

Robert Fuchs as Kleinmeister with specific reference to developing variation in his Piano Trio, Op. 22

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ABSTRACT

In accordance with the notion of the so-called “new musicology” that musicological studies should steer away from the canon of masterpieces, this study concentrates on Robert Fuchs as an example of a Kleinmeister. His Piano Trio in C major, Op. 22, is a demonstration of developing variation, a term coined by Arnold Schoenberg to refer to the technique of motivic development within a musical composition as a whole. According to Schoenberg, the music of Johannes Brahms illustrates the most advanced manifestation of developing variation in that he often starts to develop his motives from the very opening of a piece. The technique of developing variation became one solution to the key problem composers faced in the later nineteenth century, namely how to create large forms from very concise thematic material.

The purpose of this study is, firstly, to describe the concept of developing variation, providing** a historical perspective with specific reference to Brahms, and, secondly, to trace the manifestation of developing variation in Robert Fuchs’s Piano Trio in C major, Op. 22, a work which Fuchs dedicated to Brahms. The empirical section of this study shows that the characteristic feature of the germ cell (G-A-G) that appears at the beginning of this composition, namely a movement away from and a return to the point of departure, manifests on micro- (motivic), meso- (thematic), and macro- (structural) level. On micro-level the germ cell grows teleologically by means of metric displacement, rhythmic changes, augmentation, diminution, intervallic expansion, inversion, retrograde, retrograde inversion, extension, sequential treatment, liquidation and further derivatives of the germ cell until a large form is created: a four-movement work for three instruments. This study also demonstrates how the shape of the germ cell can be found in larger structures as themes and the overall structure of each of the four movements.

Keywords

Developing variation

Robert Fuchs

Brahms

Schoenberg

Piano Trio in C major, Op. 22

OPSOMMING

In ooreenstemming met die idee van die sogenaamde “nuwe musikologie” dat musikologiese studies van die kanon van meesterwerke moet wegbeweeg, konsentreer hierdie studie op Robert Fuchs as ’n voorbeeld van ’n Kleinmeister. Sy Klaviertrio in C majeur, Op. 22, is ’n demonstrasie van ontwikkelende variasie, ’n term wat deur Arnold Schoenberg geskep is om na die tegniek van motiwiese ontwikkeling binne ’n komposisie as ’n geheel te verwys. Volgens Schoenberg illustreer die musiek van Johannes Brahms die mees gevorderde manifestasie van ontwikkelende variasie deurdat hy dikwels reeds reg aan die begin van ’n stuk begin om sy motiewe te ontwikkel. Die tegniek van ontwikkelende variasie het een oplossing geword vir die belangrikste probleem waarvoor komponiste in die laat negentiende eeu te staan gekom het, naamlik hoe om groot strukture uit baie bondige tematiese materiaal te skep.

Die doel van hierdie studie is eerstens om die konsep van ontwikkelende variasie te beskryf en ’n historiese perspektief met spesifieke verwysing na Brahms te verskaf, en tweedens om die manifestasie van ontwikkelende variasie in Robert Fuchs se Klaviertrio in C majeur, Op. 22, ’n werk wat Fuchs aan Brahms opgedra het, na te speur. Die empiriese afdeling van hierdie studie toon aan dat die kenmerkende eienskap van die kiemsel (G-A-G) wat aan die begin van hierdie komposisie voorkom, naamlik ’n beweging weg van en ’n terugkeer na die vertrekpunt, op mikro- (motiwiese), meso- (tematiese) en makro- (strukturele) vlak manifesteer. Die kiemsel groei op mikrovlak teleologies deur middel van metriese verskuiwing, ritmiese veranderings, vergroting, verkleining, intervalvergroting, omkering, kreeftegang, kreeftegang omkering, verlenging, sekwensiële behandeling, disintegrasie en verdere afgeleides van die kiemsel totdat ’n groot struktuur daargestel is: ’n vierbewegingwerk vir drie instrumente. Hierdie studie toon ook aan hoe die gestalte van die kiemsel gevind kan word in die temas en in die oorkoepelende struktuur van elkeen van die vier bewegings.

Sleutelwoorde

Ontwikkelende variasie

Robert Fuchs

Brahms

Schoenberg

Klaviertrio in C majeur, Op. 22

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CHAPTER 1: INTRODUCTION

1.1 Background, problem statement and substantiation

Before the 1990s musicologists, specifically American musicologists, focused mostly on “historical problems, epochs, and canonical composers” (Kerman, 1991:133). When musicologists use the term “the canon”, they refer to the great works by the so-called “great composers” or “masters”. In his book *The Craft of Ritual Studies*, Ronald Grimes (2014:220) describes Christopher Small’s¹ opinion of the canon as follows: “By virtue of their performatively evoked presence, the magisterial perfection of the Great Composers renders them paradigms of elite culture to whom ritual deference is owed.”

In recent years the emphasis on canonical composers shifted to include the contribution of minor composers, the so-called “Kleinmeister” of musical history and repertory (Proksch, 2013:274). Joseph Kerman was the leading figure in this field of “new musicology” (Brett, 2007-2014). Kerman’s book *Musicology* (entitled *Contemplating music: challenges to musicology* in its US edition), published in 1985, was “a defining moment in the field” (Brett, 2007-2014). This new approach in musicology now acknowledges the contribution of the Kleinmeister to musical history and repertory (Neonato, 2009:676). Many of these composers had outstanding reputations while they were alive. For a certain period of time their music was regarded as “outstanding, great, canonical” (Kerman, 1983:117). However, eclipsed by the works of the masters of their period, these composers and their music were quickly forgotten. According to Wiebke Thormählen (2011:655), this is by no means an indication of lesser quality in the music itself. She reasons that such inferior durability lies in economic factors as well as in the composer’s own attitude towards politics and self-promotion through a life in the public eye (Thormählen, 2011:655).

In 2014 Sterling Murray wrote that a thorough understanding and interpretation of the style of a period is not possible without acknowledging the contributions of the Kleinmeister (Murray, 2014:389). The study of Kleinmeister can elucidate how truly great composers, such as Bach, Beethoven and Brahms, became and remained known (Lee, 2014:17). Studying the Kleinmeister and their works can “fill in the gaps” before and after the great masters of a

1 Christopher Small (1927-2011) was a musician, educator and author of a number of influential books and articles. Small is well known for coining the term “musicking”, which underlines music as a process and not an object (Laing, 2011).

period (Goodwin, 2010:464). According to Kerman (1983:118), it is one of the main objectives of historical criticism to “explain and exemplify those evanescent reputations”.

Robert Fuchs (1847-1927) achieved immediate popularity with his serenades and his works were championed by notable conductors (Grote, 1994:21). Fuchs was even called “the master of small art” by Eduard Hanslick (1825-1904), the famous Viennese music critic (Carman, 2007). Johannes Brahms (1833-1897), who rarely handed out compliments, complimented Fuchs with the following words: “...everything is so fine, so skilful, so charmingly invented, that one always derives pleasure from it” (Grote, 1994:26).² Furthermore, Fuchs was a teacher whose pupils included a remarkable list of renowned composers (Pascall, 1977:115). Still, despite the fact that he had been highly regarded in his own day, his music virtually vanished from the mainstream concert repertoire almost immediately after his death (Grote, 1994:18-19).

Fuchs met Brahms in the late 1870s and they became good friends. According to Aldalbert Grote (1994:104-7), Fuchs’s earlier works, while clearly retaining their own individuality, often reveal Brahmsian textures and thematic material. One of the most prominent features of Brahms’s music is what Arnold Schoenberg (1874-1951) called “developing variation” (Frisch, 1982:215). The concept of developing variation has received much attention from prominent theorists in recent decades (Grimes, 2012:127).

“Developing variation” is a term which defines a broad principle of thematic composition – a principle which Schoenberg (1975:290) describes in his essay *Linear Counterpoint* (1931) as “the endless reshaping of a basic shape”. In the same essay he states that “there is nothing in a piece of music but what comes from the theme, springs from it and can be traced back to it; to put it still more severely, nothing but the theme itself” (Schoenberg, 1975:290). Jack Boss (1991:1) defines developing variation as “the variation of the features of a unit that produces successions of forms, which in turn manifest the idea of the whole piece”. Schoenberg (1975:397) best explains the term “developing variation” in his essay *Bach* (1950):

Music of the homophonic-melodic style of composition, that is, music with a main theme, accompanied by and based on harmony, produces its material by, as I call it, “developing variation”. This means that variation of the features of a basic unit produces all the thematic formulations which provide for fluency, contrasts,

² “...alles ist so fein, so gewandt, so reizend erfunden! Man hat immer seine Freude daran.”

variety, logic and unity, on the one hand, and character, mood, expression, and every needed differentiation, on the other hand – thus elaborating the “idea” of a piece.

The term “developing variation” should not be confused with specific formal structures such as the development section of a sonata form or a set of variations on a theme. Nicole Grimes (2012:130) confirms that the concept of developing variation, although it relies on variation techniques, is in a category of its own. John Daverio (2002:171) contrasts developing variation with contrapuntal composition, since the latter does not produce its material by development, but by a procedure called *Abwicklung* (translated as “unravelling” or “unfolding”). According to Schoenberg (1975:397), music applying this procedure does not develop, but rather changes by adding another voice or by reassembling the theme in a different order. Sharon Levy (1991:2) asserts that the character of the theme is preserved in fugal technique, with the only change to the theme being the different contexts wherein it is presented.

Developing variation was, according to Walter Frisch (1984b:27), one solution to the key problem composers had to face in the later nineteenth century, namely “to create large forms from very concise thematic material”. Composers had to rethink the traditional structural principles. Thus, in the second half of the nineteenth century, developing variation became the tool used to build large structures from small motives without the support of formal principles (Larey, 1996:11). Developing variation extends over the entire structure of a composition and tends to overshadow the conventional roles and divisions of sonata form (Frisch, 1984b:26).³ The technique of developing variation is considered by Frisch (1984b:9) to be an important compositional principle because it can serve to prevent obvious repetitions, such as the kind of repetition found in the music of Johann Strauss II (1825-1899) and Richard Wagner (1813-1883). In his essays *For a treatise on composition* (1931) and *Criteria for the evaluation of music* (1946), Schoenberg (1975:129, 265) states that variation and development constitute a higher form of music’s formal technique than mere repetition, which he regards as a “primitive” and “inferior” form of art.

Schoenberg believes that the music of Brahms illustrates the most advanced manifestation of the technique of developing variation in that he often starts to develop his motives from the

³ Developing variation is not used solely in sonata form, but Frisch (1984b:26) specifically mentions sonata form here because of the difficulty of amalgamation of thematic material in such a large-scale form.

very opening of a piece (Frisch, 1982:216). The motive, according to Frisch (1984b:11), is the composer's primary tool. Frisch explains that the unity of a composition does not depend on the motive's original form, but on the way it is treated and developed. Brahms explained to his only private student in composition, Gustav Jenner,⁴ that a sonata will not necessarily be successful if the composer only brought a couple of ideas together within a sonata structure (Frisch, 1984b:34). The success lies instead in the spirit of sonata form, as well as in the possibilities and further development of the initial "idea".⁵ Brahms builds a theme by reinterpreting the intervals and rhythms of a short motive (Frisch, 1984b:11). He does this freely, but in such a way that the variation is recognisable (Frisch, 1982:231). This is an important principle, because variation cannot be perceived as such if no thematic material is recognised. If the thematic material cannot be identified as a derived product of previous material, it will be perceived as new material (Frisch, 1982:231).

Schoenbergian analysis has received criticism for not probing deeper than the musical surface and paying no attention to musical structure.⁶ In his book *Brahms and the principle of developing variation*, Frisch (1984b) applies Schoenberg's principles more extensively to analysis than Schoenberg himself did. In addition, Frisch concentrates on the application of developing variation as a tool to create larger structures, focusing on the compositions of Brahms.

Having performed a number of Brahms's ensemble works as well as Fuchs's Piano Trio Op. 22, I was intrigued by the similarities between the music of the two composers. The motivation to focus this study on the music of Robert Fuchs is twofold. Firstly, Fuchs had a close relationship with Brahms.⁷ Secondly, Fuchs was one of the widely admired and better known among the Brahms-followers (Dubins, 2007:118). The reason for using his Piano Trio in C major, Op. 22, for demonstration purposes is that Fuchs dedicated the work to Brahms, the composer who, according to Schoenberg, cultivated developing variation to its fullest potential (Frisch, 1982:216). Fuchs's compositional style developed towards economy and thematic unity during his career as a composer (Grote, 1994:105). One might therefore argue

⁴ Gustav Jenner (1865-1920) studied composition privately with Brahms during the winter and spring of 1888 (Jenner, 1990:185).

⁵ The concept of an "idea" is borrowed from the article Schoenberg (1975:397) wrote in 1950, *Bach*. I take the liberty of using the term without the inverted commas throughout the rest of my writing.

⁶ Peter Smith (1994b) criticised Schoenbergian analysis in his article *Liquidation, augmentation, and Brahms's recapitulatory overlaps*.

⁷ The fact that Fuchs was part of the circle of friends who accompanied Brahms on musical soirées and hiking trips demonstrates their close relationship (Heilmair, 2004:4).

that the presence of developing variation is more prominent in this work than in his other works. There is little information available on Robert Fuchs and even less on the Piano Trio Op. 22. This piano trio is not often performed and, as far as it could be determined at the time of writing this study, no detailed study of this work has been published.

The **problem statement** is therefore defined as follows: How does developing variation, a technique attributed to Brahms, manifest itself in Fuchs's Piano Trio in C major, Op. 22, a work specifically dedicated to Brahms.

1.2 Research goal and method of investigation

The aim of this study is, firstly, to describe the concept of developing variation, providing a historical perspective with specific reference to Brahms, and, secondly, to trace the manifestation of developing variation in Robert Fuchs's Piano Trio in C major, Op. 22, a work which he dedicated to Johannes Brahms.

Because this study focuses on melodic formations (i.e. melodic cells, melodic motives, and themes), harmonic analysis *per se* is not relevant to this study.

To achieve the aims set out above, a literature study that included computer searches (RILM, JSTOR, Google Scholar, Proquest, A-Z of Journals, Ebscohost) forms the basis for the first three chapters. Subsequently, using Schoenberg's concept of developing variation as described by Walter Frisch, the germ cell and its variants in Fuchs's Piano Trio in C major, Op. 22, will be identified in order to show the systematic development from a three-note melodic cell into various kinds of motives that combine with each other to form the thematic material in the four movements.

1.3 Chapter division

- In Chapter 1 the historical background, problem statement, substantiation, purpose of study and method of investigation is outlined.
- The first part of Chapter 2 deals with the essential meaning of the principle of developing variation, its origin and development, corollary and opposing techniques, as well as its functionality in musical practice. The second part investigates the application of the principle of developing variation in the music of Johannes Brahms.

- Chapter 3 concentrates on the life and composition style of Robert Fuchs, including an overview of his association with Brahms.
- Chapter 4 contains an extended discussion of Robert Fuchs's Piano Trio in C major, Op. 22, employing Schoenberg's principle of developing variation. The germ cell and its variants will be identified in order to show the systematic development from a three-note melodic cell into various kinds of motives that combine with each other to form the thematic material in the four movements.
- Chapter 5 presents several conclusions with regard to the various ways in which developing variation can be traced in Fuchs's Piano Trio in C major, Op. 22.

CHAPTER 2: DEVELOPING VARIATION

In the first half of this chapter the gist of the principle of developing variation will be conveyed. A brief historical perspective on the term will also be provided. The second half of the chapter will focus on the application of the principle of developing variation in the music of Johannes Brahms. In conclusion, the impact of Brahms's use of developing variation on fellow composers and theorists will be described.

2.1 Definitions and background history

As stated in the first chapter, Arnold Schoenberg was the first theorist to use the term “developing variation” (Frisch, 1984b:xiii). Schoenberg even suggested that developing variation should be studied as a subject as part of the curriculum for a new music department (Frisch, 1982:215).⁸

The concept of developing variation has received considerable attention from prominent theorists in recent decades. Rudolph Réti (1885-1957) was one of the first writers who acknowledged the role that developing variation plays in the creation of structural unity in his book *The thematic process in music*, written in 1951 (Sirman, 2006:19). Arno Mitschka used the term “varying development”, which turned out to be a synonym for Schoenberg's “developing variation”, in his *Inaugural-Dissertation*, written in 1961 (Sirman, 2006:19). In 1965 Carl Dahlhaus (1928-1989) analysed Brahms's Piano Concerto no. 1 in D minor, Op. 15, according to the concept of developing variation (Sirman, 2006:20). In *Das Prinzip der entwickelnden Variation bei Johannes Brahms und Arnold Schönberg*, published in 1974, Klaus Velten (born in 1937), head of the University of Music in Saarbrücken from 1991 to 1996, explored Schoenberg's concept of developing variation by analysing the first movement of Brahms's Piano Quartet no. 1 in G minor, Op. 25 (Platt, 2003:376). Walter Frisch, Professor of Music at Columbia University in New York since 1982, also researched the topic extensively and wrote the book *Brahms and the principle of developing variation* in 1984. Although Frisch (1982:215) claims that Schoenberg never formulated an indisputable

⁸ In 1946, Robert Maynard Hutchins, Chancellor of the University of Chicago, required Schoenberg's advice on the founding of a new music department (Frisch, 1982:215). Schoenberg then made suggestions towards subjects that should be included in the curriculum as well as a list of proposed problems for the department, which he believed should function exclusively as a research institution (Frisch, 1982:215).

definition for this term, Schoenberg clearly considered it one of the most important compositional principles of Western music.

2.1.1 Definitions

Developing variation occurs when frequent mutations of the intervallic and/or rhythmic components of an initial idea forms a theme (Frisch, 1984b:9). Levy (1991:2) defines it as “a technique by which a unit, whether motive, melody, or larger segment, undergoes a multi-stage process of change, in which each stage generates the next instance of change”. According to Franklin Larey (1996:11), this coincides with Schoenberg’s theoretical principles which regard developing variation as “the technique by which a motive provides the material upon which an entire work is then based”.

Ethan Haimo (1997:355) describes the process of developing variation in its most basic form as the process whereby a motive undergoes significant changes, but retains enough of its characteristics to still be recognised. The motive is the fundamental device used by the composer to create music (Frisch, 1984b:11). Schoenberg (1967:8) defines the term “motive” in *Fundamentals of musical composition*:

Since [the motive] includes elements, at least, of every subsequent musical figure, one could consider it the “smallest common multiple”. And since it is included in every subsequent figure, it could be considered the “greatest common factor”.

However, unity within a composition does not depend on a motive’s original form, but rather on the treatment and development thereof (Frisch, 1984b:11). Frisch elaborates further that the constant reiteration of a motive forms the basis of a composition’s growth. This repetition can be precise or adapted, and developed in different ways. Richard Strauss (1957:165) points out that the melodic ideas providing the basis of a composition seldom consist of more than two or four bars. He explains that the rest of a work encompasses compositional techniques such as elaboration and development. Developing variation allows for new ideas to evolve from the thematic material (Grimes, 2012:130).

In this context, “variation” can be explained as repetition with changes to some small element or elements of the motive while the rest of the motive’s character is preserved (Schoenberg, 1967:9). To change all the elements of the motive would lead to no repetition at all (Larey, 1996:20). In *Fundamentals of musical composition* Schoenberg (1967:8) warns against producing a form of the motive that is too alienated from the basic motive. This argument is

confirmed by Frisch (1982:231), because thematic material that cannot be recognised will not be perceived as developed material, but as new material. Schoenberg insisted that composers should connect ideas through developing variation, thus “showing consequences derived from the basic idea and remaining within the boundaries of human thinking and its demands of logic” (Dunsby, 2002:912). Pablo Casals⁹ wrote that each note should be important in itself but should also serve as a connection between past and future material (Larey, 1996:64). Accordingly, secondary material, whether it be ornamental, accompaniment, or non-thematic, can be subjected to developing variation as well (Levy, 1991:121).

Mitschka refers to the same concept as Schoenberg’s “developing variation”, but uses the term *variierende Entwicklung*¹⁰ (Larey, 1996:35). Apparently Mitschka was oblivious of the writings of Schoenberg and his followers when he wrote his *Inaugural-dissertation* on Brahms’s sonata forms in 1961 (Frisch, 1984b:24). Consequently, he reinvented the concept of developing variation, with the reversed title “varying development” (Frisch, 1984b:24).

2.1.2 Thematic transformation

Thematic or motivic transformation is one of the other compositional techniques that developed to conquer the demands to create bigger forms from concise material (Dahlhaus, 1989:240). This device was employed by Franz Liszt (1811-1886), one of Brahms’s so-called “adversaries” (Frisch, 1981:29). It is important to understand the difference between thematic transformation and motivic development (an essential element of developing variation), because they represent two opposite methods of building larger structures (Larey, 1996:10).

The distinction between thematic transformation and motivic development is explained clearly by Robert Nelson (in Larey, 1996:11):

The principal difference between the two is that whereas motivic development utilizes only short fragments of the melodic subject, theme transformation applies itself to larger excerpts, sometimes even to the melodic subject in its entirety. In both methods the melodic material of the theme is drastically modified; yet whereas the creation of motives is but the first act in a process of manipulation, the transforming of themes tends to become an end in itself. It is obvious that thematic transformation, because of its more extensive contact with the melodic

⁹ Pau Casals i Defilló, known as Pablo Casals during his professional career as a cellist, was born in 1876 and died in 1973 (Garza, 1993:25).

¹⁰ Varying development

subject, is somewhat less flexible as a compositional device than motivic development.

