Analysing from Experience: Gustav Mahler's *Quartetsatz* for Piano and Strings

Thesis to be submitted in partial fulfilment of the requirements for the degree MMus

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Abstract

Musical analysis has traditionally been located within the context of musicology. It is therefore an activity usually considered the purview of music scholars rather than practical musicians. The musical analyses produced by music scholars therefore provide us with intellectual understandings of musical works, rather than insights into the experience of listening to or playing music. In this thesis, I will propose that those agents involved in practical music-making can produce insights into musical works that are as valid as the work of traditional music scholarship. I will attempt to reconceptualize the position of the 'knower' or 'experiencer' - the performer - of music as one with primary access to knowledge of a musical work, and therefore ideally suited to offer analyses of these works.

The establishment of the performer as a bearer of central analytical knowledge functions in direct opposition to the traditional distinction between 'theory' and 'practice'. My thesis will trace the Platonic origins of the philosophical separation of practice and research, and as an alternative to the traditional separation of practice and research, I shall explore the concept of Practice-Based Research (PBR). My exploration of PBR will be informed by phenomenological approaches to music scholarship. As a field of enquiry which concerns itself with experience, the phenomenology of music suggests that the mind and body of the practitioner are important sources of musical insight. To address this issue, Bourdieu's notion of habitus will be explored. The habitus will be shown to contain a vast network of socio-cultural codes informing the practitioner's relationship with the musical work.

A central aim of this thesis is to explore the possibilities of using practice-based research as the foundation for the study and analysis of a composition, in order to allow for a deeper understanding of the work by means of the generation and harnessing of practical knowledge. Thus, the theoretical outline of PBR provided in this thesis will be applied to a piece of practical performance-based analysis. As such, an analysis of Mahler's *Quartetsatz* will be used as the basis on which to draw knowledge in this project.

TABLE OF CONTENTS

1.	Introduction	1
1.1	Background	1
1.2	Research Aims	2
1.3	Personal Motivation: Practice-based Research as Framework	2
1.4	Definition of terms	6
	1.4.1 Practice-based Research1.4.2 Practice, practising and performance1.4.3 Music analysis	6 6 7
2.	Practice-Based Research (PBR) in Music	8
2.1	Introduction	8
2.2	Definition and terminology	10
2.3	PBR and Knowledge	13
2.4	PBR and Music Analysis	14
3.	The Performer of Music and Habitus	20
3.1	Habitus	20
3.2	The Habitus and Practising: creating a 'Constellation Dome' of understanding	25
4.	Gustav Mahler's Quartetsatz	37
4.1	Introduction	37
4.2	Gustav Mahler's 'Quartetsatz	37
4.3	Analysis	40
	4.3.1 Macro-structure: Form4.3.2 Micro-structure: Performance Indications	40 48
5.	Conclusion	58
6.	Appendix	60
7.	List of Sources	80

LIST OF TABLES AND MUSICAL EXAMPLES

Tables

Table 1	45
Musical Examples	
Example I	27
Example ii	27
Example iii	28
Example iv	28
Example v	29
Example vi	30
Example vii	31
Example viii	32
Example ix	33
Example x	35
Example xi	42
Example xii	50
Example xiii	51
Example xiv	52
Example xv	53
Example xvi	53
Example xvii	54

Example xviii	54
Example xix	55
Example xx	55
Example xxi	56
Example xxii	57
Example xxiii	57

ACKNOWLEDGEMENTS

This thesis would not have been possible without the help, love, and support of a number of people.

To my supervisor Dr Mareli Stolp, thanks for the never-ending interest, expertise, passion and support you have given to me over the past years. It would never have been possible without you. I am eternally grateful for everything you have done for me.

To my family, thank you for the encouragement, support and for lifting me up when I was down.

Ashley, you were here for the entire writing process. I am so grateful for your support Thank you.

Thanks to the staff of Stirling high school who have provided a platform for me to work and study. Leoni, Sandra, Donne, Lisa, Wesley, Germaine and Alan, thank you for your love and support during the writing of this work.

To Catherine Foxcroft, my teacher and mentor, thank you for everything.

1. Introduction

1.1 Background

The activity of music analysis, although often regarded as a branch of musicology, has also many affinities with the activity of performance of musical works. If one can accept as a main purpose of analyses of musical works a deepened understanding of these works, then it follows that musical analysis can aid in the performance of compositions, for deeper understanding of musical works must positively influence their rendering in performance.

Kofi Agawu, in responding to Joseph Kerman's seminal 1985 article *How we got into analysis, and how to get out* (Kerman 1985), identifies two ways in which music analysis can be most beneficial: according to Agawu, 'analysis aids perception; the second is Adorno's insistence that only analysis can lead us to the truth content of a work' (Agawu 2000, 270). The positive results generated from music analysis, we can therefore surmise, could be altered perceptions of musical works, and a discovery of the 'truth content' of said work.

Different approaches to music analysis will be dealt with later in this thesis; a central aim of the current research is, however, to explore the extent to which analysis can be conducted from a 'first person point of view', particularly that of a performer of music. In this sense, the practical experience of a piece of music will be approached as the primary impetus for analysis of the work, which could lead to new understanding(s) of the composition. This thesis will propose an analysis of Gustav Mahler's *Quartetsatz* for piano and string trio based on first-person experiences of the music, generated through a practical engagement with the score: learning the notes, practising the piece and ultimately performing the work. As such, this research is conducted from within the framework of 'practice-based research'. I will posit here that a performer of music (such as the current author, who is a classically-trained pianist) has the capacity to engage with musical works from within a 'constellation dome' of factors provided by the act of assimilating and practising the music; this 'constellation dome' is seen as part of the 'habitus' of a musical performer.

1.2 Research Aims

This research aims to explore music analysis from within the framework of practicebased research. It furthermore hopes to delineate a field from within which practitioners of music may engage with musical works in a subjective way, but with the end-result being an articulated research outcome (in this thesis, the result will be an analysis of a single work). This field will be described both as the 'habitus' of a performer and as a 'constellation dome' of factors related to practical engagements with a piece of music. The planned research outcomes are therefore two-fold, and these outcomes can be viewed as carrying equal weight: to articulate a habitus of a performer, and describe how analysis can be conducted from this positioning or situatedness; and to present an analysis of Gustav Mahler's *Quartetsatz* based on practical experience generated by practising and performing this work. This work was chosen because of the author's acquaintance with the composition on a practical level (it forms part of my repertoire); however, the author acknowledges that a similar approach could be used for explorations of other compositions also, and this constitutes potential for future research following on the current project.

1.3 Personal Motivation: Practice-based Research as Framework

Practice-based research has developed in part as the result of education politics and policies, particularly as these have developed in Europe over the last two decades. In 1999, a document was signed committing twenty-nine European countries 'to a harmonization of their higher education'. This was known as the Bologna Declaration (Sligter 2007, 41). The system was put in place to essentially commit these countries to the 'adoption of a common framework of readable and comparable degrees' and to introduce undergraduate (BMus) and postgraduate (MMus and PhD) degrees in all signatory countries (Bologna Declaration 1999).

The merging of universities and conservatories has as one result the integration of practice-orientated and research-orientated institutions; this has resulted in an expansion in terms of specialization in tertiary music education. Institutions focusing primarily on performance now offer research-orientated master and doctoral degrees. This allows for innovative approaches to the integration of research and practice

(Borgdorff 2012; Stolp 2012, 4). An example of this can be seen in practice-based research (PBR). It is an emerging research type that aims to facilitate both performance and research in an integrated approach.

Research of this type assigns a highly important role to the performer. Jurrien Sligter (2007) adds that as part of a PhD project, PBR implies that artistic actions or productions of the researcher are in some way an integral part of the research project artistic experimentations are the source of data (Sligter 2007). These 'artistic experimentations' in the case of music could refer to anything related to a practical engagement with music, both preceding performance and as manifested in a performance of music itself. PBR diverges from pure practice, however, in that musicians are encouraged to explore the processes that lead up to the performance act, and to explicate those processes by means of discursive articulation. Huib Schippers states that what can be experienced in performance represents only 'the end result of complex physiological, technical, conceptual, aesthetic and social processes' (Schippers 2007, 38). What PBR in music suggests is that knowledge is generated through these processes, and that an articulation of these processes could be constitutive of new knowledge (Borgdorff 2007; Schippers, 2007; Sligter 2007; Stolp 2012). In this thesis, I will explore the extent to which processes related to the learning and practising of a piece of music can be generative of new knowledge; these processes, I will posit, occur both within the 'habitus' of a performer and a 'constellation dome' of influences facilitated through practical engagements with a composition. These ideas will be explicated in more detail in the following chapters.

Although PBR in music is a relatively new development, several international institutions have been making concerted efforts to explore this type of research. These include (among others) the Orpheus Institute in Ghent, Belgium; Leiden University in the Netherlands; and the Queensland Conservatory in Brisbane, Australia. PBR in music has been comparatively slow to develop in South Africa, however; engaging with PBR as an emergent research type is therefore a further aim of the current research. In particular, this thesis will explore ways in which to look at the 'positioning' or 'situatedness' of a performer of music when practically engaged with a piece of music, and how this situatedness can enable music analysis. To my knowledge, this part of the PBR discourse is as yet not significantly explored.

In this thesis, I will posit that both research and practice are fundamentally connected, but that historically these terms have been divided. Robin Nelson opines that '[...] The problem of knowledge has been a topic for debate in the Western philosophical tradition since Plato' (Nelson 2006, 105). Bourdieu refers to Plato in his comments on this division: 'practice was not helped by Plato who offered intellectuals...a justificatory discourse which, in its most extreme forms, defines action (one might say practice) as the inability to contemplate' (Bourdieu 1990, 28; quoted in Nelson 2006). Nelson summarizes this, saying that 'Plato located the animal drives, passions, emotions and desires in the lowest part of the soul and intellect in the highest part'. Both practice and research were assigned a value status, placing most importance on knowledge gained through research and significantly less on knowledge gained through practice (Bourdieu 1990, 27). PBR challenges these valuations by shifting the focus to the performer and practical knowledge.

Over the years I have spent as a pianist many hours practicing my 'craft', with the intention of (apart from my love of music) perfecting and engaging with musical works in order to give the best possible rendition of these works in concerts and exams. My development as a performer of the piano has also impacted on my abilities as a teacher of the instrument, an activity which has become increasingly important to me. During my years as a pianist, my first love has always been the actual playing of my instrument. I have appreciated the more academic aspects of the music discipline such as theory and history of music but have always been more interested in a practical engagement with a piece of music. My motivation for engaging with practice-based research as a research framework, and in particular the possibility to conduct music analysis from within this framework is therefore informed by this background. PBR provides a new way of analysing and researching that incorporates aspects of both the practical and research components particular to the music discipline. It is this integrative aspect of PBR which most prominently suggests its use as a research paradigm for this study.

The process of learning pieces of music, practising and preparing them for performance and finally presenting these works on a concert stage involve several types of research activities (Schippers 2007, 36). These research activities cover many different spheres of knowledge and research such as consulting books and other texts on the particular style period and biography particular to the composer of the work; listening to audio and DVD recordings of renditions of the work by other performers; as well as critically reflective engagements (in practice sessions, ensemble rehearsals and performances) and involvement with issues of technique and interpretation. A theoretical understanding of a work is helpful in generating insights into the work; however, traditional music analysis typically takes place from an 'outsider's perspective', privileging method rather than experience in relation to arriving at an understanding of the work. This type of research is – ideally – objective and empirical; personal or subjective ideas and understandings related to the experience of the musical work (on whatever level) are usually not considered to be of primary importance.

I will here attempt to re-conceptualize the position of the 'knower' or 'experiencer' - the performer - of music as one with primary access to knowledge of a musical work, and therefore ideally suited to offer analyses of these works. This research project will focus on Gustav Mahler's *Quartetsatz*, the only known example of chamber music in the composer's output. It will explore the possibilities of conducting music analysis from a 'performer perspective', utilising the tenets of practice-based research in order to translate into a discursively articulated medium the practical knowledge generated through learning, practising, rehearsing and performing the work. A second result, related to analysis of the macro-structure of the work, will be to suggest an 'edit' of the micro-structure of the composition. Although this is not a typical outcome of an analytical project, the edit of the micro-structure of the composition is seen as a secondary (but significant) outcome of an analysis conducted from a performer perspective.

