Autoethnographic reflections on the acquisitional stages of learning a piano work for performance

by

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ABSTRACT

Performing music at an advanced level is a uniquely challenging act requiring intense preparation and a multi-modal learning approach. The path from the practice room to the stage is a complex and distinctive path that differs from performer to performer. Frequently performers have an incomplete understanding of not only their own individual path of learning but about learning in general.

This study explored, tracked and documented the acquisitional shifts during the piano performance preparation process by using an inductive and autoethnographic study design, so that the potential coherence between shifts, levels of learning, and subjective responses at intervals during this process could be traced, with a view to a better understanding of the acquisition process. The study used a qualitative, autoethnographic methodology for data collection and analysis. A system of triangulation was used, interweaving the interpretation of data from various subjective and literature driven lenses. The Brahms *Intermezzo* Op. 119 No. 1 was used as the base line musical piece. The process from starting to learn the score to being ready to perform the piece was selected as the trajectory for data gathering for this study. The acquistional process was divided into six selected sessions in the trajectory and the description and analysis was undertaken in those six sessions.

Although no set conclusions were reached the study provides a comprehensive thick description presented through the triangulation process in the study design. This may present future researchers with further insight into investigating, describing and understanding the subjective experiences of the piano performer's trajectory of the acquisition of a piano score.

KEYWORDS

- Acquisitional shifts

- Preparing

- Musical performance

- Autoethnography

- Learning

- Kolb

- Bloom

- Whole-brain

- Competency ladder

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Introduction

1.1 Introduction and background

> Performing music at an advanced level is arguably the most demanding of human accomplishments. Making music involves an intricate integration of multimodal sensory and motor information and monitoring via auditory feedback (Altenmüller & Schneider 2009: 332).

In order to trace and understand the processes and shifts that a performer adheres to when learning and practising a piano score for performance, the concept of 'learning' has to be defined. Goel (2011) posits that learning is defined differently when approached from various fields. He further offers that no less than 111 theories can be traced regarding "human learning, intelligence and thinking". Caine, Caine, McClintic and Klimek (2005: 2) maintain that all learners have an individual style and uniqueness (2005: 4) and will thus learn differently. Rita Dunn states in an interview with Koch (2007: 4) that an awareness of learning styles is important for the learner as well as the teacher. She argues that all work one does takes place by drawing on a particular preferred learning style. It is stated by Lovelace (2005:176-177) that Dunn and Dunn (1993) posit that learning styles are "the way that students begin to concentrate on, process, internalize, and remember new and difficult academic information" (Ibid). Kolb (1984: 38) argues that "[L]earning is the process whereby knowledge is created through transformation of experience." Caine et al. (2005: 6) contend that "active processing of experience" leads to "performance knowledge", in other words, knowledge that can be used with insight to successfully complete a task, or, in the performing musician's case, a musical performance on stage.

It is generally accepted that the process of learning happens in phases. Sloboda (1985: 216) states that skills acquisition in music can be clustered into three phases (or stages), namely the "cognitive stage, the associative stage and the autonomous stage." Maslow defines four specific phases of learning in general (Hendricks 2002:

75) in what is known as his Conscious Competence Theory. These are: unconscious incompetence, conscious incompetence, conscious competence and unconscious competence. During my undergraduate studies in Music,[1] I was made aware of Maslow's four phases of learning. I discovered through experiential learning the value of awareness of these four phases as a learning trajectory during the acquisition of a music piece as I began to realise that potentially each phase might or would require different learning strategies.

These phases do not exclude Fitts' stages which are cognitive, associative and autonomous (Fitts 1964, as cited in: Sloboda 1985: 216, 217), but provide a linear, developmental construct into which these stages, as well as other processes of learning and practising, can be placed, in order to determine the objective and subjective shifts[2] that take place in the performer during the preparation process. As such, the various learning strategies towards performance should be researched and will be acknowledged and explained in Chapter 2 of this study.