The purpose of thematic transformation is to enable unity both within and between movements of multi-movement works (Grimes, 2012:130). Larey (1996:14) explains that, in the case of thematic transformation, the basic shape of a melody is preserved throughout its different statements. Although the original melodic outline of a theme is retained, Frisch (1984b:36) points out that the mode, harmony, tempo, rhythm, or metre may change. Whereas thematic transformation retains an essential shape whose secondary features change while primary ones remain constant, developing variation allows the primary features themselves to change, thus resulting in new and independent structures (Levy, 1991:2).

Contrary to these explanations of the term “thematic transformation”, the term is often used as an equivalent for Schoenberg’s “developing variation”. Réti, for example, uses the term “thematic transformation” when stating that in every great composition “anything and everything can be traced back to the basic, underlying motive” (Larey, 1996:34). Réti (1951:63-64) explains his understanding of this term equivalent to developing variation as the intentional creation of shapes seemingly different on the surface but identical in their core.

2.1.3 Developing variation versus repetition

In *For a treatise on composition* (1931) and *Criteria for the evaluation of music* (1946), Schoenberg (1975:129, 265) states that variation and development constitute a higher developmental degree in music’s formal technique as opposed to repetition, which he describes as the initial stage – a “primitive” and “inferior” form of art.¹¹

Exact repetition is also criticised by Adolf Schubring¹² in *Schumanniana 11* (as quoted in Frisch, 1984a:275):

Thematic work is the logic of music. He who does not remain at his musical task, the theme; he who does not understand how to work up the individual motives and motivic particles of the theme into new characteristic shapes by means of mosaic combination, continuation, expansion; he may for a while – if he has the tools – delight the untutored multitudes with his potpourris, or startle them with

¹¹ Although Schoenberg deems repetition to be inferior, Johann Strauss II, one of the greatest popular composers of his time, made his melodies memorable by using exact or parallel repetition, or by so-called “musical verse” (Frisch, 1984b:4, 8).

¹² Schubring (1817-1893), a judge and music critic, was a friend and admirer of Brahms (Schubring, 1990:103).

prickling harmonies, tone colours, and orchestral effects achieved by simple means. But a logical musician he is not.

Schoenberg asserts in his radio talk on *The Orchestral Variations*, Op.31, that “a stricter style of composition must do without such convenient resources. It demands that nothing be repeated without promoting the development of the music, and that can only happen by way of far-reaching variations.” (Frisch, 1984b:4) Developing variation, therefore, is a compositional principle that refrains from the obvious repetition that Schoenberg and Schubring so despised. The writings of Peter Lichtenthal¹³ in 1825 (in Grimes, 2012:131) confirm Schoenberg’s beliefs:

Amongst the works of the great masters may be found innumerable pieces that are built upon a single motif. What marvellous unity there is in the structure of these compositions! Everything relates to the subject: nothing extraneous or inappropriate is there. Not a single link could be detached from the chain without destroying the whole. Only the man of genius, only the learned composer can accomplish such a task, one that is as admirable as it is difficult.

2.1.4 Correlation with musical prose

“Musical prose” is a term used by Schoenberg when referring to the systematic evolution of thematic material, avoiding unnecessary repetitions (Brown, 1995:164). Developing variation “provides the grammar by which the musical prose is created” (Frisch, 1984b:9). Musical prose is, in a sense, similar to the process of developing variation:

- In musical prose the themes do not fall into regular, predefined or obvious patterns (Frisch, 1984b:8).
- Musical prose is a “direct and straightforward presentation of ideas” (Schoenberg, 1975:415).
- In musical prose there is no “patchwork” and “no empty repetitions” (Schoenberg, 1975:415).

2.1.5 Organicism

Developing variation as applied by Schoenberg embodies the metaphor of organicism within a musical composition (Grimes, 2012:129). The metaphor of organicism is already traceable

¹³ Peter Lichtentall (1780-1853) was a physician, composer and musicologist in Austria and Italy (Le Huray & Day, 1988:248).

in the writings of Aristotle (384 BC-322 BC) and Plato (427 BC-347 BC). Mitchell Whitelaw (2001:345) reports that Aristotle and Plato used the living body as a metaphor of organisation and unity in their discussions on any form of artwork, including rhetoric, drama and music. Their writings were echoed by those of Jean Baptiste Robinet (1735-1820), a historical and natural philosopher, early evolutionist and author of *De la nature* (1761-8) (Emling, 1977:367). Robinet developed the concept of an original life form in the 1760s: “a small primal element, a cell possessed of a will to develop into higher forms” (in Grimes, 2012:128). At the turn of the nineteenth century Johann Wolfgang von Goethe (1749-1832), a German writer, artist and politician who took a keen interest in natural science (Holscher-Lohmeyer, 1991:7), shared his writings on the related subject of evolution (Whitelaw, 2001:345).

A distinctive trait of an organism is its dynamic form, continuously undergoing development and mutation (Broyles, 1980:355). He further states that an organism grows in a teleological or goal-oriented manner: “It is a form of becoming rather than being.” Every aspect of an organism contributes to its coherence (Broyles, 1980:355). Likewise, developing variation allows new ideas to stem from the original thematic material, thus demonstrating direction and growth (Grimes, 2012:130). Logical, step-by-step, goal-oriented development is, according to Larey (1996:71), very important in the process of developing variation. Regardless of such perpetual transformation, motives or ideas initiate unity through their matching characteristic features (Malone, 2008:80). Developing variation offers the possibility of forward motion, allowing growth through new or contrasting, but interrelated, ideas. Therefore developing variation can be seen as the manifestation of organicism within the context of a musical composition. Organicism can be compared with a cohesive agent, upholding and promoting thematic coherence and logic within the large forms of the nineteenth century (Montgomery, 1992:59). This organic approach to developing variation became prevalent after Schoenberg’s death (Musgrave, 1979:170).

The concept of organicism as a model for musical structure was already mentioned by ETA Hoffmann¹⁴ in his 1810 review of Beethoven’s Fifth Symphony (Grimes, 2012:128). One example of organicism in musical structure is the declining use of the repeat sign in the second half of works in sonata form (Levy, 1991:58). Michael Broyles (1980:352, 356)

¹⁴ Ernst Theodor Wilhelm Hoffmann (1776-1822) was a German Romantic author of fantasy and horror, writing under his pen name ETA Hoffmann (Ernst Theodor Amadeus). He was also a composer, music critic, jurist, draftsman and caricaturist (Kremer, 2010:131).

explains that, because the organic model is goal-directed, the repeat sign inhibits the forward movement and dramatic logic of the work.

2.1.6 Evolution of developing variation

The technique of developing variation emerged in the late nineteenth century as “a direct result of the disintegration of the periodic structure and cadential harmony of the Classical period” (Dahlhaus, 1989:256). The predicament for nineteenth-century composers was to find a new way to create large forms from very concise thematic materials. Adding to this challenge was the all-encompassing demand for originality. Composers were forced to explore new techniques of musical organisation (Larey, 1996:1). Hence they had to rethink the conventional structural principles. Within sonata form, the growth of thematic ideas and motives, rather than key relationships and symmetrical groups, was forced to take on the role of highest structural constituent (Larey, 1996:2).

Developing variation was a solution to a global artistic ideal of relation and variation; it was not merely a melodic phenomenon (Levy, 1991:178). Developing variation was regarded by Schoenberg (1975:50) as a method to transcend the limits of the theme itself, able to shape the large developmental processes of a movement. Developing variation tends to overshadow the customary functions and sections of sonata form (Frisch, 1984b:26). Thus, as Larey (1996:30) points out, apart from developing variation’s application to themes and motives, it is a fundamental part of the design of a composition. Various sections of a form can be connected into a “tighter continuity” by applying the principle of developing variation (Levy, 1991:195). Because developing variation can either underline or reduce the clarity of structural sections, Levy (1991:40) insists on the fact that it can aid in demarcating and individualising musical forms. Thus, in the second half of the nineteenth century, developing variation became the primary tool to build large structures¹⁵ from small motives without the support of formal principles (Larey, 1996:11).

¹⁵ To Levy (1991:159) it seems as if developing variation is not a typical technique when composing in song form, due to the smaller structural implications. In ternary form the need for thorough development of thematic material is also less than in the bigger structure of sonata form (Larey, 1996:36).

Leonard Meyer¹⁶ (in Dunsby, 2002:915) proclaims in a paper that originated as a keynote address to the Society of Music Theory in 1988:

The implicit claim [of developing variation] is that the process of change makes musical sense in and of itself – that developing variation is not merely a set of techniques for motivic manipulation, but a specific and independent structural/processive principle.

This belief is echoed by Levy (1991:104), who reports that developing variation functions within and between different formal sections of a composition, thus serving as a type of “formal calculator”.

Developing variation thus originated as one of a few responses to nineteenth-century composers’ substantial problem of creating large forms from brief motives (Dahlhaus, 1980:40). Developing variation, then, stood in direct opposition to Wagner’s solution of sequence applied to a *leitmotif*, as well as to Liszt’s reaction of implementing thematic transformation (Larey, 1996:i).

Although developing variation has formerly only been associated with the late-nineteenth-, early-twentieth-century Germanic style of composition, as practised by especially Brahms and Schoenberg, theorists such as Schoenberg, Frisch and Josef Rufer¹⁷ refer to its existence in the earlier Viennese classical style (Levy, 1991:64). Even though the Viennese classicists, specifically Beethoven, Haydn and Mozart, began to refine the principle of developing variation, Schoenberg (1975:435) advocates that Brahms brought it to “the pinnacle of its evolution”, because he often starts to develop his motives from the very beginning of a piece. Jan Swafford (1997:385) agrees that Brahms brought developing variation to an ultimate height, making every note important to the whole. In his analyses of Brahms’s sonata forms, Heinrich Schenker¹⁸ easily found the type of organic unity that he attempted to demonstrate in his analysis of late-eighteenth-century music (Smith, 1994a:78). This kind of development from the very beginning of a piece indicates impeccable strategic planning by the composer (Musgrave, 1979:114).

¹⁶ Leonard B Meyer (1918-2007) contributed to the fields of aesthetic theory in music and musical analysis (Taruskin, 2009:450).

¹⁷ Rufer (1893-1985) was one of Schoenberg’s students (Neff, 1993).

¹⁸ Schenker (1868-1935) dedicated his Beethoven study of 1912 to “Brahms, the last master of German music” (Musgrave & Pascall, 1987:142). Seeing that Schenker’s legacy lies in the procedures of analysis, it is interesting to note that Brahms recommended the aspiring composer Schenker to his own publisher, Simrock (Smith, 1994a:77).

The application of developing variation evolved from the classical era to the late nineteenth century. Formal ideas and melodic detail originated simultaneously in the music of Ludwig van Beethoven (Frisch, 1981:25). The single motive was germane to the work in its entirety. In the late nineteenth century the motive, which set the music in motion and provided the basis for development, served as the melodic idea (Dahlhaus, 1980:42). Themes tended to be brief and were in itself treated as an independent idea, standing at the core of the compositional standards of the time (Larey, 1996:1). Levy (1991:56) attributes this development to the fact that emphasis was increasingly placed on thematic relationships to create unity within a work, whereas unity was formerly achieved through harmony (Montgomery, 1992:41). Theodor Adorno (1903-1969), well known as a sociologist, musicologist and philosopher, and especially well known for his critical theory of society (Claussen, 2003:1), asserts that the role developing variation began to play in the compositional ideologies of the nineteenth-century composer was to organise a work through the development of ideas (Larey, 1996:11). This change in emphasis was conveyed by composers in their compositions and recognised by theorists in their analyses thereof (Levy, 1991:56).

The difference between developing variation in the music of the Viennese classicists and the music of Brahms is noted by Dahlhaus: the former used this technique primarily for purposes of development, whereas Brahms applied it as an underlying principle overseeing all the subdivisions in entire movements (Larey, 1996:14). Development, according to Schoenberg (1967:58), became the driving force behind musical construction. For this reason musical form no longer acted as a preconceived system of formal relations, but became a consequence of thematic ideas (Dahlhaus, 1980:42).

2.1.7 Developing variation as an analytical tool

The real meaning of the concept of developing variation became the topic of many debates since Schoenberg's first writings¹⁹ on the subject. Dahlhaus (1988:128) writes in his essay *What is "developing variation"?* that Schoenberg could not overcome his indecision whether to define developing variation as a "technique", a "style of presentation" or the "development of a [musical] idea". Schoenberg does not limit the concept of developing variation by

¹⁹ In 1917 Schoenberg wrote *Zusammenhang, Kontrapunkt, Instrumentation, Formenlehre* (Coherence, counterpoint, instrumentation, instruction in form) in which he first discussed the principle of developing variation (Neff, 1993).

narrowing it down to a single definition. Michael Musgrave (1985:631) believes that Schoenberg attempted to give the concept maximum flexibility rather than giving it an exact, accurate definition. In his book *Brahms and the principle of developing variation*, Frisch (1984b:122) also avoids a concrete definition of the term and chooses to view developing variation as a flexible principle rather than a specific technique.

Levy (1991:95) deems that developing variation should be thought of as a musical technique similar to counterpoint or thematic transformation. According to Frisch (1981:14), the analyst benefits just as much from the principle of developing variation as the composer. It can serve as a valuable tool for examining not only brief themes, but also larger segments of movements and even compositions in their entirety (Frisch, 1984b:xiv).

The study of developing variation is the study of a musical process and of the techniques of relation and transformation. The analysis of music in terms of developing variation enables the analyst to discover the diverse techniques employed by the composer. These techniques supply an understanding of the language of the composer and of the specific manner in which the global requirements of continuity and inventiveness are met.

Whether developing variation is an intentional compositional style or not is not the question at hand. Berk Sirman (2006:26) suggests that analysis, whether it employs the concept of developing variation or any other method of analysis, should lead to an understanding of the inner unity of a work. Therefore, developing variation aids the analyst in uncovering new truths about the piece analysed, truths which might not yet have been discovered (Sirman, 2006:36).

2.2 Developing variation as described in the literature on Johannes Brahms

The earliest German scholars on the subject of developing variation in the music of Brahms were Christian Schmidt, Klaus Velten and Rainer Wilke (Frisch, 1984b:28-29). In 1971 Schmidt (born in 1942) made a detailed analysis of Brahms's Clarinet Sonata in F minor, Op. 120, in *Verfahren der motivisch-thematischen Vermittlung in der Musik von Johannes Brahms* (Frisch, 1984b:28). Velten analysed Brahms's Piano Quartet in G minor, Op. 25, in *Schönbergs Instrumentation Bachscher und Brahmscher Werke als Dokumente seines Traditionsverständnisses* in 1976 (Frisch, 1984b:28-29). In 1980 Wilke (born in 1941) wrote

the monograph *Brahms, Reger, Schönberg Streichquartette* on the motivic processes in the quartets of these composers (Frisch, 1984b:29).

The most influential twentieth-century analysts of Brahms's music were Schoenberg and Schenker (Musgrave, 1987:14). They saw in Brahms the personification of timeless, pure musical values (Musgrave & Pascall, 1987:142). According to Robert Anderson (1985:285), developing variation is the key to comprehend some of Brahms's musical processes. Brahms's application of developing variation reinforces and secures his importance in Western music and accounts for the pleasure his music provides the analyst.

2.2.1 Origin of developing variation in Brahms's music

The origin of developing variation in Brahms's music is often traced back to his childhood, playing with lead soldiers and setting them up in new formations. According to Karl Geiringer (1948:14), this game had nothing to do with usual childlike war games. Geiringer believes that the arrangement of the soldiers in varying formations inspired Brahms's creative work in his adulthood. It gave him the same pleasure he derived from writing variations on a theme, for in both cases he remodelled a given material with the aid of imagination (Swafford, 1997:22).

On the other hand, Daverio (2002:157) speculates that Brahms's developing variation had its origin in the fact that Brahms played chess, the rules of which he learnt from Robert Schumann (1810-1856). Daverio substantiates this speculation by explaining that chess demands a considerable amount of strategic planning and calculation on the part of the player.

From yet another point of view Geiringer (1948:93) thinks that Brahms's inability to stay in one place for long after his mother's death may be regarded as a metaphor for his extensive use of the principle of developing variation. A parallel can therefore be drawn between the diversity Brahms needed in his immediate surroundings and the variety he subjected his music to by means of development.

2.2.2 Compositional procedures

Brahms was quite scrupulous about destroying the sketches of his compositions as well as his letters of correspondence²⁰ (MacDonald, 1990:147). Schoenberg (1975:67) finds this regrettable as no concrete evidence of Brahms's thoughts regarding compositional procedures has been preserved. The few remaining pieces of evidence only cast a glimpse of light on Brahms's musical thoughts and beliefs.

For Brahms, the creative process begins with the "gift" of a musical idea. George Henschel²¹ (as quoted in Frisch, 1984b:33) reports the composer's words to him in his journal:

There is no real creating without hard work. That which you would call invention, that is to say a thought, an idea, is simply an inspiration from above, for which I am not responsible, which is no merit of mine. Yea, it is a present, a gift, which I ought even to despise until I have made it my own by right of hard work. And there need be no hurry about that, either. It is as with the seed-corn; it germinates unconsciously and in spite of ourselves. When I, for instance, have found the first phrase... I might shut the book there and then go for a walk, do some other work, and perhaps not think of it again for months. Nothing, however, is lost. If afterward I approach the subject again, it is sure to have taken shape: I can now begin to really work at it.

Brahms's advice to Gustav Jenner, his student in composition, was to go for a walk when musical ideas came to him (Jenner, 1990:200).

In 1869 Schubring wrote a review article in the *Allgemeine musikalische Zeitung* in which he specifically drew attention to the unity in the third movement of *Ein deutsches Requiem*, Op. 45 (Platt, 2003:493). Brahms's response (as quoted by Frisch, 1982:231) to Schubring's analysis is a revelation:

I disagree... but do confess that when I am working, my thoughts do not fly far enough away, and thus unintentionally come back, often with the same idea... If I want to retain the same idea, then one should recognize it clearly in every transformation, augmentation, inversion.

This letter shows that even as disciplined a composer as Brahms realises the role the subconscious plays in the process of creation (Frisch, 1981:45). Brahms thus agrees that it is possible to unconsciously create valid thematic relationships and unity through the

²⁰ It was said that Brahms wanted to avoid any future Gustav Nottebohm analysing his compositional methods after his death as Nottebohm did with Beethoven (MacDonald, 1990:147).

²¹ George Henschel (1850-1934) was a close friend of Brahms with a successful career as a conductor, pianist, composer and baritone (Bozarth, 2008:3,237).

procedures of developing variation. Even though Brahms does not deny the origin of unconscious inspiration, the deliberate, calculated development of the idea was still the most important factor in his compositional procedure (Larey, 1996:5).

Hugo Wolf (1860-1903) observed that Brahms brought the “art of composing without ideas” to new heights (Daverio, 2002:158). This statement actually demonstrates an important term in nineteenth-century organicism in music, namely *Notwendigkeit* – that which happens in the music as a matter of necessity (Grimes, 2012:148). Brahms had the ability to say more and more with less and less notes (MacDonald, 1990:157). As Jenner (1990:201) also reports, Brahms believed the pen was not only used for writing new notes, but also for scratching out the unnecessary ones. Adorno considered Brahms to be a master of economy, composing music where nothing happens coincidentally and everything can be traced back to the fundamental thematic material (in Kim, 2003:16). According to Dahlhaus (in Kim, 2003:230,) “a more rigorous economy of means is scarcely conceivable”.

2.2.3 Formal structures

All but one of the first movements of Brahms’s 24 chamber works, as well as 16 of the last movements, are in sonata form (Pascall, 1975:698). Sometimes he uses sonata form in middle movements too and, in minute form, in most sections of scherzo-and-trio type movements.

In accordance with his own conviction, Brahms gave Jenner the task of studying Beethoven’s movements in sonata form (Frisch, 1984b:33). Brahms (in Schubert, 1994:11) elucidates his commitment towards the older forms:²²

Form is something that has been created over a thousand years through the efforts of the greatest masters and which it behoves every follower to learn as quickly as possible. It would be a most foolish delusion of misguided originality for everyone to set out again to search and grope for what was already available in great perfection.

From Brahms, Jenner learnt that a sonata will not necessarily be successful if the composer merely brought a couple of motives together within a sonata structure (Frisch, 1984b:34). Christopher Thompson (1996:55) maintains that, for Brahms, sonata form was not a result of

²² Wagner, a disciple of the *Neudeutsche Schule*, commented on hearing Brahms’s Handel Variations: “One sees what can still be done with the old forms in the hands of one who knows how to deal with them.” (Geiringer, 1948:83).

writing the correct notes in the correct places according to a preconceived scheme; sonata form was rather a result of the inner workings of the music. Brahms's motto in life, in Goethe's words, flows over into his convictions about music and thus illustrates his affinity for classical structures: "It is only law that can give us freedom."²³

Brahms's music was allegedly slow to win favour among audiences and even among Brahms's followers because of his complex formal structures and ambiguous boundaries (Swafford, 1997:226). Sir Donald Francis Tovey (1875-1940) (as quoted in Frisch, 1984b:128) believes that it is not the intricacies of Brahms's music that makes it difficult for listeners, but "simply his originality". This coincides with Schoenberg's philosophy that you cannot like what you cannot understand and remember (Schoenberg, 1975:127). This tendency is superbly illustrated by the popularity of the music of one of Brahms's contemporaries, Johann Strauss II, who made his melodies memorable by using exact or parallel repetition (Frisch, 1984b:4, 8).²⁴

Brahms often maintains pitch relationships in his recapitulations which can easily be confused with exact repetition if the analyst only takes the melodic line into consideration. However, Brahms changes the mood and character while retaining pitch relationships (Frisch, 1984b:142). This demonstrates one of Brahms's most important compositional principles, namely *Ausdruckskontrast*.²⁵

2.2.4 Application of developing variation

An advanced level of the principle of developing variation is already applied in Brahms's Second Piano Sonata, Op. 2 in F# minor, composed in 1853 (Schubring, 1990:110). Brahms reached full maturity in his third quartet, *Werther*, Op. 60 in C minor (1875), by achieving an economy which did not tolerate one unnecessary note (Geiringer, 1948:231-2). This kind of economy points to the term *Notwendigkeit* mentioned on page 19. Simultaneously, Brahms perfected a system of amalgamation that gave a whole work the appearance of "having been cast from one mould" (Geiringer, 1948:233). Brahms is capable of upholding a convincing unity while the thematic material develops before the "mind's ear" (Keys, 1974:8).