This thesis is divided into four chapters. Following on the introductory Chapter 1, Chapter 2 deals with the background and context of practice-based-research in music and delineates possible approaches to PBR and music analysis by providing a brief overview of music analysis and some of its possible applications. Building on the tenets of so-called 'phenomenological music analysis' which emerged during the 1980's, an argument is constructed for conducting music analysis from a performer's first-person perspective. Chapter 3 suggests an understanding of Bourdieu's concept

5

of the 'habitus' as a space occupied by a performer of music, and outlines a theory for knowledge creation from within a 'constellation dome' of factors related to practising a musical composition. Chapter 4 deals with Gustav Mahler's *Quartetsatz* and aims to suggest a possible analysis of this work based on a practical engagement with the composition. An 'alternative' analysis of the macro-structure of the composition will be presented, together with suggestions for interpretation on the micro-structural level; the latter will be presented in the form of score edits. The analysis will be generated from subjective, first-person experience of the score while engaged with it on a practical level: learning the notes and practising the work. This analysis is therefore primarily 'experiential' in nature.

1.4 Definition of terms

1.4.1 Practice-based Research

Practice-based research (PBR) is an emergent type of research which aims to facilitate both research and practice in single research endeavours.¹ Research of this kind is 'undertaken in order to gain new knowledge partly by means of practice and the outcomes of the practice' (Candy, 2006). Although different terms are commonly used to describe this type of research (practice-as-research; practice-led research; artistic research) in this thesis the term practice-based research will be used to denote an approach that attempts to integrate research and practice. Furthermore, this type of research is not limited to applications in music, but is used also in other art-related disciplines such as visual arts and design, theatre and dance. In this document, the focus will be on PBR in music. A more comprehensive engagement with PBR follows in Chapter 2.

1.4.2 Practice, practising and performance

The three terms above describe different types of practical engagements with music. 'Practice' (noun) is defined in this thesis in two ways: as a habitual action or repeated exercise to improve skill which would essentially be the practical realization of

¹ As will be stated in more detail in Chapter 2, different terminologies are in use to describe similar approaches to PBR. These will be dealt with in more detail in the next chapter.

theoretical concepts (practical realization of the written music score); and as an art practice which includes the many different facets related to the profession or activity of music. This latter definition includes for the purposes of this thesis the different 'role players' in the music profession: performers, composers and audiences.

Practising (verb) refers to the actual carrying out of the action; practising will be approached in this thesis as a site of knowledge creation. Performance refers to a situation where a piece of music is rendered live in front of an audience. It is important to note that an audience determines the context in which the terms 'practising' and 'performance' are used. If a pianist performs in a concert hall but does not have an audience, it arguably does not constitute a performance according to this definition. This act can possibly be defined as 'practising performance' (verb), but is ontologically different from what is understood as 'performance'.

1.4.3 Music analysis

Traditional music analysis was developed as a way to understand the meaning of music. Ian Bent states that 'underlying all aspects of analysis as an activity is the fundamental point of contact between mind and musical sound, namely musical perception' (Bent 2009). Bent further defines 'music analysis' as (Bent 2009):

[...] That part of the study of music that takes as its starting-point the music itself, rather than external factors. More formally, analysis may be said to include the interpretation of structures in music, together with their resolution into relatively simpler constituent elements, and the investigation of the relevant functions of those elements.

Although music analysis is a broad field and many different approaches to analysis exist, the approach followed in this thesis is most closely related to score analysis in order to ascertain musical construction (Bent 2009). The act of analysing a piece of music according to this approach means that the work is 'broken down' into smaller parts so that these sections can be examined in order to create a better understanding of the work as a whole. Sligter writes on music analysis in the *Dutch Journal of Music Theory* (2007) that the 'assumed relationship between the notes is dissected, phrases are divided into opening and closing sections and the logic of chord progressions is

determined' (Sligter 2007, 46). The focus, therefore, is on the written notes of a musical composition (Sligter 2007, 46). Methods of analysis, and how these can be informed by the tenets of PBR, will be discussed in more detail in Chapter 2.

2. Practice-Based Research (PBR) in Music

2.1 Introduction

This chapter will focus on Practice Based Research (PBR) in music. I will define PBR, provide a summary of recent developments in the field, examine the differences between PBR in music and other disciplines and make an argument for its usefulness in generating and articulating knowledge in the music discipline. I will then discuss Bourdieu's idea of the *habitus* of the performer. This section will elaborate on the role of the performer with regards to the position and situatedness that the performer takes on when engaging with a composition practically, be that during a musical performance or while engaged with practising. The purpose of this chapter is to examine some ways in which 'practice' (on all the levels referred to in section 1.2.2) can serve as the basis for the articulation and generation of new knowledge; it will therefore attempt to articulate a research framework in which practice and research are integrated in a project of music analysis.

Practice-based research (PBR) is an emergent type of research which approaches research and practice as integrated parts of research projects. Marcel Cobussen defines PBR as a situation where an artistic action or production of the researcher forms part of the entire project (Cobussen, 2007). The implication is that research of this nature would be undertaken within fields that are heavily practice-orientated. As was mentioned before, PBR has already been applied in many different creative areas but applications of PBR in music have only more recently gained traction (Borgdorff 2007; Cobussen 2007; Stolp 2012).

When reviewing literature on practice-based research in the arts and its use in music specifically, it becomes apparent that very little has been written. This is understandable considering it is a fairly recent development. The editors of the 2007 issue of the *Dutch Journal for Music Theory* point out that there is a 'perceived deficiency in the writings of practice-based research' and that the 'writings deal mostly with visual arts and dance', adding that 'music is virtually absent' from the discourse. Nevertheless, over the past fifteen years there have been some significant contributions made in the field of PRB in music, and this field is continuously

expanding. Researchers like Borgdorff (2006; 2007; 2011; 2012); Cobussen (2007); Draper and Harrison (2010); Emmerson (2009); Sligter (2007); Schippers (2007); and Stolp (2012) have all contributed towards the understanding of this type of research and its possible applications in music.

Various developments have taken place in the field of PBR, and discussions and debates surrounding the types of degrees in which PBR can be applied are ongoing. During the 1990's, importance was placed on the changes taking place within university structures particularly in the United Kingdom and Scandinavia. As a result many debates surrounding the topic have been centred in those countries (Borgdorff 2007). The integration of practice-orientated and research-orientated institutions has resulted in an expansion in terms of specialization in tertiary music education: institutions focusing primarily on performance now offer research-orientated master and doctoral degrees, which allows for greater innovative approaches to the integration of research and practice (Borgdorff 2012; Stolp 2012:4).

An example of this integrated approach in tertiary education can be found in the 'docArtes' program referred to both by Borgdorff (2007) and Cobussen (2007). According to the official webpage, 'docARTES is an international inter-university doctoral programme for practice-based research in musical arts, designed for musician-researchers (performers, composers, etc.)' (docARTES 2014). This doctoral program is made up of universities and conservatoires from the Netherlands and Belgium, namely Conservatory of Amsterdam, The Royal Conservatoire in The Hague, the Leiden University Faculty of Creative and Performing Arts (Netherlands) and the Orpheus Institute in Ghent, Belgium (Cobussen 2007, 19). This programme is structured around a four-year curriculum that consists of training and research. To date, fourteen doctoral students have completed research through this programme (docARTES 2014). Australia too has shown significant developments in the PBR field. A study conducted in 2004 indicated that 79% of universities engaged with PBR (Schippers, 2007). One such example is that of the PBR doctoral program established in 2005 at the Queensland Conservatorium of music at Griffiths University in Brisbane (Draper and Harrison, 2011).

An important development that took place in 2007 saw the collaboration between 13 researchers from different countries including Australia, Norway, Finland, Sweden

and Britain in the 2007 edition of *The Dutch Journal of Music Theory*. This edition was devoted to articles and papers pertaining to PBR and its use in music. Numerous issues are dealt with in these articles including past and current debates, issues with regards to terminology, education politics and other pertinent research questions.

For the purposes of this thesis the term 'practice based research' (PBR) describes a type of research where practice is an important part of both the research process and result (Stolp 2013, 52). As a performer of predominantly western art music, PBR has created an opportunity to engage with a musical work, reflect critically on it and provide an experiential analysis of the work.

2.2 Definition and terminology

To date, there has been no settlement on a definitive definition of PBR or even consensus on the appropriate terminology. According to Stolp, this could be due to the 'fragmentary nature of artistic research discourse in general' (2012, 52). Borgdorff divides types of art research into three distinct categories: research on the arts, research for the arts and research in the arts. Research on the arts is well established in university disciplines like the humanities, and includes musicology, art history, theater studies, media studies and literature (Borgdorff 2007, 5). This type of research places the word 'art practice' in the broadest sense as its main 'art object' and implies that there is an objective distance between the researcher and the object of the research. Research for the arts differs from the first in that the art research is conducted with the intention of providing insights into art practice. Borgdorff gives an example of this research referring to an electric cello where studies are undertaken in order to examine how technique and sound can be modified and extended (Borgdorff 2007, 5). Borgdorff refers to this type of research as providing an 'instrumental perspective'. The third, research in the arts, is the most controversial and also arguably the most important research type in the current argument with regards to PBR. It assumes that there is 'no distance between the researcher and the practice of art' and that 'research in the arts seeks to articulate [...] knowledge throughout the creative process and in the art object' (Borgdorff 2007, 5). This is a very important point which summarizes much of what PBR in music aims to achieve. Borgdorff refers to this as the 'performative perspective' (Borgdorff 2007, 5). The performative

perspective positions the researcher as the individual involved in the process of creating the 'research object'. Just as a pianist practices and plays the correct notes and sounds in order to create an aural representation of a scored piece of music, so too the artist applies paint to a blank canvas. It is through this process of creation and completion and a reflexive engagement with and translation of these processes that PBR seeks to articulate knowledge about the art object and the process of creation (Borgdorff 2007, 5).

There have been a number of terms used to refer to research in the arts. For the sake of consistency, I will make use in this document of the term 'practice-based research' (PBR) as defined in the introductory chapter (Borgdorff 2007, 5). Other terms used to describe research where practice plays an integral part include 'artistic research' (Borgdorff 2011; Borgdorff 2012; Coessens et al 2009), 'practice- led research', 'practice as research' and 'performance as research' (Stolp 2012, 52). Linda Candy refers to practitioners in art, design, curating, writing, music and teaching in her definition of the term (Candy 2006).

The definition of PBR in these fields will vary due to the nature of the art form. At the end of an artistic process, a painter, for example, could produce a completed artwork that can be seen, touched, studied and analysed. This would apply to design too. The product is very different in music, where the concept of an artwork is that of an aural one, transient and ephemeral. It is only heard once in performance and thereafter it no longer exists, as opposed to the painter's artwork; this significantly complicates the processes of reflection and translation of the artistic process, as well as the documentation thereof (Reason 2006).

The words *practice* and *research* should be defined separately. The term *practice* can be defined as 'habitual action; repeated exercise to improve skill and action as opposed to theory' (Oxford dictionary, 2013). 'Research' is defined by the National Research Foundation in South Africa and the Research Assessment Exercise of the United Kingdom as follows: 'Research is an original investigation undertaken to gain knowledge and/or enhance understanding' (Borgdorff 2007, 7; National Research Foundation 2012).

In the visual arts and design disciplines the art practice has a concrete art product as

its end result; in music, 'practice' can relate to the act of making music in performance as well as in preparation for performance. The latter refers to the verb 'practising' which could be seen as a constitutive part of music 'practice' as a whole. In a musical context, performing a recital involves many hours of practising, which is constituted of many different activities. Apart from the practising ('action') taking place on an instrument (here referring to experimentation with technique and interpretation), many other different spheres of knowledge and research are commonly engaged with, including consultation of books and other texts on the particular style period and biography particular to the composer of the work, audio and DVD recordings of renditions of the work by other performers as well as individual tuition from a primary instrumental music teacher as well as possibly other skilled and knowledgeable individuals. These actions taken together constitute what can be termed musical 'practice'.

Borgdorff comments that in the arts we differentiate between the activity and/or role of those involved in practice. He uses the example of musical theatre and music. In music we distinguish between composer, performer and improvisation while in musical theatre we distinguish between actors, directors, playwrights and stage designers (Borgdorff 2007, 6). Borgdorff also offers another distinction – object, process and context. If these were placed in the context of music, these could translate as sheet music, musical syntax and notes as the objects of research; assimilation of the musical material and practicing as the process; and performance environment and reception by an audience as constitutive of context (Borgdorff 2012, 7).

Practice-based research is extremely useful in generating and articulating knowledge in the music discipline. It provides an insight into processes that are generally neglected as sites of new knowledge and finds ways of examining and presenting of these processes in clear and logical ways. In his article *The production of knowledge in artistic research* (Borgdorff 2011), Borgdorff shows that these insights could contribute not only to art as a discourse, but also in the form of new products and experiences, which relate meaningfully to the world of art. In music, the process of learning a piece of music is far more intense and complex than what is shown on the stage during a recital. The subtle nuances, whether it be fast passages requiring finger dexterity, the sound of a particular chord or the gestalt of a certain rhythm are all developed and created during the practising of a piece of music. As will be demonstrated in Chapter 4, this information can be of great use when trying to generate an understanding of a work (analytical, but also beyond structural analysis) and can include other aspects of the work like technical difficulty, balance, colour and interpretation. It will further be argued here that these insights can be instrumental in the analysis of a musical work being thus engaged with.

