase structure analogous to Schubert's (cf. Straus 1990: 164).

¹³Hyde examines in detail many connections—some more overt, some very subtle—between Schubert's and Schoenberg's movements. Her comparison, the details of which are outside the scope of this work, can be found in Hyde 1996.

that truly all he desired was to carry on composing as before. As he himself said, “I personally hate to be called a revolutionist, which I am not” (Slonimsky 1938: 575), lending further credence to the notion of the “idea” in Schoenberg’s serial music as a continuation of past notions of the musical “idea”, rather than as referring to something new.

Serial meaning

For Willi Reich the problem of artistic meaning in serial music is a simple one:

the only features determining the artistic value are the ones valid in all other music: power and originality of invention, wealth of ideas, and the artistic certainty and comprehensibility with which these are articulated, linked and presented.

Reich 1971: 134)

Likewise Anne Sivuoja-Gunaratnam, in her study of Einojuhani Rautavaara’s first serial period, emphasizes that in serial works there are many other features besides the row that contribute to the total musical experience; she says of the opening of Rautavaara’s Second Quartet, for instance, that

The pitches of the musical subject are derived from the series P5 ... , but that is *not* the most important factor contributing to its identity. Much more important are the dotted rhythms and melodic profile.

(Sivuoja-Gunaratnam 1997: 168)

In other words, both writers feel that a considerable amount of musical meaning in twelve-tone music is created not by the twelve-tone nature of the music, but by aspects shared with tonal music: dynamics, tempo, texture, instrumentation, treatment of material, etc. However, if one chooses to analyse a serial work in such a way, one is not, strictly speaking, dealing with serially-created meaning, but rather with the aspects of the music that can be clearly identified as being shared with tonal music, such as motivic variation or style analysis. These are obviously as important to a full understanding of a serial composition as a tonal one, and their interaction with the row is necessarily complex. On the other hand, an examination of the technical aspects of a piece of music on some level or other must also play an important part in the creation of meaning for that work, whether it is serial or tonal. Both topics are extensive in scope, and as

such the analyst must choose where his or her focus will lie.

Taking as standard the aural capabilities of the majority of listeners, the traditional large-scale dominant-tonic polarity between exposition and recapitulation must be considered an abstraction, and as such one could argue that inversional balance is no less relevant an organizing force than its predecessor. However, some people can feel the long-range sense of tension to resolution in a traditional sonata form, whereas a long-range sense of inversional balance must be much more difficult to sense; one would first have to remember the pitch-classes that constitute the various axes of inversion, and would then have to surmise which notes Schoenberg was referring to as being representative of a particular axis. Nevertheless, this is unimportant for two reasons. Firstly, even if undetectable by a listener, it is still there, and as such deserves recognition as a structural element with a considerable effect on the architecture from the large to the small scale. Secondly, one way of looking at music is as the aural impression of the philosophy that underlies it. Thus music is both a signifier of that philosophy, acting for the observer as the representamen that triggers interpretants that may lead one to think of the philosophy in question; and at the same time it is the signified, being the concrete, intended result of a certain way of thinking.

Looked at from this point of view, it scarcely matters whether the listener is emotionally affected by the music in a conventional sense: the music's purpose has moved beyond traditional notions of beauty to being a carrier of an intellectual idea. Goehr's scrutiny of Schoenberg's notes for the composer's intended book "The Musical Idea, Its Representation and Continuation' (*Der musikalische Gedanke, seine Darstellung und Durchführung*)" (Goehr 1985: 61; cf. Goehr 1977, which consists of excerpts from the manuscript later published as Schoenberg 1995) is in line with this: he suggests that Schoenberg was by this time interested more in the abstract concept of "musical logic" (Schoenberg, quoted in Goehr 1985: 4) than in the expression of Romantic, or Expressionist, emotion: "*Gestalten* (forms) are not the same as *Gedanken* (ideas), which are continued by means of *musikalische Logik* (musical logic)" (1985: 62). Schoenberg says the following on the matter:

... I believe that meaningful advantage can be derived from this art of composition [dodecaphony] when it is based on knowledge and realization that comes from musical logic; and that is also the reason why I do not teach my

students ‘twelve-tone composition’, but ‘composition’, in the sense of musical logic; the rest will then come, sooner or later, by itself.

(Schoenberg, quoted in Rufer 1962: 140)

One should not thus conclude that the music is emotionless; rather, perhaps, that emotion in music is now treated as an idea, an idea that can be abstracted and dealt with intellectually; it is there, for instance, but not primarily to invoke a direct response in the listener so much as to play a necessary role in the composition: emotional expression is a necessary part of the “musical logic”, or “idea”.

If music is, in any given example, not merely an expression of an emotion or of some programmatic element but also a discussion about the nature of musical material itself, then Schoenberg’s serialism presents the most comprehensive account of the harmonic element in conjunction with developing variation and a thorough motivic treatment. This is achieved through its function as the culmination of the process of increasing dissonance that occurred from the late nineteenth into the early twentieth century: it presents a musical surface which could not be more dissonant while still being polyphonic and reasonably transparent in texture, which is pragmatically assured through the use of all twelve tones before repeating any of them. Thus serialism allows an overview of the total harmonic context in which music functions. Serialism often faces the claim that it is an arbitrary system; however, it functions effectively as a continuation of the past through its role as an ordering system for the highest possible level of dissonance—the end result of the process pioneered most famously by Liszt and Wagner.

As far as narrativity as a creator of meaning in a musical context is concerned, what Nattiez says on the topic is true:

[I]f one is tempted to do it [apply narrative principles to music], it is because music shares with literary narrative that fact that, within it, objects succeed one another: this linearity is thus an incitement to a narrative thread which *narrativizes* music.

(Nattiez 1990b: 257)

Certainly, the most essential feature of narrative is that it works through time; a narrative exists

because “objects succeed one another”.¹⁴ The process of continuation in tonal music can be narrativized because we apply the idea of tension and resolution to the functions of harmony. The narrativization of serial music must thus involve an exploration of methods of continuation; with a harmonic source that is egalitarian and homogeneous, as is the twelve-tone row, continuation in the sense of dynamism is not an inherent feature. In order for continuation to be present, difference is needed. Rosen points out that

[h]omogeneity was not, in fact, completely congenial to Schoenberg: from the beginning he attempted to undercut it by his choice of transpositions [T]he only transposition allowed in the Suite, opus 25, has the effect of emphasizing the tritone G–C-sharp, already singled out by the inversion, as well as the tritone B-flat–E, which comes from the first and last notes of the series. In order to set certain elements of the series into relief, Schoenberg is guardedly selective with his transpositions, and deliberately limits the possibilities of serial treatment.

(Rosen 1976: 93)

Thus choice of transposition is used as a method of creating heterogeneity. Another method is the manner in which Schoenberg presents the row itself. Other methods of continuation, such as developing variation, are the result of abstraction from tonal composition. In the following chapter, the interpretation of data from the semiotic feature list in table 6 shows how Schoenberg uses the row as an integral part of the meaning of the composition, and as a tool for the discussion of the “idea”, in the manner in which it interacts with sonata form and developing variation to create methods of continuation.