²³ "Und das Gesetz nur kann uns Freiheit geben." (Walker, 1898-1899:129)

²⁴ An interesting fact is that Brahms, the upholder of developing variation, regarded the Blue Danube Waltz as "unfortunately not by Johannes Brahms" (Musgrave, 1990:133).

²⁵ Expressive contrast

Brahms's application of developing variation is not only apparent in motivic and intervallic processes, but also in the interaction of thematic, harmonic and formal procedures (Frisch, 1984b:98, 153). His harmonic and motivic procedures are closely knit (Frisch, 1984b:113). According to Edward Cone (1990:165-166), Romantic composers had a tendency to derive harmonic accompaniments motivically from the very melodies that they support. Cone calls this tendency, where melodic lines and successive chords comprise the same notes or intervals, "harmonic congruence". Brahms's affinity towards, for instance, the interval of a third is well-known: it is easily visible in the arpeggiated melodies, the bass line descending in thirds, as well as the third-related tonalities (Cone, 1990:168-170). In the *Lied* Brahms also applies the principle of developing variation by elevating the accompaniment to an equal, often independent, partner of the melody (Jenner, 1990:199). He also links the different parts of a composition, in the case of the *Lied* the voice part and the piano accompaniment, by the use of similar motives (Geiringer, 1948:267).

Structural unity was, according to Charles Joseph (1981:7), the genesis of Brahms's creative process, not only the objective. Frisch (1984b:36) states that Brahms derives his themes and sections of the sonata structure from an original idea or motive. Thus, musical form becomes dependent on and a result of this initial motive (Frisch, 1981:232). Dahlhaus (1980:50) asserts that Brahms develops motives from earlier motives or ideas, each of which is a consequence of its forerunners. Brahms is, according to Joseph (1981:7), "the archetype of a master musical engineer", building his musical schemes by the most economical minimalistic measures. Dahlhaus (1989:256) confirms that Brahms casts a highly concentrated web of motives into a musical form. Schubring (in Frisch, 1984a:276) even claims that Brahms develops his thematic material so thoroughly and convincingly in the exposition of a work that there is not much room left for development in the actual development section.

John Rothgeb (1987:204) compares developing variation with "organising diminution" in order to create fluidity and continuity within the composition. In other words, a passage evolves, yet is delimited, creating themes and melodies noticeably contrasting in nature. Although this process can lead to considerable metrical ambiguity, Frisch (1984b:5) maintains that, to a large extent, the phrase structure in Brahms's music stays conventional and symmetrical. The first composition illustrating Brahms's use of metre as a tool of developing variation is, according to Frisch (1981:102), the Piano Quintet, Op. 34 (1864). Schoenberg was the first

major critic to note the ambiguity between the written and the observed metre in Brahms's music (Frisch, 1990b:140).

2.2.5 Brahms the Janus figure

Brahms seems to be a Janus-like character, ambivalent in his approach to music: on the one hand he is modernistic; on the other he is retrospective (MacDonald, 1990:183). Despite this ambiguity his music shows no evidence of conflict between old and new, freedom and restraint, fantasy and discipline, experiment and tradition, but rather presents a fusion of all these opposing elements (Geiringer, 1990:4).

Brahms was clearly influenced by the practices of his time and the works of his predecessors and contemporaries such as Beethoven, Schubert and Schumann (Frisch, 1984b:170). According to Frisch (1984b:17), Brahms adopted his techniques of developing variation from the classical composers, but his advanced application of developing variation also exceeded that of his classical predecessors. As the classicist, Brahms reinterpreted the principles of classical music (Sisman, 1990:102). As the modernist or innovator, he followed in Beethoven's footsteps regarding the unfolding of structures in which the teleological growth bears equal importance to the actual thematic material (Dahlhaus, 1980:42).

Brahms exploited three characteristics of Renaissance and Baroque music, namely counterpoint, rhythmic displacement, and cross-relations used to expressive ends (Finson, 1992:154). Brahms fuses the principles of motivic counterpoint with those of developing variation to "produce a hybrid cognitive pattern divorced from existing trends" (Dahlhaus, 1989:258-259). Brahms adopted this "legacy" from a combination of Bach's fugal style and Beethoven's sonata style (Dahlhaus, 1998:258-259). On the one hand he employs the procedures associated with contrapuntal music and on the other hand the procedures of the "homophonic-melodic" style (Schoenberg, 1975:397). Brahms thus develops the basic idea of a piece of music employing both of these opposed methods. The Vienna correspondent of the *Neue Zeitschrift für Musik* wrote that Brahms succeeded in combining the legacies of Bach, Beethoven and Schumann with a modern approach (Musgrave, 1999:46).

Despite all the inherited elements, Larey (1996:97) points out that Brahms's style is clearly distinguished and undeniably unique. Although Brahms adopted certain fundamental compositional principles from his predecessors and contemporaries, he did not merely follow

in their footsteps, but strove to make these principles his own and thereby created something new (Schoenberg, 1975:439).

2.2.6 Brahms's legacy

Brahms not only studied the music of his predecessors and peers, but also left his imprint on the nineteenth century and the years to follow. According to Peter Burkholder (1984:75), Brahms influenced the compositional techniques of many other composers. One of Brahms's main contributions to the musical world is developing variation (Jacobson, 1977:38), which provided the inspiration for Schoenberg's ideas (Larey, 1996:97).

The early works of Schoenberg share certain basic compositional techniques with those of Brahms (Frisch, 1984b:157-8). Having adopted developing variation as a compositional technique, Schoenberg carried the technique, and therefore Brahms's legacy, into the twentieth century (Frisch, 1981:14). With Schoenberg's essay *Brahms the progressive* (1947), he also managed to save Brahms from the dead end he was reaching as the labelled "conservative" set against the more modern forms of music drama and symphonic poem. Schoenberg saw in Brahms's music the model he himself strove for, namely a highly concentrated composition as a consequence of continuously developed, but related, ideas (Larey, 1996:22).

Schoenberg's interest in the music and compositional methods of Brahms was manifold. If he proved Brahms's classical pedigree, he himself could also claim equally distinguished ancestry, seeing that he owed much to Brahms (Frisch, 1981:48). According to James Nail (1978:5), Schoenberg aligned himself with the Austro-German musical tradition in order to link himself to traditional German music. He could, as a result, claim his place in the Austro-German musical scene as well as justify his own compositional processes (Grimes, 2012:155).

Developing variation was initially solely applied to the analysis of tonal music (Boss, 1992:125), but, in course of time, it was found that developing variation can also clarify structures in atonal music (Boss, 1991:240). This notion, that Brahms's application of developing variation lies as much at the root of serial music as it stands behind the germinal development techniques of composers like Bartók and Sibelius, is supported by Bernard Jacobson (1977:38).

Brahms is indeed the most imitated composer of the late nineteenth century (Burkholder, 1984:75). Furthermore, Burkholder states that Brahms's approach to music became most typical of composers of later generations. The post-1880 revolution in British musical life, called "the British Musical Renaissance", is seen by Malcolm MacDonald (1990:405) as a consequence of Brahms's impact on mastering complex instrumental forms.

Hugo Leichtentritt²⁶ proclaims that all chamber music²⁷ written since 1880 is in some way or another indebted to Brahms (Brodbeck, 1999:130). Brahms was the only composer still writing great music in the genre of chamber music in the late nineteenth century (Colles, 1933:5) and his application of developing variation became a compositional hallmark of chamber music (Dahlhaus, 1989:257).

Dahlhaus (1989:252-261) emphasises that the critical evolutionary stage between the balanced "architectonic form" of the later eighteenth century and the rigorous "logical form" of Schoenberg's twelve-tone music is embodied by Brahms's use of the principle of developing variation. According to Pascall (1975:698), Brahms's treatment of sonata form positions him midway between the early classical composers (basing their form mostly on tonal power) and Schoenberg (basing his form on motivic and thematic development). It was not Wagner, the revolutionary, who integrated a progressive musical language with the traditional idiom of Bach,²⁸ Mozart, Haydn, and Beethoven, but rather Brahms, the so-called "traditionalist" (Burkholder, 1984:82). Hermann Wetzel²⁹ (in Musgrave, 1979:101) claims that the compositional model set by Wagner and Liszt leads to a cul-de-sac, without any possibility for further development. According to Burkholder (1984:92), there are no Wagner or Liszt imitators today, with the exception of composers of movie music such as John Williams (born in 1932), but there are hundreds of Brahms followers, looking to the classical music of the past as a basis and measure of their own "classical music".

²⁶ Hugo Leichtentritt (1874-1951) was a German musicologist, music critic and composer (Music Division, Library of Congress, Washington, DC, 2009:2).

²⁷ Brahms's early interest in chamber music remained with him throughout his lifetime. Brahms initiated the revival of chamber music after Schumann's death (Bozarth & Frisch, 2001:192).

²⁸ After Bach, Brahms was one of the few composers who wrote counterpoint as if it was his native tongue and not a learned technique (Daverio, 2002:168). Max Kalbeck, a close friend and partisan of Brahms, wrote in his monumental biography on the composer that Brahms often deceived his friends when improvising in the style of Bach (Musgrave, 1983:291).

²⁹ Wetzel, a music critic, was significant in regarding Brahms as a progressive as late as 1912 (Musgrave, 1979:101).

Alexander von Zemlinsky (1871-1942), one of Robert Fuchs's students at the Vienna Conservatory, can be positioned as a direct link between Brahms and Schoenberg (Musgrave, 1979:19). According to Musgrave (1979:19), Zemlinsky was not simply an imitator of Brahms's style, but a true and dedicated student of his technique. Zemlinsky experienced Brahms's music as "fascinating, its influence inescapable, its effect intoxicating" (Daverio, 2004:353).

Brahms is part of a tradition of developing variation extending over 150 years (Musgrave, 1985:630). Whether he consciously or subconsciously knew what he was doing in his compositional procedures is, according to Schoenberg (1975:422), not an important issue. If the analysis of Brahms's music indicates the presence of developing variation, it is sufficient evidence to acknowledge its existence. David Lewin (1990:19) shares Schoenberg's conviction in this regard, placing emphasis on the reaction to Brahms's music today, and not on his conscious processes.

Max Reger (1873-1916), a so-called "Brahms-Verehrer" (Brahms admirer) from very early in his life, wrote to his friend Adalbert Lindner in April 1894 that all musicians should recognise Brahms as "the greatest of living composers" (Frisch, 1990a:81, 93). This statement presents the motivation behind a closer investigation into the music of Brahms's followers. Only then can we try to determine Brahms's legacy and begin to understand why Brahmsian characteristics are so much more frequently imitated than the characteristics of the music of most of his contemporaries. Kofi Agawu (1999:155) asserts this belief in his article on Brahms's compositional output:

(It) is not only how much of the past is consolidated therein, or how much of the present is domesticated by him, but how significant subsequent practices may be traced to him.

2.3 Conclusion

In this chapter the principle of developing variation was defined and terminology clarified. The origin and development of developing variation were established and compared to similar as well as contrasting techniques and/or concepts. Consequently, a brief historical perspective was sketched.

In the second half of this chapter the application of the principle of developing variation in the music of Johannes Brahms was investigated. The origin and development of developing

variation in his music were indicated, concluding with the impact of Brahms's use of developing variation on fellow composers and theorists.

CHAPTER 3: ROBERT FUCHS

This chapter is divided into two sections, the first of which includes a concise biography of Robert Fuchs and a discussion of his general compositional style. The second half of the chapter will outline the connection between Fuchs and Brahms.

3.1 History and background

3.1.1 Early life

Robert Fuchs, the youngest of thirteen children, was born in Frauenthal near Graz on 15 February 1847. His father was a schoolteacher, organist and recognised composer of church music (Grote, 1994:9). Robert received his first tuition in piano, violin, flute and figured bass from Martin Bischof, his father's brother-in-law (Grote, 1994:10).

In 1862 Robert Fuchs was appointed as the organist in the Graz Opera house (Grote, 1994:12). Grote notes that Fuchs's income from teaching and composing made him financially independent since the age of fifteen.

3.1.2 Studies

Fuchs moved to Vienna in 1865 where he was appointed as the organist of the Piarist Church in the following year (Mayr, 1934:18). He studied composition with Otto Dessooff and Joseph Hellmesberger (Pascall, 1977:115). Dessooff (1835-1892) studied in Leipzig and became a well-known conductor and teacher (Haas, 2012). He was usually slow to praise his students, but, according to Anton Mayr (1934:17-18), Dessooff found Fuchs's compositions both imaginative and disciplined. Hellmesberger (1828-1893) was violin professor and director of the Vienna Conservatory. He was a musician of considerable influence, being also artistic director and conductor of the *Gesellschaft der Musikfreunde* and concertmaster of the Hofoper (Stowell, 1992:72).

For his final examination in composition in 1868, Fuchs wrote the Symphony in B minor. At Dessooff's demand the symphony was performed twice on the same evening and Fuchs had to ascend the stage three times to accept the audience's appreciative applause (Grote, 1994:16). On this momentous evening Fuchs was awarded a scholarship which he would receive for another two years (Grote, 1994:17).

3.1.3 Teaching career

In 1874 Fuchs, together with Hermann Gärdener, was appointed lecturer in harmony at the Vienna Conservatory, the same institution where he studied (Grote, 1994:22). The tasks of teaching theory and counterpoint were added to his duties after a recommendation from Brahms³⁰ in 1886 (Mayr, 1934:34).

Fuchs taught at the Vienna Conservatory from 1874 to 1912 (Grote, 1994:163). Bärbel Heilmair (2004:1) lists some of the renowned composers he taught during this period: Gustav Mahler (1860-1911), Erich Korngold (1897-1957), Hugo Wolf (1860-1903), Jean Sibelius (1865-1957), Alexander von Zemlinsky (1871-1942), Franz Schmidt (1874-1939) and Franz Schreker (1878-1934).

When Fuchs's brother, Nepomuk,³¹ died in 1892, Fuchs succeeded him as director of the Vienna Conservatory. Stratton Rawson (2002:98) states that, after two decades of directorship, Fuchs was worked out by a group who wanted to appoint Schoenberg as director. After some deliberation, one of Fuchs's own pupils, Schreker, received the position (Rawson, 2002:98).

3.1.4 Fuchs's career as a composer

Fuchs's early popularity as a composer was due to the positive response to two of his *Lieder* performed by Wagnerian singers during a concert in Graz in 1864 (Grote, 1994:11). These singers felt that his songs demonstrated a highly developed musical education, combined with a warm heart and good taste (Grote, 1994:12). Later in his career, in 1886, he won the Beethoven Prize in a competition by the *Gesellschaft der Musikfreunde* with his Symphony no. 1 in C major (Pascall, 2001: 311).

Fuchs's most successful compositions were his serenades, the immediate popularity of which granted him the nickname *Serenaden Fuchs*³² (Grote, 1994:18-9). Had the serenades been Fuchs's only contribution to music, it would explain why his music virtually vanished from the

³⁰ Brahms became director of the *Gesellschaft der Musikfreunde* and therefore had considerable influence on new appointments at the Conservatory (Grote, 1994:37). Brahms preferred Fuchs to teach composition above Bruckner (Botstein, 1999:54). More on the relationship between Fuchs and Brahms follows in section 3.2.

³¹ He was conductor of the Vienna Court Opera and director of the Vienna Conservatory (Heilmair, 2004:1).

³² "Serenading fox"

mainstream concert repertoire almost immediately after his death, even though he had been highly regarded in his own day. However, the catalogue of Fuchs's works compiled by Grote (1994:105-219) is extensive: three symphonies, four string quartets, a piano concerto, three piano sonatas, two cello sonatas, a viola sonata, a double bass sonata, six violin sonatas, piano trios, string trios and terzetti (trios for two violins and viola). He also wrote operas, masses, organ works, fantasy pieces, and numerous other compositions, including duets for two violins and for violin and viola.

Despite the popularity of Fuchs's serenades, his larger works did not seem to reach the same heights (Grote, 1994:44). Notwithstanding, Wilhelm Altmann (1929:439) recorded that Fuchs achieved a consistent high level of inventiveness and inspiration, even in his old age.

Before 1937 Fuchs's works were performed much more frequently than those of his contemporary Max Bruch (1838-1920), whose music is far better known today than the music of Robert Fuchs (Grote, 1994:19). Grote (1994:19-20) reasons that there were too many rivals in the music world at the time that Fuchs composed his first symphony: Johannes Brahms composed his Haydn Variations, as well as his first and second symphonies; Anton Bruckner (1824-1896) composed his second symphony; Richard Wagner composed *Der Ring*, *Tannhäuser*, and *Lohengrin*; and Hugo Wolf composed *Tagebuch*.

Though many of Fuchs's works were championed by notable conductors, such as Arthur Nikisch (1855-1922), Hans Richter (1843-1916), and Felix Weingartner (1863-1942), Fuchs himself shied away from the politics and self-promotion of public life, preferring his teaching activities at the Vienna Conservatory to the limelight of the opera house and concert hall (Silvertrust, 2009:15).

3.1.5 Fuchs's development as composer

The first concert of a philharmonic orchestra Fuchs attended included Beethoven's Fourth Symphony in B $\flat$ major, Op. 60 in the programme. Mayr (1934:17) reports that this piece brought Fuchs to tears, initiating his intense adoration of Beethoven. The influence of Beethovenian sonata structures is evident in Fuchs's early compositions (Grote, 1994:78). Together with the Beethovenian sonata structures, Fuchs's early works reveal frequent use of Alberti bass accompaniment (Grote, 1994:134).

Fuchs acquired a comprehensive understanding of contrapuntal writing through his lessons with Dessooff (Mayr, 1934:17) which, together with extensive tuition in Mendelssohn's practice of thorough development, is also perceptible in Fuchs's early compositions (Grote, 1994:93). The impression Schumann made on Fuchs is illustrated in Fuchs's smaller programmatic works, such as *Ländliche Szenen*, Op. 8 and his easy pieces for the young, such as *Jugend-Album*, Op. 47 (Pascall, 1977:115). One of Fuchs's foremost gifts was his rich lyricism, often embodied in neo-Schubertian melodies (Grote, 1994:89). His admiration for Schubert is evident in a letter to his friend and later biographer, Anton Mayr: "That the Schubert G major Mass gives you joy really goes without saying. Who would not be touched by this lovely, naive music?"³³ (Mayr, 1934:105).

Fuchs's lifespan coincides with Emperor Franz-Joseph's time of reign (1848-1916). Fuchs is therefore regarded as one of the last representatives of the ending Habsburg monarchy (Heilmair, 2004:3). At the time, composing in a pleasant style was favoured by the public because it distracted them from the prevailing tense political situation. According to Heilmair (2004:6), Fuchs remained as the last composer of the era of the Viennese Classical School. He outlived Johannes Brahms, who died in 1897, as well as Anton Bruckner (1896), Johann Strauss II (1899), Hugo Wolf (1903), Antonín Dvořák (1904), Gustav Mahler (1911) and Richard Heuberger (1914). He also outlived friends such as Theodor Billroth (1894) and Eduard Hanslick (1904) (Grote, 1994:45, 55).

3.1.6 Last years

After the death of his wife, Amalie, in 1897 (after 28 years of marriage) and the death of Brahms³⁴ in the same year, Fuchs withdrew considerably from the music scene in Vienna, composing only chamber music and performing it at intimate soirées (Heilmair, 2004:1, 7). From 1902 onwards Fuchs spent his summer holidays in Admont (Styria) with his friend and biographer, Anton Mayr (Mayr, 1934:29). He regularly visited the Von Brücke family in Thumersbach in Salzburg (Grote, 1994:57). Fuchs dedicated his Clarinet Quintet to Theodor von Brücke, a senior civil servant (Heilmair, 2004:7).

³³ "Daß Euch die Schubertische G-Messe Freude macht, ist wohl ganz selbstverständlich. Wem sollte diese liebe, naïve Musik nicht zu Herzen gehen?"

³⁴ A discussion of the relationship between Brahms and Fuchs follows in section 3.2.