Hargreaves, Macdonald and Neill (2005: 14, 15) argue that each musician has a personally unique profile that influences the preparation process as well as the performance profile. The profile is determined by elements such as "gender, age, personality", technical skills, "[I]nterpretative skill…. [E]xpressive intentions" and "internal states (such as) arousal, anxiety, motivation" (Ibid). Other factors that may play a role include unique attributes such as cognitive skills, concentration capabilities as well as general mood states.

It will be argued that this personal, unique profile with its concomitant set of personalised activities and functioning during the acquisition process will also be reflected in:

1.   the individual's subjective responses to the learning process in the practise moments; as well as

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[1] It should be noted that the central thrust of this mini-dissertation relies on the method of autoethnography (as shall be defined later). Consequently, the researcher as both researcher and participant is located in my own work – I am my own researcher and participant. The consequence is that there are places where the reference to the self is not only critical, but demanded.

[2] Provisionally, the notion of 'shift' can be defined as the movement from one learning phase to another in whichever knowledge dimension one is analysing or operating.

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2.　　in the individual's reflective journaling regarding the process following each practise moment.

The outcome of this study concerns itself with the context of the acquisition of all that is necessary and is accessed in the preparation for the performance of a composed piece of piano music. Thus this study engages with, reflects upon, and documents the process that leads to a performance, where the performance is seen as an end product. Consequently this research project interrogates the process of the performer preparing a piece for piano performance.

1.2 Aim of the study

This study explored,[3] tracked and documented (1) the acquisitional shifts during the piano performance preparation process by (2) executing an inductive and autoethnographic study, so that (3) the potential coherence between these shifts, levels of learning and subjective responses at intervals during this process could be traced, with a view to a better understanding of the acquisition process. The aim of the study, therefore was not to 'generate new knowledge' but, through a narrative and thick description, trace the potentialities that might have arisen during the process, so that, as in any qualitative study, such descriptions can contribute to transferability of experience to the researcher (or, in this case, the performer) as reader.

The Brahms *Intermezzo* Op. 119 No. 1 was used. The process from starting to learn the score (conscious incompetence) to being ready to perform the piece (unconscious competence) was selected as the trajectory for data gathering for this study. Drawing on the narrative metaphor, therefore, one can argue that the description of the learning process traces a 'plot development' line — a 'though line of the narrative' — with the various Maslow phases seen as potential 'plot moments' in the narrative.

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[3] It should be noted that this document (the mini-dissertation) constitutes a 'research report.' As such it reports on the methods and designs that were used in the research process, the data collected, and the discussion of the findings arrived at. Consequently, the tense selected for the research report presentation is the past tense where applicable.

This research project combined the stages and processes outlined above with the four levels stated in the Maslow theory on conscious competency. The acquisitional shifts were traced by means of:

1. A scholarly survey on theories of learning such as Kolb, Bloom and Whole brain learning, with specific reference to musical acquisition (which provided a potential, phased, theoretical structure of development through the process);
2. Journaling, which documented but also subjectively reflected on the acquisition process after the six practice sessions;
3. Audio-visual recordings of the six practice sessions. These audio-visual recordings captured periodic visual and acoustic data during the acquisition phases, allowing for observation and further reflection.

No research paper, of which I am aware, makes use of this specific comparison between theories of learning, subjective reflections and observations of audio-visual recordings of the acquisitional processes in music practise. Although each of the individual learning strategies and methods have been explored separately and individually in previous studies, this study set out to place the findings of each in relation to the other in the same study. The relevance of the study for research purposes therefore is the presentation of the autoethnographic responses to the same set of events namely the acquisition of a piano score for performance. Therefore, although no direct findings are presented, the nature of such a description of these events potentially opens out further studies in this field. Nevertheless, in line with qualitative research methods generally, the thick description allows for transferability of context and reflected experience in that context.

1.3 Research questions

The main research question

In the preparation of a piano score for performance, what strategic acquisitional shifts do I as a pianist undergo in the trajectory between unconscious incompetence and unconscious competence?