¹⁴However, the continuation need not take place within the medium under investigation itself: a single cartoon frame, for instance, can suggest a series of narrative events which the reader fills in in his or her own head.

CHAPTER 5: SEMIOTIC/NARRATOLOGICAL ANALYSIS
OF THE THIRD QUARTET, FIRST MOVEMENT

Carrying out the analysis with reference to Nattiez's semiological tripartition, the neutral level will be discussed first. I note, and so does Nattiez, that there is nothing absolute about the analysis of the neutral level; from one perspective both the poietic and neutral levels themselves should be classified under the esthetic level, due to their nature, from a certain viewpoint, as subjective constructions of the analyst's thought. According to Nattiez's method, the first step is the isolation of the most important paradigmatic, or vertical elements—the main motifs and their variants, in other words, taken as individual elements—and then the observation of those elements in their syntagmatic, or horizontal context—how they function in the context of the work.

This is what I will be doing, with one exception and one minor deviation. The minor deviation is that my presentation of paradigms combines with what Nattiez would call a feature list, because I agree with Cook that “the initial paradigmatic classification is redundant since feature analysis of the individual segments supplants it” (Cook 1987: 180). The exception is that my concern here is particularly with serialism and its interaction with narrativity; a motivic analysis would deal with aspects of the work which are shared with much non-serial music, and as such is too general to fit in with the topic I wish to discuss here. As Dunsby's semiotic analysis, which I described in Chapter 2, demonstrates, it is up to the analyst to decide what the unit of signification should be: while, for instance, Nattiez uses a particular motif form, Dunsby uses the single note. Because the work I am dealing with here is a serial work, and the particular meaning I am dealing with is serial meaning, my analysis will take the twelve-note row as the unit of signification, allocating it to various categories according to the presentation of order numbers within each row form. A complete row analysis can be found in Appendix 1, serving as the source of the information presented in the table of features and syntagmatic analysis below. It is based on the analysis of row forms presented in Möllers 1977: 145-151.

The analysis of the neutral level will be followed by the poietic analysis, which presents the distribution of the unit of signification according to pertinent categories through the table of features, and their syntagmatic presentation by means of the syntagmatic graph. The esthetic level will then interpret the data presented in the poietic level in the context of its meaning for

the movement under scrutiny.

ANALYSIS OF THE NEUTRAL LEVEL

The row analysis, which forms the main body of the analysis of the neutral level, is in the Appendix.

Tables 5.1-5.3 give row matrices for each of the three rows, presenting all the possible row permutations in the work. Schoenberg's own matrices are shown in Schoenberg 1984a: 23-24.

	I-0	I-9	I-8	I-2	I-5	I-10	I-11	I-4	I-3	I-6	I-1	I-7	
P-0	g	e	eb	a	c	f	f#	b	bb	db	ab	d	R-0
P-3	bb	g	f#	c	eb	ab	a	d	db	e	b	f	R-3
P-4	b	ab	g	db	e	a	bb	eb	d	f	c	f#	R-4
P-10	f	d	db	g	bb	eb	e	a	ab	b	f#	c	R-10
P-7	d	b	bb	e	g	c	db	f#	f	ab	eb	a	R-7
P-2	a	f#	f	b	d	g	ab	db	c	eb	bb	e	R-2
P-1	ab	f	e	bb	db	f#	g	c	b	d	a	eb	R-1
P-8	eb	c	b	f	ab	db	d	g	f#	a	e	bb	R-8
P-9	e	db	c	f#	a	d	eb	ab	g	bb	f	b	R-9
P-6	db	bb	a	eb	f#	b	c	f	e	g	d	ab	R-6
P-11	f#	eb	d	ab	b	e	f	bb	a	c	g	db	R-11
P-5	c	a	ab	d	f	bb	b	e	eb	f#	db	g	R-5
	RI-0	RI-9	RI-8	RI-2	RI-5	RI-10	RI-11	RI-4	RI-3	RI-6	RI-1	RI-7	

table 5.1: matrix for P-0

	I-0	I-9	I-8	I-2	I-5	I-6	I-1	I-10	I-4	I-11	I-7	I-3	
P-0	g	e	eb	a	c	db	ab	f	b	f#	d	bb	R-0
P-3	bb	g	f#	c	eb	e	b	ab	d	a	f	db	R-3
P-4	b	ab	g	db	e	f	c	a	eb	bb	f#	d	R-4
P-10	f	d	db	g	bb	b	f#	eb	a	e	c	ab	R-10
P-7	d	b	bb	e	g	ab	eb	c	f#	db	a	f	R-7
P-6	db	bb	a	eb	f#	g	d	b	f	c	ab	e	R-6
P-11	f#	eb	d	ab	b	c	g	e	bb	f	db	a	R-11
P-2	a	f#	f	b	d	eb	bb	g	db	ab	e	c	R-2
P-8	eb	c	b	f	ab	a	e	db	g	d	bb	f#	R-8
P-1	ab	f	e	bb	db	d	a	f#	c	g	eb	b	R-1
P-5	c	a	ab	d	f	f#	db	bb	e	b	g	eb	R-5
P-9	e	db	c	f#	a	bb	f	d	ab	eb	b	g	R-9
	RI-0	RI-9	RI-8	RI-2	RI-5	RI-6	RI-1	RI-10	RI-4	RI-11	RI-7	RI-3	

table 5.2: matrix for P-0(a)

	I-0	I-9	I-8	I-2	I-5	I-6	I-3	I-1	I-10	I-11	I-4	I-7	
P-0	g	e	eb	a	c	db	bb	ab	f	f#	b	d	R-0
P-3	bb	g	f#	c	eb	e	db	b	ab	a	d	f	R-3
P-4	b	ab	g	db	e	f	d	c	a	bb	eb	f#	R-4
P-10	f	d	db	g	bb	b	ab	f#	eb	e	a	c	R-10
P-7	d	b	bb	e	g	ab	f	eb	c	db	f#	a	R-7
P-6	db	bb	a	eb	f#	g	e	d	b	c	f	ab	R-6
P-9	e	db	c	f#	a	bb	g	f	d	eb	ab	b	R-9
P-11	f#	eb	d	ab	b	c	a	g	e	f	bb	db	R-11
P-2	a	f#	f	b	d	eb	c	bb	g	ab	db	e	R-2
P-1	ab	f	e	bb	db	d	b	a	f#	g	c	eb	R-1
P-8	eb	c	b	f	ab	a	f#	e	db	d	g	bb	R-8
P-5	c	a	ab	d	f	f#	eb	db	bb	b	e	g	R-5
	RI-0	RI-9	RI-8	RI-2	RI-5	RI-6	RI-3	RI-1	RI-10	RI-11	RI-4	RI-7	

table 5.3: matrix for P-0(b)

ANALYSIS OF THE POIETIC LEVEL

Table of features and syntagmatic graph

Table 6 contains the feature list for the presentation of the unit of signification, which is the twelve-tone series.¹⁵ Series forms or groups of series forms are classified according to the grouping of order numbers within each series.