In 1927, four days after his eightieth birthday, Fuchs died suddenly of heart failure (Mayr, 1934:30). According to Mayr, Fuchs's death was hastened by extreme eightieth birthday celebrations. Grote (1994:71) reports that the Viennese state paid for the funeral. Fuchs's epitaph reads:

*Dem begnadeten Tondichter, dem selbstlosen Lehrer, dem erlesenen Menschen...*³⁵ (Mayr, 1934:114)

3.2 The Fuchs–Brahms link

3.2.1 First acquaintance

Brahms and Fuchs only met in 1876 and rumours were that Brahms was not very impressed with Fuchs's compositions (Grote, 1994:23). They met quite by chance at a concert when Fuchs was seated between chapel conductor Wilhelm Gericke (1845-1925) and Brahms (Mayr, 1934:33). Gericke introduced Fuchs to Brahms with the following words: "This man declares that if he doesn't like a composition of Brahms, the problem lies with him and not with the composition."³⁶ (Grote, 1994:25)

These words, that were meant to put Fuchs in a favourable light in the eyes of the great master, did not seem to impress Brahms much (Grote, 1994:25). However, Mayr (1934:33) reports a change in Brahms's attitude towards Fuchs's compositions after he heard Fuchs playing one of his own compositions, the Piano Sonata in G major, Op. 9, at a musical soirée at the house of Billroth. Brahms's positive stance is demonstrated by his request towards Fuchs to play the sonata again, this time for Clara Schumann (Mayr, 1934:34).

Fuchs's compositions made a strong impact on Clara. Upon hearing his First Symphony in C major, Op.9, Clara said: "I find your compositions so naturally flowing, so delicate, often dreamingly noble and always pleasant, that I take real pleasure in them."³⁷ (Grote, 1994:30)

³⁵ In memory of the gifted composer, the selfless teacher, the select person...

³⁶ "Dies ist der Herr, der von sich behauptet, wehn ihm ein Stück von Brahms nicht gefalle, es an ihm und nicht am Stück liege."

³⁷ "Ich finde Ihre Kompositionen so natürlich fließend, feinsinnig, oft träumerisch nobel, durchaus immer wohlklingend – daß ich wahres Behagen dabei empfinde."

3.2.2 Personal and professional relationship

Fuchs met Richard Fellingner, one of Brahms's closest friends, at a social gathering in 1884. Fellingner asked Brahms whether he knew Fuchs. On Brahms's negative reply Fellingner commented: "What, you do not know him? This is Robert Fuchs, one of our finest musicians. You should know him."³⁸ (Mayr, 1934:32). Hereafter, Brahms played the role of a father figure and mentor towards Fuchs (Grote, 1994:30). Brahms never corrected anything in Fuchs's compositions, but rather gave recommendations and aided him financially (Heilmair, 2004:2). In 1884 Brahms recommended Fuchs to his own publisher, Fritz Simrock (1837-1901), with these descriptive words: "...fresh and brisk and fine musicianship"³⁹ (Mayr 1934:31-32). Brahms, however, never wanted Fuchs to know that he recommended Fuchs's works to his own publisher (Grote, 1994:29).

Fuchs's position in Vienna was strengthened by his alliance with the Brahms circle, which played a major role in building Fuchs's intellectual and aesthetic reference (Heilmair, 2004:1-2). Despite his association with the Brahms circle, he could not outgrow his nickname *Serenaden Fuchs* (Grote, 1994:44). Maybe Fuchs's personality contributed to this misfortune, but Grote (1994:72) speculates that the public shared blame for Fuchs's inability to rise above his fame as a mere serenade composer. The fact that he composed symphonies, string quartets and choir works never changed the profile created by the popularity of his first and early works, the serenades (Bauman, 2003:97).

When Fuchs dedicated his first piano trio, Op. 22 in C major, to Brahms, Brahms was so impressed with the piece that it inspired him to try his own hand at the piano trio again after a void of 30 years in the genre (Edition Silvertrust, s.a.). Among the particular pieces that Brahms admired of Fuchs are the Piano Sonata, Op.19; the Waltzes, Op. 25; the Piano Concerto, Op. 27; the Cello Sonata, Op. 29; the Piano Studies, Op. 31; the First Symphony, Op. 37, which he promoted with the publisher Simrock; *Traumbilder*, Op. 48 for piano duet; and the Fourth Serenade, Op. 51, for strings and two horns (Pascall, 1977:115). Pascall (1977:115) also reports that Brahms was usually first to try out Fuchs's new duets together with the composer, including the Waltzes, Op. 25, *Traumbilder*, Op. 48, *In der*

³⁸ "Was, den kennen Sie nicht? Das ist Robert Fuchs, einer unserer besten Musiker, den muß man kennen."

³⁹ "...frisch und flott, wie fein musikalisch sie ist."

Dämmerstunde, Op. 38, and the Viennese Waltzes, Op. 42. Brahms recommended these works to Peters Publishers (Mayr, 1934:35).

In 1891 Brahms complimented Fuchs with the following words: "...everything is so fine, so skilful, so charmingly invented, that one always derives pleasure from it"⁴⁰ (Grote, 1994:26). According to Heilmair (2004:2), this quote illustrates Fuchs's position in the music scene as a very gifted and musical composer who wrote works with a pleasant melodic appeal. Heilmair then elaborates that Fuchs's music does not include all the possible aspects within the wide spectrum of musical composition. However, Jerry Dubins (2012:365) believes that Fuchs's influence on other composers should not be disregarded, for some of his salon and dance-hall elements turn up in the music of Mahler.⁴¹

3.2.3 Developing variation – the common denominator

The influence of one composer on another is a popular and recurring theme in writings about music. Musgrave (1979:14) suggests that such influence should rather be described as one composer "responding" to the works of another in a characteristic and selective manner. Fuchs therefore responded to Brahms's application of the principle of developing variation, the working out of a theme. He did so not only on a melodic level, but also on the level of structure (Grote, 1994:104-5).

Fuchs's compositional style, illustrating the use of developing variation and the concept of organicism,⁴² is described by Mayr (1934:110) in the following words:

*The strength of Fuchs's art lies in the fact that it applies the most modest means, is only interested in faithfulness and truth of expression and denies itself any merely outward flashy effect. This art carries its worth in itself and its modesty touches and convinces all the more, because the strict form and economy of the means used offers a wealth and depth that many other works of art fail to attain.*⁴³

Fuchs's application of the principle of developing variation is, according to Grote (1994:104-5), best illustrated in his Piano Trio in C major, Op. 22. Although Fuchs concentrates his

⁴⁰ "...alles ist so fein, so gewandt, so reizend erfunden! Man hat immer seine Freude daran."

⁴¹ One critic of the time noted the "Fuchsisms" in Mahler's Second Symphony (Dubins, 2012:365).

⁴² The concept of organicism in music was discussed in section 2.1.5.

⁴³ "Die Stärke der Fuchsischen Kunst liegt darin, daß sie mit den bescheidensten Mitteln arbeitet, auf jeden nur äußeren Effekt verzichtet und im Ausdruck treu und wahr ist. Sie trägt ihren Wert in sich und ihre Schlichtheit rührt und überzeugt umso mehr, da sie in strenger Form und Knappheit eine Fülle und Tiefe bietet, an die manches andere Kunstwerk kaum heranreicht."

motivic-thematic development in the upper voice, usually the melody (Grote, 1994:136), he employs developing variation within the rhythmic realm as well (Grote, 1994:105). Pascall (1977:117) reports that Fuchs's style quickly developed towards refinement, economy, and inventive, original themes.

3.3 Conclusion

This chapter discussed the life, career and compositional style of Robert Fuchs, as well as the connection between Fuchs and Brahms. The next chapter will show how Fuchs employed the technique of developing variation in his Piano Trio in C major, Op. 22.

CHAPTER 4: DEVELOPING VARIATION IN THE PIANO TRIO IN C MAJOR, OP. 22, BY ROBERT FUCHS

Robert Fuchs's Piano Trio in C major, Op. 22,⁴⁴ is dedicated to Johannes Brahms, Fuchs's mentor and friend. Composed in 1879, Fuchs's first piano trio impressed Brahms so much that he started to write another piano trio after a void of nearly 30 years in the genre (Edition Silvertrust, s.a.). Fuchs's Piano Trio Op. 22 consists of four movements. The first movement is marked *Allegro moderato*, the second, *Adagio con molto espressione*, followed by a lively Scherzo marked *Allegro*. The finale, *Allegro risoluto*, is full of energy, contrasted against an expressive *legato* theme. At the end a heroic mode emerges.

In this discussion of developing variation in the four movements of Fuchs's Piano Trio Op. 22, melodic motives will be the main focus, beginning with three-note motives in the first movement. These motives are the building blocks of the Trio. Due to the limited scope of a mini-dissertation, I will concentrate primarily on thematic material.

In correlation with the concept of organicism, building blocks or cells undergo changes to form new material, derived from the original material. As stated in section 2.1.5, developing variation and organicism share some characteristics. This work is built on varied, developed and disintegrating variants of the opening motive. This three-note melodic motive is shown in Example 1. Metaphorically speaking, the work grows from this one musical cell. Schoenberg used the term 'germ' when referring to the building motive or basic "idea" of a composition (Schoenberg, 1967:8). Therefore, the term "germ cell" will be used here when referring to the original three-note motive. In this discussion the term "cell" will then be used for any variant thereof.

The discussion that follows will demonstrate how the characteristic of the germ cell, namely a movement away from and a return to the point of departure, manifests on micro- (motivic), meso- (thematic), and macro- (structural) level.

To facilitate the discussion that follows, the labels and descriptions of the germ cell and its most frequent variants are listed in the following table for quick reference.

⁴⁴ The full score can be found at [http://imslp.org/wiki/Piano_Trio_No.1,_Op.22_\(Fuchs,_Robert\)](http://imslp.org/wiki/Piano_Trio_No.1,_Op.22_(Fuchs,_Robert)).

Table 1: Labels, descriptions and examples of the germ cell and its variants

Label	Description	Example
GC 1-2-1	Original germ cell; an auxiliary-note figure	G-A-G
C 1=2=1	Inversion of the germ cell	A-G-A
c 1-2-1	A variant of the germ cell where the whole tone of the auxiliary-note figure is replaced with a semitone	E-F-E
c 1=2=1	The inversion of c 1-2-1	F-E-F
S1	The ascending whole tone segment of the germ cell	C-D
S2	The descending whole tone segment of the germ cell	D-C
s1	The ascending semitone segment of the semitone variant of the germ cell	E-F
s2	The descending semitone segment of the semitone variant of the germ cell	F-E
EGC	Extended germ cell, namely cell 1-2-3-2-1	C-D-E $\flat$ -D-C
sm1	The first segment of the extended germ cell	C-D-E $\flat$
sm2	The second segment of the extended germ cell	E $\flat$ -D-C
Main motive	The first four notes of the fourth movement	G-A $\flat$ -C-B
Pentatonic main motive	The main motive, but with an A instead of an A $\flat$, thus creating a pentatonic opening cell	G-A-C-B
Pentatonic cell	The first three notes of the pentatonic main motive	G-A-C

4.1 First movement, *Allegro moderato* (348 bars)

Because of the absence of a contrasting second theme, it is almost impossible to analyse the first movement in terms of a traditional formal scheme such as sonata form. The following discussion will therefore concentrate on the thematic material in bars 1-108.1,⁴⁵ because this

⁴⁵ In this discussion bars and beats are referred to in the following manner: “bar 2.4” indicates the fourth beat of the second bar. Further subdivisions are conveyed by the addition of letters a, b, c or d after the beat, for example “bar 5.3b” refers to the second half of the third beat of bar 5.

section is repeated, albeit with slight variations, at the end of the first movement (bars 203.4-309.1). Despite the absence of a definite formal scheme, the movement can still be divided into three sections, creating a non-traditional A-B-A structure. The first section, which covers the presentation and development of new cells, ends in bar 108.1. The middle section (bars 108.2-203.3) mainly consists of repetitions, variants and modulations of the germ cell that are developed in various ways, as will be shown in the discussion that follows. The last section starts with the main theme⁴⁶ in the original key of C major (bar 203.4). Other thematic material is derived from the first theme, specifically from the germ cell. The discussion will show that the development of the germ cell already starts within the first theme, thus from the very beginning of the piece.

The first three notes of the work form the germ cell. This cell is traditionally labelled as an upper-auxiliary-note figure. In this study the germ cell G-A-G will be referred to as GC 1-2-1. Number 1 refers to the first note of the melodic three-note formation. The subsequent numbers represent the distance, expressed in number of steps, from the first note of the cell, always indicated as 1. The numbers do not refer to scale degrees or key. This method is chosen in order to simplify the typing and reading of the text.

This study concentrates primarily on the shape and contour of motives. In order to distinguish between different variants of the germ cell, the variant of the germ cell where the whole tone is replaced with a semitone, (for example E-F-E) will be labelled as c 1-2-1. The contour of this cell remains the same as that of the germ cell. The inversion of the germ cell (for example A-G-A) will be labelled as C 1=2=1 and the inversion of c 1-2-1 (for example F-E-F) will be labelled as c 1=2=1.

In the **first theme** of the first movement the systematic disintegration of the germ cell already demonstrates the concept of developing variation.

⁴⁶ In this mini-dissertation the first theme of the first movement will also be referred to as the main theme, because the rest of the work is derived from it.

Example 1: Trio, Op. 22, first movement, bars 0.4-12.2

The musical score for Example 1 is presented in three staves: Violine (Violin), Violoncell (Cello), and Pianoforte (Piano). The tempo is marked 'Allegro moderato'. The Violine and Violoncell parts are marked with 'sonore' and 'mp' (mezzo-piano). The Pianoforte part is marked with 'mp legato'. The score is divided into two systems. The first system contains bars 0.4 to 12.2. The second system contains bars 6 to 12.2. Square brackets numbered 1 to 7 indicate germ cells and their variants. Broken slurs indicate arpeggiated secondary material connecting one cell with the next cell.

The broken slurs in all the examples indicate arpeggiated secondary material connecting one cell with the next cell. It can be seen as connective or prolonging material.

The square brackets in Example 1, marked with numbers 1 to 7, indicate the germ cell and its variants. Only the germ cell is marked with solid square brackets. Cells (variants of the germ cell) are marked with broken square brackets. Cells 1 to 7 will be discussed next.

Cell 1: G-A-G is the germ cell, labelled as GC 1-2-1. The auxiliary-note figure has a slight angular shape formed by the rising contour of the first segment and the falling contour of the second segment.

Cell 2: The pitch names of this cell correspond to those of cell 1 (thus also GC 1-2-1), but the motive appears an octave higher and the rhythm is varied. Instead of three crotchets, the rhythm is changed to a dotted crotchet followed by a quaver and a crotchet. In the first

appearance of the germ cell the accent falls on the second note of the motive, but here the first note is emphasised, varying the metrical accent and therefore the character of the motive.

In the first two-bar phrase of the work, two germ cells frame connecting material, creating an *a-b-a* pattern where *b* represents a movement away from the point of departure *a*. This *a-b-a* pattern reflects on meso-level (thematic level) the same idea as the germ cell on micro-level, namely a movement away from and a return to the point of departure.

Cell 3: The original GC 1-2-1 appears an octave higher with corresponding rhythm and metrical placement.

Cell 4: The opening GC 1-2-1 is transposed one step higher (A-B-A).

Cell 5: This cell (GC 1-2-1) is a transposition of cell 2, one step higher.

The distance between the two notes of both segments of the germ cell augments conspicuously from bar 6.4 onwards.

Cell 6: A-D-C (cell 1-4-3) is a variant of the germ cell. Beginning with the opening note of the previous cell, the original ascending major second is enlarged to create a perfect fourth, followed by a descending whole tone as in the germ cell.

Cell 7: Both segments of the germ cell enlarge to create a climactic cell 1-6-4 (G-E-C) with the largest opening interval yet. This conspicuous development is accentuated by the *tenuto* on G, as well as by the higher dynamic level of *mezzoforte* in contrast with the *mezzopiano* of the first cells. The outline of cells 1 to 5 is a major second, the outline of cell 6 is a perfect fourth and the outline of cell 7 is a major sixth. In the process, the shape of the original germ cell became significantly angular.

The development of thematic material is not restricted to the melodic line, but is embedded in the accompaniment as well. Examples of cell 2, a rhythmic variant of the germ cell, can be seen in the left hand of the piano part in bars 4 and 8. Furthermore, the germ cell is varied in such a way that it develops and disintegrates into the arpeggiated secondary material which already appeared in bar 1 as the connecting material (*b*) in the *a-b-a* pattern.

After bar 12.2, a bridge passage leads to a repetition of the first eight bars of the main theme in the piano part, starting in bar 23.4 in the original key of C major, marked *forte legato*. The next prominent reference to the main theme appears in bar 42.2 with a change of register in the piano part. A perfect cadence, marked *diminuendo*, completes the statements of the first theme in bars 41-42.1, leading towards the **second theme** marked *piano legato*.

Example 2: Trio, Op. 22, first movement, bars 42.2-44.1

It seems as if the first theme, doubled an octave lower by the left hand, is going to be repeated. Instead the first two bars of the theme, in this study described as the first fragment, are varied. The germ cell (G-A-G) is followed by D-C-F-E, that could be regarded as an ornamentation of G-C-E, the last three notes of bar 1 (see Example 1). This arpeggiated secondary material in Example 1 has developed into thematic material, thereby losing its connective function. At the same time, C-E also figures prominently in the accompaniment of bar 42 (right hand). The triplets in the right hand of the piano part recall the rhythmic character of the germ cell, which also consists of three notes of equal duration. The triplets also bring to mind the inversion of the angular shape of cell 7 in Example 1.

The notes in Example 2 show different variants of the germ cell. These cells connect with one another (the last note of one cell is the first note of the next cell), forming a new theme developed from the germ cell. The brackets in Example 2 are marked with numbers 1 to 3 and the discussion of these cells follows.

Cell 1: G-A-G is the original GC 1-2-1. Instead of starting on the fourth beat, the germ cell now starts on the second beat of the bar.

Cell 2: G-D-C (cell 1-5-4) is a variant of the germ cell. Beginning on the last note of the preceding germ cell, the original ascending major second is enlarged to create a perfect fifth, followed by a descending whole tone as in the germ cell.

Cell 3: C-F-E (cell 1-4-3) correlates with cell 6 in Example 1. Thus, the initial ascending major second is enlarged to create a perfect fourth, but this time followed by a descending semitone instead of the whole tone of the germ cell. This cell is extended by a D# to form a four-note figure with the purpose of ending off the phrase (C-F-E-D#). A rhythmic variation of the cell is presented by the prolonged appoggiatura F, followed by a quaver E (chord note) now fulfilling the role as a passing note to the D#.

The semitone, E-D#, is the point of departure in the cell (E-D#-E) that forms the opening notes of the next important entry of the theme in bar 73.4 (see Example 3). The germ cell has taken on an inverted shape, namely c 1=2=1, with a semitone and not a whole tone as in the germ cell in bar 1. The auxiliary-note figure remains the opening figure of each new theme so far.

The third reference to the main theme starts in bar 73.4, after the semitone figure A#-B was repeated as a reference of the semitone auxiliary-note pattern, a variant of the germ cell. Eventually the **third theme** crystallises from the disintegrated thematic material.

Example 3: Trio, Op. 22, first movement, bars 62-84

The musical score for Example 3, Trio, Op. 22, first movement, bars 62-84, is presented in three systems. The first system (bars 62-68) shows the violin and viola parts with 'espress' and 'f' markings, and the piano part with 'fp' and 'f' markings. The second system (bars 69-76) continues the violin and viola part with 'f' and 'p' markings, and the piano part with 'f' and 'p espress.' markings. The third system (bars 77-84) features the violin and viola part with 'cresc.' and 'f' markings, and the piano part with 'cresc.', 'f', 'sf', and 'cresc.' markings. The score includes various musical notations such as slurs, ties, and dynamic markings.

The expressive semitone movement (E-D#-E) of the third theme in bar 73.4 mentioned before is preceded by a fragmentary appearance of the ascending semitone A#-B played by all three instruments. The first and second semitone intervals (bars 62 and 64) are marked

decrescendo, while the third semitone (bar 66) is marked *crescendo*. The repetition of A#-B anticipates the new theme. It also illustrates a reverse form of the effect of disintegration in the main theme in bars 1-12.1. A transposition of the complete c 1=2=1 to E-D#-E already appears in bars 55.4b-56.2. The *tenuto* marks in the arpeggiated secondary material in bars 67 and 71 bring to mind the way in which the germ cell developed into secondary material in Example 1, cell 7, as explained before.

Cell 1: The expressive ascending semitone (originally A#-B) is finally embedded in the motive E-D#-E (c 1=2=1) in bar 69.4. The whole tone of the germ cell is substituted with a semitone.

Cell 2: E-D#-E (c 1=2=1) introduces theme 3 in bar 73.4 in the right hand of the piano part. This lyrical melody, marked *piano espressivo*, is given more prominence by the piano playing the melody in octaves. Impetus is given to the middle note of the cell by lengthening the note value to three crotchets instead of the original one crotchet. The slur over D#-E accentuates the D# even more.

Cell 3: c 1=2=1 (E-D#-E), bars 77.4-78 in the right hand of the piano part, is a repetition of cell 2, but with different instrumentation and different implied harmony. In cell 2 the instrumentation was limited to the piano playing the new theme in octaves, whilst the cello is added in cell 3, giving even more importance to c 1=2=1.

Cell 4: c 1=2=1 (E-D#-E) appears again in bars 81.4-82 of the piano part.

Cell 5: This cell is an inversion of the germ cell. C 1=2=1 (F#-E-F#) appears in bar 83. This cell is subjected to metrical variation, with the first note of the cell starting on the first beat of the bar and not on the fourth beat as in the germ cell. The violin and cello play this cell in unison,⁴⁷ giving impetus to the inversion. The dynamic level has also increased from *piano* at the beginning of the theme to *forte* with an added *crescendo* on cell 5.

Cell 6: The piano part states another repetition of c 1=2=1 (E-D#-E) in bars 83.4-84. Cell 6 is a repetition of cell 4, but with a variation in harmony. The second note of cell 4 plays the role of an accentuated lower auxiliary note for the harmony of A major, whereas the second note of cell 6 is an accentuated lower auxiliary note for the harmony of E minor.