Sub-questions

In order to answer the investigative question several sub-questions were posed:

- What are the strategies and processes followed when preparing a piano score for performance within the trajectory of the "conscious competence ladder" as a sequential 'structure of learning'?
- What are the subjective shifts that I as the pianist made during the preparation of the chosen piano score for performance?
- How could the qualitative data be compared to provide a description of the trajectory of the learning process between conscious competence and unconscious competence?

1.4 Methodology

1.4.1 Research Strategy

The strategy for this research study was determined by the nature of the study itself (Munro 2012: 7, 8). The centrality of practice drove this study and followed a performance autoethnographic strategy. Denzin (2003: 263) posits that in a performance autoethnographic project "the researcher becomes the research project". Ellingson (2006: 303) argues that autoethnography merges "science and humanities" by erasing "the differentiation between researcher and researched." Spry (2001: 710) refers to the process as a "self-narrative that critiques the situatedness" of the process. Following Munro (2011: 156) the concept auto/ethno/graphy can be unpacked and applied to this study in the following way:

'Auto' equates to 'self'. This study attempted to capture and then reflect on my experience of the process from the moment that I started working with the specific piano piece until the moment that I was ready to perform the piece.
'Ethno' equates to 'culture'. In this specific case this study accessed the 'culture of learning' as well as the 'culture of piano performance' and did not draw from culture in the wider sense as a socio-political or identity-driven construct.

'Graphy' refers to the 'act of writing'. 'Graphy' referred to writing the report of this project as well as the 'writing' of the performance.

> Autoethnography refers to the process as well as the product of writing about the personal and its relationship to culture. It is an autobiographical genre of writing and research that displays multiple layers of consciousness. Autoethnographers showcase concrete action, dialogue, emotion, embodiment, spirituality, and self-consciousness. These features appear as relational and institutional stories affected by histories and social structures that are dialectically revealed through actions, feelings, thoughts, and language (Knowles & Coles 2008: 130).

Spry (2001: 711) argues that "autoethnographic methods recognize the reflections and refractions of multiple selves in contexts that arguably transform the authorial 'I' to an existential 'we.'"[4] Harris (2011: 726-727) refers to autoethnography as an "inward, outward and onwards" process as it not only reflects on and in the self or onto others, but it is continuously shifting from moment to moment. The autoethnographic approach of this study allowed for a subjective reflection on the methods that, in turn, allowed the outcome of the study to be reflective of the 'existential we'. As the researcher in this autoethnographic study I am a member of the 'pianist community' and as such, my experience of the learning process may be reflective of the experience of the 'pianist community'. This idea is based on Chang (2008: 26) and points to the transferability of documented and reflected experience as a hallmark of autoethnography within the qualitative research paradigm.

As this study is autoethnograpical in design, I documented my experiences during the learning of the Brahms *Intermezzo* Op. 119 No. 1 by using the learning trajectory offered by Maslow's four phases of the Conscious Competence Theory to map the various acquisitional shifts in the learning process of a piano work. This research is thus about the discoveries I made in the phases applicable to the process of preparing a piano score for performance (Miller, Vandome & McBrewster 2011). Such discoveries were strategized around theoretical underpinnings (the 'I ought to' strategy), reflective journaling (the 'I experience' strategy) and interrogation of audio-visual material of self (the 'I observe' strategy).

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[4] I would also, perhaps controversially, argue that this move to the existential 'we' provides one of the cornerstones of 'transferability' in qualitative research methods.

1.4.2 Research Process

This research project placed me as the primary and only participant of the research process (see Knowles & Cole 2008: 128) as the source of primary data. Such primary data was then engaged with critically, drawing on theory. I used Maslow's four levels of learning (also referred to as the conscious competence ladder) as a learning trajectory to gauge my own acquisitional shifts while learning a piano score for performance. As indicated above, the outcome of the study was reflective of the 'existential we' (see Spry 2001: 711).