The horizontal row at the top of each page of the table, containing numbers in bold print, shows the categories of order-number presentation. I have abstracted these from the approximately sixty different variations in presentation of order number that Schoenberg uses in this movement. Each category represents a particular type of ordering of elements within the series.

The table uses the following conventions:

In the top row, each of the numbers in the columns has one of two purposes. The first purpose is to represent a contiguous presentation of order numbers within a series. All of the numbers have this purpose unless they are preceded by a multiplication sign (x). How do these numbers with the first purpose interact with the twelve-tone series? Here is an example:

The order numbers of a series are divided among the four voices in the following way: cello—order numbers 0, 1, 2, 3, 4; viola—order numbers 5, 6; 2nd violin—order numbers 7, 8, 9, 10; 1st violin—order number 11. There are thus four groups of order numbers, the first with five elements (cello), the second with two elements (viola), the third with four elements (2nd violin), and the fourth with one element (1st violin). The four groups of order numbers could thus be expressed as 5-2-4-1, showing which elements of the series are presented contiguously and which are not. It is possible to go through the entire movement and categorize each series according to this method; the problem with doing so, however, is that an unwieldy number of categories are created. To decrease the number of categories, I have taken only the two largest groups into account when categorizing the row forms, reducing the number of categories from around sixty down to sixteen. Thus the example here, which is a description of bar 244 (series form I-5(a)), would be expressed as “5, 4”, and would fit into the second category.

¹⁵Up to this point I have always talked about the twelve-tone *row* rather than *series*. While discussing the semiotic analysis, I intend to use the word “series”, to avoid possible confusion between rows of the table and the twelve-tone row.

The second purpose of the numbers, which is implied if they follow a multiplication sign, comes into play if a form of the series contains the same-sized grouping of order numbers more than once, for example, two sets of five contiguous order numbers. This particular example would be represented by the first category, “5x2”. Here is an example of a series that would fall into this category:

2nd violin—order numbers 0, 1, 2, 3, 4; cello—order numbers 5, 6; 1st violin—order numbers 7, 8, 9, 10, 11. The notes are thus divided up between three instruments. These three sets of order numbers could be expressed as 5-2-5. Thus there are two groups of five contiguous order numbers, and taking the largest elements, this would be expressed as 5x2. Likewise the category “4x3” means three sets of four contiguous order numbers, “2x5” means 5 sets of 2 contiguous order numbers, etc. Categories with multiple groups of the same number of contiguous order numbers are the only ones that take into account more than two groups of order numbers. This supplies the reader with a higher level of information about the remaining groups of order numbers in a category, which must then always be smaller groups than any of the groups referred to in the category description.

I have arranged the elements in the table from the most contiguous, namely “5x2”, to the least contiguous, namely “2”, this last category referring, of course, to forms of the series which have only two contiguous elements. The arrangement of categories is not absolute; some might argue, for instance, that “4x3” represents a higher level of contiguity than “5, 2”, but I have chosen to consider one longer set of contiguously ordered numbers as more contiguous than two only slightly shorter sets.

The distribution of row forms into the various categories is also not absolute; I have devised certain conventions and attempted to stick to them, and on other occasions have simply had to use my judgment. My first criterion is that order numbers must appear in one voice in order for them to be considered contiguous, but there are extenuating circumstances; for instance, should the sounding together of three notes with contiguous order numbers in different voices but in a similar range be considered contiguous or not, given that if they were all in one voice I would consider them so? Most often I answer “yes” to this question. On the other hand, if one voice contains two distinct parts, for instance the left-hand *pizzicatos* played in conjunction with *arco* notes by a single instrument in the development section, I do not consider notes with contiguous order numbers between the two parts to be contiguous, as they form two

distinct voices.

Some categories are missing from the table, for instance “5” and “4, 2”. This is simply because there are no series forms that fit into these categories.

The categories down the left side of the graph are self-explanatory

The numbers in the main body of the table refer to bar numbers. This reflects the fact that Schoenberg often uses the same partitioning of order numbers throughout a number of series statements, namely isomorphic partitioning. The result is that a large number of bars might sometimes be partitioned identically, though row forms not isomorphically partitioned but following each other chronologically may also belong to the same category. It is thus both more convenient and more meaningful to refer to bar numbers rather than series forms.

Much of the information in the footnotes, documenting irregular use of the row, is taken from Möllers’s comprehensive study (Möllers 1977).

Interpretation of the data is presented in the section “Analysis of the esthetic level”.

		5x2	5, 4	5, 3	5, 2	4x3	4x2	4, 3	3x4	3x3	3x2	3, 2	2x5	2x4	2x3	2x2	2	
Exposition	1st theme	5-32																
	trans- ition	33-6	36-8		37- 40													
			40-3															
		43- 8 ¹⁶		48-51			51- 61 ¹⁷											
	2nd theme	62-8				68		69- 70			70-1							
				71-2				72-4										
				74-6				76-7										
				78-9				79- 80										
					81-2													
				82-5						85-6								
				86-7				88- 90										
				91-4														

¹⁶Order number changed in bar 44: 8, 9, 11, 7, 10 in vcl.

¹⁷Order number 4 doubled in bar 53; Order numbers 5 and 6 omitted in bars 60-61, replaced by doubled order numbers 8 and 9.

		5x2	5, 4	5, 3	5, 2	4x3	4x2	4, 3	3x4	3x3	3x2	3, 2	2x5	2x4	2x3	2x2	2	
Development	1st half					95-9					99-103			103-11	111-2 ¹⁸			
												113-4						
					114-5							116-7						
									118					119-20				
											121-2 ¹⁹					122-5		
														126-8	129-30			
	2nd half				130-3				134-47			148-51						
					151-4	154-63								163-8				
										168-9	170-1					171-3		

¹⁸Order number 5 missing.

¹⁹Order number 7 missing

		5x2	5, 4	5, 3	5, 2	4x3	4x2	4, 3	3x4	3x3	3x2	3, 2	2x5	2x4	2x3	2x2	2	
Recap- itulation	2nd theme	174- 80				180		181- 2			182- 3							
				183-4				184- 6										
				186-8					188- 9									
				190-1					191- 2									
					193- 4													
				194-7								197- 8						
				198-9					200- 2									
				203-6														
	trans- ition		207- 30 ²⁰															
		230- 4		235-8														

²⁰Order number 6 missing from bars 213 and 215.