2.3 PBR and Knowledge

If one accepts that the generation of new knowledge is a core aim of any type of research, it remains to determine what types of knowledge can be generated by means of practice-based research, and how these differ from knowledge generated by means of scientific or positivist explorations. This is essentially an epistemological question. The type of knowledge most obviously relatable to PBR is, arguably, phenomenological knowledge or 'knowledge of experience'. This section will engage with phenomenology and its role in PBR in music.

In her article *Practice as Research and the Problem of Knowledge*, Robin Nelson articulates 'the problem of knowledge' as being connected to the split between rational and sensual knowledge that has characterised Western knowledge systems since the time of Plato. Nelson states (2006, 105):

As part of a hierarchy in which he installed knowledge above reasoning, belief and illusion respectively, Plato located the animal drives, passions, emotions and desires in the lowest part of the soul and intellect in the highest part. Plato also opened up a divide between theory and practice.

The divide and hierarchy posited by Plato favoured rational thought over sensual knowledge (Bowman 1998, 256). In order to gain prestige and security, philosophical traditions adapted and aligned themselves with other forms of analysis like Linguistics and Logic (Bowman 1998, 257). This would shift much of philosophy into a positivistic framework, leaving very little room for the human subjective experience (Bowman 1998, 257; Nelson 2006; Pears 1971). Positivistic thought has traditionally been positioned as superior to human experience like our actions, passions, emotions and desires. This historical shift of philosophy towards the

privileging of positivistic frameworks has resulted, arguably, in frameworks where experience and subjectivity are under-valued. The effect that a positivistic framework has on subjective experience is an extremely important point, when referring particularly to PBR in music and the epistemological question of knowledge in music. Music and music performance are potentially more aligned to experiential knowledge systems than to positivist approaches. The subjective experience referred to relates to an aural or practical engagement with a piece of music, focusing on the human interaction and experience of a work; this kind of engagement can potentially yield much information that cannot be accessed by means of positivist approaches alone.

It is therefore an argument central to the current research project that PBR is able to generate and articulate knowledge through subjective experiences. This paradigm of experiential knowledge articulates with the philosophical tradition referred to as Phenomenology. In 1901, the philosopher Edmund Husserl wrote about these philosophical ideas in his book, *Logische Untersuchungen (Logical Investigations)*. Husserl insisted on placing 'human consciousness' at the heart of his philosophical endeavours (Bowman 1998, 257). Along with philosophers like Edmund Husserl, Martin Heidegger and Maurice Merleau-Ponty, the idea of phenomenology developed into a significant philosophical tenet of the twentieth century.

Phenomenology is a philosophical tradition that places personal experience at the centre of knowledge. According to Smith (2003), 'phenomenology is the study of structures of consciousness as experienced from the first-person point of view'. It is a type of philosophical orientation that seeks to 'describe the objects of human experience in their full richness as they are lived' (Bowmen 1998, 254). A phenomenological approach to the articulation of new insights on musical works could suggest therefore that the viewpoint of personal experience of these works (generated through practical engagement) can be viewed as central to the understanding of these works; in other words, phenomenological knowledge of musical works can be instrumental to an analytical project.

2.4 PBR and Music Analysis

Traditional music analysis was developed as a way to understand and explain the meaning of music. Kofi Agawu quotes Ian Bent when explaining music analysis as

'that part of the study of music which takes as its starting-point the music itself rather than external factors' (Bent 2009; Agawu 2004, 270). Musical analysis has traditionally been located within the context of musicology, and is therefore an activity normally privileging music scholars rather than those focused on practical engagement with a piece of music – performers of music.

Different types of music analysis techniques have been developed to explain the meaning of music. Riemannian theory, for example, refers to the German theorist Hugo Riemann and is based on the idea of a 'dualism' between major and minor harmony. Riemann (1849-1919) is cited as an important leader of formal and constructive analysis in the late nineteenth and early twentieth centuries (Bent 2009). Heinrich Schenker (1868-1935) is one of the most well-known theorists in the twentieth century. Schenkerian analysis is a type of analysis that is based on relationships of tonality, tonal space and hierarchy. Prior to the twentieth century, other techniques developed: Bent writes that music analysis can be traced back as far as the 1750's. During the eighteenth century it was Jean-Philippe Rameau that was most influential in music theory (Bent 2009). What these kinds of analysis have in common is that they are predominantly score-based, which suggests that all drawn conclusions are made on the relationships of the written notes, omitting any practical or even aural engagement with the work. There is therefore a distinction to be made between types of analysis such as Riemannian and Schenkerian analysis that are score-based and music analysis that is generated from the perspective and experience of a performer of music.

As was mentioned before, Agawu states that music analysis can be understood as having two main purposes: deepening one's perception of the work, and unlocking the work's 'truth content' (the latter point referring to Theodor Adorno). Agawu explains the first - perception - as follows (Agawu 2004, 270):

[...] Analysis sharpens the listener's ear, enhances perception and, in the best of cases, deepens appreciation. Detailed and intensive scrutiny of a work brings one into close contact with the musical material, leaving the analyst permanently transformed by the experience. No subsequent hearing of the work can fail to reflect this new, heightened awareness of its elements. The second purpose of music analysis is that of the discovery of 'truth content'. Agawu describes the truth content by articulating it as such (Agawu 2004, 270):

[...] the activity of analysis, in bringing us face to face with the musical elements, with the detail and particularity of a work, with its inside ... this explication draws us close to understanding what Adorno, following Benjamin, called the composition's truth content.

Through these descriptions of the meaning of music analysis it would be safe to assume that, as mentioned previously, music analysis is used as a tool with which to decode musical meaning within a composition. This definition is based on an engagement with the score, not through practical involvement with the music but by the scrutiny of musical syntax: 'the music itself' as it manifests in the score. The argument I would like to put forward here is that if meaning can be found in the probing of the syntax of a composition, it could potentially also be discovered through a performer's practical engagement with the piece of music: experiential analysis can be used as an alternative means of the discovery of musical meaning. Of importance here is the notion of the analyst. In the approach being advocated for in this thesis, it is no longer the musicological analyst that undertakes the analysis; the performer now takes their place. It is posited here that this alternate view on music analysis field.

These ideas essentially connect to the philosophical tenets of phenomenology, in that experience and the experiencer are positioned as primary drivers for analysis. The focus on analysis of syntax as presented in a 'stable' musical score developed during a time where knowledge, as Lawrence Ferrara puts it, was seen ideally as 'objective' (Ferrara 1984, 355). However, during the 1980's a phenomenological approach to music analysis began to gain traction. According to Ferrara (1984) the focus of analysis in the past had been empirical: essentially a score-orientated approach. Here an important part of the music is excluded - the performer. Phenomenological music analysis could be said to view the performer and his or her experience of a score as central to the analysis project. As discussed in section 2.3, a link can be identified between PBR and phenomenological knowledge. Phenomenological music analysis

therefore can therefore be explored as an analysis strategy through applications of PBR.

Chapter 3 will suggest a description of the habitus of the performer and a 'constellation dome' of knowledge generation formed through practical engagements with a composition. This construct allows for the performer to be viewed as directly involved in the music-making process on various different levels; this includes learning the notes, rehearsal of the work as well as the experience of the work in performance. What I will argue is that an analysis which looks beyond the score itself, to how it is experienced by a performer, can contribute valuable knowledge to the analysis discourse. A phenomenological analysis of Gustav Mahler's *Quartetsatz* will be offered in the final chapter as a case study to strengthen this argument.

Judy Lochhead argues that 'the primary focus of a phenomenological approach is the human experience of music' (Lochhead 1982, 9). A phenomenological music analysis therefore potentially allows the performer to analyse from experience, which would include practicing, performances and deep listening. The specific focus of the analysis should thus deal with issues most readily accessible by means of practical engagement with the music: form (as experienced rather than suggested through musical syntax inherent in the score), tempo, dynamics and sound production. Following on Ferrara, who argues that '[...] phenomenological analysis is grounded in a prior reverence for the human element in music' (1984, 357), I will argue that the performer's experience of a work, generated from many different levels of practical engagement with the work, provides an ideal 'human element' from whence to articulate an analysis of a musical composition.

A phenomenological analysis is particularly useful with music that doesn't conform to 'typical' or traditional musical structures as are commonly found in the musical canon of eighteenth and nineteenth century works. Lochhead argues that phenomenological music analysis can be particularly useful when analysing music that 'resists the received categories of the musical structure' (Lochhead 1986, 9). As a single-movement work (possibly meant to form part of a larger, unfinished work, although score proofs are not in existence), Mahler's *Quartetsatz* does challenge (if not wholly elude) traditional structural classification. It is never clear whether the movement

should be analysed as a stand-alone, self-contained composition, or whether it should be analysed as a functional movement within a bigger whole (this, of course, has implications for whether the work should be analysed from within the confines of sonata-form or rather as a 'stand-alone' work). Furthermore, there are many discrepancies between the Sikorski and Universal editions of the work, with the former including many performance instructions not Mahler's own. These incongruities make performing the work open to a wide range of interpretive possibilities. The analysis of Mahler's *Quartetsatz* that I will offer here will therefore focus on structural as well as interpretive aspects, as suggested through a phenomenological analysis from a performer's perspective.

The analytical process will begin with what Ferrara refers to as 'deep listening' which takes place during the practising and performance of the work. Ferrara states that the '[...] purpose of these "open" listenings is to orientate the analyst to the work' (Ferrara 1984, 359). These 'listenings' are meant to enable reflexivity: the possibility to re-visit and analyse aural experiences of the work over a period of time. It includes any level of meaning experienced in the work as well as any other important ideas that are experientially presented. The focus of the analysis presented in Chapter 4 will be on the 'experiential hearing' of the work and not on the traditional score structures and forms. Using my understanding and experience of the work generated from performing it, I will construct an analysis of Mahler's work that could suggest an 'alternative' reading of the composition, moving beyond the knowledge that can be generated from a study of the score alone.

Apart from deep listening, other methods that will constitute the PBR used for an analysis of *Quartetsatz* include the sensory domains of sight and touch. These will be described in detail in the next chapter but, briefly, in terms of sight the visual aspect of the score as well as that of the keyboard will be considered, and as far as touch is concerned, the whole range of technical considerations at play in learning and performing the piece will inform my analysis (and contribute to suggestions on the micro-structural level). These sensory elements will be supplemented by an analysis of the affective states evoked in the piece, and the ways in which these manifest as performance decisions as well as inform analysis of the macro-structure. Each of

these methods will be discussed in greater detail, and with relevant examples from the work itself, in Chapters 3 and 4.

3. The Performer of Music and Habitus

3.1 Habitus

Although phenomenological knowledge can be applied to music research in a number of different ways, this thesis will use Pierre Bourdieu's articulation of the 'habitus' as a central point of departure. The idea will be expounded here that a performer of music, by virtue of their practical engagement with a musical work, can articulate insights on the micro- and macro-structure of a work from within this habitus.

Bourdieu (1990) uses the term 'habitus' to describe a construct within which knowledge can be generated. He posits in *The Logic of Practice* (1990) that objects of knowledge can be 'constructed', rather than 'passively recorded' (Bourdieu 1990, 52). Bourdieu argues that one could ideally 'situate' oneself within an activity in order to gain knowledge about that activity, and that such an approach could lead to significant insights that cannot be gained from outsider observation alone (ibid.).

The term habitus is an ancient philosophical construct that began with Aristotle where he posited the idea of *hexis* which when translated directly means 'state'; this term is re-imagined by Bourdieu to constitute the habitus. The term has been used in a number of different disciplines. In 1939, German sociologist Norbert Elias used the term in his book *The Civilizing Process*. Other sociologists and philosophers like Max Weber, Marcel Mauss and Edmund Husserl also made use of the term (Scott and Marshall 1998).

The habitus has been used in a musical context in numerous ways, particularly in the field of ethnomusicology. Howard Brown writes on the changes made to the approaches scholars take in terms or research in ethnomusicology: 'Much of this change in orientation is due to recent sociological and anthropological concerns such as the growing influence of Bourdieu's concept of "habitus" in ethnomusicological work' (Brown, cited in Waterman 1991, 50–54). Brown adds that 'perhaps the most important contribution of ethnomusicology to the study of performing practice is that performing practice itself becomes the subject of interpretation' (ibid.). Tiger C. Roholt also acknowledges the impact that Bourdieu's notion of habitus has had on recent theories of art (Roholt 2009). In general, the notion of habitus seems to appear most often within the context of music education studies (Georgii-Hemming et al

2013), to describe the intersections of different experiential frames introduced by students and teachers.