⁴⁷ The definition of unison in the *The Oxford Companion to Music* is “the simultaneous performance of the same line of music ... at exactly the same pitch or in a different octave” (Latham, 2011).

Succeeding material ending off the third theme consists of a transposition of cell 5 (bars 85.1-85.3) and a rhythmic augmentation of c 1=2=1 (G-F#-G in bars 86.4-87.3) and cell 1-3-2 (G-B-A in bars 87.3-88.3), another variant of the germ cell. Beginning on the last note of the preceding cell, the original ascending major second is enlarged to create a major third, followed by a descending whole tone as in the germ cell. The dynamic indication has increased even more to a level of *fortissimo*.

Between cell 2 and cell 3 (see Example 3) a circular figure appears (F#-G-A-B $\flat$ -A-G-F#) in the piano part. The added A in bar 77.2 removes the effect of closure. Between cell 3 and cell 4 a similar circular figure is repeated in the piano and cello parts, but now one step higher (G-A-B-C-B-A-G#), also with the ascending minor third (B in bar 81.2) added. Where germ cells frame the arpeggiated secondary material in the first theme, variants of the germ cell frame circular figures in the third theme to form another *a-b-a* pattern on meso-level.

One attribute of developing variation is that secondary material also undergoes development. This can be seen in the change of the major arpeggios into a diminished arpeggio as in bar 89, played by all three instruments. It paves the way for the extended cadence leading into the next reference to the main theme in bar 94 (see Example 4).

The disintegration of the germ cell in Example 3 develops into still new variants of the germ cell, with the **fourth theme** beginning in the violin part in bar 94 in G major, the dominant key of C major (see Example 4). This theme can be seen as the final disintegration of the germ cell at the end of the first section of the first movement. In the main theme the germ cell was slightly angular and the arpeggiated secondary material was linear. In a similar way that the germ cell developed in the main theme (bars 1-12.2) to become secondary material (cell 7, Example 1) the germ cell now changes from its angular character into the linear character of the secondary material.

Example 4: Trio, Op. 22, first movement, bars 94-98.2

The musical score for Example 4 shows the beginning of the fourth theme in bars 94-98.2. The Violin (Vn) part is in G major (one sharp) and 3/4 time. It starts with a piano (p) dynamic. The Violoncello (Vc) part is in the same key and time, also starting with a piano (p) dynamic. The score is divided into measures 1, 2, and 3, with bar numbers 94, 95, 96, 97, and 98.2 indicated. The Violin part features a melodic line with slurs and accents, while the Violoncello part has a more rhythmic, arpeggiated line.

The fragmentation of the germ cell and its variants in bars 62-66 (see Example 3) can be seen as the anticipation of the new cell at the beginning of the fourth theme in bar 94 (A#-B-D). Leaps expand systematically as in the main theme in bars 1-12.1. The discussion of cell 1 to 3 follows.

Cell 1: The first three notes (A#-B-D) under slur 1 in the violin part in bar 94 can be regarded as a linear formation (cell 1-2-4), because the return to the note of departure (A#) is obscured by the phrasing. Although there are four notes under each slur, the third note (D), with its extended note value of a dotted crotchet, can be seen as a point of arrival. The quaver note succeeding the dotted crotchet can be seen as connecting material to the next cell. Cell 1 consists of the first segment of the semitone variant of the germ cell plus another ascending interval, a minor third. This linear cell provides the material for the fourth theme.

Cell 2: cell 1-2-5 (A#-B-E in bar 95) is a variant of cell 1 where the first two notes remain the same, but the minor third between the last two notes is developed by means of intervallic expansion to a perfect fourth.

Cell 3: In bar 96, cell 1-2-7 (A#-B-G) develops the distance between the lowest and highest notes of the cell to form a climax combined with a *crescendo*. This corresponds with the intervallic growth of the cells in the main theme.

The cello imitates the fourth theme canonically. Yet, the phrasing is not synchronised, as if to highlight the semitone movement (c 1=2=1, B-A#-B) with which the cello starts in bar 94. At the end of the theme in bar 98.2 the piano repeats the canonic passage in the right and left hand, although embellished with arpeggiated triplet figures. This canonic treatment of the varied germ cell with its changed phrasing and a changed shape affirms that the original germ cell has reached its final disintegration within the first section of the first movement. The phrasing obscures the return to the note of departure (A#) in all three cells. In the third cell the obscured return to the note of departure is postponed by a scalar passage in bar 97 to reach A# only in bar 98, where it accentuates the ascending semitone movement (A#-B) with the two-note slur.

The middle section of the first movement (bars 108.2-202.3) presents further statements of the thematic material discussed above. The opening theme of the middle section, in C# minor, in bars 116.2-117.4 (left hand, piano, in octaves, marked *pianissimo espressivo*), is a

repetition of the second theme (Example 2). The leap of a fifth between the two cells is replaced by the leap of a fourth, now to form G $\sharp$ -A-G $\sharp$ -C $\sharp$ -B $\sharp$ -E-D. The first fragment of the main theme is repeated often, for example in bars 117.4-119.3 (violin), bars 118.4-120.3 (cello) and in a repetitive modulating passage in the piano in bars 133.4b-143.3. The first fragment is also varied, in that the note values are diminished and performed as tremolos in the violin and cello parts in bars 135.4b-145.3.

The third theme (Example 3) is repeated in a different key in bars 158.4b-164.1. Instead of the whole theme being repeated, it is interrupted in bar 165 with similar arpeggiated material as was found in bars 64-69. The opening bar of the fourth theme (Example 4) is treated sequentially in bars 171.4b-174.2. This time the violin and cello play the theme in unison.

The rest of the middle section consists of fragments, as well as variants of these fragments, of the themes as discussed before. It serves the purpose of modulating from C $\sharp$ minor back to the key of C major for the restatement of the first theme in bar 202.4.

The micro-structure of the germ cell is also recognisable in the greater tonal scheme of the first movement, that is, on macro-level. The first theme is in C major. From bar 114 the key of C $\sharp$ minor dominates, until the original key of C major returns in bar 203.4 where the first theme appears in its totality for the first time since its first statement. On a macro-level the tonal scheme (C major – C $\sharp$ minor – C major) represents c 1-2-1, the semitone variant of the germ cell. The germ cell therefore also represents the design and tonality of the first movement, embodied in the macro structure of this movement.

The manifestation of a similar structural design on micro-, meso- and macro-level brings to mind “the self-similar pattern”, with each part of the object mirroring the whole, that manifests itself in the fractal geometry of the Polish-born mathematician Benoit Mandelbrot (Shiffman, 2012:357). Developing variation, “the variation of the features of a unit that produces successions of forms, which in turn manifest the idea of the whole piece” (Boss, 1991:1), coincides with fractal geometry as a study of structures in which the form of a small unit is similar to the form of the structure as a whole (Shiffman, 2012:357). A fractal object can be compared to Chinese boxes or Russian dolls, where structures are nested within one another (Kanadoff, 1986:6). “The comparison serves to analyse the procedure of structural changes from the key notes to the melodies and to the whole.” (Hsü & Hsü, 1991:3509)

4.2 Second movement, *Adagio con molto espressione* (110 bars)

The thematic material in bars 1-44 will be discussed because this section is repeated in bars 50-92, albeit with slight variations and in different keys. The first section of the movement begins in F minor and ends with a perfect cadence in C minor in bar 45. This point of arrival is emphasised by the dynamics of *forte crescendo* followed by the *diminuendo* to *piano* on the tonic of C minor. The discussion that follows will show that the thematic material of the second movement is also derived from the germ cell, as presented in the first movement, and variants thereof.

Example 5: Trio, Op. 22, second movement, bars 1-23.1b

Adagio con molto espressione.

Violine.

Violoncell.

Pianoforte.

pp legato sempre

pp

6

10

cresc.

dim.

cresc.

dim.

cresc.

dim.

14

p *cresc.*

pp

19

mf *mf* *mf*

S2 S2 S2 S2 S2

s1 S2 s2 S2 s2

S2 S2 S2 S2

In the second movement the two segments of the germ cell function independently. In the following discussion the first segment of the germ cell (an ascending second), will be labelled as either S1 (a whole tone) or s1 (a semitone). The second segment of the germ cell (a descending second), will be labelled as either S2 (a whole tone) or s2 (a semitone).

The solid square brackets marked as S1 or S2 in Example 5 indicate, respectively, the ascending and descending whole tone segments of the germ cell. Broken square brackets marked as s1 or s2 indicate the semitone intervals. The complete germ cell (for example G-A-G) is still marked with a solid square bracket as in the first movement. Variants of the germ cell are marked with a broken square bracket. The broken square brackets marked as c

indicate the semitone variant of the germ cell, whereas =c indicates the inversion of the semitone variant of the germ cell.

The **first thematic material** starts with a juxtaposition of s1 and s2. The descending s2 (D $\flat$ -C), rhythmically varied, appears in the right hand of the piano part in bar 1. The slur over D $\flat$ -C accentuates the sigh motive and embodies the *con molto espressione* stated at the beginning of this movement. The left hand of the piano part shows the ascending s1 (E $\natural$ -F), creating a mirror image of the motive in the right hand part.

The juxtaposition of these two segments creates a vertical variant, as opposed to the horizontal statements of the cells in the first movement. This is the first appearance of the vertical variant of the germ cell. In bar 2 the two segments of the vertical variant are inverted. The vertical variant consists of contrary motion and is the building block of the first theme of the second movement. The vertical variant only appears in the second movement.

In the third bar the violin and cello repeat the s2 (D $\flat$ -C) of the piano part in bar 1 in octaves against the left hand of the piano part repeating s1 (E $\natural$ -F). In the next bar s2 is transposed to F-E $\natural$, the retrogression of the original s1. The vertical variant in bar 1, repeated in bars 2-3, crystallises out into the horizontal thematic material of bars 3-4 played by the violin and cello. The connecting secondary material (bar 4.1), framed by s2, is a diminished triad with the interval of a diminished fifth between the lowest and highest notes. This interval and the secondary material will also develop throughout the second movement. The two-note slur and *diminuendo* accentuate the sigh motive in bar 4.2. For the purpose of this discussion bars 3-4 will be regarded as the first phrase of the main thematic material in the second movement.

The pattern of the first phrase in bars 3-4 corresponds with the *a-b-a* pattern in the first two bars of the main theme of the first movement, where the germ cell is connected to another germ cell by means of secondary material, creating an *a-b-a* pattern where *b* represents a movement away from the point of departure *a*. This *a-b-a* pattern reflects on meso-level the same idea as the germ cell on micro-level and the C-C $\sharp$ -C tonal scheme of the first movement on macro-level.

A transposition with variation of bar 1 is found in bar 5. The right hand and left hand of the piano part still play the vertical variant in contrary motion, albeit consisting of segments of the original germ cell now, thus whole tone segments. The added accompaniment in the left hand

creates a forward movement. An extension of the one-bar motive is made possible by the rhythmic variation of the S2 (B $\flat$ -A $\flat$) in bar 5.2 leading into c 1=2=1 (A $\flat$ -G-A $\flat$) with its semitone inflection in bar 6.1. The left hand of the piano part continues the movement of bar 5 with s1 until the F minor chord, the tonic of the key of this movement and this theme, is reached in bar 6.2, for the first time without any accentuated leaning note. Secondary material connects this statement of the first theme with the next statement in bar 7. The piano part states the original s2 (D $\flat$ -C) against the S2 (B $\flat$ -A $\flat$) of the germ cell in the violin part. The violin and cello still play in parallel motion, but not in unison anymore, creating a more complex texture. The second half of bar 8 ends without the sigh motive, thus the thematic material develops away from the sigh motive.

The thematic material of bars 3-4 is varied in bars 7-8. The secondary material in the violin part preceding the end of the phrase in bar 8 is a variation of bar 4. The distance between the first and last notes of bar 4 (B $\sharp$ -E $\sharp$) forms a perfect fourth. B $\sharp$ -E $\sharp$ is transposed to G-C in bar 8 in the violin part and intensified by the left hand of the piano part playing the same notes. However, the secondary material in the violin part in bar 8 is varied by augmenting the distance between the lowest and highest notes from a diminished fifth (B $\sharp$ -F) in bar 4 to a minor sixth (G-E $\flat$). This variation by means of intervallic expansion brings to mind the systematic intervallic expansion of the first and fourth themes of the first movement (Examples 1 and 4).

The succeeding bridge passage (bars 9-14) develops the secondary material into scale passages where the interval of a diminished fifth forms the outline of both arpeggiated and scale variants of the secondary material. The secondary material creates a mirror image, imitating the contrary motion of the vertical cell. All three instruments play this secondary material alternately, granting the material significance. The descending scale passage connecting G $\flat$ with C (bar 9) in the violin part mirrors the passage in the right hand of the piano part (connecting C with G $\flat$). As in the first theme of the first movement, the secondary material here also develops into thematic material when the secondary material takes on the contrary motion of the vertical variant in bar 1 of the second movement. The secondary material still serves a connective purpose and still forms an interval of a diminished fifth between the lowest and highest notes as in bar 4.

The scale passage in bar 9 leads to the ascending s1 in bar 10 (C-D $\flat$) in the violin part played against the descending S2 (E $\flat$ -D $\flat$) in the cello part, thus creating another vertical variant. The violin and cello play the next connective scale passage in octaves in bar 11, again forming a diminished fifth between the lowest and highest notes (G-D $\flat$). The piano plays a mirror image of the same scale passage in the right hand (D $\flat$ -G). A repetition of the opening s2 (D $\flat$ -C in bar 1) in bar 12 is presented in octaves by the violin and cello.

The mirror image is also developed in bar 14. The interval between the lowest and highest note of the scale passage still sounds like a diminished fifth, albeit transcribed as an augmented fourth in the right hand of the piano part. Instead of playing an ascending scale passage in bar 14 leading towards the F minor chord in bar 15, the right hand plays c 1-2-1 (C-D $\flat$ -C) as a reminder of the semitone variant of the germ cell. The emphasis on D $\flat$ on a strong beat of the bar is reminiscent of the opening semitone (D $\flat$ -C) before the opening thematic material is repeated in bar 15, finally on the tonic note of F minor.

From bar 15 onwards, motivic as well as secondary material develops by means of expansion, contraction, juxtaposition and rhythmic variation. Only the descending s2 (F-E $\sharp$) is heard in bar 15, played over a pedal point (F). The motive is, however, developed by the added G in bar 16.1 to create an ascending minor third that develops the character of the sigh motive into the effect of a question. Bar 17 is a transposition of bar 15, but the thematic material is developed further by adding another voice in the left hand playing in parallel octaves with the double octaves played by the right hand. The absence of the *decrescendo* after the *crescendo*, as it appeared in bar 15, emphasises the questioning effect of the ascending minor third.

The arpeggiated secondary material develops further in bar 16. In the first half of the bar the violin and cello play in contrary motion, reminding the listener of the treatment of the germ cell segments in the opening motive in bar 1. However, the cello changes direction in the second half of the bar to play in parallel motion with the violin. The secondary material now combines the arpeggio and scale passages. The violin ends its secondary material with S2 (G-F) in bar 17. Thus the introductory motive of bar 1, expanded over two bars in bars 3-4, is now developed further to fill four bars.

The secondary material also develops to fill a whole bar (bars 16 and 18) instead of half a bar as in bar 4. The secondary material in bar 16 connects s2 in the piano part (F-E $\sharp$, bar 15.2)

with S2 in the violin part (G-F, bar 17). A transposition of bar 16 is found in bar 18, marked *crescendo*. The combination of motivic and secondary material reaches a climax in bar 19, marked *mezzoforte*, the highest dynamic level in this movement so far. Here the motivic and secondary material is combined in one voice (the right hand of the piano part). This contraction of thematic and secondary material, indicated in Example 5 with arrows, intensifies the climax.

The descending arpeggiated secondary material in the right hand (bar 19.1) is mirrored by the ascending arpeggiated secondary material in the left hand. On the second beat the violin and cello introduce ascending arpeggiated material that culminates in the sigh motive to form another contracted version of secondary and primary motivic material. The contraction of the two types of material has a stretto-like effect, increasing the sense of urgency. Bar 19 is treated sequentially in bar 20 and 21. However, the violin plays a compression of thematic material in bar 21 where two S2 segments (B $\flat$ -A $\flat$ and D $\sharp$ -C) frame arpeggiated secondary material (A $\flat$ -C-E $\flat$). Thematic material is developed even further in bar 22. The first four notes form a diatonic sequence of the first four notes of bar 21, but the secondary material is extended with two more notes (E $\flat$ -C) to postpone the ending of the phrase with s2 (C-B) to bar 23.

The atmosphere and texture change in bar 23. The ascending segment of the germ cell now loses its character as an independent segment, disintegrating into a chromatic passage. The parallel sixths in the right hand of the piano part thin out the texture and instil a calm atmosphere to form a bridge passage that links the climax of the preceding four bars with the second theme.

The **second theme** is in C major, the dominant key of the first theme, and the piano leads with the melody.

Example 6: Trio, Op. 22, second movement, bars 26-33

The musical score for Example 6, Trio, Op. 22, second movement, bars 26-33, is presented in three systems. The first system (bars 26-29) shows a treble and bass staff with 'molto espress.' and 'cresc.' markings, and a grand staff with 'molto espress.' and 'cresc.' markings. The second system (bars 30-32) shows a treble and bass staff with 'S2' and 'ff' markings, and a grand staff with 'ff' and 'dim.' markings. The third system (bar 33) shows a treble and bass staff with '3' and 'dim.' markings, and a grand staff with '3' and 'dim.' markings. The score includes various musical notations such as slurs, ties, and dynamic markings.

Bar 26 starts with C 1=2=1 (D-C-D) in C major, the same key as the main theme of the first movement. In the first movement the middle note of the original germ cell was the non-harmonic note fulfilling the function of an accented upper auxiliary note. However, the middle note of the cell as found in bar 26 (D-C-D) is the harmonic note. The character of the cell is thus changed. The D preceding the harmonic note plays the role of a suspension and the D succeeding the harmonic note fulfils the function of an unaccented passing note, which can also be regarded as part of the secondary material. A scale passage on the second beat leads to a descending S2 (G-F) in bar 27.1.

The pattern of the opening phrase in this theme also represents the *a-b-a* pattern of the opening phrases of the first themes in the first and second movements, which both consist of secondary material framed by the germ cell or variants thereof. The *a-b-a* pattern is developed as well, because the connecting material does not connect one germ cell with another germ cell, but with a segment only of the germ cell.

A repetition of C 1=2=1 (A-G-A) is found in bar 29, although obscured by the phrasing and by its appearance in the lower voice of the right hand of the piano part. The material in bar 29 is treated sequentially in bar 30, albeit not in an exact way. The phrasing is adjusted as if to confirm the presence of C 1=2=1 (D-C-D) in the first half of the bar. The intervallic expansion in the second half of the bar reminds the listener of the intervallic expansion found in the first movement: D-F-E in bar 29 changes to E-A-G in the second half of bar 30, augmenting the interval between the first two notes from a minor third (D-F) to a perfect fourth (E-A). Following the *crescendo* in bar 29, the violin and cello present different statements of S2 in the first halves of bars 30-32, two octaves apart, coinciding with the lowest note in the right hand of the piano part. The *diminuendo* in bar 33 leads to a perfect cadence in C major, introducing the **third theme** in bar 34.

Example 7: Trio, Op. 22, second movement, bars 34-37

The musical score for Example 7 shows the Trio, Op. 22, second movement, bars 34-37. The score is in 6/8 time and C major. It features three staves: Violin (top), Cello (middle), and Piano (bottom). The Violin and Cello parts are marked 'p dolce' and play a melodic line. The Piano part is marked 'p cantabile' and features a complex rhythmic pattern of triplets in both hands. The score includes bar numbers 34, 35, 36, and 37. A key signature change to C major is indicated in bar 37.

The third theme is still in C major, the dominant major key of F minor, and the melody lies in the middle of the piano texture, starting with the thumb of the right hand, marked *piano cantabile*.

The motives of the third theme can be seen as variants of the germ cell, as they follow the same angular contour of the germ cell. In the right hand of the piano (bar 34) the cell, G-B-C-G-G, is rounded off with a return to the note of departure (G). This corresponds with the germ cell, where the middle note escapes from the two notes that frame it. Here the motive is framed by the same note (G) as in the original germ cell at the beginning of the first movement. Cell 1-3-4 (G-B-C) can also be seen as a retrograde inversion of the contour of the fourth theme of the first movement (A $\sharp$ -B-D, see Example 4). Cell 1-3-4 appears in bars 34, 35 and 36, and is followed by a transposition of cell 1-3-4 (D-F $\sharp$ -G) in bar 36.2, leading towards cell 1-3-2 (A-C-B) in bar 37. Cell 1-3-2 is a variation of the germ cell where the first segment of the cell is enlarged to form a minor third instead of the original interval of a major second. The climax note (C in bar 37) introduces retrogression (C-B-G) of the opening cell in bars 34, 35 and 36, creating another circular effect.

The violin takes over the melody in bar 38, but the key changes from C major to C minor. The theme is varied in bar 39 by not returning to the note of departure, but rather initiating sequences of ascending arpeggiated diminished triads that can be traced back to the secondary material in the first theme of the second movement (Example 5, bar 4). The quavers in the right hand of the piano part (bars 39.2-40) mirror the ascending diminished triads in contrary motion, corresponding with the contrary motion of the first theme (Example 5, bars 1-3).