		5x2	5, 4	5, 3	5, 2	4x3	4x2	4, 3	3x4	3x3	3x2	3, 2	2x5	2x4	2x3	2x2	2
1st theme				239-41	242												
				243													
		244		245-7													
		248		249-50													
	251-7			257-60													
	260-76									276-7							
Coda										278-81							281-2
																282-3	
															284-5		
													286-91			292-4	
				295-302							302-3 ²¹						

²¹Order number 0 omitted, replaced by doubled order number 2

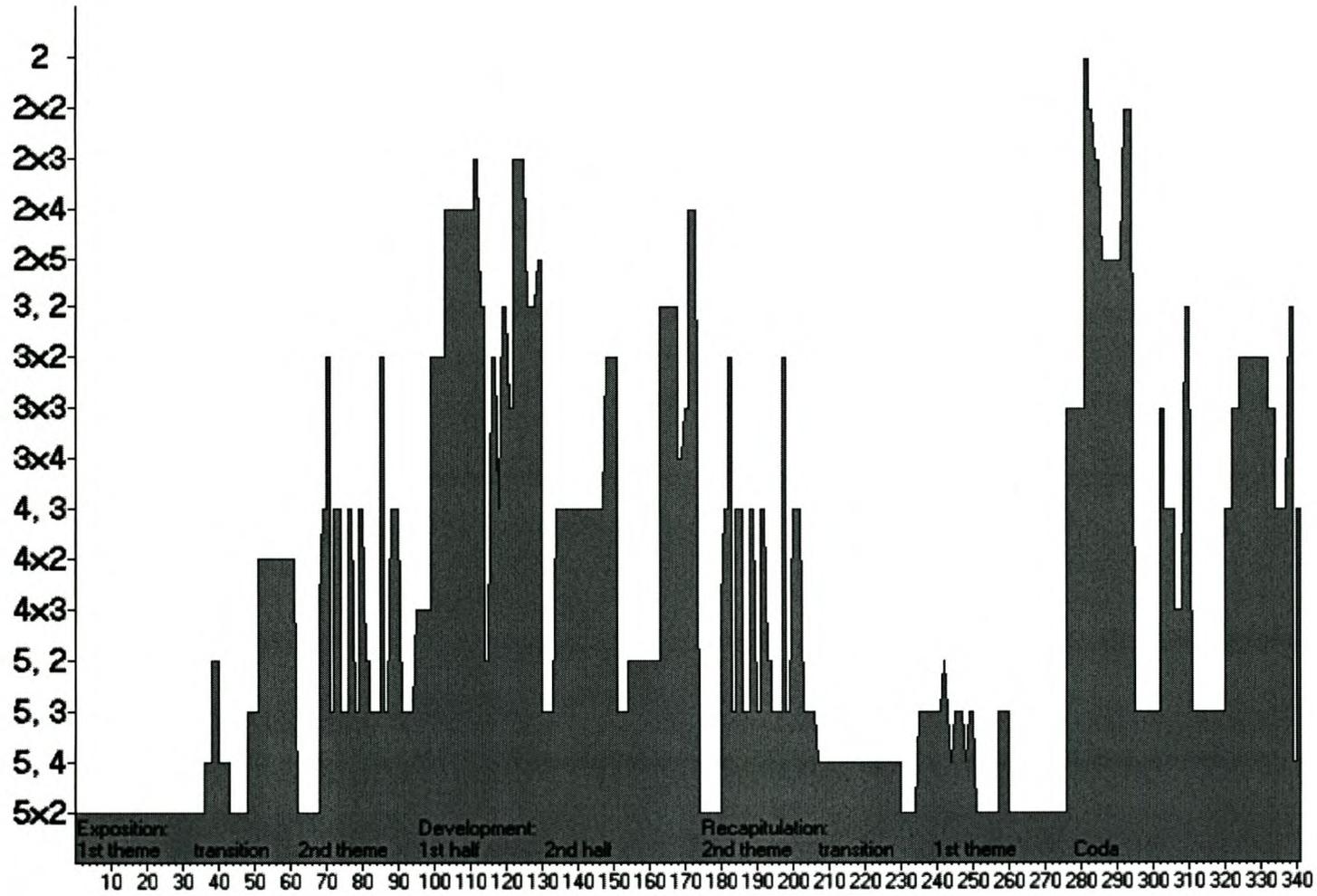
		5x2	5, 4	5, 3	5, 2	4x3	4x2	4, 3	3x4	3x3	3x2	3, 2	2x5	2x4	2x3	2x2	2
								303-6									
						306-8						309-10 ²²					
				311-20 ²³				320-2		322-4	324-32						
										332-4							
								334-7				338-9					
		339-40						340-1									

table 6: feature list

figure 1 overleaf: graphic representation of syntagmatic axis

²²Order numbers 5, 6, 7, 8, 9, 10 and 11 doubled.

²³Order number 2 omitted in bars 311-12, replaced by doubled order number 9.



ANALYSIS OF THE ESTHESIC LEVEL

Preliminary interpretation of the semiotic feature list and syntagmatic axis

The most striking feature of the semiotic feature list presented in table 6 and its reinterpretation through time in the syntagmatic axis in figure 1 is the close relationship it reveals between the sections of sonata form as they are listed in table 2 and the degree of contiguity in the presentation of order numbers in the row forms. There is a high degree of correspondence between traditionally thematic sections and the ordered presentation of the row, and traditionally developmental sections and the unordered presentation of the row. This can be seen most clearly on the graph, but is also clearly shown by looking down the table, and bearing in mind that the data is so arranged that the category representing the highest degree of contiguity (5x2) (the “partition which characterizes and dominates the entire movement” (Hyde 1984: 38)) is furthest to the left and the category representing the lowest degree of contiguity (2) is furthest to the right.

The first theme (bars 5-32) appears entirely in the left-most category of the table. The transition section (bars 33-61) starts to move out of this range: the first nineteen bars (33-51) stay in the range of categories with five elements; the last eleven bars (51-61) move into the range of categories with four elements, particularly 4x2. The second theme (62-94) continues this trend towards the right-hand side of the table, or upwards on the graph, though begins by fulfilling other obligations: the second theme group is traditionally a point of tonal stability, and Schoenberg refers to this by returning to the first category to present the first seven bars (62-68). Thereafter, the rest of the section (68-94) alternates between just two categories, 5, 3 and 4, 3, with the exception of seven bars out of the twenty-seven.

I have informally divided the development section into two halves, based on the change of character evident at bar 130, which marks the beginning of the second half. The first half (95-130) shows an immediate character change in presentation of order numbers, which involves a sudden move to the right of the table, or on the graph a sudden large spike, suggesting a high degree of “liquidation” of the row form. Thirty bars now appear in and to the right of 3x2—the most dextral of the categories on the table in the exposition—while only ten appear to the left

of this.²⁴ Of these ten, five (95-99) appear at the very beginning of the development, which in traditional sonata form is often marked by a restatement of the main theme, which is thus in keeping with a higher level of contiguity in the order numbers.

The second half of the development shifts sinistrally on the table to a considerable degree, though there is still a fair amount of activity at the right hand side of the table. To the right of 3x3 (one of the two middle categories of the sixteen used here) there are thirteen bars; to the left, thirty-two, and two on 3x3 itself (170-171). Much of the activity, particularly in bars 130-154, is centred around the same area of categories as the second theme group, which is the next section to appear; this is especially clear on the graph.

The recapitulation of the second theme (174-206) is bar for bar, order number for order number, identical to the second theme in the exposition, for the reason that it is an exact inversion of it, which of course affects the pitch classes but not the intervals between them. The result is that the presentation of order numbers moves firmly back to the left of the table. The transition (207-238) presents a stable bed of the three most contiguous categories. The first theme, although first presenting a modified presentation of order numbers (239-50) compared with its appearance in the exposition, follows up with twenty-four bars of the original 5x2 category (251-257/260-276).