I would like to suggest that the notion of habitus can be applied beyond the fields of ethnomusicology and music education, in order to look at the various parameters that outline the experiential field of the musician. Ultimately, accessing, reflecting on and translating the subjective experiences of a performer generated from within the habitus can, I will argue, be instrumental in the analyses of musical works.

Loren Ludwig explains the notion of habitus as follows (2011, 20):

Habitus describes the embodied and affective condition of being a person in a particular place and time, the 'feeling world' that one comes to inhabit by acquiring basic cultural competencies like language, habits of dress, and social mores; the emotional substrata that develops as one achieves a culturally and historically located subjectivity. Habitus is the frontier between nature and nurture, it registers the 'dispositions' and habits that order experience and that both shape and respond to one's interactions with the world.

From Ludwig's definition, it becomes clear that habitus uses both the internal and external worlds of an individual: the internal world is made up of the experiences and physical boundaries that are specific to a person, which subconsciously shape the way in which one relates to the world. This includes aspects like body, personality, genetic makeup, memory and essentially one's history. The external world refers here to the social and historical 'contexts' within which one finds oneself. This will include ideas like class, race, nationality, language and geographical location, as well as more specific characteristics such as social trends, cultural conventions, fashionable practices and matters of etiquette and good taste. These categories may seem arbitrary considering they are based on specific times and places, but it is their indiscriminate nature that makes their impact on a person so profound: due to the fact that these ideas are constantly shifting, their influence upon the way in which we relate to our surroundings can easily go unnoticed. One can surmise therefore that the habitus refers to a range of factors that are interlinked. Some of these are personal and some are social; collectively they determine the way that we experience the world.

When looking at knowledge generation in the context of the habitus, it becomes clear

that knowledge is constructed as a conglomeration of all of these elements, rather than just a random recording of pre-existing objective facts. In a musical context, the habitus could be seen to be constructed through the practical elements of music, which refers to the individual's practical involvement with a composition. Again, for the sake of clarity, the habitus can be divided into the internal and the external. The internal habitus of the performer will refer to those personal characteristics that will influence their approach to and interpretation of a musical work. In terms of physicality, this can refer to the performer's technique: whether it is a good technique or a bad technique, a technique that is best suited to virtuosic passagework or rather a lyrical cantabile sound (although the two are obviously not necessarily mutually exclusive). It can also refer to physical objects like the size and shape of the individual's hands, the capacity to produce loud and soft sound quality on the instrument, or any other physical aspects that might make certain types of playing easier or more difficult. These aspects of the performer's body significantly influence the way in which they experience the preparation and performance of a piece of music.

The internal habitus will also involve the performer's personal history. In terms of musical experience, it is the experiences that shaped the way in which the performer identifies him or herself musically that become important. This can refer to the performer's earliest musical memories, the music that his or her parents listened to in the home, or the musical education of siblings and friends. Possibly the most important factor in personal history will be the performer's own early musical education: the techniques taught by the teacher, the types of music for which an appreciation was nurtured, and the establishment of good or bad practice habits are all features of early music education that significantly impact the way in which the performer engages with and comprehends music and musical structure at a later stage. Again, these aspects of the internal habitus enable a unique and experiential understanding of pieces of music for a performer practically engaged with these works – these understandings can be instrumental in articulating analytical insights on musical works.²

² The argument could be made here that knowledge generated from within the internal habitus is too subjective to be applicable beyond the personal realm; I would posit, however, that all analytical projects are influenced by degrees of subjectivity, and that the success of an analytical

The external habitus of a performer is influenced by a number of different aspects. Of these, I will highlight the most important to this thesis. Firstly, when studying Western Art Music for instance, certain understandings about musical form and structure are ingrained in the performer. Partly as a result of normative approaches in terms of curriculum and concert practice (see Dusman 1994; Stolp 2012), these are overwhelmingly informed by the practices that emerged during the eighteenth and nineteenth centuries. The performer of Western Art Music will generally approach a musical work with the assumption that the piece develops towards certain musical goals, including the goals of climax and resolution and determined at least in part by means of Western tonal procedures particular to the eighteenth and nineteenth centuries. This tonality-based structural framework also determines certain expectations on the part of the performer: what sounds 'normal' and what sounds 'strange' within the larger structural context. It determines what is experienced as dissonance or as resolution, and what the meaning of a cadence is. In theory, if a musician had been primarily exposed in their foundational education to music of the Renaissance and early Baroque periods, or music from the twentieth century, their understandings of musical structure would arguably not be as heavily informed by Western tonal procedures as is the case with musicians whose education has been focused on the canonical repertoire of the eighteenth and nineteenth centuries. Thus, the argument here is that background influences understanding; when conducting analysis from a first-person perspective, it is important for a performer- analyst to bear these limitations in mind, for they play a role in determining what kind of listening and analysis the practitioner will be able to do.

In analysing 'from experience' a work such as Mahler's *Quartetsatz* it has been important to acknowledge aspects of my own 'habitus' that both enable and complicate my understandings of the work. For example, tonal meaning as it manifests in particularly eighteenth and nineteenth century repertories has been a central part of my theoretical and practical education since secondary school. What sounds 'complete' and 'correct' in the music that I am performing as well as what, according to my experience and education, sounds 'incorrect' is heavily informed by the characteristics of these repertories. This understanding became so strong that it

project – no matter the approach – is contingent on a self-reflexive articulation of the findings, thus making the work accessible and applicable beyond the personal realm

evolved into a 'preference', and influenced my repertoire choice throughout my secondary and tertiary education. Resultantly my understanding and 'piecing together' of contemporary works - or any works that do not fit easily into an eighteenth and nineteenth century tonal framework – is different from works from the nineteenth and eighteenth century canon. Acknowledging these factors as essential aspects of my habitus allows for a finer sense of my experiential understanding of a work such as Mahler's *Quartetsatz*, where 'traditional' tonal procedures are already beginning to break down in the aftermath of late-Romantic tonal explorations by Wagner and Liszt (Griffiths 1994).

The aspects that form part of a musician's habitus (and I do not mean to suggest that the ones I mention here are by any means exhaustive), clearly place the musical experience within a vast range of parameters, which all influence the performer's understanding of the meaning of a piece of music. These parameters are not necessarily readily available to a music theorist, whose approach to music makes use of objective facts and materials (primarily the music score) rather than experience. The way in which habitus impacts upon musical meaning and interpretation is inherently different for a theoretical analyst and one analysing 'from experience', such as a performer of the music. This distinction is not meant to be read as a 'value judgment', suggesting that one type of analysis supersedes another; rather, the argument here is that a performing musician has access to aspects of a composition that a theorist does not necessarily have, that of practical experience of the music, of how it feels, how it sounds, and how it 'works' in a particular space.

It is important to note that the performer is not a passive recipient of the knowledge outlined above. Since each aspect of the habitus simultaneously impacts upon and is located within the individual, it becomes evident that a musician is actively involved in the construction of the field of experience from which this musical knowledge is generated. The performer 'constructs' the object of knowledge actively while engaged in the preparation for and actual performance of the work; he or she doesn't just 'record' information that is gained from studying the score. During every practice session and performance, the musician therefore 'produces' the musical experience, which will serve as the basis from which analyses will be generated, conclusions will be drawn and knowledge will be created. When engaging with a work as a performer, the musician situates him- or herself within the 'real activity' (Bourdieu 1990, 52) of performing or being practically engaged with the work; he or she 'realizes' ('makes real') the work; they gain understanding of the work (the 'object of knowledge') by way of an 'insider's perspective'. In contrast, the theorist does not in the same way take into account how a work sounds, how it feels to perform, the timbre of an instrument, tempo choice (this influences the way in which the music is communicated). The results of analysis are, in other words, inherently different.

3.2 The Habitus and Practising: creating a 'Constellation Dome' of understanding

A central tenet of the current research is that knowledge of pieces of music can be generated through the act of practically engaging with the music. This practical engagement can be divided into three 'stages': learning the score, practising and performing the work. Furthermore, this knowledge can be harnessed and translated into a discursive medium with the purpose of providing new insights into the musical work. The aim here is to articulate an approach to music analysis based on the three stages of practical engagement with the music referred to above, which take place from within a performer's habitus. These engagements, it will be posited, can lead to discovery and explication of knowledge and understanding of a musical score.

The initial stages of practical engagement with a piece of music – familiarizing oneself with the score and preparing for performance – arguably constitute different types of involvement with the work than occurs when the work is performed. With this in mind, the analysis proposed here will focus primarily on knowledge generated by means of the initial stages of practical engagement with the work: learning the notes, and practising.

I would like to posit that the activity of learning and engaging with a piece of music on a practical level is constructed through a variety of different elements. These factors make up what I would refer to as a 'constellation dome' of interrelated fundamentals that enables a musician to learn, understand and perform a piece of music. This 'dome' can be seen as one interpretation of the habitus of a performer of music. The term 'dome' has been chosen as it metaphorically describes the space in which a performer 'meets' a composition in practice, and serves as a metaphor for an all-encompassing process that includes sensory, physical and emotional factors all geared towards attaining the desired performative result.

The 'constellation dome' is very much at work during both practice and performance. A piece of music cannot be learned and performed without it, and it is my contention that this 'dome' can be approached as a site of knowledge creation. The different elements of the 'practising dome' all contribute to different insights on structure of the work; these will be dealt with in more detail in Chapter 4. Existing analyses of the *Quartetsatz* generally posit that the work is best analysed as a sonata-form structure. As will be shown in Chapter 4, the macro-structure analysis of Mahler's *Quartetsatz* will suggest an alternative analysis that departs from the limitations of sonata form. Instead of traditional sonata form, the work is divided into separate sections. These sections will be referred to as domains. The purpose of this section is to explain my approach to and understanding of the 'practising constellation dome' generally, in order to explicate its application to analysis of Mahler's *Quartetsatz* in Chapter 4.

The first sensory factor I would identify is sight, which applies to both the reading of the score and the visual element concerned with playing on and looking at the keys. The starting point when engaging with a composition is with the score, which is a visual representation of the composition. It is made up of a large amount of information that includes elements like rhythm, pitch, dynamics, phrasing, pedalling and articulation. These factors are all taken in visually and processed to allow the performer to execute them physically on the instrument. This would apply especially to sight-reading, where a musician is able to play a piece of music while reading a score for the first time. Just like reading text where the eye sees letters, words and punctuation, so too the musician is able to read and decode all the parts of the score. This process becomes more complex in particular with ensemble music, where the pianist is required to be aware of multiple musical lines simultaneously. This is evident in the Mahler's *Quartetsatz* where visually, rhythm is a main factor when dividing the work into different sections (what I will refer to as domains). Example (i) is from What I have identified as 'Domain 1', while Example (ii) is from Domain 2.³

³ The reader will note discrepancies in the formatting of these examples. In some cases, examples were copied from the Sikorski edition of Mahler's score; in other cases the score was rendered by using the Sibelius programme.

Example (i) shows that the music is in duple time with triplet figure, while Example (ii) shows that the music has moved into quadruple time with quavers in the right hand. Visually, these examples have different musical characteristics. It was partly this visual difference that suggested the separation of each into these domains.⁴

Example (i): Gustav Mahler Quartetsatz bar 1-4



Example (ii): Gustav Mahler Quartetsatz bar 42-43



The other uses for sight in learning and performing a piece of music and that influence an understanding of a work's structure is related to the piano keyboard itself: visualization of motoric patterns that develop during the learning of a score. These patterns are constituted by harmonic as well as melodic structures: if, for example, a score was written in the key of C major and contained a melody with the notes C, D, E and G in the treble clef, a pianist could visualize this as a broken C major triad with an added 'D'. Through a thorough understanding of scales, a pianist can already visualize a pre-set pattern on which a work is written. In other words, pianists can 'visualize' key signatures and harmonic constructions on the piano keys.⁵

⁴ Because of the experiential nature of this analysis approach, the focus has been on the piano part rather than the composition as a whole; for that reason, in most cases only the piano's section of music is reproduced here.

⁵ I will acknowledge here that this is not always possible or desirable when learning repertoire from twentieth-century, where such tonal and harmonic procedures are often wholly absent; in the work under discussion, however, many examples where this technique of visualisation proved usefl did occur. This will be discussed in more detail in Chapter 4.