The *crescendo* in bar 39 leads through bar 40, which is saturated with diminished triads, to the climax in bar 41 on the cadential second inversion of the tonic chord in C minor. The third theme of this movement ends with a complex contraction of the thematic material of the first theme. The violin now plays an extension of the first four arpeggiated notes of the secondary material in the piano part of bar 19. Both cases are followed by s2 (G-F $\sharp$ in bar 19.2 and A $\flat$ -G in bar 41.2). The cello also plays arpeggiated secondary material, but in contrary motion to the violin. The s2 following in bar 41.2 (C-B $\flat$) is in parallel motion to the violin, trying to resolve the tension that was created earlier. The right hand of the piano part in bar 41 states s2 in C minor, rhythmically corresponding to s2 in bar 1 (Example 5).

The inversion of the semitone variant of the germ cell, c 1=2=1, appears for the first time in this movement in bar 43.1 in the violin part (C-B-C), moving in parallel sixths with the cello. At the same time c 1-2-1 (G $\flat$ -A $\flat$ -G) is extended in the inner piano texture, marked *forte*

crescendo, to fill the whole bar. As in the original germ cell, the note of departure is G and, as in the main theme of the first movement, G is the dominant of the key.

A modulating bridge passage (bars 45-49), consisting of scale passages alternating between the violin and cello, leads to the repetition in bars 50-92 of bars 1-44, albeit with slight variations and in different keys, starting in F minor. The repetition of the second theme (starting in bar 75) is in F major and the third theme (starting in bar 83) begins in F major, returning to F minor in bar 87. While the keys of the first section were F minor – C major – C minor, the keys of the varied repetition are F minor – F major – F minor.

The overall effect of the second movement is the reverse of that of the first movement, creating a mirror pattern on a macro-level. As stated previously, the first movement starts with the germ cell, which is varied and developed throughout the movement. The second movement starts with the two segments of the semitone variant of the germ cell, stated individually. Thus the first theme of the second movement starts with disintegrated material, gradually developing into the original germ cell, heard at the beginning of the second theme (Example 6, bar 26) and marked *molto espressivo*, followed by a *crescendo*.

The way in which the texture is manipulated on meso-level in the second movement also reflects the *a-b-a* pattern of the thematic material. A thick texture covering a broad spectrum, extended over four octaves, is found in the first thematic section (see Example 5, bars 1-23). The texture thins out to parallel sixths extended over three octaves in the second thematic section (see Example 6, bars 26-33) and thins out even more to two and a half octaves in the third thematic section (see Example 7, bars 34-37). The thick, broad spectrum enters again in bar 41, reminiscent of the motivic contraction in the first thematic section, thereby framing the thinner texture of the second and third themes with the thicker texture of the first thematic material.

4.3 Third movement, *Scherzo: Allegro* (303 bars)

The third movement consists of three sections, the third being a repetition of the first 108 bars. To facilitate an understanding of the overall structure, the three sections will be referred to as A-B-A. Although section B (bars 113-264) does not consist of contrasting thematic material as in the traditional ternary form, B contrasts with A in respect of the following aspects:

- Mode: section A is in C minor; section B is in C major.
- Dynamic level: section A is marked *piano*; section B is marked *sempre forte*.
- Tempo and character: section A is marked *Allegro*; section B is marked *largamente*, preceded by two bars marked *pesante*.
- Articulation: section A alternates *staccato* and *legato*, combined with trills; section B is played extremely *legato*, as the performance instruction (*largamente*) indicates.
- Texture: the texture of section A is transparent; the texture of section B is thick.

The discussion that follows will show that the entire third movement is thematically derived from the same motive, a variant of the germ cell.

Example 8: Trio, Op. 22, third movement, bars 0.3-8

The musical score for Example 8 consists of two systems of staves for Violine, Violoncell, and Pianoforte. The first system (bars 0.3-4) shows the Violine part with a trill (tr) and a staccato motive (sm1) leading into a staccato motive (sm2). The Violoncell part has a long note with a trill (tr) and a staccato motive (sm2). The Pianoforte part has a long note with a trill (tr) and a legato marking. The second system (bars 5-8) continues the Violine part with a trill (tr) and a staccato motive (sm2). The Violoncell part has a long note with a trill (tr) and a staccato motive (sm2). The Pianoforte part has a long note with a trill (tr) and a legato marking. The tempo is marked 'Allegro' and the dynamics are 'p' (piano). The score includes annotations for 'EGC' (Extended Germ Cell) and 'sm' (Staccato Motive).

The **main theme** of the third movement starts with the original germ cell (GC 1-2-1) that develops by means of extension to form a new motive, namely cell 1-2-3-2-1 (C-D-E $\flat$ -D-C) in bars 1-2. This is the main motive of the third movement and will be referred to as the extended germ cell in the discussion to follow (abbreviated as EGC). The extended germ cell

is preceded by an upbeat of 5-1 (G-C). Because the upbeat loses its thematic character in section B and seldom appears in the Scherzo, it will not be considered when discussing the way in which the expanded cell appears in the third movement. When the upbeat is present, it will be mentioned in the discussion to follow.

The contour of the extended germ cell corresponds with that of the original germ cell in the sense that it represents a movement away from and a return to the point of departure. In the third movement the original melodic three-note formation (G-A-G, see Example 1) is developed to a melodic five-note formation consisting of an ascending three-note formation and a descending three-note formation, with the highest note shared by the two segments.

In the following discussion the extended germ cell will be divided into two segments. The first segment of the extended germ cell (an ascending three-note figure, 1-2-3) will be labelled sm1. The second segment (a descending three-note figure, 3-2-1) will be labelled sm2. The solid square brackets marked as sm1 or sm2 in Example 8 indicate the ascending and descending segments of the cell. When the extended germ cell (sm1+sm2) appears in its entirety, it will be referred to as EGC and not as sm1+sm2. A broken square bracket marked EGC will indicate the appearance of the entire main motive (extended germ cell 1-2-3-2-1). Only the first appearance of the extended germ cell will indicate the two segments. Thereafter the segments will only be marked when they are treated individually. The germ cell (GC 1-2-1) is still indicated with a solid square bracket marked with GC. The inversion of the germ cell will be indicated with a broken square bracket marked =C. In order to clarify the numbering of the bars, the bar with the first repeat sign will be numbered as 28a and the bar with the second repeat sign as 28b.

Multiple appearances of the different versions of the extended germ cell are found throughout section A. The extended germ cell in the violin part (bars 0.3-2.2, see Example 8) is extended even further with the repetition of sm2. Thus the first phrase consists of EGC + sm2 in C minor, rounded off with a melodic C minor triad. The violin repeats the first four bars a minor third higher in bars 5-8.2, rounded off with a melodic E $\flat$ major triad.

From bar 28b.3 onwards the extended germ cell develops by means of diminution, augmentation, prolongation and modulation.

Example 9: Trio, Op. 22, third movement, bars 28b.3-44

The musical score is presented in three systems, each with a violin and cello part. The first system (bars 29-35) shows the violin part with an extended germ cell (EGC) and a cello part that imitates and varies it. The second system (bars 36-40) shows the violin part continuing with the EGC and the cello part with a semitone (sm1) pattern. The third system (bars 41-44) shows the violin part with a semitone (sm1) pattern and the cello part with a semitone (sm1) pattern. Dynamics include p, f, sf, and cresc. The score includes various musical notations such as trills, slurs, and ties.

The violin plays the extended germ cell in A $\flat$ major, preceded by the upbeat and followed by the minor triad, in bars 29-31. The cello part imitates and varies the extended germ cell, without the upbeat, in bars 30-33 and repeats it, again without the upbeat, in bars 34-37. The first note of the extended germ cell is lengthened to the value of a dotted minim tied over to a crotchet and the closing leap of a major third is replaced by a semitone. Bars 33-35 (violin) is

a repetition of bars 29-31, but the original ascending major third is now augmented to an ascending fifth (E $\flat$ -B $\flat$).

Throughout the movement, the segments of the extended germ cell are often detached from one another. The first appearances of sm1 are found in bars 37 and 38 in the left hand of the piano part. In the succeeding bars (39-40) sm1 develops by means of intervallic expansion, a technique applied throughout the entire Piano Trio. In bar 39 a major third (A $\flat$ -C) replaces the opening whole tone (A $\flat$ -B $\flat$). In bar 40 the interval is further enlarged to an augmented fourth (A $\flat$ -D).

The extended germ cell appears in the cello part in bars 42-44, again with the same enlargement of the note value as in bars 29-30. This motive is followed by a prolongation of the extended germ cell by means of multiple repetitions of sm2, creating EGC + sm2 + sm2 + sm2.

A further development of the opening phrase (bars 1-4) is found in the violin part in bars 53-56. The distance between the lowest and highest notes of the extended germ cell was originally a minor third. In bars 53-56 this distance is enlarged to a major third. Another development is the replacement of the initial ascending minor triad (C-E $\flat$ -G in bar 3) with a descending minor triad (C-A $\flat$ -F). This presentation of EGC + sm2 is preceded by a variant of sm2 in bars 51-52, where the first note is lengthened to a dotted minim tied over to a crotchet. This variant of sm2 is repeated in the cello and in the inner voices of the piano parts in bars 55-56, bars 57-58 and bars 59-60.

The first eight bars of the opening theme of this movement (with upbeat) appear with slight variations in bars 64.3-72.2: the ascending major third at the end of the opening phrase is enlarged to an interval of a perfect fourth (G-C) in bars 71.3-72.1. Two repetitions of the extended germ cell, rhythmically varied, appear in the right hand of the piano part in bars 76.3-78.2 and bars 78.3-80.2. Multiple repetitions of sm1 in all the instruments follow in bars 81-88. The last repetition (bars 87-88) is rhythmically varied to fill two bars.

The next appearance of the extended germ cell, in bars 90-93 (violin and cello parts), shows even more development. The ascending interval of a major third at the end of the opening phrase shrinks to an ascending semitone, the s1-segment of cell 1-2-1. In bars 94-97 the violin and cello yet again rounds the extended germ cell off with the ascending semitone that

featured prominently in the second movement as part of the vertical variant. While the ascending semitone in bar 92 was preceded by an upward leap of a perfect fifth to close the four-bar phrase with G-D-E $\flat$, this time the ascending semitone is preceded by a downward leap of a minor sixth (G-B-C).

Section A ends with a four-bar link (bars 109-112) based on a melodic C major triad. To introduce the major mode of the new section, the tonic (C) is extended over two bars and the original major third (E $\flat$ -G, bar 3, see Example 9) is replaced with a minor third (E-G, bars 111-112) and also extended over two bars as if to recall its appearance at the end of the eight-bar phrase (G-B $\flat$, bar 7) at the beginning of this movement. This triadic material serves the purpose of connecting material, now connecting section A with section B.

Example 10: Trio, Op. 22, third movement, bars 113-136.2

113

sempre f

sempre f

EGC

largamente

sempre f

EGC

sm1

sm1

125

ff

decresc.

ff

decresc.

EGC

sm1

EGC

sm2

sm2

As discussed above, section B (bars 113-264) contrasts with section A with regard to mode, dynamic level, tempo, character, articulation and texture.

The extended germ cell, now in C major, is stated in bars 113-116.2 in the right hand of the piano part (C-D-E-D-C). The motive is varied rhythmically through the extension of the first note of the first segment and the last two notes of the second segment. The direction of the triad that followed the original motive now changes from the original ascending leap to a descending leap (C-A) in bar 116. Furthermore, the arpeggiated material from the first phrase of the third movement disintegrates to only one interval of a minor third (C-A), connecting one statement of the extended germ cell with another in bars 117-120. The secondary material has shrunk from a melodic triad to a minor third, now being framed by the extended germ cell. The *a-b-a* pattern is therefore visible on meso-level in section B of the third movement.

Two sm1-segments are linked in such a way as to form a connecting ascending scale passage in bars 121-124. This leads toward a presentation of the extended germ cell prolonged over three bars (bars 125-127). The note value of the first two notes of sm1 is lengthened to a dotted minim each which, being marked *crescendo*, leads towards the climax in bar 127, marked *fortissimo*. At the climax the left hand of the piano part states sm1, leading towards a transposition of the first motive of section B in the left hand (bars 129-132.1). A repetition of bars 113-136.2 is found in bars 136.3-160.1 (with upbeat), but the violin and cello now play the theme in octaves.

The extended germ cell has developed from section A to section B in such a way that the character of the motive has changed. The indication *largamente* at the beginning of section B is emphasised by the prolonged note values of the motive. The first phrase of section B follows the *a-b-a* pattern, even though the connecting triad has shrunk to the interval of a minor third. The secondary material has therefore developed to form thematic material, as in the main theme of the first movement (see Example 1). The repetition of the sm2-segment in the opening phrase of section A falls away in section B.

Example 11: Trio, Op. 22, third movement, bars 160.3-168.2

A rhythmic variant of the inversion of the germ cell (C 1=2=1) appears for the first time in this movement in the violin part of bars 161-162 (B-A-B), repeated in bars 163-164 as G-F-G. The first crotchet changed to a dotted minim, tied over to a crotchet. The first appearance of the inverted germ cell in this movement is preceded by a descending minor third. The connecting interval of the first phrase of section B (C-A-C, bars 115.3-117, see Example 10) now becomes the upbeat (descending minor third, D-B) introducing the inverted variant of the germ cell. The two inverted cells appear in the same key (C major) as the original germ cell in the first movement and are succeeded by secondary arpeggiated material rounding off the phrase in bar 168.2.

The abovementioned phrase is imitated by the cello in bars 161.3-168.2. A diatonic sequence of the violin and cello parts in bars 160.3-168.2 appears in bars 168.3-176.2 in the piano part. The right hand of the piano part initiates the sequence and the left hand of the piano plays the imitation.

A development of arpeggiated secondary material leads towards the restatement of the first phrase of section B in bar 213, marked *fortissimo sempre*. The material in bars 113-136.2 is repeated in bars 213-236, with slight variations. The right hand of the piano part starts with the first phrase, but the violin takes over the melody in bar 221 when sm1 appears twice in succession. The left hand of the piano part plays the repetition of bars 129-136.2 in bars 229-236, imitated by the violin and cello playing in octaves in bars 237-243. The left hand of the piano part completes the descending scale passage on the same pitch as the violin and cello in bar 243.

A bridge passage (bars 244.3-264) leads to the repetition of section A. The bridge passage consists of repetitions of the extended germ cell and sm1. The violin and cello play the extended germ cell (with upbeat) in octaves (bars 244.3-246.2), repeated one octave lower in bars 247-248.2. In the first appearance of the extended germ cell (with upbeat), marked *forte*, the rhythm of the motive is restored to that of its original appearance in bar 1 (Example 8). In the repetition in bars 247-248.2 the previously slurred sm1-segment is now marked *staccato* and *piano*. These four bars are repeated in bars 249-252.2. Over the next four bars the extended germ cell disintegrates into repetitions of sm1. A slurred sm1 in the key of F major (bar 253) is followed by a *staccato* sm1, one octave lower. These two bars are repeated in bars 255-256, introducing the extended germ cell (now with upbeat) in bars 257-258, played an octave higher by the right hand of the piano. This statement of the extended germ cell is preceded by a leap of an octave, the biggest leap preceding any appearance of the motive or segments thereof in the third movement. A succession of sm2-segments creates a downward scale passage, contrasting with the ascending scale passage in bars 121-124 (see Example 10). This leads to an embellishment and prolongation of the dominant of C minor by means of upper-auxiliary-note figures, bringing to mind the original germ cell in the first movement.

After section B bars 1-108 is repeated, followed by the coda starting in bar 265. In the coda the first phrase of section B appears in bars 269-276.1 in all the instruments, although only the piano part shows a disguised upbeat. The left hand of the piano part plays the extended germ cell in bars 277-280. This appearance of the extended germ cell combines the mode of the motive's first appearance in section A with the rhythmic variation of its first appearance in section B. A repetition of sm1 in bars 281-282, and again in bars 283-284, leads to the *Presto* display of alternating segments of the extended germ cell and arpeggiated secondary material.

In the third movement the germ cell appears for the first time near the end of section B and then in its inverted form (C 1=2=1). The main motive of the third movement (extended germ cell 1-2-3-2-1) is an extended version of the original germ cell. The overall structural scheme, A-B-A, also represents the germ cell 1-2-1 on a macro-level, that of a movement away from and back to the point of departure (section A). The germ cell therefore represents the overall design of the third movement on a micro-scale. The *a-b-a* pattern is also visible on meso-level. In section B the connecting arpeggiated material in bar 3 disintegrates to only one interval of a minor third (C-A) connecting one statement of the extended germ cell with

another. Because the secondary material (melodic triad) shrunk to a minor third, it became part of the thematic material as in the first and second movements.

4.4 Fourth movement, *Finale: Allegro risoluto* (418 bars)

The opening motives of each of the four movements demonstrate systematic development of the original germ cell:

- First movement: the opening germ cell consists of three notes (G-A-G) that represent two different pitches.
- Second movement: the vertical variant in bar 1 consists of four different pitches, but its two-part framework (D $\flat$ -C / E-F) covers the temporal space of two pitches.
- Third movement: the extended germ cell (C-D-E $\flat$ -D-C) consists of five notes that represent three different pitches.
- Fourth movement: the opening motive (G-A $\flat$ -C-B) consists of four different pitches (a discussion on the fourth movement follows).

In the fourth movement the original germ cell of the first movement is developed even further to form new motives. In addition, the basic cell is extended to form phrases rather than short motives.

The discussion below will show how motives are derived from the original germ cell in order to create new thematic material in the fourth movement. The discussion will concentrate on thematic material in bars 1-104.1, because these bars are repeated at the end of the fourth movement (bars 231.2b-335.1), albeit in different keys and with slight variations. The middle section (bars 104.2-203.2a) starts with a rhythmically varied restatement of the first two bars of the first theme followed by repetitions, variants and modulations of the new motives derived from the germ cell. They are developed in various ways, as will be shown in the discussion to follow. The coda is a final point of arrival on structural level and serves as an indication of how far the germ cell has been developed.

Example 12: Trio, Op. 22, fourth movement, bars 0.2b-16.1

Allegro risoluto

Violine. *f*

Violoncell. *f*

Pianoforte. *f*

7

12

In the fourth movement the main motive consists of four different pitches. While the semitone segments of cell 1-2-1 functioned independently on two different levels in a two-part framework in the second movement, in the fourth movement the two semitone segments are linked melodically to form a new melodic four-note motive. The ascending semitone segment and the descending semitone segment frame an ascending major third to create cell 1-2-4-3

(G-A $\flat$ -C-B), the first four notes of this movement. The necessity to progress from the term “cell” (as used in the first movement) to the term “motive” (in the third and fourth movements) further demonstrates the concept of developing variation in the work as a whole.

The broken square brackets in Example 12, marked with numbers 1 to 9, indicate the main motive and variants of the germ cell. Only the germ cell is marked with a solid square bracket. Motives 1 to 9 will be discussed next.

Motive 1: G-A $\flat$ -C-B (cell 1-2-4-3) is the main motive of this movement. This is the first melodic opening cell with four different pitches in this Trio. The first three notes of this main motive correspond with the first three notes of the fourth theme of the first movement (see Example 4).

Motive 2: C-D-E $\flat$ -D-C is the extended germ cell of the third movement. The accents on the descending segment 3-2-1 (E $\flat$ -D-C) are significant, as they accentuate the material that will be developed further in this movement.

Motive 3: D-C-D is an inversion of the original germ cell, thus C 1=2=1.

Motive 4: The extended germ cell (motive 2) is developed by means of sequential continuation of the descending segment 3-2-1 (E $\flat$ -D-C followed by B $\flat$ -A $\flat$ -G). This motive will be referred to as the scalar extended germ cell. This scale passage recalls the succession of sm1-segments in the third movement (see Example 10, bars 121-124). Scale passages were regarded as secondary material in the first and second movements, but have now developed from the germ cell in such a way that it becomes thematic material.

Motive 5: B $\flat$ -A $\flat$ -G is a rhythmically varied repetition of the descending segment of the extended germ cell.

Motive 6: C 1=2=1 (F-E $\flat$ -F).

Motive 7: A transposition of motive 4.

Motive 8: B-D-B represents the outline of the extended germ cell of the third movement, because the second note of the cell (C) is omitted in the ascending and descending segments thereof. Still, the movement away from the note of departure returns to the same

note again and thereby the contour of this melodic movement is the same as the original germ cell of the first movement.

Motive 9: B-F#-B is a variant of motive 8 by means of intervallic expansion: the leap of a minor third is expanded to an interval of a perfect fifth. In the process the shape of the motive became significantly angular, as also happened in the main theme of the first movement.

Starting with the leap of a minor sixth, from bar 13 onward the **first theme** disintegrates through two-note melodic patterns based on the dominant seventh chord of C major.

The connecting secondary material in bars 1.2b-2.2a forms a diminished triad with the interval of a diminished fifth between the lowest and highest notes (D-A $\flat$). This recalls the importance of the diminished triad as connecting material (see Table 1 below), connecting one cell with another to create the *a-b-a* pattern in the second movement. As in the first themes of the first two movements, as well as the second themes in the second and third movements, the *a-b-a* pattern is discernible, albeit disguised, on meso-level and reflects the same structural idea as the germ cell on micro-level.