The coda (278-341) presents interesting information, supporting what is clearly shown by the score and the length of the section, namely that Schoenberg treats it in the Beethovenian tradition as a second development section: it contains the highest levels of row “liquidation” in the entire movement (281-283/292-294).

The pattern created by the presentation of the order numbers in their categories is striking, particularly in figure 1: the beginning of the first theme in the exposition to the end of the first theme in the recapitulation clearly portray the arch form of the work, showing a direct relationship between the data and the overall form. The coda does not take part in the arch, though in not doing so it plays a pertinent role, as is shown in the section “the arch form of the graph”.

²⁴The reader will notice in my descriptions that occasionally the sum of the number of bars I mention outweighs the number in the section being referred to. This is because Schoenberg’s use of row forms does not, of course, coincide with barlines, and my definition of bars belonging to particular categories includes a bar even if only one note of the row form occurs within that bar, so that many bars are counted twice.

Factors controlling the foreground level of serial composition

To move towards a fuller interpretation of the information presented in figure 1, this section will look at the interaction of the presentation of order numbers with other features that affect the foreground level of this and other serial works.

The arrangement of the order numbers constitutes the foreground level of serial music; naturally it does not work alone, but is affected by other features, such as possible foreground expressive preferences Schoenberg might wish to incorporate, and the treatment of motivic variation. The former are perhaps most detectable at places where order-number sequence has been changed or order numbers have been omitted or replaced by other, now-doubled order numbers, and as such have only a limited relevance here. These places are all documented in the form of footnotes to table 6. The latter exerts a larger influence on order-number presentation. The variation of motivic forms is primarily achieved through variation of rhythm—a frequent observation about Schoenberg's serial themes (e.g. Griffiths 1985: 181)—although the presentation of motifs and order numbers are also closely related.

The most predominant motif, and the one with the greatest influence over order number presentation, is the accompanimental motif, shown in example 1, that opens the piece and is heard in one form or another in almost every subsequent bar.



Example 1

This is strongly linked to order numbers 0, 1, 2, 3, 4 and 7, 8, 9, 10, 11: when five contiguous order numbers appear, it is most often this motif or one of its many variants—though not necessarily with the particular pitch classes shown in example 1—that is being presented. If four or three contiguous pitch classes are presented, they will often be sections of this motif. Variants of this motif are also constructed out of repeated statements of two order numbers.

On the other hand, it is not the case that this motif is always presented with these order numbers, or even with contiguous order numbers; this is the case in bars 70 (8, 7, 4, 3); 72-73 (8, 7, 4); 81-82 (9, 11); 85-86 (2, 1, 0, 10, 11); 88-89 (4, 7, 8); 89-90 (3, 4, 5); 92-93 (5, 6, 7, 8,

9); 303-304 (3, 4, 5, 6); 305-306 (5, 6, 7, 8); and 334-338 (1, 2, 5, 6, 7, 8).

Five contiguous order numbers may also be used to present another motif, namely the main melody, the first appearance of which is shown in example 2.



Example 2

The notes in the top and bottom lines both present order numbers 7, 8, 9, 10, 11. Again, the pitches are highly interchangeable, depending on the row form used, though this melody is not stated as a contiguous unit anything like as often as the accompanimental motif.

The table and graph documenting the presentation of order numbers must thus necessarily also contain information about the presentation of, particularly, the accompanimental motif and its liquidations, as these are closely connected to the level of integrity of the row. This means that figure 1 functions as a low-definition analysis of Schoenberg's use of developing variation in the piece.

The arch form of the graph

Figure 1's very clear arch form has already been pointed out. The graph, it is now known, contains information both about the presentation of the accompanimental motif and the way in which it is varied, though not in a very precise manner, and also, in a much more precise manner, about the presentation of order numbers. The arch form is interesting in relation to both of these.

In the case of the presentation of the accompanimental motif, this low-definition semiotic presentation of motivic variation based on presentation of order numbers offers an interesting alternative to the high-definition semiotic analysis of motifs themselves that forms the basis of Nattiez's analytical system. For a complex piece like Schoenberg's Third Quartet, where a

comprehensive semiotic review of motivic practice is not viable, this analytical approach offers access to meaningful results. Using the row as signifier eliminates the necessity of deciding on categories based on contour, pitch or other factors, which may in the end yield no clearly discernible result while drowning the analyst in data; it classifies only one type of liquidation, namely the number of elements from the original motif remaining in any one variation. A more precise study of the accompanimental motif than the one offered by figure 1 could be made by keeping the categories more or less the same but eliminating all the information not pertaining to the motif, namely ignoring all order numbers not involved in its presentation.²⁵

Relating this distributional study of order-number presentation to developing variation, then, yields the result that the manner in which Schoenberg applies developing variation is “organically” linked to the overall arch form, insofar as he liquidates the motif to a bare number of its original elements, then rebuilds it again, in such a way that the liquidation and rebuilding coincide with the arch form of the whole. This information is best approached, however, from the point of view of order numbers.

The arch form created by the presentation of order numbers, as well as the fact that the coda does not take part in the arch, suggests that Schoenberg’s method of applying serialism takes into account the order numbers so that they work in conjunction with the overall formal design, thus helping in its expression and promoting what might be thought of, by both us and Schoenberg, as “unity”, and more precisely as playing an integral part in the expression of the “idea”. It suggests a relationship between foreground and background: it is perhaps less unified than the “Russian doll” type of relationship expressed by Schenkerian analysis, where each layer is encompassed by and interacts with the layer underneath it, but it certainly suggests at least a sameness of purpose in the large-scale and small-scale levels of composition. It thus assists Schoenberg’s use of “inversional balance”, in being a serial technique which justifies and supports his use of arch form.

In addition, the data shows Schoenberg’s serial analogue of the processes that take place in a conventional tonal sonata form: areas concerned with presentation of themes have a high level of integrity concerning order number contiguity, while areas of development demonstrate

²⁵Haimo’s ‘Developing Variation and Schoenberg’s Serial Music’ (Haimo 1997) studies how Schoenberg engineers the interaction between the two techniques.

a low level of integrity. Thus order-number presentation functions as an analogue of the level of tonal stability associated with particular sections of sonata form. In this way Schoenberg makes the row function in a manner which enables it to overcome its inherent homogeneity; he essentially “narrativizes” it, allowing it to interact with sonata form.

This is the means by which the “idea”, understood as “the method by which balance is restored”, is principally referred to in the piece. This “method” refers to a narrativistic approach to musical form, whereby situations require development, and that development requires resolution. The methods by which this development and resolution occur are the methods of continuation. The mechanics of these methods of continuation, namely the ways in which the row forms differ from one another in each section, have already been documented in the preliminary interpretation of data on pages 79-80. It remains only to formalize them by placing the row forms into a narrative framework through the application of Greimas’s “aspectual configurations”.

In terms of figure 1, inchoativity refers to the categories closest to the bottom of the graph—all those categories containing groups of five contiguous elements. This is the range in which the entire presentation of the first theme in both the exposition and recapitulation appear, and which contains the categories which necessarily refer to the row in its most unchanged, and thus inchoate, form. The boundary is obscured slightly by brief references in the development section to categories in this range as well, which are a feature of its second half. In terms of average areas of distribution, however, the development is situated in a far higher range of categories.