The intricate visual patterns that develop during the practising of a work can create what I refer to as 'anchor points' that are crucial for memorization and technical accuracy in both practise and performance. By the term anchor points, I am referring to visual cues (on the keys) that become apparent only when engaging with the work on the piano. Examples of these anchor points can be found in the Mahler's *Quartetsatz* mostly at points where there are technical difficulties such as the downward run in the right hand at bar 111 (see Example (iii)); and the large jumps and stretches such as in the left hand of bar 22-23 (see Example (iv)). These anchor points, in the analysis approach followed here, further add to the analysis of macrostructure that will be presented in the next chapter.

Example (iii): Gustav Mahler Quartetsatz bar 111



Example (iv): Gustav Mahler Quartetsatz bar 22-23



Anchor points can also become evident in harmonic progressions including cadences and key changes. Bar 66 - 67 (Example (v)) shows a perfect cadence linking (in my experiential analysis) Domain 1 and Domain 2.



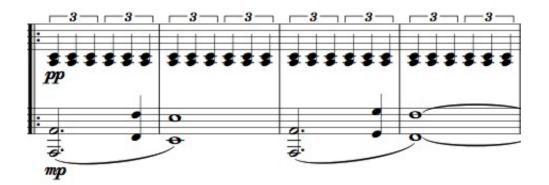


It must be added that when practising and performing a chamber work, it is generally accepted that the performer uses the score in both practising and performance. By the time a performer is on stage and ready to perform, the music is often used as a point of reference and gives a basic outline. The work becomes internalized and even though the score is still used to show outlines, the work is now a physical and sound structure, manifesting in performance as the result of the practising that has taken place in preparation.

The second sensory element is related to sound and listening, which includes the hearing of recorded renditions of the work and live performances as well as the intense listening that occurs during practice and performance. Here it is important to note that the score (as written on the page) and sound produced by the instrument are directly related to each other. This is made possible by the performer who, through practicing, works to meet the demands and requirements that a score poses. Here I refer to the learning of the notes played with the intention of creating an aural or sound representation. When hearing a piece for the first time on a recording or in live performance, an aural imprint of the work is made. This is in part how a pianist can recognize melodies, dynamics and rhythms, which help when learning a score for the first time: by means of a pre-established aural imprint of the work. Specific parts of a work can stand out and in the Mahler Quartetsatz this became apparent when creating and defining the domain outline. I was instantly able to recognize the main theme from what is now Domain 1 when the work was first heard and this theme was heard throughout the work. Later it will be shown that this theme and domain repeats numerous times.

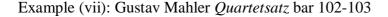
A secondary aim of the experiential analysis was earlier stated to be suggestions for a 'score edit' of the work; it is in this regard where the sensory element is perhaps most useful. Being practically engaged with a work could enable a performer to generate useful suggestions for the performance of the work (especially in a case such the present, where the composer added few original indications to assist with interpretation). For example, as a pianist, balancing the sound between the hands is of great importance. Listening to this balance while playing enables the pianist to adjust their touch and create more (or less) sound. Example (vi) shows how a pianist could best balance the melody and accompaniment. The melody is in the left hand and should be balanced to the top note (thumb) whilst keeping the accompaniment soft. The left hand sounds best, in my experience, played as legato as possible. For that reason I have inserted slur markings on the left hand melodies to ensure this.

Example vi): Gustav Mahler Quartetsatz bar 3-6



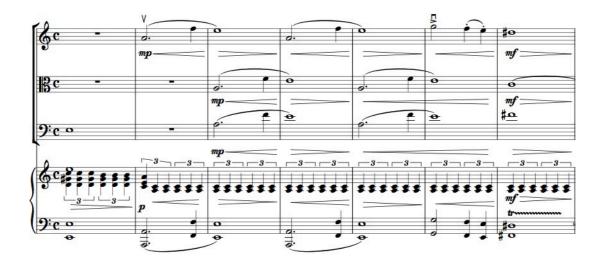
When preparing for a chamber music work, like the Mahler *Quartetsatz*, there are three (possibly four, if recordings are taken into account) listening stages evident, and insights on the work's structure are generated at all levels. The first is the listening that takes place during the initial learning and mapping of a work to where the work displays technical fluency. Linked to this is the notion that a performer would be rehearsing a solo part resulting in a part learned well enough to rehearse with the other musicians. The second level of listening would refer to the collaboration of all musical parts of the chamber work, when played together. The pianist (although it would apply to all in the chamber group) has become accustomed to their own part but is now required to listen and process more than their own musical contribution. This produces a matrix of sounds that are processed by the musician in order to fit and adapt their sound/tempo. This is evident in the Mahler *Quartetsatz* mainly due to the

collaborative nature of the work. Example (vii) shows bars 102-103 where the piano and strings play towards the work's climax. When rehearsing without the strings, the dynamic output of the pianist is not an issue, but when performed together, the pianist must balance with the strings in order to match their dynamic level. It would also be important for the strings players to maintain sufficient dynamic levels. This part of the work was placed in its own domain (Domain 6). When engaging with this domain in performance, I was overtly aware of the balancing in this section, but still tended to overpower the ensemble. I therefore had to listen and play far more sensitively in order to achieve this balance. Due to this issue it has stood out as a separate domain.





During these listening phases, an aural imprint of the work is developed and defined. This results in a more comprehensive understanding of the work than what could be generated from hearing the work on recording only, or by a score analysis alone. The question of 'what' is being listened for is of importance as from the early stages of learning a work there are numerous focal areas that receive attention in the learning of a score; these focus points influenced a my understanding of the structure of the work's domain outline which will be presented in chapter 4. Intense listening becomes particularly significant when dealing with a score such as Mahler's Quartetsatz, which in its original form provides very few indications of dynamics and in its edited form provides many indications that are not necessarily ideal. Intense listening on the part of the performer enables a new understanding of elements of the micro-structure of the work, and enables the performer to make informed suggestions in this regard. Phrasing, for example, requires intense listening in order to help grade the sound being produced by the instrument. Since a phrase has a high and low point (low being a softer dynamic) each note is judged by the pianist as to allow for an increase or decrease in the dynamic level of the sound. When hearing a particular note's dynamic level, the pianist (or musician) is able to adjust the way in which the next note is played in order to judge the over-all direction of the phrase. The example below (Example (viii)) shows the length of a phrase, including the string parts, bars 14-18. All the musical lines are part of the phrase and the pianist should, starting at bar 14, gradually increase the dynamic level in the left hand in order to create an increase in dynamic. This should be well graded and requires that the pianist listen intensely in order to judge the dynamic level of each note. Bar 18 could potentially be the high point of the phrase where after there would be a decrease in sound.



Example (viii): Gustav Mahler Quartetsatz bar 13-18

What is heard is also a direct reflection on what is being executed, physically. Sound and action (physical) are therefore directly linked to each other and this element adds a new dimension into the understanding of a work. This understanding refers to the form or structure in the Mahler *Quartetsatz*. Through performance, sound and touch help in understanding the music that is being performed. In this case it was a very important factor when identifying musical domains in the Mahler. What felt and sounded the same is shown in the domain outline provided on page 46. It is through sound and touch that specific domains have been identified and then repeated later on in the work. For example, performing music from Domain 2 is strikingly similar to Domain 10. The example below shows these similarities:

Example (ix) Gustav Mahler Quartetsatz bar 42-43 and 190-191



A further level of understanding that also impacts on insights into the structure of a composition and is generated through practical engagement with a composition is that of emotional involvement.

According to Kleinginna, the term emotion refers to (Kleinginna cited in Sloboda & Juslin 2001 75):

A complex set of interactions among subjective and objective factors, mediated by neural/hormonal systems which can (a) give rise to affective experiences such as feelings of arousal, pleasure or displeasure; (b) generate cognitive processes such as perceptually relevant effects, appraisals, labeling processes; (c) activate widespread physiological adjustments to the arousing conditions which may lead to behaviour that is often, but not always, expressive, goal-directed, and adaptive.

The term 'emotion' refers to how the music makes the performer and audience feel, as well as understanding the emotional content of the work. Catherine Foxcroft references Juslin and Sloboda who define music emotion as an emotion that is 'somehow induced by music' (Foxcroft 2014, 14). She goes on to distinguish between emotions that are perceived and induced. In the case of music this would be a very important distinction to make. Perceived emotion refers to an emotion brought on by a composition without the performer feeling that particular emotion, while induced emotions refer to the emotions that are actually brought about from the response to music (Gabrielsson 2001). In this context the performer's emotional experience is what is of importance. It is through perceived and induced emotions that sections of the structure of the Mahler *Quartetsatz* stand out in terms of their emotional quality. The emotional quality presented in Domain 1 is contrasting to the emotional character presented in Domain 2. These emotions were experienced as perceived emotion, from hearing and performing the work. The emotions play a fundamental role in the interpretation of a composition. There are specific musical elements, which evoke particular emotions. For example, a soft dynamic creates a different mood to that of a loud dynamic. The same could be said that a work in a minor key evokes different emotions to that of a work in a major key. The tempo of a work can create a sense of calm due to its slow tempo indication while creating excitement at a fast tempo. The Mahler *Quartetsatz* demonstrates this clearly. The work is written in a minor key, which certainly adds to the sombre character that the work presents. The domains

mentioned previously also demonstrate this in that the harmony (major or minor) and rhythmic feel are used to determine the domain categories. Domain 3 and 11 are in a major key and represent a similar mood and character. The example below shows the similarities between the domains while also highlighting the differences:

Example (x): Gustav Mahler Quartetsatz bar 54-55 and 202 - 203

Domain 3







Moving beyond analyses of macro-structure, understanding a work's 'truth content' is another significant aim of music analysis (Agawu 2004; Adorno 1982); a performer of music can discover this truth content by means of the constellation of factors functioning together in the process of practising a work. This 'truth content', I would argue, is often related to the emotional content of a composition. The emotional content within the Mahler *Quartetsatz*, as identified through the practical engagement with the work afforded by the practise dome, was instrumental in creating a structural outline of the composition. It is not only from score-based analysis that a musician can identify emotional content of a piece of music. The practical engagement with a piece of music brings the emotional content to the fore.

The constellation of senses and factors mentioned here are all interconnected in one process, which makes up the 'constellation dome'. Understanding of the music generated from within this space allows for an alternative interpretation of the music than can be afforded by a study of the score alone. It is within this constellation of factors that I meet with Mahler's piano quartet. Here a new interpretation of the work is gained that is not necessarily gained through analysing the score from traditional analytical methods.

4. Gustav Mahler's Quartetsatz

4.1 Introduction

The main aim of this section is to suggest a possible analysis of the macro-structure of Gustav Mahler's *Quartetsatz* for Piano Quartet (piano, violin, viola and cello) based on a practical engagement with the work. A further outcome of this 'experiential analysis' will be suggestions for score edits (representing insights on the micro-structure of the work). Mahler's *Quartetsatz* was composed in 1876. Sketches for a second movement exist, but the first movement is most often performed as an independent composition.

A central aim of this thesis is to explore the possibilities of using practice-based research as the foundation for the study and analysis of a composition, in order to allow for a deeper understanding of the work by means of the generation and harnessing of practical knowledge. Mahler's *Quartetsatz* will be used as the basis on which to probe the possibilities inherent in experiential analysis from a performer perspective. This chapter will provide a brief overview of Mahler's life and compositional output, in order to provide context for the discussion of his *Quartetsatz*, which will be the main focus of the chapter.

4.2 Gustav Mahler's 'Quartetsatz'

As mentioned in the introduction, Mahler's *Quartetsatz* constitutes a unique composition within Mahler's oeuvre as the only published chamber music work (without voice) by this composer. In spite of being completed already in 1876, the work was not performed again after the year of its composition until the 1960's, when it was revived by Peter Serkin and the Gallimar Quartet (Prim 2014). The singularity of this work has prompted the inclusion of the following section to contextualise Mahler's compositional output, in terms of biographical as well as musical considerations.

Gustav Mahler was born in Iglau, Austria in the year 1860, in a German-speaking Jewish community. Mahler took to the piano at an early age and was regarded as a wunderkind by the age of ten (Franklin 2009). He learned much about music in his younger years from attending band concerts and parades as well as receiving lessons from theatre musicians. In 1875 Mahler was accepted into the Vienna conservatory where he studied piano for three years, before focusing on harmony and composition, which he studied with Robert Fuchs and Franz Krenn (Franklin 2009). Here he completed his formal training and in the last year of his studies took on his first conducting roles where previously he had conducted only student rehearsals. Mahler went on to establish himself as a 'powerful and innovatory conductor' (Franklin 2009).