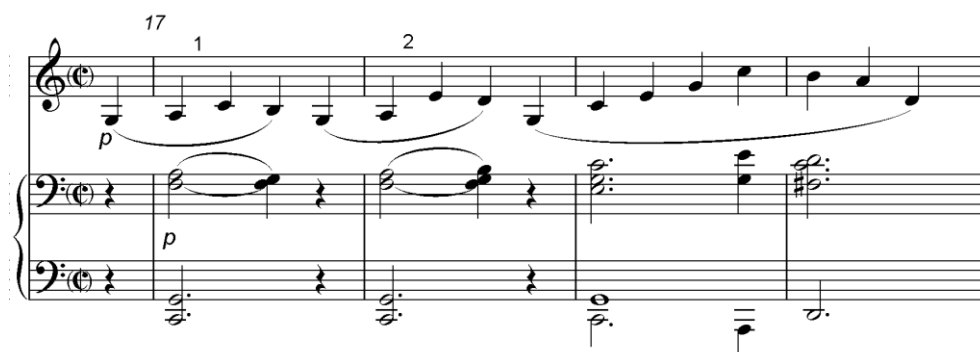
Table 2: Secondary material in the thematic *a-b-a* pattern

Movement	Theme	Secondary connecting material
1	1	Major triad
	2	None
	3	Scalar passage
	4	Single interval (minor third)
2	1	Diminished triad
	2	Scalar passage
	3	None
3	1	Minor triad at the end of each of the first two phrases
	2	Single interval (minor third)
4	1	Diminished triad
	2	Major triad
	3	None
	4	None

Whereas the secondary material in the previous movements was framed by motives that are similar, the secondary material in this movement is framed by two different motives, namely the main motives of the second and third movements. This shows that the *a-b-a* pattern has also developed on meso-level. In the fourth movement the motivic material disintegrates into secondary material, ending the first phrase on an imperfect cadence in bar 16.1.

The upbeats in the main motive are also developed in the fourth movement. The first upbeat is only one note, G (which was also the first note and upbeat of the first and third movements). The upbeats to bars 2 and 3 are already two notes each, and in bar 4 it crystallises out to three notes representing the inversion of the original germ cell (cell 1=2=1).

Example 13: Trio, Op. 22, fourth movement, bars 16.2b-20.2a



The **second theme** starts in C major in bar 16.2b in the violin part. The second theme is a reduction and variant of the first theme and therefore a development thereof: the mode has changed from C minor to C major, and the strong rhythmic character of the first theme, marked *forte*, changes into a lyrical theme marked *piano* with *legato* slurs. The violin now plays the melody two octaves lower, thus in its low register, initiating a change in colour, whereas all three instruments played the first theme at the beginning of this movement in unison without accompanying material.

The first four notes of the second theme, demarcated by the slurs, form a variant of the main motive. The A $\flat$ in G-A $\flat$ -C-B is replaced by an A to form G-A-C-B. The first three notes of this new motive yields the character of a part of the pentatonic scale. In the succeeding discussion this variant of the main motive will be referred to as the pentatonic main motive.

The four notes demarcated by the second slur is a development of the pentatonic motive by means of intervallic expansion. The interval between the second and third notes of the

pentatonic main motive is expanded to a perfect fifth in bar 18.1, creating cell 1-2-6-5 (G-A-E-D) instead of the initial cell 1-2-4-3. As in the first theme of this movement, the second theme also demonstrates the developing technique of intervallic expansion. The first phrase of the second theme ends with arpeggiated secondary material in bar 19. A transposition follows in bars 20.2b-24.1b and is in turn followed by secondary material: first ascending arpeggiated passages and then a descending scale passage in bars 29-30, until the perfect cadence in C major in bar 31.1a.

Example 14: Trio, Op. 22, fourth movement, bars 31.1b-37.1

The motivic material of the **third theme**, which appears in the piano part (bars 31.1b-50.1), is a variant of the extended germ cell of the third movement. The angular contour of the five notes of the extended germ cell changes into a five-note ascending scale passage (C-D-E-F-G, bars 31.2-32.2a) with ornamentation and preceded by the upbeat G. The return to the note of departure is therefore omitted, as in the fourth theme of the first movement. Pentatonic formations overlap in bars 33-37.1a: **B-A-F#-E-D-C-A-G** (the notes in bold typescript are marked with accents in the score) and are continued in the cello part in bars 36-37.1 (G-F-D-C). Six pentatonic formations, marked in Example 14 as broken square brackets numbered 1 to 6, are present in this material. This material relates to the opening motive of the second theme of this movement, the pentatonic main motive (Example 13). More specifically, the first three accented notes (B-A-F#) is an inversion of G-A-C, omitting the last note of the pentatonic main motive. Hereafter these three notes, and any variant thereof, will be referred to as the pentatonic cell.

The descending pentatonic phrase leads to the repetition of the ascending five-note scalar pattern in bars 37.1b-38.2a, followed again by four overlapping pentatonic cells within E minor (E-D-B-A-F#-E) in bars 38.2b-41.1a. The scalar extended germ cell (as indicated in Example 12, motive 4) is varied rhythmically in bars 45-46 (violin and piano parts), followed by an embellishment of the third step of E minor in the violin and piano parts. Bars 47-48 (G-F#-E-F#-G) recall the inversion of the extended germ cell.

Example 15: Trio, Op. 22, fourth movement, bars 50.2-58.1

The **fourth theme**, marked *mezzoforte espressivo*, starts in bar 50.2 in E minor, played by the cello and the piano. The first seven notes are a further development of motive 2 of the first theme of this movement (see Example 12). The three-note ascending and descending figure, the extended germ cell of the third movement, is extended even further to create a corresponding but incomplete four-note ascending and descending figure. As in the third theme of this movement, the return to the note of departure is omitted. The interval between the last two notes of this variant is replaced by an interval of a perfect fourth (F#-B, bars 52.2b-54.1) in the first appearance of this motive (E-F#-G-A-G-F#-B, bars 50.2-54.1). The

perfect fourth expands to a diminished fifth (F $\sharp$ -C, bars 56.2b-58.1) in the second appearance of this motive (E-F $\sharp$ -G-A-G-F $\sharp$ -C, bars 54.2-58.1). The developing technique of intervallic expansion therefore manifests itself again as in the first and second themes of this movement. The germ cell has therefore developed by not returning to the note of departure. The succeeding motivic material combines the variant of the extended germ cell with the interval of a diminished fifth between the lowest and highest notes to remind the listener of the secondary scale passages in the second movement (for instance bar 9, see Example 5).

The motive in bars 58.2-61 (piano, right hand) further demonstrates the expansion of the germ cell 1-2-1. Five different pitches appear in stepwise movement in a rhythmically varied and inverted format (A-G-F-E-D $\sharp$). Here the return to the note of departure and therefore the point of arrival is avoided by replacing the final ascending major second with a descending minor third (G-E). The interval between the highest and lowest notes of the new variant is a diminished fifth (A-D $\sharp$). The scale passage that was previously part of the connecting secondary material from the second movement has therefore developed into thematic material in the fourth movement. The scale passage developed from the germ cell in the first movement (1-2-1) through the opening motive of the third movement (1-2-3-2-1).

The middle section (bars 104.2-231.2a) consists of repetitions and variants of the motives in the four themes of this movement. It commences in bar 104.2 after a perfect cadence in E minor in bars 103-104.1 marked *forte*. The crotchet rest in bar 104.1b confirms the beginning of a new section. The middle section begins with a repetition of the first theme of this movement, now rhythmically augmented and marked *piano legato* and *espressivo*, in A minor, played only by the piano in a lower register. However, the repetition of the first theme is incomplete. Only the main motive of the fourth movement (cell 1, see Example 12), together with its connecting material, hereafter referred to as the extended main motive, is presented in bars 104.2-108.1. The repetition of the main motive at the beginning of the middle section serves as an indication of how far the motives have developed away from it in the course of the first section.

The thematic material disintegrates further with the repetition of only the pentatonic main motive in the violin part, with the cello playing in parallel sixths, in bars 108.2-110. The slurs in the score separate the pentatonic cell (A-B-D) from the last note (C) of the pentatonic main motive (A-B-D-C). This anticipates the nature of the further development of the pentatonic

main motive in this movement still to come. The right hand in the piano part plays yet another variant of motive 2, the extended germ cell (see Example 12). The return to the note of departure is replaced with a leap to form 1-2-3-2-5 (A-B-C-B-E) in bars 110.2-112.1. A transposed repetition of the new variant leads to a bridge passage starting at bar 128, consisting of secondary arpeggiated material. This leads into the repetitions of the second phrase of the first theme (bars 5-8.2a, see Example 12) played by all three instruments, marked *fortissimo sostenuto*. A repetition, in F# minor, of the fourth theme of this movement follows in the piano part (bars 156.2-163.1). This time the cello plays a pedal point on C# rather than duplicating the melody as in bars 50.2-58.1.

The next statement of the pentatonic main motive (bars 180.2-182.1a) is marked *fortissimo con fuoco* and the first three notes, the pentatonic cell (G#-A#-C#), are accented, emphasising their importance. The pentatonic main motive is rounded off with the descending segment of cell 2 of the first theme of the fourth movement (3-2-1, B-A#-G#), thus the descending segment of the main motive of the third movement, creating the extended pentatonic motive. The extended pentatonic motive can be seen as a variant of the fourth theme of this movement, where a scalar passage consisting of four notes ascending and descending is created (see Example 15). The third note of the ascending scalar passage is omitted to create the pentatonic cell discussed previously. It can also be explained as a variant of cell 2, and therefore the main motive of the third movement, but the scalar passage is extended to a perfect fourth between the lowest and highest notes, as opposed to the interval of a minor third created in cell 2. With this movement back to the note of departure (G#), the contour of the germ cell is imitated. However, the first segment (the movement away from the point of departure) and the second segment (the return to the point of departure) are not the same as in the case of the germ cell and the extended germ cell of the third movement.

The extended pentatonic motive is repeated again, with its accents on the pentatonic cell, in bars 184.2-186. The descending segment of the extended pentatonic motive is repeated sequentially to create a scale passage that leads into a rhythmic variant, by means of augmentation, of the first phrase of the first theme in the violin, doubled an octave lower by the cello (bars 190.2-196). The slurs in the score again separate the first three notes from the rest of the thematic material. The piano imitates this variant of the first phrase of the first theme in bars 196.2-202. A variant of the extended main motive (the main motive plus the first three notes of the connecting material) of this movement is played by all three

instruments in bars 216.2b-218.2a and repeated in bars 218.2b-220.2a. The interval between the first two notes of the main motive is enlarged to a minor third and the rhythm is varied. The change in the interval between the first two notes creates a minor triad, referring to the secondary connecting material of the first theme of the third movement. As in the first and second movements, the secondary material is developed into thematic material. The first appearance of this variant of the extended main motive in 216.2b-218.2a is marked *pesante* followed by a *più crescendo*. Numerous repetitions of the ascending segment of cell 2 (see Example 12) leads to the repetition of the first section in bars 231.2b-335.1. The first theme is in C minor again, and the second and third themes are in C major, as in the first section. The fourth theme, beginning in bar 281.2, however, is in C minor instead of the original E minor.

The return of the first theme in F minor, now rhythmically varied with longer note values, indicates the opening of the coda in bar 335. The coda thereby provides “thematic completion” (Kerman, 1983:151). A list of the motivic material and further variants thereof in the coda follows:

- Ascending segment of the extended germ cell (bars 360.2-367), piano, left hand.
- Extended pentatonic motive, marked *forte sempre* with accents (bars 367.2-370), violin and cello.
- Pentatonic cell, marked *fortissimo* with *marcato* (bars 385.2-386, piano, and bars 387.2-388, violin and cello). A point of arrival on structural level is created in bar 393.2, marked *fortissimo sempre* and *largamente*. Further repetitions are found in bars 385.2-386, bars 397.2-398, and bars 401.2-402 (violin and cello). The pentatonic cell is isolated with minim rests before and after its appearance in bars 401-403, adding more emphasis to this cell, yet again.
- Retrograde inversion of the first three notes of the main motive, marked *fortississimo* (cell 1-3-4, G-B-C) (bars 405.2-406).

The four-note main motive of the fourth movement has developed into a three-note motive. The movement, and Trio, ends with a final C major arpeggio.

As in the first movement, it was easier to recognise different themes in the fourth movement because the thematic material in the second and third movements was more fragmented. A contrasting second theme is absent in all four movements, seeing that the thematic material is derived from the germ cell and its variants.

On meso-level the pattern of the opening phrase of this movement also represents the *a-b-a* pattern that occurred in the first themes of the first two movements and the second themes of the second and third movements, namely secondary material framed by the germ cell or variants thereof. The *a-b-a* pattern is developed even further than in the second movement. The connecting material now connects a germ cell with a segment of the germ cell. In the fourth movement the secondary material serves as connecting material between two different variants of the germ cell.

The overall structural scheme of the fourth movement, A-B-A, represents the germ cell 1-2-1 on a macro-level, namely that of a movement away from and back to the point of departure, section A.

CHAPTER 5: SUMMARY AND CONCLUSION

This study concerns itself primarily with the application of the principle of developing variation as it appears in the Piano Trio in C major, Op. 22, by Robert Fuchs. Fuchs was, according to Schoenberg, one of the most significant scholars of the Brahms school (Grote, 1994:65). Following Brahms's example regarding the principle of developing variation, Fuchs's compositional style developed towards economy and thematic unity (Grote, 1994:105). Developing variation occurs when frequent mutations of the intervallic and/or rhythmic components of an initial idea forms a theme (Frisch, 1984b:9).

5.1 The nature and influence of the germ cell

The Piano Trio in C major, Op. 22, starts with a three-note germ cell that permeates the work as a whole. It consists of a three-note melodic figure that has the shape of an auxiliary-note motive, namely GC 1-2-1 (G-A-G, see Example 1). The germ cell, the basic idea, grows teleologically by means of augmentation, diminution, metric displacement, rhythmic changes, expansion, retrograde, inversion, retrograde inversion, liquidation, sequential treatment and further derivatives of the germ cell. The germ cell and its variants identified in this work show its systematic development from a three-note melodic cell into various kinds of motives that combine with one another to form the thematic material in the four movements.

The continuous development of the brief motive throughout the work holds true to the concept of developing variation, permitting new ideas to develop from the thematic material in a way similar to an organism growing in a teleological or goal-oriented manner (Grimes, 2012:130). In correlation with the concept of organicism, as presented in section 2.1.6, these building blocks or cells undergo changes to form new material derived from the original material. Metaphorically speaking, Fuchs's Piano Trio in C major, Op. 22, grows from this one musical cell, demonstrating developing variation when creating new, but always related, ideas.

5.2 The germinal idea permeates the work as a whole

The empirical section of this study showed that the characteristic feature of the germ cell (G-A-G) that appears at the beginning of the work, namely a movement away from and a return to the point of departure, manifests on micro- (motivic), meso- (thematic), and macro- (structural) level.

5.2.1 Micro- (motivic) level

The powerful influence of the germ cell in Fuchs's Piano Trio Op. 22 is evident within the first theme of the first movement (see Example 1). The germ cell develops by means of rhythmic variation, change of metre, change in register, transposition, intervallic expansion, and shape of the germ cell's contour within the first nine bars. The development of thematic material is not restricted to the melodic line, but is embedded in the accompaniment as well (piano part, bars 4 and 8, Example 1).

Furthermore, the germ cell is varied in such a way that it develops and disintegrates into the arpeggiated secondary material which already appears in bar 1. According to Levy (1991:121), secondary material, whether it be ornamental, accompaniment, or non-thematic, can be subjected to developing variation as well. This is already clearly discernible in the first movement, as well as in all the movements to follow (see Table 1).

The motivic material of the second movement is derived from the germ cell. The two segments of the semitone variant of the germ cell function independently from one another. The juxtaposition of these two segments creates a vertical variant, the building block of this movement, as opposed to the horizontal statements of the cells in the first movement. As in the first theme of the first movement, the secondary material here also develops into thematic material when taking on the contrary motion (for example bar 16) of the vertical variant in bar 1 of the second movement (as discussed in section 4.2, see Example 5). Motivic as well as secondary material is developed by means of expansion, contraction, juxtaposition and rhythmic variation. The motivic material of the third theme of the second movement is a variant of the germ cell as it follows the same contour: that of a note framing a movement away from it, although the movement away is not the same as the movement back to the note of departure (see Example 6).

In the third movement the germ cell, the original melodic three-note formation, is developed to a melodic five-note formation consisting of an ascending three-note formation and a descending three-note formation, with the highest note shared by the two segments. This main motive of the third movement (cell 1-2-3-2-1) is an extended version of the original germ cell (see Example 8). The contour of the extended germ cell corresponds with that of the original germ cell in the sense that it represents a movement away from and a return to the point of departure. As in the second movement, the two segments of the extended germ cell

are treated individually. The technique of intervallic expansion is applied yet again (see Example 9) and the extended germ cell develops further by means of further extension as well as liquidation (as discussed in section 4.3). In the third movement the germ cell appears for the first time near the end of section B, albeit in an inverted form and with lengthened note values (C 1=2=1).

In the fourth movement the three-note germ cell is expanded to four different pitches. While the semitone segments of c 1-2-1 functioned independently on two different levels in a two-part framework in the second movement, the two semitone segments are linked in the fourth movement to form a new melodic four-note motive. Cell 1-2-4-3 (G-A $\flat$ -C-B, see Example 12), the first four notes of this movement, is the main motive of this movement. This kind of progression and teleological growth is yet another manifestation of developing variation on micro-level.

As in the main theme of the first movement, the shape of the motive in the first theme of the fourth movement develops by means of intervallic expansion and becomes significantly angular (as discussed in section 4.4). The second theme of this movement also illustrates developing variation by means of intervallic expansion (see Example 13). In the third theme the angular contour of the five notes of the extended germ cell changes into a five-note ascending scale passage with ornamentation (C-D-E-F-G), preceded by the upbeat G (see Example 14). The return to the note of departure is therefore omitted, as in the fourth theme of the first movement. The fourth theme of the fourth movement demonstrates further expansion of the extended germ cell but, as in the third theme of this movement, the return to the note of departure is omitted (as discussed in section 4.4). At the end of the fourth movement the four-note main motive has developed by means of liquidation into a three-note motive, the pentatonic cell (as discussed in section 4.4).

5.2.2 Meso- (thematic) level

The germ cell develops in the course of the Piano Trio from a three-note melodic cell to form phrases and themes. The germ cell therefore develops on micro-level in such a way that it forms thematic structures that follow the *a-b-a* pattern.

Most of the themes in this Piano Trio follow the *a-b-a* pattern, where *b* represents a movement away from the point of departure *a*. This pattern is already present in the first

theme of the work, in the first two-bar phrase (see Example 1), where two germ cells frame connecting material. One germ cell is connected to another germ cell by means of secondary material, creating the *a-b-a* pattern described above. This *a-b-a* pattern reflects on meso-level (thematic level) the same idea as the germ cell on micro-level, namely a movement away from and a return to the point of departure.

The pattern of the first phrase in the first theme of the second movement (see Example 4) corresponds with that of the first phrase of the main theme of the first movement. The pattern of the second theme of the third movement represents the *a-b-a* pattern as well.

The *a-b-a* pattern also develops throughout the work as the germ cell develops (as discussed above). In the second theme of the second movement the connecting material does not connect one germ cell with another germ cell, but with a segment only of the germ cell. In the first theme of the fourth movement the *a-b-a* pattern is developed even further when the secondary material is framed by two different motives, namely the main motives of the second and third movements.

The way in which the texture is manipulated on meso-level in the second movement (as discussed in section 4.2) also reflects the *a-b-a* pattern of the thematic material. The first thematic section has a thick texture (see Example 5) which thins out in the second thematic section (see Example 6) and thins out even more in the third thematic section (see Example 7). The thick, broad spectrum enters again in bar 41, thereby framing the thinner texture of the second and third themes with the thicker texture of the first thematic material.

5.2.3 Macro-(structural) level

The structure of the germ cell also manifests itself on macro-level, because it represents the overall design of all four movements. This phenomenon correlates with the concept of an original life form, conceived by Robinet in 1760 (as quoted by Grimes, 2012:128), defined as “a small primal element, a cell possessed of a will to develop into higher forms”.

The non-traditional A-B-A structure of the first movement reflects the structure of the germ cell on macro-level: a movement away from and back to the point of departure, section A. The tonal scheme of the first movement (C major – C# minor – C major) represents c 1-2-1, the semitone variant of the germ cell. The germ cell therefore forms a fundamental part of the design and tonality of the first movement, embodied in the overall structure of this movement.

On macro-level the overall effect of the second movement is the reverse of the first movement. The first movement starts with the germ cell which is varied and developed throughout the movement. The second movement starts with disintegrated material, the two segments of the semitone variant of the germ cell stated individually, gradually developing into the original germ cell heard at the beginning of the second theme (see Examples 5 and 6). This creates a mirror pattern on a macro-level with the first movement (as discussed in section 4.2). The overall design of the third and fourth movements, a non-traditional A-B-A structure, also represents the germ cell 1-2-1 on a macro-level.

Because of the absence of contrasting second themes in all four movements, it is almost impossible to analyse the movements in terms of traditional formal schemes such as sonata form. In the first and fourth movements it was easier to recognise different themes than in the more fragmented thematic material of the second and third movements. This correlates with the notion that developing variation extends over the entire structure of a composition and tends to overshadow the conventional roles and divisions of sonata form (Frisch, 1984b:26).

The fact that the Piano Trio Op. 22 as a whole is derived from the same basic idea implies that Fuchs did not isolate his application of the principle of developing variation to certain chosen aspects of compositional genesis and evolution, but also employed it as a technique to create the larger structure of the work.