Durativity refers to a wider and less clearly demarcated series of categories. As the categories containing five contiguous order numbers function as inchoate, the first of the categories containing groups of four elements must mark the beginning of categories with a durative function. This durative function incorporates all the rest of the categories, in that having defined inchoate categories as referring to the most unchanged forms, the categories represent increasing durativity as they ascend the *y* axis.

Terminativity is the most difficult category to define. From one point of view, terminativity falls into the same range as inchoativity, insofar as the recapitulation, which in a classical sonata form would be the “beginning of the end”, refers back to the categories of inchoativity. This is supported in the classical sonata by the return to the tonic, namely a

position of “rest” rather than “tension”. It is clear that the function of rest in this case is fulfilled by the return to the unliquidated row form/motif.

On the other hand, one would expect the coda to serve the purpose of terminativity. In terms of order-number presentation, it is clearly most akin to the development section, which means that it is playing a durative, rather than terminative role, functioning as a second development, as is often the case in Romantic music and certainly in Schoenberg’s music. At the end of the coda Schoenberg does not “resolve” the order numbers to any very high level of contiguity; the movement ends in the category “4, 3”, which falls into the range I have marked as durative. Its terminative function is partly served on a higher structural level through the repetition of P-0 and I-5, which has been pointed out by many writers as serving, by analogy with dominant-tonic progressions in tonality, a cadential function.

An interesting “case study” of high versus low degrees of order-number contiguity in the various sections is the melody played by the first violin in the second half of the first transition section (bars 43-61) versus the melody played by the same instrument that constitutes the second theme (bars 62-94), which, incidentally, contains the only row forms in the movement not catalogued by the table of features and the syntagmatic graph, though the discussions of Hyde and Straus’s work dealt with them at some length. In the transition section, the melody consists of order numbers 5 and 6 from fourteen different row forms.²⁶ Taken together as a single unit, they constitute a series of notes bearing no relation to the row form. By contrast, the second theme presents a melody which consists predominantly of order numbers 5 and 6, 10 and 11, or 7 and 8, taken from twenty-five different row forms. As Hyde and Straus both point out, if these notes are taken together as a single unit, they present horizontally four different statements of the row. Thus the transition section presents a succession of non-contiguous order numbers, while the second theme presents a full row of contiguous order numbers.

Types of unity

Chapter 3 described Schoenberg’s “idea” as referring to a narrativistic approach to music: things happen because they are the result of other things that have happened before them. The “idea”, we have seen, is a theory of unity, which achieves its goal if all the parts of a work interact together to fulfil the expectations created by other parts of the work, and if all the parts can be

²⁶The last row form replaces order numbers 5 and 6 with doubled order numbers 8 and 9.

seen to be referring together to a single signified.

Serialism is a strategy for bringing the concept of the musical “idea” to fruition: a means of creating unity whereby everything, from the horizontal to the vertical, is the result of a single element, namely the row. That Boulez and other post-war modernists felt Schoenberg’s achievement to be inadequate was because to their eyes he had not done this, as Boulez expressed in the quote in chapter 4: rhythm, articulation, dynamics and other factors were not directly controlled by the row. However, Schoenberg had other ways of making the row interact with the other features of his compositions, and these ways constitute his theory of unity, which was different to theirs and different to the most powerful theory of unity which preceded it, namely the unity made explicit in tonal compositions by Schenker’s analytical procedures, in that “Schoenberg was not seeking coherence from tonal forces, but from other musical parameters” (Sivuoja-Gunaratnam 1997: 115).

Joseph Straus’s elaboration of the concept of inversional balance (Straus 1990) serves to illuminate a feature of Schoenberg’s serial unity, explaining how the row is used to account for large- and small-scale formal features, from choice of row forms following on from each other, to similarities between sections of the form, up to the overall design of the large-scale form itself. Martha Hyde’s demonstration that the interval content of parts of the set are mirrored in even-measured phrase lengths within musical lines (Hyde 1984), and of other methods in which Schoenberg uses the row to create higher-level metrical patterns, also constitute elucidations, or possibly creations, of Schoenberg’s theory of serial unity. The same applies to work done by Ethan Haimo (Haimo 1997) dealing with the connection between developing variation and serialism.

My own analysis has also attempted to contribute to this area of knowledge, by showing how Schoenberg’s large-scale form is expressed in small-scale structural features, namely the order numbers, which are used in a way that creates an “arch” pattern mirroring the pattern of the whole, and which also shows how developing variation, at the level on which it most explicitly connects with presentation of order numbers—namely the extent to which the “pitch-class-rich” motif is broken down to a state of “pitch-class poverty”—is made to function in the same way.

Schoenberg’s “idea”, then, would be achieved through the flawless expression of unity, and it is here that serialism acts as a double-edged sword, being designed to take under its wing

every aspect of the music from small-scale features to large-scale structure, but being unable by its nature to achieve the sort of interaction of parts from the smallest to the largest scale which Schenkerian analysis recognizes in certain pieces from the tonal area, wherein layers are “peeled away” to produce the higher levels of unity on background levels, showing how the same basic design is manifested from the lowest to the highest formal levels. Thus the system contains

tension or dialogue between Schoenberg’s ‘classical’ aspirations to organic unity and those more modernist fractures and ambiguities which inevitably arise when the composer tries to use the linear components of just two row forms in the vertical as well as the horizontal plane.

(Whittall 2005: personal communication)

Of course, the tonal system developed gradually over a period of hundreds of years; the basic tenets of serialism were developed in a period of roughly ten years, out of the desire to make one subsidiary element of the former system, namely the motif, continue the rise to power it had begun in that system’s final years, allowing it to take pride of place in the latter system.

CONCLUSION

The syntagmatic graph demonstrated that the presentation of order numbers in the movement is closely correlated to the overall form. This presentation functions as one of Schoenberg's methods for ensuring the validity of the arch form through his serial technique.

The correlation between small- and large-scale features through serial aspects of the work expresses a type of serial unity, in line with what Schoenberg wished to achieve in terms of his notion of the musical "idea". This is further expressed by the "narrativization" of the essentially homogeneous row in the context of sonata form, which is consistent with the narrativistic nature of Schoenberg's "idea".

The techniques used here are a portion of the narratological techniques available, others of which would be constructive for the further interpretation of the movement's structural elements in terms of narrative structures. For example, in addition to the "narrative episodes", there are various other "distinctions" (Pope 1998: 207) for narrativistic structural cataloguing: "[s]tory and plot" (1998: 207), which distinguish between "what" is told and "how" it is told; "[f]abula and sjuzet" (208), which distinguish the basic chronological narrative elements of a story from "the particular chronological sequencing and structural logic of a specific telling" (208); "[n]arrators" (208), examining who is doing the speaking, or expressing; "[c]haracters" (208) and others.

My examination of narrative elements in the movement has taken into account how one structural element functions as narrative in the context of the overall narrative structure. Further investigation could explore how the other elements function together to express, not necessarily sonata form, but a coherent series of events, in terms of Schoenberg's "idea".