Unfortunately it is not easy to give an accurate description of how many works Mahler wrote during his time as a student, as the *Quartetsatz* is the only surviving manuscript. There are however records of works written before and after the *Quartetsatz* such as a piano quintet that was written for his graduation submission in the form of a scherzo; the score has never been found (Franklin 2009). Along with this Mahler completed an opera at the age of eighteen entitled *Herzog Ernst von Schwaben* which he later destroyed (Gartenberg 1978, 220). Other lost or destroyed works include a sonata for violin and piano, and a suite for piano and a symphony in A minor termed the *Nordic Symphony*. The reason for the destruction of these works was due to the dis-satisfaction that Mahler felt with these works (Gartenberg 1978, 221). The oldest composition to survive apart from the *Quartetsatz* is the cantata *Das Klagende Lied* which was written between the years 1878 – 1880; it was entered for the Beethoven Composition Prize (which Mahler did not receive) (Gartenberg 1978, 220).

Mahler would go on to write numerous works for voice and orchestra including three volumes of *Lieder und Gesänge*; a set of 12 songs given the title *Des Knaben Wunderhorn*; two sets of five songs, the first entitled *Rückert-Lieder* and the second *Kindertotenlieder*. His last composition of the type is the work for voice and orchestra entitled *Das Lied von der Erde* translated as 'The Song of the Earth', which was completed in 1909. Mahler was also known to write his own texts.

Of Mahler's works, it is his Symphonies that define him best and that are most wellknown. It is worth noting that Mahler's music did not always enjoy the success it has gained today. Botstein states that the 'popularity of the music of Gustav Mahler, on concert stages and in recordings, particularly in the last forty years, has been so commanding and widespread that it itself has become the subject of commentary and scholarship' (Botstein 2002, 1). Leonard Bernstein in the 1960's recorded the first complete set of Mahler symphonies; this brought Mahler to the forefront of symphonic music and allowed his music, in Botstein's words, to become the 'defining example of symphonic music' (Botstein 2002, 2). Mahler wrote and completed nine symphonies between the years 1884 and 1910.

Mahler is well known for his ten groundbreaking symphonies and numerous songs – some with orchestra and others piano (Franklin 2009). He is therefore evidently a composer with a very specific style, which favoured either the grand and spectacular (as in the symphonies) or the very intimate (as in the vocal compositions). It is of importance to place the *Quartetsatz* within these contexts and as such I would posit that the *Quartetsatz* falls in between each of these styles. It contains elements of grandeur while displaying elements of intimacy.

When reviewing the literature on the subject, it became apparent that the Quartetsatz was the only surviving manuscript of a chamber composition by Mahler. After composing enormous, ground-breaking symphonies, he never returned to the genre or completed his first attempt. In essence, this work could possibly hold thoughts and ideas of a 'forward thinking' composer, breaking the structural mould adopted during the classical period and Germanic tradition. By this I mean that Mahler was in this early work already breaking away from the traditional structures imposed on composition that Beethoven had previously questioned and experimented with in his compositions forty years earlier. These include musical elements like eighteenth century approaches to harmony, rhythm, melody, form and structure, articulation and tempo. To this I would add important artistic elements like emotion and intention. These may seem like a common thread within the realms of Romantic composition but here, Mahler, only a teenager, attempts a work of such a large scale and displays in just one movement both traditional Germanic musical structures (eg: Sonata form) while also displaying signs of moving outside of the box and engaging with structural experimentation.

A study of the literature further reveals a dearth of engagement with this particular work within Mahler's oeuvre, and few complete analyses of this composition exist (the analysis by Jeremy Barham, referred to below, is the only completed analysis of the work that could be located by this author). A possible reason for this could be that the work was 'lost' for many years until its rediscovery and first performance (since 1876) in the 1960's; also possible is that, because of the work's anomalous position in Mahler's oeuvre, it has not received similar amounts of attention as , for example, the larger scale symphonic works. This analytical project attempts to address this gap in the literature.

My investigation of Mahler's *Quartetsatz* will proceed on two levels: a formal analysis of the work will be followed by an 'edit' of the work, including performance suggestions such as dynamic markings, phrasing and so forth. I will analyse the quartet in two structural ways: the macrostructure (the form of the work) and microstructure of the work which would include factors like articulation, dynamics, tempo, difficulty, ensemble, patterns and balance. Each factor influences the other and so will be presented in a combined way. It is of importance that from the outset the reader understands that the analysis as presented below is a possible suggestion and not a definitive analysis. It is a suggestion based on a practical engagement with the piece of music.

4.3 Analysis

4.3.1 Macro-structure: Form

One can analyse the work from a form perspective and conclude that Mahler used sonata form as the composition structure. Franklin refers to the piano quartet thus: 'this purposeful sonata structure in A minor demonstrates sympathetic knowledge of Schubert, Schumann and Brahms' (Franklin 2009). Jeremy Barham also refers to the sonata structure in the *Quartetsatz*, where he refers to 'exposition', 'development' and 'recapitulation' in the book *The Mahler Companion* (Barham 1999, 82). The sonata form structure can be found in the work using bar numbers. The exposition could be said to begin at bar 1 and conclude in bar 66 where the traditional repeat bar line is

situated (the exposition is generally repeated in sonata form). The development runs from bars 67 to 150 and the recapitulation begins in bar 151 until 173.

Sonata form is traditionally encountered in a multi-movement work such as a full sonata. Why Mahler chose to compose this work in sonata form cannot be answered but could possibly be due to his youth and compositional experimentation by looking back and using traditional compositional forms. During the Romantic period, composers increasingly used sonata form less often, opting for freer forms (Liszt's 'Symphonic Poems' are good examples). While this work could plausibly be analysed as an example of sonata form, I will attempt an alternative analysis of form in this work, which will be suggested through my practical engagement with and experience of the composition.

As mentioned, the work does conform to some degree to a sonata form structure. It shows evidence of an exposition (bars 1-66), development (bars 67-150) and recapitulation (bars 151-234) suggesting sonata form; these divisions display tonal characteristics that support a sonata form analysis. Traditionally (in the classical period circa 1750-1820) the exposition began in the tonic key presenting two themes. The first theme is in the tonic and the second theme is in the dominant or relative minor or major allowing the cadence at the end of the exposition to end in the dominant (Webster 2009). The development section opens in the dominant - this is where a composer develops thematic ideas. These ideas are combined with distantly related keys, tonal instability and tension until a return is finally facilitated to the tonic, after which follows the recapitulation. The recapitulation generally presents material that is identical to the exposition but with slight variations in that the first and second themes are presented in the tonic providing a sense of completion and balance; a coda normally completes the structure (Webster 2009). Much of sonata form has to do with tension and release, created by means of tonal relationships (the leading-tone in the dominant of a key, for example, which needs to resolve to the tonic). The expositions present the home key whereafter the development section presents tension. This tension is then resolved when returning to the tonic in the recapitulation.

During the Romantic period, the sonata form structure underwent significant changes. Webster goes on to explain that the main difference between Classical (eighteenthcentury) sonata form structures and the nineteenth-century sonata form structure is the 'greatly expanded system of tonal relations'. This means that the themes and sections were not necessarily linked by the tonal relationships typical to Classical era sonata form: tonic, dominant, subdominant and relative major/minor relationships. In the Quartetsatz other tonal relationships are used such as foreign modulations (modulations to distantly related keys), enharmonic modulations and chromatic modulations. This disregards a fundamental element within the sonata form structure and therefore 'loosens' the harmonic structures that usually provide the binding elements of sonata form. The fundamental element refers to the idea that the structure should always move within the tonal boundaries of the tonic, and always with the aim of returning to the tonic. The unstable tonal structures particular to the nineteenthcentury (and very much present in the *Quartetsatz*) represent the tendency towards emotional expressiveness and drama (rather than logical progression and balanced form) that was characteristic of the Romantic era. In essence, this creates a problem for applications of 'traditional' sonata form analyses, which rely on the pre-supposed tonal and structural relationships that sonata form presents. Mahler's Quartetsatz is a prime example of a nineteenth century approach to sonata form: as mentioned above, the several unusual modulations and non-traditional tonal approaches suggest that an approach to analysis other than sonata for analysis could be useful here.

From a performance perspective, the work may not feel and sound like sonata form due to the absence of clear or overt harmonic connections. For instance, the first key presented in the work is A minor and the work remains in that key from the beginning up until bar 54, where a suggestion of F major is given before returning to the tonic.

Example (xi): Gustav Mahler Quartetsatz bar 1-2; 54-55; 56

A minor



F Major







This is not the traditional harmonic relationship that one would expect to see in a typical sonata form. This is only one example, but there are many similar identifiable examples in this work. Through practical involvement with this work I have come to

believe that Mahler's *Quartetsatz* can be divided into different sections within the composition that do not conform to the sectionality typical of sonata form. I have chosen to refer to these sections as 'domains'. Each 'domain' contains specific compositional (including sensory, emotional and technical characteristics) that are experienced as unifying elements when playing. These domains can also be seen on the score and the identification of these domains has suggested a different construction of the work as opposed to the sonata form construction mentioned earlier.

Table 1 illustrates how the Mahler quartet can be divided up into different domains, along with bar numbers, rhythmic changes and key changes. There are two columns for each domain. The column titled 'Domain a' represents the number of Domains; the column titled 'Domain b' represents the repeated domains. For example, Domain 4 makes use of the same material as Domain 1. In performance Domain 4 is strikingly similar to Domain 1 despite small differences: and they both use the same rhythmic and motivic content in the strings. In the analysis below the sonata form structure is indicated in the analysis to show where the domains fall in the sonata from structure.

TABLE 1 - MAHLER PIANO QUARTET – MACRO STRUCTURE				
Domain	Domain	Bar	Rhythm	Кеу
(a)	(b)	Number		
EXPOSITION	J			
Dom 1		1 - 41		A Minor
Dom 2		42 - 53		A minor
Dom 3		54 - 66		F Major
DEVELOPM	ENT			
Dom 4	Dom 1	67 – 91		A Minor
Dom 5		92 – 97		A Major
			'CADENZA' - PIANO	
Dom 6		98 - 115		D Minor
Dom 7		116 - 150		D Minor G Minor
RECAPITULATION				
Dom 8	Dom 1	151 - 173		A Minor
Dom 9	Dom 5	174 - 189		F# Major
Dom 10	Dom 2	190 - 201	лл	A Minor
Dom 11	Dom 3	202 - 215		A Major
Dom 12	Dom 6	216 - 222	66	A Minor
			'CADENZA – VIOLIN'	
Dom 13	Dom 5	223 - 234		A Minor

When experiencing the domain structures in practice and performance it must be made clear that the analysis is based on my own engagement with the piano part in particular and to a lesser extent how this part is integrated with the strings.

Domain 1 is in the tonic key of a minor. It runs from bar 1 until bar 41 and appears first in the structure of the work. It is characterised by a triplet accompaniment in the piano and is in simple duple time. This domain introduces the work's main theme. Domain 2 begins in bar 42 until 53 and is again in the tonic key of A minor. It contrasts the first domain in rhythm as the basis of this domain is written in straight quavers (rather than triplets). The time signature is now in four time and the domain is entitled Entschlossen ('with decisiveness'). Domain 3 begins in bar 54 and concludes in bar 66. The basic rhythm is now based on the triplet and contrasts the first two domains in that the music is now in F major tonality. This section is mostly accompanimental for the pianist but presents a new theme. Domain 4 returns to the tonic key of A minor. It runs from bar 67 until bar 91 and is characterised by an underlying triplet accompaniment. Essentially this domain is a repeat of domain 1: it contains most of the same material that is presented in the first domain. Domain 5 begins in bar 92 and finishes in bar 97. This domain is identifiable by its A major tonality and a semiquaver accompaniment figure. It is not a long domain, but is contrasting enough to place into a separate domain. It also contains a quasi-cadenza in the piano part. Domain 6 begins in bar 98 until 115; its specific character is determined by a triplet accompaniment. It contains the densest textures presented in the work; I experience this domain as the climax of the composition. Domain 7 runs from bar 116-150 and is characterised by semi-quavers and very much repetition. It is based in D minor but also contains fragments in G minor and E flat major. Domain 8 returns to the tonic key of A minor. It starts in bar 151 and finishes in bar 189, and is strongly reminiscent of Domain 1. Like Domain 1 it also makes use of a triplet accompaniment and they share the same string motifs. Domain 9 occurs from bar 174 until bar 189. In the key of F sharp minor, this domain is identifiable by a semiquaver accompaniment. This domain is a repeat of domain 5 but in a new key. Unlike Domain 5, it does not contain the cadenza referred to earlier but modulates to the tonic key of A minor, which is used in the following domain. Domain 10 begins in bar 190-201 and uses a quaver accompaniment. This domain is a repeat of Domain 2 but contains small changes in the piano and cello parts. The melodies are still the

same as domain 2. From bar 202 until bar 215 Domain 11 occurs, beginning in A major and typified by a triplet accompaniment. This domain is a repeat of Domain 3 (54-66) but it is now based in a new key. Due to the major key, Domain 11 is warm in character. It ends with a modulation into the tonic key, which brings on Domain 12, a short domain from bar 216 to 222 where the theme that begins in domain 6 is restated. The theme is presented in the tonic key by all instruments. Combined in this domain is a quasi-cadenza for the violin. Domain 13 is the final domain and is a repetition of Domains 5 and 9. This domain is in A minor and makes use of semi-quavers in the piano part. The melodies present in Domains 5 and 9 are presented here too.