This study shows that the recurrence of a small scale design (the germ cell) on larger scales (on meso- and macro-level) is a phenomenon that has been acknowledged in the field of mathematics. The manifestation of a similar structural design on micro-, meso-, and macro-level brings to mind “the self-similar pattern” that manifests itself in Benoit Mandelbrot’s fractal geometry, a study of structures in which the form of a small unit is similar to the form of the structure as a whole (Shiffman, 2012:357).

5.3 Similarities with regard to developing variation in the music of Brahms

- Brahms gave the work as a whole the appearance of “having been cast from one mould” (Geiringer, 1948:233). In a similar way Fuchs’s Piano Trio Op. 22 is cast from one germ cell, as discussed in Chapter 4.
- The fact that the thematic material in the four movements of Fuchs’s Piano Trio is derived from the original germ cell causes the absence of contrasting themes. Developing

variation, therefore, obscures the subdivisions and sections of each movement. Brahms applied developing variation as an underlying principle influencing all the subdivisions in entire movements (Larey, 1996:14). Structural unity was very important in Brahms's creative process (Joseph, 1981:7). Fuchs achieves structural unity in his Piano Trio Op. 22 by means of developing variation that takes the germ cell as point of departure in order to influence the creative process on micro-, meso-, and macro-level (as discussed in section 5.2.3).

- Brahms's application of developing variation is not only apparent in motivic processes, but also in the interaction of thematic, harmonic, and formal procedures (Frisch, 1984b:98,153). The germ cell in Fuchs's Piano Trio Op. 22 is visible on meso- (thematic) level (as discussed in section 5.2.2). The *a-b-a* pattern is discernible, albeit often disguised, on meso-level and reflects the same structural idea as the germ cell on micro-level.
- Brahms develops motives from earlier motives or ideas, each of which is a consequence of its forerunners (Grimes, 2012:132). The discussion in Chapter 4 shows that Fuchs also develops motives from earlier motives, ideas, or cells.
- Brahms derives his themes and sections from an original idea or motive (Frisch, 1984b:36). Likewise, Fuchs's themes and sections are derived from the germ cell. The germ cell is developed on micro- and meso-level.
- Adorno (in Kim, 2003:16) considered Brahms to be a master of economy, composing music in which nothing happens coincidentally and everything can be traced back to the fundamental thematic material. The discussion in Chapter 4 shows that the germ cell is discernible on micro-, meso-, and macro-level in Fuchs's Piano Trio Op. 22. The design of the work as a whole can thus be traced back to the design of the germ cell.

5.4 Robert Fuchs as Kleinmeister

Brahms did not surround himself with many masters of his time, with the exception of Johann Strauss II, Antonín Dvořák and Gustav Mahler (Pascall, 1984:202). He rather surrounded himself with Kleinmeister, such as Fuchs. According to David Lee (2014:17), the study of such Kleinmeister can elucidate how truly great composers, such as Brahms, became and remained known. Although Fuchs was eclipsed by the works of the masters of his time, this is by no means an indication of lesser quality in his music (Thormählen, 2011:655). On the contrary, Brahms, who rarely handed out compliments, complimented Fuchs with the

following words: "...everything is so fine, so skilful, so charmingly invented, that one always derives pleasure from it" (see section 3.2.2). Eduard Hanslick even called Fuchs "the master of small art" (Carman, 2007). Furthermore, Fuchs's pupils included a remarkable list of renowned composers (Pascall, 1977:115). Despite the fact that he had been highly regarded in his own day, even more so than his contemporary Max Bruch, his music virtually vanished from the mainstream concert repertoire almost immediately after his death, resulting in his current status as a Kleinmeister (Grote, 1994:18-19).

According to Kerman (1983:118), it is one of the main objectives of historical criticism to "explain and exemplify those evanesced reputations". On a very small scale, I tried to "exemplify" one of "those evanesced reputations", Robert Fuchs,

... the gifted composer, the selfless teacher, the select person... (Mayr, 1934:114).

REFERENCE LIST

- Agawu, K. 1999. Formal perspectives on the symphonies. (*In* Musgrave, M., *ed.* The Cambridge companion to Brahms. Cambridge: Cambridge University Press. p. 133-155).
- Altmann, W. 1929. Robert Fuchs. (*In* Cobbett, W.W., *ed.* Cobbett's cyclopedic survey of chamber music, Vol. 1. London: Oxford University Press. p. 439).
- Anderson, R. 1985. Brahms the craftsman: Brahms and the principle of developing variation by Walter Frisch. *The musical times*, 126(1707):285-286.
- Bauman, C. 2003. Fuchs: "Piano Concerto in B $\flat$ minor"; Kiel: "Concerto in B $\flat$ ". *American record guide*, 66(4):97.
- Boss, J.F. 1991. An analogue to developing variation in a late atonal song of Arnold Schoenberg. New Haven: Yale University. (Thesis – PhD).
- Boss, J. 1992. Schoenberg's Op. 22 radio talk and developing variation in atonal music. *Music theory spectrum*, 14(2):125-149.
- Botstein, L. 1999. Brahms and his audience: the later Viennese years 1875-1897. (*In* Musgrave, M., *ed.* The Cambridge companion to Brahms. Cambridge: Cambridge University Press. p. 51-76).
- Bozarth, G.S. 2008. Johannes Brahms & George Henschel: an enduring friendship. Sterling Heights: Harmonie Park Press.
- Bozarth, G.S. & Frisch, W. 2001. Brahms, Johannes. (*In* Sadie, S., *ed.* The New Grove Dictionary of Music and Musicians, Vol. 4. 2nd ed. London: MacMillan. p. 180-227).
- Brett, P. 2007-2014. Kerman, Joseph. (*In* Grove Music Online. Oxford Music Online. <http://www.oxfordmusiconline.com.nwulib.nwu.ac.za/subscriber/article/grove/music/14914> Date of access: 22 Aug. 2014).

- Brodbeck, D. 1999. Medium and meaning: new aspects of the chamber music. (*In* Musgrave, M., *ed.* The Cambridge companion to Brahms. Cambridge: Cambridge University Press. p. 98-132).
- Brown, J. 1995. Schoenberg's musical prose as allegory. *Music analysis*, 14(2-3):161-191.
- Broyles, M. 1980. Organic form and the binary repeat. *The musical quarterly*, 66(3):339-360.
- Burkholder, J.P. 1984. Brahms and twentieth-century classical music. *19th-Century music*, 8(1):75-83.
- Carman, J. 2007. Music reviews: song collections – Robert Fuchs: "Lieder," Op. 81. *Journal of singing*, 64(2):249-250.
- Claussen, D. 2003. Theodor W Adorno: ein letztes Genie. Frankfurt: S. Fischer Verlag.
- Colles, H.C. 1933. The chamber music of Brahms. London: Oxford University Press. (The Musical Pilgrim).
- Cone, E.T. 1990. Harmonic congruence in Brahms. (*In* Bozarth, G.S., *ed.* Brahms studies: analytical and historical perspectives. Papers delivered at the International Brahms Conference, Washington, DC, 5-8 May 1983. Oxford: Clarendon Press. p. 165-188).
- Dahlhaus, C. 1980. Between romanticism and modernism: four studies in the music of the later nineteenth century. Translated from the German by M. Whittall. Berkeley: University of California Press. (California studies in 19th century music, 1).
- Dahlhaus, C. 1988. Schoenberg and the new music. Translated from the German by Derrick Puffet and Alfred Clayton. Cambridge: Cambridge University Press.
- Dahlhaus, C. 1989. Nineteenth-century music. Translated from the German by J. Bradford Robinson. Berkeley: University of California Press. (California studies in 19th century music, 5).

Daverio, J. 2002. Crossing paths: Schubert, Schumann, and Brahms. New York: Oxford University Press.

Daverio, J. 2004. Fin de siècle chamber music and the critique of modernism. (In Hefling, S.E., ed. Nineteenth-century chamber music. London: Routledge. p. 348-382). (Routledge studies in musical genre).

Dubins, J. 2007. Brahms and his contemporaries, vol. 1. *Fanfare*, 31(2):118-119.

Dubins, J. 2012. Fuchs piano trios: no. 1; no. 2. *Fanfare*, 35(3):365-366.

Dunsby, J. 1986. Brahms and the principle of developing variation by Walter Frisch. *Music & Letters*, 67(1):88-90.

Dunsby, J. 2002. Thematic and motivic analysis. (In Christensen, T., ed. The Cambridge history of Western music theory. Cambridge: Cambridge University Press. p. 907-926).

Edition Silvertrust. s.a. Robert Fuchs: Piano Trio no. 1 in C major, op. 22.
www.editionsilvertrust.com/fuchs-piano-trio1.htm Date of access: 16 May 2012.

Emling, J.F. 1977. Value perspectives today: toward an integration with Jean Piaget's new discipline in relation to modern educational leaders. Cranbury: Associated University Presses.

Finson, J.W. 1992. Brahms studies: analytical and historical perspectives edited by George S. Bozarth; Brahms and his world edited by Walter Frisch. *Journal of the Royal Music Association*, 117(1):152-157.

Frisch, W.M. 1981. Brahms's sonata structures and the principle of developing variation. Berkeley: University of California. (Dissertation – PhD).

Frisch, W. 1982. Brahms, developing variation, and the Schoenberg critical tradition. *19th-Century music*, 5(3):215-232.

Frisch, W. 1984a. Brahms and Schubring: musical criticism and politics at mid-century. *19th-Century music*, 7(3):271-281.

Frisch, W. 1984b. Brahms and the principle of developing variation. Berkeley: University of California Press. (California studies in 19th-century music, 2).

Frisch, W. 1990a. The "Brahms fog": on analyzing Brahmsian influences at the fin de siècle. (In Frisch, W., ed. Brahms and his world. Princeton: Princeton University Press. p. 81-102). (Bard Music Festival, 1)

Frisch, W. 1990b. The shifting bar line: metrical displacement in Brahms. (In Bozarth, G.S., ed. Brahms studies: analytical and historical perspectives. Papers delivered at the International Brahms Conference, Washington, DC, 5-8 May 1983. Oxford: Clarendon Press. p. 139-163).

Garza, H. 1993. Pablo Casals. New York: Chelsea House.

Geiringer, K. 1948. Brahms: his life and work. 2nd ed. London: George Allen and Unwin.

Geiringer, K. 1990. Brahms the ambivalent. (In Bozarth, G.S., ed. Brahms studies: analytical and historical perspectives. Papers delivered at the International Brahms Conference, Washington, DC, 5-8 May 1983. Oxford: Clarendon Press. p. 1-4).

Goodwin, C. 2010. The Weissfest goes on... *Early music*, 38(3):463-466.

Grimes, N. 2012. The Schoenberg/Brahms critical tradition reconsidered. *Music analysis*, 31(2):127-175.

Grimes, R.L. 2014. The craft of ritual studies. New York: Oxford University Press.

Grote, A. 1994. Robert Fuchs: Studien zu Person und Werk des Wiener Komponisten und Theorielehrers. München: Musikverlag Emil Katzsbichler.

- Haas, F. 2012. Hermann Levi: from Brahms to Wagner. Translated from the German by Cynthia Kloor. Lanham: Scarecrow Press.
<http://books.google.co.za/books?id=prfGY0JtWxEC&pg=PT171&dq=otto+desoff&hl=en&sa=X&ei=NRQZUvCPCaW47Abnr4HwAg&ved=0CDQQ6AEwAQ> Date of access: 24 Aug. 2013.
- Haimo, E. 1997. Developing variation and Schoenberg's serial music. *Music analysis*, 16(3):349-365.
- Heilmair, B.U. 2004. Robert Fuchs' Quintet for clarinet, 2 violins, viola and violoncello in E♭ major, op. 102, from a clarinetist's perspective: a study in performance practice. Los Angeles: University of California. (Dissertation – DMA).
- Hölscher-Lohmeyer, D. 1991. Johann Wolfgang Goethe. München: CH Beck.
- Hsü K.J. & Hsü, A. 1991. Self-similarity of the "1/f noise" called music. *Proceedings of the National Academy of Sciences of the United States of America*, 88(8):3507-3509.
- Jacobson, B. 1977. The music of Johannes Brahms. London: The Tantivity Press.
- Jenner, G. 1990. Johannes Brahms as man, teacher, and artist. Translated from the German by Susan Gillespie. (In Frisch, W., ed. Brahms and his world. Princeton: Princeton University Press. p. 185-204).
- Joseph, C.M. 1981. Origins of Brahms's structural control. *College Music Symposium*, 21(1):7-23.
- Kanadoff, L.P. 1986. Fractals: where's the physics? *Physics today*, 39(2):6-7.
- Kerman, J. 1983. A few canonic variations. *Critical inquiry*, 10(1):107-125.
- Kerman, J. 1991. American musicology in the 1990s. *The journal of musicology*, 9(2):131-144.
- Keys, I. 1974. Brahms chamber music. London: The Whitefriars Press.

- Kim, S.L. 2003. Rhythmic development in the motivic process of Brahms's chamber works. Berkeley: University of California. (Dissertation – PhD).
- Kremer, D., *Hrsg.* 2010. E.T.A. Hoffmann: Leben - Werk - Wirkung. Berlin: De Gruyter. (De Gruyter Lexikon).
- Laing, D. 2011. Christopher Small obituary. *The Guardian*, 19 Sep.
www.theguardian.com/music/2011/sep/19/christopher-small-obituary Date of access: 1 Aug. 2014.
- Larey, F. 1996. Developing variation, thematic transformation, and motivic unity in the Quintet for piano and strings, op. 34, by Johannes Brahms. Cincinnati: University of Cincinnati. (Thesis – DMA).
- Latham, A., *ed.* 2011. The Oxford companion to music. Oxford: Oxford University Press.
www.oxfordmusiconline.com.nwulib.nwu.ac.za/subscriber/article/opr/t114/e7027?q=Unison&search=quick&pos=2&_start=1#firsthit Date of access: 29 Aug. 2014.
- Le Huray, P. & Day, J., *eds.* 1988. Music and aesthetics in the eighteenth and early-nineteenth centuries. Cambridge: Cambridge University Press. (Cambridge readings in the literature of music).
- Lee, D.G. 2014. Music in motion: considerations on and new approaches to editing medieval and renaissance music. Glasgow: University of Glasgow. (Thesis – MMus(R)).
- Levy, S.G. 1991. Developing variation, Mozart, and the classical style. Chicago: University of Chicago. (Dissertation – PhD).
- Lewin, D. 1990. Brahms, his past, and modes of music theory. (*In* Bozarth, G.S., *ed.* Brahms studies: analytical and historical perspectives. Papers delivered at the International Brahms Conference, Washington, DC, 5-8 May 1983. Oxford: Clarendon Press. p. 13-27).
- MacDonald, M. 1990. Brahms. London: JM Dent.

Malone, M.J. 2008. Symbols of transformation: reconceptualizing the boundaries of organicism in the music of Béla Bartók. Austin: University of Texas. (Dissertation – PhD).

Mayr, A. 1934. Erinnerungen an Robert Fuchs. Graz: Leuschner & Lubensky.

Montgomery, D.L. 1992. The myth of organicism: from bad science to great art. *The musical quarterly*, 76(1):17-66.

Murray, S.E. 2014. The career of an eighteenth-century Kapellmeister: the life and music of Antonio Rosetti. New York: Boydell & Brewer. (Eastman studies in music).

Musgrave, M.G. 1979. Schoenberg and Brahms: a study of Schoenberg's response to Brahms's music as revealed in his didactic writings and selected early compositions. London: University of London. (Thesis – PhD).

Musgrave, M. 1983. Brahms the progressive: another view. *The musical times*, 124(1683):291-294.

Musgrave, M. 1985. Brahms and the principle of developing variation by Walter Frisch. *Journal of the American Musicological Society*, 38(3):628-636.

Musgrave, M. 1987. Brahms and England. (*In* Musgrave, M., ed. *Brahms 2: biographical, documentary and analytical studies*. Cambridge: Cambridge University Press. p. 1-20).

Musgrave, M. 1990. Schoenberg's Brahms. (*In* Bozarth, G.S., ed. *Brahms studies: analytical and historical perspectives*. Papers delivered at the International Brahms Conference, Washington, DC, 5-8 May 1983. Oxford: Clarendon Press. p. 123-137).

Musgrave, M. 1999. Years of transition: Brahms and Vienna 1862-1875. (*In* Musgrave, M., ed. *The Cambridge companion to Brahms*. Cambridge: Cambridge University Press. p. 31-50).

Musgrave, M. & Pascall, R. 1987. The string quartets op. 51 no. 1 in C minor and no. 2 in A minor: a preface. (In Musgrave, M., ed. Brahms 2: biographical, documentary and analytical studies. Cambridge: Cambridge University Press. p. 137-144).

Music Division, Library of Congress, Washington, DC. 2009. Hugo Leichtentritt papers. <http://rs5.loc.gov/service/music/eadxmlmusic/eadpdfmusic/2012/mu012014.pdf> Date of access: 24 Aug. 2013.

Nail, J.I. 1978. The concept of developing variations as a means of producing unity and variety in Schoenberg's Theme and Variations, op. 43a. Austin: University of Texas. (Thesis – DMA).

Neff, S. 1993. Schoenberg's theoretical writings after the Harmonielehre: a study of the published and unpublished manuscripts. *College music symposium*, 33. http://symposium.music.org/index.php?option=com_k2&view=item&id=2105:schoenbergs-theoretical-writings-after-the-harmonielehre-a-study-of-the-published-and-unpublished-manuscripts&Itemid=124 Date of access: 24 Aug. 2013.

Neonato, S. 2009. A manual of piano history: The mechanical muse: the piano, pianism and piano music, c.1760–1850; The companion to The mechanical muse: the piano, pianism and piano music, c.1760–1850 by Derek Carew. *Early music*, 37(4):675-677.

Pascall, R. 1975. Ruminations on Brahms's chamber music. *The musical times*, 116(1590):697-699.

Pascall, R. 1977. Robert Fuchs, 1847-1927. *The musical times*, 118(1608):115-117.

Pascall, R. 1984. Brahms und die Kleinmeister. *Hamburger Jahrbuch für Musikwissenschaft*, 7:199-209.

Pascall, R. 2001. Fuchs, Robert. (In Sadie, S., ed. The New Grove Dictionary of Music and Musicians, Vol. 9. 2nd ed. London: MacMillan. p. 311).

Platt, H. 2003. Johannes Brahms: a research and information guide. London: Routledge. (Routledge Music Bibliographies).

Proksch, B. 2013. Jan Ladislav Dussek (1760-1812): a Bohemian composer “en voyage” through Europe edited by Roberto Illiano and Rohan H. Stewart-MacDonald. *Notes*, 70(2):274-277.

Rawson, S. 2002. Fuchs: Quartets 3 + 4. *American record guide*, 65(2):98-99.

Réti, R. 1951. The thematic process in music. New York: MacMillan.

Rothgeb, J. 1987. Brahms and the principle of developing variation by Walter Frisch. *Music theory spectrum*, 9(1):204-215.

Schoenberg, A. 1967. Fundamentals of musical composition, edited by G. Strang and L. Stein. London: Faber & Faber.

Schoenberg, A. 1975. Style and idea: selected writings, edited by L. Stein. New York: St. Martin's Press.

Schubert, G. 1994. Themes and double themes: the problem of the symphonic in Brahms. *19th-Century music*, 18(1):10-23.

Schubring, A. 1990. Five early works by Brahms. Translated from the German by Walter Frisch. (In Frisch, W., ed. Brahms and his world. Princeton: Princeton University Press. p. 103-122).

Shiffman, D. 2012. The nature of code.
http://dep.fie.umich.mx/~garibaldi/data/uploads/graficacion/nature_of_code-005_shiffman_12.4.12.pdf Date of access: 2 Sep. 2014.

Silvertrust, R.H.R., ed. 2009. The piano trios of Robert Fuchs. *The chamber music journal*, 20(3):15.

- Sirman, B. 2006. Developing variations: an analytical and historical perspective. Uppsala: Uppsala Universitet. (Independent thesis basic level – Degree of Bachelor).
- Sisman, E.R. 1990. Brahms's slow movements: reinventing the 'closed' forms. (*In* Bozarth, G.S., *ed.* Brahms studies: analytical and historical perspectives. Papers delivered at the International Brahms Conference, Washington, DC, 5-8 May 1983. Oxford: Clarendon Press. p. 79-103).
- Smith, P.H. 1994a. Brahms and Schenker: a mutual response to sonata form. *Music theory spectrum*, 16(1):77-103.
- Smith, P.H. 1994b. Liquidation, augmentation, and Brahms's recapitulatory overlaps. *19th-Century music*, 17(3):237-261.
- Stowell, R. 1992. The nineteenth-century bravura tradition. (*In* Stowell, R., *ed.* The Cambridge companion to the violin. Cambridge: Cambridge University Press. p. 61-78.)
- Strauss, R. 1957. Betrachtungen und Erinnerungen, herausgegeben von W. Schuh. 2. Aufl. Zürich: Atlantis.
- Swafford, J. 1997. Johannes Brahms: a biography. New York: Alfred A. Knopf.
- Taruskin, R. 2009. Music in the late twentieth century. Oxford: Oxford University Press. (The Oxford history of Western music, 5).
- Thompson, C.K. 1996. Brahms and the problematizing of traditional sonata form. Madison: University of Wisconsin–Madison. (Dissertation – PhD).
- Thormählen, W. 2011. 'Kleinmeister' music – a conflict of interests? *Early music*, 39(4):655-658.
- Walker, E. 1898-1899. Brahms. *Proceedings of the Musical Association*, 25:115-138.

Whitelaw, M. 2001. The abstract organism: towards a prehistory for A-life art. *Leonardo*, 34(4):345-348.