The "idea" could also be looked at in terms of its extramusical function, using, for example, Schoenberg's "Ghostship" as one possible starting point. This would involve a more in-depth examination of what serialism expresses in extramusical terms, a difficult task given the paucity of pre-existing senses of expression compared to tonal music.

The semiotic analysis as a whole would provide more information as part of a study of other works in Schoenberg's oeuvre, or of the works of other composers. In other words, these analytical techniques could be applied to other works for the purposes of style analysis, which Nattiez suggests as an applicable and useful application of the semiotic system (Nattiez 1990a:

141).

GLOSSARY

The definitions given here are my own, with the exception of part of the definition for pitch class, taken from Haimo 1990: 184. Other “informal definitions ... designed to help the reader who has had little experience with twelve-tone theory” can be found in Haimo 1990: 183-185. More formal definitions can be found in Forte 1977. The terms defined here are concepts used in serial music that are referred to in the text.

hexachordal inversive combinatoriality—When two twelve-note row forms related by inversion are so designed that the first six pitch classes of one are complementary to the first six pitch classes of the other, in other words that the pitch content of the first half of one is such that it contains no pitch class which is also found in the first half of the other, those two row forms are said to be related by hexachordal inversive combinatoriality. The row from Schoenberg’s Piano Piece op. 33a exhibits hexachordal inversive combinatorial properties if the prime form, P-0 and its inversion at the perfect fourth, I-5, are juxtaposed:

P-0: b b f ♯ c ♯ b ♯ a ♯ f ♯ c ♯ d ♯ g ♯ a b d ♯ e ♯

I-5: d ♯ g ♯ c ♯ d ♯ e ♯ g ♯ c ♯ b b f ♯ f ♯ b ♯ a ♯

This form of combinatoriality allows the simultaneous statement of two row forms while ensuring that no octave doubling or repeated pitches will occur.

interval class—Because enharmonic spelling is essentially meaningless in serial music, the use of different interval names for aurally identical intervals—such as augmented fourth and diminished fifth—also becomes obsolete. Instead the interval names are replaced by interval classes 1 through 6; interval class 1 refers to a minor second or major seventh, interval class 2 to a major second or minor seventh, interval class 3 to a minor third or major sixth, etc.

isomorphic partitioning—This refers to the similar distribution among the instruments of the order numbers of a row in two or more row forms. For example, if P-5 is used and order numbers 0, 1, 2, 3 (c, a, a b, d) are played by the first violin, 4, 5, 6 (f, b b, b) by the second violin, 7, 8, 9 (e, e b, f ♯) by the viola and 10 and 11 (d b, g) by the cello, then another row form is used and the same distribution of order numbers is adhered to, then

they are isomorphically partitioned. Schoenberg's Third Quartet contains many approximate examples, but few that adhere strictly to the pattern. Examples of strict adherence can be found in bars 272-4 and 304-5.

order number—Any of the twelve positions, numbered from 0-11, within the twelve-tone row in which a pitch-class can occur. Thus in the prime form of the row of the Third Quartet, for instance, g occurs at order number 0, e at order number 1, e \flat at order number 2, etc.

permutation—Denoting any of the 48 forms of a particular row, all of which are related to each other by inversion or retrograde in conjunction with transposition.

pitch class—"Denotes a class of pitches related by octave equivalence. Thus, for instance, any D, regardless of registral placement, is a member of pitch class D. Enharmonic spellings have no significance in the twelve-tone system. Thus, for example, E \flat and D \sharp are members of the same pitch class" (Haimo 1990: 184). These pitch classes are thus often and more succinctly referred to by number, from 0 to 11, where c is 0, c \sharp /d \flat is 1, d is 2, etc., up to b, which is 11.

pitch-class set—Any group of notes, whether they occur horizontally or vertically, is reducible to a pitch-class set of two to twelve elements, expressed in their smallest possible intervallic distance from one another and transposed so that the first member of the set is 0. Thus the notes f g \sharp b \flat would first of all be converted to pitch-class notation, namely (5,8,10) and would then be ordered so that they are arranged in such a manner that their intervallic content is as small as possible, and expressed with the smallest interval first, namely (10,8,5). The set is then transposed to make the first element 0, causing it to be written (0,10,7). The intervals are then inverted, making the pitch-class set (0,2,5). Forte has classified all 208 of the pitch-class sets containing 3 to 9 elements in an appendix to his work *The Structure of Atonal Music*.

transposition number—The interval by which a row form is transposed from its prime form. The transposition number of P-4, for instance, is 4, and signifies that the row has been transposed a major third up from the prime form. Thus if P-0 begins on g, then P-4 will begin on b, while I-9, for example, will begin on e, starting a major sixth up from the prime form.

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APPENDIX: ROW ANALYSIS

I

Moderato (♩=100)

1. Geige

2. Geige

Bratsche

Violoncello

p-0

7

6 8 7 9 10 8 11

p-0(a)

9 10

0 1 2 3 4

5 6

Detailed description: This block contains measures 6 through 11 of the musical score. It features four staves: Violin I, Violin II, Viola, and Cello. Measure 6 has a dynamic marking of *f*. Measures 7-11 show various dynamics including *p*, *mf*, and *pp*. Handwritten annotations include 'p-0(a)' above measure 9, and numbers '5' and '6' with arrows pointing to specific notes in measures 10 and 11. Fingering numbers (e.g., 0, 1, 2, 3, 4) are present in the violin parts.

11 12 13 14 15

p-0(b)

5 6

7 8 9 10 11

H

0 p

1

2 3

Detailed description: This block contains measures 11 through 15. It features four staves: Violin I, Violin II, Viola, and Cello. Measure 11 has a dynamic marking of *f*. Measures 12-15 show dynamics of *p*, *pp*, and *mp*. Handwritten annotations include 'p-0(b)' above measure 13, 'H' above measure 14, and '0 p' and '1' below measure 14. Fingering numbers (e.g., 2, 3) are present in the cello part.

16 17 18 19 20

RI-5(b)

5

6

p-0

7 8 9 10

sempre spicc.

pp

5 6

H 0

1

mp

pp

Detailed description: This block contains measures 16 through 20. It features four staves: Violin I, Violin II, Viola, and Cello. Measure 16 has a dynamic marking of *f*. Measures 17-20 show dynamics of *pp*, *mp*, and *pp*. Handwritten annotations include 'RI-5(b)' above measure 16, 'p-0' above measure 19, and 'sempre spicc.' above measure 20. Fingering numbers (e.g., 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10) are present in the violin and cello parts.