The over-arching elements that stand out when placing the relevant sections of this work into domains consist of rhythms and keys. The sections are visible on the score; often shown by a double bar line, indicating some kind of change. In some cases, there is a harmonic connection between the domains such as the change from Domain 1 to Domain 2 where a perfect cadence connects them. Another example is evident between Domain 8 and 9 where again a perfect cadence is used to connect the domains. As laid out in the table, Domain 1 (bars 1-41) is in the key of A minor and represents the tonic of the work. Domain 2 (bars 42-53) remains in the tonic key before moving into Domain 3 (bars 54-66) where there is a modulation to F major. The key relationship between Domain 2 and 3 is that of a third relationship. It is a significant modulation as a major key is introduced instantly changing the character. Domain 4 (bars 67-91) returns to the tonic key and is very much a repeat of Domain 1. This is due to the content that they both share. They share the same key, basic rhythmic structure and melodic material. Domain 5 (bars 92-97) finds a modulation to the parallel major (A major) providing a sense of warmth after the turbulent ending of Domain 4. This harmonic movement is helpful when moving into Domain 6 (bars 98-115) that is based in D minor, as it takes on dominant function allowing for a V - Imodulation. Just before this modulation occurs a *quasi cadenza* is introduced on the piano. In performance, this particular part became a very real 'landmark' within the work. This 'landmark' is mostly due to the nature of the piano part, which demonstrates loud double octave playing which resembles kind of writing a pianist could expect to encounter in a concerto or very romantic work. Domain 7 (bars 116-150) remains in the key of D minor with minor deviations into other keys such as G minor. At the end of Domain 7 a slow transition into Domain 8 occurs. Domain 8 is a

repeat of Domain 1. It uses the original triplet figure as well as the string themes. This may resemble the recapitulation within sonata form, but what follows Domain 8 (Domain 1) is not a repetition of what was used in the 'exposition' (Domain 1-4). Domain 8 (bars 151-173) now returns to the tonic key which represents another repeat of Domain 1. The most far off modulation occurs between Domain 8 and Domain 9 (bars 174-189) where a lower third relationship exists (A minor – F# major). This is a repeat of Domain 5 but in a different key, now in F sharp Major and not A major. Domain 10 (bars 190-201) returns again to the tonic key and repeats the same material as Domain 2. Another parallel modulation that occurs is in Domain 11 (bars 202-215). The key is now A major and no longer A minor. In the final two Domains, the key remains in the tonic but still separated by rhythmic features and most importantly a *quasi cadenza* by the violin, which is similar to the same type of cadenza that occurred between Domains 5 and 6.

This analysis suggests that, experientially, Mahler's *Quartetsatz* reveals a structure that consists of multiple short sections that could be said to occur in a 'through-composed' manner; in other words, the work can be seen as constituted from multiple condensed musical sections, following on each other in a fluid construction. While an analysis of sonata-form is also appropriate to this composition, I would like to posit that the form of this work can be *experienced* as a through-composed structure, rather than (only) as a sonata form. Such a through-composed structure is in line with the emotional demands of nineteenth century composition (generally speaking). Such an interpretation perhaps provides a useful way to perceive Mahler's composition: as a work no longer bound by the constraints of sonata form, but able to move freely between different tonal centres, spaces of tension and release and focal points of differing emotional content.

4.3.2 *Micro-structure: Performance Indications*

This thesis explores not only possibilities for creating macro-structure analysis based on practical experience of a composition, but also the extent to which performers can use their practical experience and expertise on the micro-structural level. This section will suggest performance indications and some fingering possibilities which the author has found to be advantageous in the execution of performance of Mahler's *Quartetsatz*.

Other than notes, a composer usually includes performance directions in the score. Some composers are more generous with their directions while others tend to leave that more to the discretion of the performer. These markings are seen as having an important impact on a work's character and interpretation. In question are the edition and editing. Here editing refers to the added direction markings with regards to tempo, dynamics and articulation, phrasing and pedalling, amongst others. In the Mahler *Quartetsatz*, the performance directions are few. It was first published in 1973 by Hans Sikorski (in spite of being composed in 1876) and later edited by Peter Ruzicka. The composer himself had made very few editorial markings.

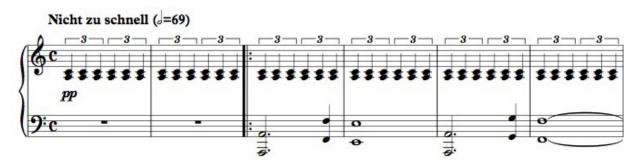
The original *Quartetsatz* manuscript contains no dynamic markings; Ruzicka however gives suggestions with regards to tempo, dynamics and articulation. These editorial suggestions are presented within square brackets in the Sikorski edition. The Universal Edition version of the work is a close rendition of the original manuscript, with only Mahler's original indications included. One could speculate that Mahler provided so few indications (especially bearing in mind that in his symphonic works Mahler provides extensive performance indications) perhaps because he was still a very young composer, and the work was not set to be published at the time of composition.

Ruzicka provides only one dynamic marking for the pianist during the first 41 bars of music. This lack of performance direction leads the performer to question their artistic boundaries when engaging with the work. It is not to say that following the editorial markings would be wrong, as they are often helpful and insightful to the performer, but not all editors are necessarily studied pianists or highly devoted interpreters. They may not have experienced the work as a performer has.⁶

⁶ It should be added that the performer must study the musical genres thoroughly with regards to stylistic elements if the intention is to play the closest possible rendition of the work in a performance or recording.

A lack of editorial markings on behalf of the editor is not necessarily a negative. This is similar to the markings in baroque scores where the interpretation is left mostly to the performer. Pianists are able to decide on musical elements like tempo, dynamics and articulation, which presents a great freedom when interpreting a piece. In turn this entails that a performer ends up producing a performance which is more personal, authentically their own rather than a 'carbon copy' of what the score intimates. These are the type of elements that sets different performers' renditions apart from each other. From a performer's perspective the musical content of a work would guide aspects of a performance like phrasing, melody, accompaniment and tempo. I would like to posit that an engagement with a work on a practical level could lead to a better understanding of the composition and its interpretation, and enable useful suggestions in terms of performance indications. Throughout this section, Ruzicka's editorial suggestions will be remarked upon in terms of their perceived applicability in performance; in some instances, I have found that his suggestions are practical, but in other instances my own experience of the work have necessitated alternative suggestions.

Mahler's own tempo-marking reads: *Nicht zu schnell* translated as 'not too fast' (Example (xii)). A metronome marking was added as an edit, 69 to the minim suggesting that the work should be felt in two (it is written in 4/4 time but should be felt in divisions of two beats per bar). This works well for the piano part, which begins the work with triplets in the right hand, which should be kept soft and legato creating a sustained sound and providing a forward-moving feel to the work. To play in a slower tempo than what is suggested can cause the work to drag and would omit the feeling of playing in simple double time. The tempo provided by the editor in the beginning is a worthy performance indication and should therefore in my opinion be used.



Example (xii): Gustav Mahler Quartetsatz bar 1-6

The first theme begins in bar 3. It is played under the triplet accompaniment in octaves and is used throughout the work as points of return. Dynamic markings are editorial and suggest the work starts piano [p]. Through practical engagement with the work it becomes apparent that it helps to start rather at [pp] as this would help with progression in the music and to capture the mood or character of the piece (this alternative is indicated in the score).

The first Domain of the work runs from bar 1 to 41 where after the initial theme is restated with the strings, which joined the piano in bar 9 (example (xiii)). Here the bass of the piano should match the cello in dynamic levels indicated in the example; this is not specifically indicated by Sikorski.

Example (xiii): Gustav Mahler Quartetsatz bar 9-10

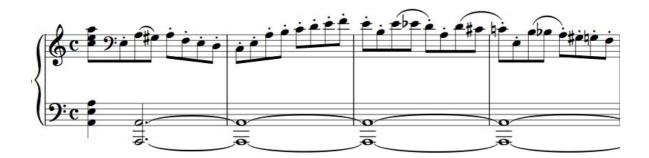


Physically, this section up to and including bar 41 is very much driven by the piano, which has been providing the inner rhythmic drive. It can be easy to allow the

accompaniment to increase in dynamic level as the writing becomes more exciting and dense. Regardless of the writing the performer should practise keeping the dynamic level consistent with the other parts playing at the same time (it requires a softer touch and smaller movements in order to achieve this). The rhythmic difference between the left and right hands creates a sense of struggle, as it is 3 versus 4. This becomes particularly apparent when engaging with the work on a physical level (although arguably this could also be discerned to some degree by means of score analysis also).

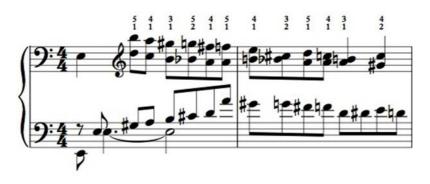
The next example refers to the beginning of what I have identified as 'domain 2' (Example (xiv)). The composer entitled this section *Entschlossen* translated as 'determined'. The sense of 'determinedness' is reinforced by the change in rhythm. The triplets are now straight quavers. This suggests a stricter or more 'square' sense of rhythmic gestalt. Another contributing factor would be the time signature, which is now in four and no longer in half time. To add to this change in texture and rhythm, a suggestion would be to play the quavers staccato as this creates more excitement and energy, and it helps the right hand as it is now playing directly with the strings (rhythmically). Through physical interaction with the work, playing this passage staccato allows a more direct emphasis on each note. I would suggest a performer might want to add slurs at bars 44 and 45 (chromatics) to create more interest. Apart from this, the chromatic line creates a sequence and placing slurs on the specific notes emphasises this. These suggestions are indicated in the music example.

Example (xiv): Gustav Mahler Quartetsatz bar 42-45



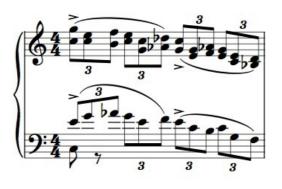
Mahler's use of chromatic 6ths in bars 46 present a particular difficulty with the fast jumps in the left hand followed by a chromatic line played at the same time. Of importance here is the use of fingering. It is useful, especially at speed, to alternate between finger 4 and 5 in the soprano line. This will also help in executing a legato line (see Example (xv)).

Example (xv): Gustav Mahler Quartetsatz bar 46 and 47



At bars 50 this rhythmic (3 against 2) pattern is again changed. An off-beat pedal point is placed in the left hand fifth finger. It feels as though a break is being put down in the music. When heard, bars 50-53 sound simplistic, but physically the co-ordination between the hands creates a sense of difficulty. At bar 53 (Example (xvi)), the music again changes to triplets in both hands. This passage is technically tricky but can be simplified if small accents are added to the first triplet on beat one and three (I have indicated these additions in the example). This breaks the triplet lines into two separate passages. The performer therefore thinks of two small passages and not twelve separate notes.

Example (xvi): Gustav Mahler Quartetsatz bar 53



Domain 3 starts at bar 54. The piano part is spread further apart in that the hand must stretch to meet the interval requirements, creating a sense of broad space. It is also of importance that there are constant harmonic changes which show that the music is unsettled. Bars 58 and 60-61 pose a technical issue in the stretch required to execute the notes. The interval here is a tenth and at speed can be somewhat uncomfortable. Example (xvii) shows the piano part in bar 60 and 61. The left hand plays a semibreve on middle C, which is then also played by the right hand and therefore cannot be held on for its full duration. It is this C that creates the uncomfortable stretch. In order to improve this issue a take-over with the right hand can be used or the chord can be broken and rolled. For technical precision, it is preferred to do a take-over, which is shown in Example (viii). The right hand plays the C and allows the left hand a smaller interval of a fifth.

Example (xvii): Gustav Mahler Quartetsatz bar 60-61

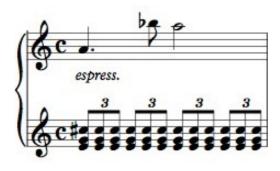


Example (xviii): Gustav Mahler Quartetsatz bar 60-61



It is after this that Domain 1 is again repeated except that now it is in quadruple time and not in the original duple time; there are however still similarities in musical content. This particular domain requires impeccable listening as the string parts all take turns playing the fragments from the different themes. The first is from Domain 1 and the second from Domain 2. The piano part is still very much accompanimental but adds to these melodies in bars 74 (example (xix)) where the performer should play out (*espressivo*). This is not indicated in the Sikorski version of the score, but should in my opinion be played as such considering the other parts are silent during that bar and the piano part is contributing the fragmented melodies.