21 22 23 24 25

I-9 P-0

5 6 7 8 9

4 5 6 7 8 9 10

sempre spicc.

mp

26 27 28 29 30

I-5 P-8

1 2 3 4

7 8 9 10 11

pp p

31 32 33 34 35

I-11

5 6 7 8

P-8

0 1 2 3 4

pp p f

36 37 38 39 40

RI-11(a) R-8(b)

3 pizz 4 5 6 3 5 6 8 10

R-8(a) pizz RI-11(b)

pp arco

pp (RI-11(a)) pp (R-8(b))

41 I-II (b) poco rit. . . Tempo I-2 42 43 44 P-5 45 R-5 (b)

46 47 RI-8 (b) 48 P-10 (a) 49 50 P-2 (a)

51 I-5 52 P-0 53 54 RO (a) 55 RI-5 (a)

56 P-0 (b) 57 I-5 (b) 58 P-8 (b) 59 60 I-9 (b) poco rit. .

Handwritten musical score for a string quartet, measures 41-60. The score is divided into four systems, each with two staves (violin and viola). It includes various musical notations such as notes, rests, dynamics (pp, p, f, ff, mf), articulation (accents, slurs), and performance instructions like 'poco rit.' and 'Tempo I-2'. Fingerings and bowings are indicated throughout. Measure numbers 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, and 60 are clearly marked.

molto rit.

Etwas ruhiger, molto cantabile

61 62 I-II(b) 63 R2 64 RI-1(a) 65 RI-7(a)

66 P-8(b) 67 RI-II 68 R3(a) 69 RI-9(b) 70

71 R-10(a) 72 RI-II(a) 73 R-4(a) 74 I-3(b) 75

76 R-7 77 I-9 78 I-4(b) 79 I-4(b) 80

81 **I-4** 82 **R-7** 83 **RI-9** 84 **P-7(b)** 85

86 **RI-11(b)** 87 **P-1** 88 **R-1(b)** 89 90

91 **I-5** 92 **RI-10** 93 **rit. P-0** 94 **P-0** 95 **Tempo I**

96 **P-0** 97 **I-5** 98 99 100

Handwritten musical score for guitar, measures 121-140. The score is written on three staves (treble, middle, and bass clefs). It includes various musical notations such as notes, rests, and fingerings. Above the staves, there are handwritten labels for techniques and dynamics: P-11, P-4, I-9, R-3(b), RI-1(a), R-6(b), I-5, R-8(b), I-1(b), P-11, P-5(a), I-4(b), R-3, I-5, R-4, and RI-2. Dynamics include mf, f, ff, p, pp, and arco. The score is divided into measures 121 through 140, with some measures containing multiple systems of notation.

141 R-3 RI-1 R-6 RI-7

146 R-1(b) I-2 poco rit. et was ruhiger R-0

151 I-3(b) R-7(a) vorwärts RI-8(a) P-0(b)

156 RI-3 P-6 I-9(b)

pesante etwas langsamer (sehr wenig)

161 162 163 164 165

R-1(a) I-8

166 167 168 169 170

P-1 I-1 R-5

rit. I-1(a) a tempo etwas ruhiger, molto cantabile

171 172 173 174 175

P-6(b) RI-3

176 177 178 179 180

P-4(a) I-5(a) I-9(b) R-6 I-3

12

181 **I-2(a)** **R-8(b)** **I-7(a)** **R-6(a)** **RI-7(a)**

186 **P-2(b)** **RI-10** **P-8**

191 **P-1(b)** **P-1** **RI-10**

196 **R-8** **I-10(b)** **R-6(b)** **I-4**

201 *RE-4(6)* *P-0* *R-7* *rit.* *molto rit.* 205

Tempo *etwas langsamer* 206 *I-5* *P-8* 207 *I-11* 208 *I-4* 209 *P-1* 210

211 *I-9* *Tempo I* 212 *P-7* 213 *P-7* 214 *P-0* 215

216 *I-5* 217 *P-8* 218 *I-1* 219 *P-5* 220 *I-6*

221 4 7 8 9 || 222 P-3 I-3 P-6 I-6
5 6 223 224 225 226
cresc. cresc. cresc.
(P-3) (I-3) (P-6) (I-6)

226 P-2 pesante P-2 I-5 I-5 (G)
5 6 227 228 229 230
P-2 P-2 I-5 I-5
(P-2) (P-2) f ff

231 Tempo I I-5 I-5 I-5 I-5
7 8 9 10 232 233 234 235
f mf p pp

236 237 238 sehr ruhig, aber im Tempo I-5 239 240
pp cantabile pp pp
pp

241 I-5(a) 242 9 243 10 244|| 245 I-5(b) pizz. 4

Handwritten musical score for measures 241-245. Measure 241 is labeled I-5(a). Measure 245 is labeled I-5(b) with 'pizz.' and 'arco' markings. The score includes treble, middle, and bass staves with various fingerings and dynamics like ppp and pp.

246 2 3 4 247 0 1 248 1 3 249 P-0(b) 250 3

Handwritten musical score for measures 246-250. Measure 249 is labeled P-0(b). The score includes treble, middle, and bass staves with various fingerings and dynamics like ppp and pp.

251 I-5 252 arco 253 254 P-8 255

Handwritten musical score for measures 251-255. Measure 251 is labeled I-5. Measure 252 has 'arco' and 'pp' markings. Measure 254 is labeled P-8. The score includes treble, middle, and bass staves with various fingerings and dynamics like ppp and pp.

256 I-5 257 258 I-5 259 P-8 260 I-11

Handwritten musical score for measures 256-260. Measure 256 is labeled I-5. Measure 258 is labeled I-5. Measure 259 is labeled P-8. Measure 260 is labeled I-11. The score includes treble, middle, and bass staves with various fingerings and dynamics like ppp and pp.

Handwritten musical score for measures 261-265. The score is written on four staves (treble, alto, tenor, and bass clefs). It includes various chord symbols such as P-6, I-9, P-6, I-1, and P-10. Performance markings include *cresc.*, *mf*, and *sf*. Fingerings and articulations are indicated with numbers 1-5 and slurs. Measure numbers 261, 262, 263, 264, and 265 are clearly marked.

Handwritten musical score for measures 266-270. The score continues on four staves. Chord symbols include I-5, P-2, I-9, P-0, and I-0. Performance markings include *f* and *sf*. Measure numbers 266, 267, 268, 269, and 270 are clearly marked.

Handwritten musical score for measures 271-275. The score continues on four staves. Chord symbols include P-3, R-3, R-6, I-6, R-9, and I-9. Performance markings include *f*, *poco pesante*, and *molto rit.*. Measure numbers 271, 272, 273, 274, and 275 are clearly marked.

Handwritten musical score for measures 276-280. The score continues on four staves. Chord symbols include R-0, P-0, and I-5. Performance markings include *pp* and *opp*. A tempo change is indicated by the text "Etwas langsamer" above measure 278. Measure numbers 276, 277, 278, 279, and 280 are clearly marked.

281 *calando* R-0 282 6 10 283 RI-5 9 10 284 P-0 285

286 I-5 4 287 9 288 I-9 289 290 P-8 7

291 I-5 Sehr ruhig 292 293 P-0 294 295

296 I-5 297 7 298 P-4 299 I-6 300 P-5 5 6

321 322 I-5 323 3 4 5 324 5 6 325 0 326 I-5

Tempo I

327 328 P-0 329 1 2 330 I-5 331

332 P-4 9 333 I-6 334 P-5 335 P-0 336 I-5 337 P-8

337 338 I-9 339 pesante P-0 340 6 I-5 341