Example (xix): Gustav Mahler Quartetsatz bar 74



From bars 88 (Example (xx)), Mahler inserts a left hand tremolo on a pedal point. This creates excitement and intensity but must be played in context of the section, not allowing them to overpower the right hand and ensemble, in particular the cello. It might be best to begin the left hand tremolo at a soft (p) dynamic and then only crescendo in bar 90 (as indicated in the example), which leads into the following domain.

Example (xx): Gustav Mahler Quartetsatz bars 88-90



This leads to the third domain. Evidence of romantic writing is seen in the piano part of Domain 6 starting at bar 98 (example (xxi)) This can be seen in the left hand, which is written with octaves deep in the bass along with densely repeated triplet chords. This particular domain exudes excitement and is also comfortable to play. The pianist should try not to overpower the rest of the ensemble in this section. This is due to the dense writing in the piano, which can increase the amount of sound that is being produced. To avoid overpowering the ensemble the pianist should lower the dynamic to *mezzo forte* while the strings sustain the marked fortissimo.

Example (xxi): Gustav Mahler Quartetsatz bar 98-100

In order to balance the piano and strings correctly, the pianist should balance their own part very clearly so that more of the melody and less of the chord is heard. This also applies to the balance between the hands. A heavy left hand can overpower the ensemble.

The transition between this domain and Domain 7 consists of a descending base line which settles on an A pedal point (bar 116). Domain 7 requires stamina and precision. The left hand contains jumps between the pedal point mentioned earlier and chords in a dotted rhythm. Of interest here are the left hand chords from bar 116 onwards (Example (xxii)). These chords provide the harmonic outline of the semi-quaver passages in the right hand. No articulation is provided for these chords and it would be helpful to place a *staccato* on the chord that precedes the chord that falls on a strong beat, which is marked with a tenuto line (indicated in the example). This domain may need to be memorized, as the visual aspect is important for technical accuracy. Memorising this domain proved to be easy and helpful in performance. This particular section can become monotonous but can be saved with good phrasing and

dynamic variation. It will help to begin bar 116 with a *subito* piano. This way the dynamics can be used to build interest and excitement. Phrasing every two bars will create further interest.

Example (xxii): Gustav Mahler Quartetsatz bar 116-119



Domain 9 (bars 174-189) requires large stretches in the piano part. The right hand chords on beat 1 of bars 174, 176, 178 (Example (xxiii)) and 180 can be rolled in the case of a small hand that struggles to manage the stretch.

Example (xxiii): Gustav Mahler Quartetsatz bar 178



These are just some suggestions for edits of the score at the micro-structural level. While these suggestions are not commonly associated with music analysis (and by no means exhaustive), they are included here to suggest further ways in which practical engagements with compositions can lead to useful and shareable results.

5. Conclusion

This thesis set out to explore the possibilities of combining practice-based research and analysis in a single study approach. The research culminated in a suggested analysis of Gustav Mahler's *Quartetsatz* for piano and strings; this analysis was generated from the performer's experience of this composition, generated from many different levels of practical engagement with the work. It attempted to reconceptualize the position of the 'knower' or 'experiencer' - the performer - of music as one with primary access to knowledge of a musical work, and therefore ideally suited to offer analyses and other insights on this composition.

The motivation for engaging with PBR as a research framework was suggested through my personal background as a student of primarily music performance: PBR provides new ways of analysing and researching that incorporates aspects of both the practical and research components particular to the music discipline. My exploration of PBR was informed by phenomenological approaches to music scholarship. As a field of enquiry which concerns itself with experience, the phenomenology of music suggests that the mind and body of the practitioner are important sources of musical insight. Following on this, Bourdieu's notion of habitus was explored in order to explain the situatedness of a performer when engaging with musical works, on a practical level but also on the level of research and analysis. The concept of habitus was developed to include a constellation dome of different factors perceived to be related to a music practitioner's involvement with musical compositions.

While it is hoped that the analysis presented here will provide useful insights into alternative readings of musical form in Mahler's composition, an even more significant research outcome is perceived to be the articulation of the *space* from whence new insights into music (on the widest possible variety of levels) can be discovered and articulated: that of the habitus of a performer of music. Unlocking and harnessing the information most readily available to a performer, who has direct, first-person experience of musical works, can ideally open up new horizons for music

scholarship across the board. This thesis aims to make a small initial contribution to this project, particularly in its articulation of a performer's habitus, and in its suggestions for an alternative reading of Gustav Mahler's *Quartetsatz*.

6. Appendix



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*) vgl. Editionsbericht T.109

















*) 203-215 vgl. Editionsbericht









*) Ms: tremol.



7. List of Sources

Agawu, Kofi. 2004. 'How We Got Out Of Analysis, And How To Get Back In Again' in *Music Analysis*, vol. 23, pp. 267-286.

Barham, Jeremy. 2002. 'Mahler's First Compositions: Piano Quartet and Songs', in Donald Mitchell & Andrew Nicholson (eds.) *The Mahler Companion*, 2nd rev. edn Oxford University Press, 2002, pp. 597–607

Bent, Ian D. 2009. 'Analysis'. Grove Music Online. Internet source: www.oxfordmusiconline.com.wam.seals.ac.za/subscriber/article/grove/music/41862p g2. Accessed December 14, 2014.

Batstone, Philip. 1969. 'Music Analysis as Phenomenology' in *Perspectives of New Music*, vol. 7 no. 2, pp. 94-110.

Bologna Declaration. 1999. Joint Declaration of the European Ministers of Education convened in Bologna on the 19th of June 1999. Internet source: http://ec.europa.eu/education/policies /educ/bologna/bologna.pdf. Accessed 13 March 2014.

Bordorff, Henk. 2007. 'The Debate on Research in the Arts' in *Dutch Journal of Music Theory*, vol. 12 no. 1, pp. 1-17.

Bourdieu, Pierre. 1990. *The Logic of Practice*. Translated by R. Nice. Stanford: Stanford University Press.

Bowman, Wayne D. 1998. *Philosophical Perspectives on Music*. Oxford: Oxford University Press.

Barham, Jeremy. 2007. 'Juvenilia and early works: from the first song fragments to Das Klagende Lied' in *The Cambridge Companion to Mahler*. Cambridge: Cambridge University Press.

Candy, Linda. 2006. *Practice-based Research: A Guide*. Internet source: http://www.creativity andcognition.com/resources/PBR%20Guide-1.1-2006.pdf. Accessed 5 April 2014.

Clarke, David and Clarke, Eric. 2011. *Music and Consciousness: Philosophical, Psychological and Cultural Perspectives*. Oxford: Oxford University Press.

Cobussen, Marcel. 2007. 'The Trojan Horse: Epistemological Explorations Concerning Practice-based Research' in *Dutch Journal of Music Theory*, vol. 12 no. 1, pp. 18-32.

Coessens, Kathleen; Crispin, Darla and Douglas, Anne. 2009. *The Artistic Turn: A Manifesto*. Leuven: Leuven University Press.

Cook, Nicholas. 2001. 'Theorizing Musical Meaning' in *Music Theory Spectrum*, vol. 23 no. 2, pp. 170-195.

Cusick, Suzanne. 1994. 'Feminist Theory, Music Theory, and the Mind/Body Problem' in *Perspectives of New Music*, vol. 32 no. 1, pp. 8-27

DeBellis, Mark. 1995. *Music and Conceptualization*. Cambridge: Cambridge University Press.

DeBellis, Mark. 2002. 'Musical Analysis as Articulation' in Journal of Aesthetics and Art Criticism, vol. 60 no. 2, pp. 119 – 135.

docARTES. 2014. *Doctoral Studies in the Arts*. Internet source: http://www.docartes.be/nl. Accessed 3 September 2014.

Draper, Paul and Harrison, Scott. 2010. 'Reflecting on Reflection-in-action: Supervising Practice-based Doctorates in Music'. Full Paper Proposal, ISME Conference 2010. Unpublished; paper made available by the authors.

Draper, Paul and Harrison, Scott. 2011. 'Through the eye of a needle: the emergence of a practice-led research doctorate in music' in *British Journal of Music Education*, vol. 28, pp. 87-102.

Ferrara, Lawrence. 1984. 'Phenomenology as a Tool for Musical Analysis' in *The Musical Quarterly*, vol. 70 no. 3, pp. 355-373.

Franklin, Peter. 2009. 'Mahler, Gustav' in *Grove Music Online*. Internet source: www.oxfordmusiconline.com.wam.seals.ac.za/subscriber/article/grove/music/40696. Accessed March 9, 2014.

Gabrielsson, Alf. 2001-2002. 'Emotion perceived and emotion felt: same or different?' *Musicae Scientiae*, Special Issue: 123-147.

Gartenberg, Egon. 1978. 'Mahler: The Man and His Music'. Macmillan Pub Co

Georgii-Hemming, Eva; Burnard, Pamela; Holgersen, Sven-Erik. 2013. *Professional knowledge in music teacher education*. Farnham: Ashgate.

Griffiths, Paul. 1994. *Modern Music: a concise history*. New York: Thames and Hudson.

Johnson, Mark. 1987. *The Body in the Mind: the Bodily Basis of Meaning, Imagination and Reason*. Chicago: University of Chicago Press.

LeGuin, Elisabeth. 2006. Boccherini's Body: An Essay in Carnal Musicology. Berkeley: University of California Press.

Lochhead, Judy. 1986. 'Phenomenological Approaches to the Analysis of Music' in *Theory and Practice*, vol. 11, pp. 9-13.

Ludwig, Loren M. 2011. *Equal to all alike: a cultural history of the viol consort in England, c.1550 – 1675.* Unpublished PhD dissertation, University of Virginia.

Mahler, Gustav. *Klavierquartett.* Hamburg: Hans Sikorski, 1973 http://imslp.org/wiki/Piano_Quartet_(Mahler,_Gustav)

National Research Foundation. 2012. Definition of Research. Internet source: http://www.nrf.ac.za/presidents_awards.php. Accessed 8 April 2012.

Nelson, Robin. 2006. 'Practice-as-research and the Problem of Knowledge' in *Performance Research* vol. 11 no. 4, pp. 105-116.

Oxford English Dictionary. 2013. Oxford: Oxford University Press.

Pears, David. 1971. What is Knowledge? London: Allen and Unwin Ltd.

Prim, Shih-Ni. 2014. *Mahler's Piano Quartet in a minor (c. 1876)*. Internet source: http://libertyparkmusic.weebly.com/blog/mahlers-piano-quartet-in-a-minor-c-1876. Accessed 3 January 2015.

Reason, Matthew. 2006. *Documentation, disappearance and the representation of live performance*. New York : Palgrave Macmillan.

Roholt, Tiger C. 2009.

Schippers, Huib. 2007. 'The Marriage of Art and Academia: Challenges and Opportunities for Music Research in Practice-based Environments' in *Dutch Journal of Music Theory*, vol. 12 no. 1, pp. 1-17.

Scott, John and Marshall, Gordon (editors). 1998. *A Dictionary of Sociology*. Oxford: Oxford University Press.

Sligter, Jurrien. 2007. 'Performer and Research' in *Dutch Journal of Music Theory*, vol. 12 no. 1, pp. 41-49.

Smith, David Woodruff. 2008. *Phenomenology*. Internet source: http://plato.stanford.edu/entries/phenomenology. Accessed on 20 February 2014.

Stark, James. 1999. *Bel Canto: A History of Vocal Pedagogy*. Toronto: University of Toronto Press.

Stolp, Mareli. 2012. 'Practice-based Research in Music: International Perspectives, South African Challenges' in SAMUS vol. 32, pp. 77-90.

Stolp, Mareli. 2012. Contemporary Performance Practice of Art Music in South Africa: A Practice-based Research Enquiry. PhD Dissertation: Stellenbosch University. Tilmouth, Michael. 2009. 'Tovey, Sir Donald' in Grove Music Online., www.oxfordmusiconline.com.wam.seals.ac.za/subscriber/article/grove/music/28234. Accessed January 7, 2015.

Walser, Robert. 1991. 'The Body in the Music: Epistemology and Musical Semiotics' in *College Music Symposium* vol. 31, pp. 117 – 126.

Waterman, Christopher A. : ' Juju History: toward a Theory of Sociomusical Practice', Ethnomusicology and Modern Music History, ed. S. Blum, P.V. Bohlman and D.M. Neuman (Urbana, IL, 1991), 49–6

Webster, James. "Sonata form." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed September 11, 2014, http://0-www.oxfordmusiconline.com.wam.seals.ac.za/subscriber/article/grove/music/26197.