Due to the self-reflective process, a process of triangulation was used. "Triangulation helps us get a 'fix' on something in order to understand more fully the complexity of issues by examining them from different perspectives, and generating data in different ways by using different methods" (Gray & Malins 2004: 121). Critically, in autoethnographic research, to simply document one's own experiences and then, in the documentation, to reflect, again from a personal perspective, leaves the research only in autobiographical mode. Thus such autoethnographic research also requires an interrogation of both the data and the reflection using theory and other research as a triangulation engagement with the personal. This allows for the necessary thick description, commenting critically both on the personal from viewpoint of theory, and on the theory, from the viewpoint of the personal. Following Dos Santos and Hentschke (2011: 275) this study can also be categorized as a phenomenological study where the focus is on one's experience of the process. This refers specifically in this study to the acquisitional shifts made in preparation towards performance of a piano score being described as it was experienced.

1.4.3 Data Collection and Procedure

The data collection took place in two phases:

Phase 1 was the pre-acquisition preparation and was the basic analysis of the score as a means of familiarizing myself with it. The score analysis was not an in-depth theoretical analysis – in other words only as much information was sought from the analysis as would contribute to the performance dynamics of this piece as I required

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them. The aim was, thus, to provide the basic informational framework of the score which aided me, as the performer, in the understanding of the structure, harmonies and other characteristics of the piece, before actively starting to practice the piece on the piano. The strategic process of analysis was drawn from Chaffin and Imreh (2002a).

Phase 2 was the data collection of the acquisition process over six practice sessions which entailed journaling and audio-visual recordings. A discussion and comparison of data between these aspects was done in order to map the strategic acquisitional shifts that took place during the learning trajectory from conscious incompetence to unconscious competence. This is reported on in Chapter 4.

What follows here is an overview of the methods employed in this study – each method is expanded upon in Chapter 3.

Journaling

I made notes daily after each of the six practice sessions, reflecting on my subjective experience while preparing this score for performance. Journaling, according to Gray and Malins (2004: 113), is "a purposeful process and framework for helping expose and explore various models of practice, encourage interdisciplinarity and collaboration, extend professionalism and have more effective communication with ourselves." I devised a semi-structured table in which I 'journalled'. The content of this 'journal table' was based on a table used and reflected upon by Chaffin and Imreh (2002a: 141) regarding the stages of practising. I adapted their table by adding rows for information concerning applicable theories of learning, perceived levels of learning, stages, and potential interference from the camera when relevant.

Audio-visual recordings

I made an audio-visual recording of each of the six practice sessions. This allowed for a real-time playback of the process to be correlated with. The purpose of the audio-visual recording was to capture "dynamic information" (Gray & Malins 2004: 110) which included "things we may unconsciously 'filter out' of our perception"

(Ibid). Dos Santos and Hentschke (2011) made use of video recordings in a study investigating the practise procedures of undergraduate students. The advantage of using an audio-visual recording, according to Gray and Malins (2004: 110) is that it captures objective data (in terms of the acoustic, the visual and the kinaesthetic) and provides additional information that may not have been perceived in journaling, during the rehearsal process or during a performance. The option is also there to play and replay the rehearsals and performance moments so that an in-depth analysis can take place. Frame-by-frame analysis can be done should it be necessary. The audio-visual recordings enabled me to track various stages of the practice process such as repetitions, stops/starts and spontaneous movements or utterances. These observations could, where applicable, then be compared to the subjective journal responses as discussed above, allowing already for partial triangulation. I was aware of the fact that, according to a research report by Chaffin (Chaffin, Imreh & Crawford 2002: 115), Imreh (the pianist studied for Chaffin's research) indicated that the presence and use of a camera might have been inhibiting for her. Taking note of Imreh's awareness, I added this as a point of reflection in my 'journal table'.

1.4.4 Data Analysis

Journaling

Once the data was captured in the journal the process of 'flagging and tagging' was employed. The journal is both longitudinal in presentation (the data was captured over time) and 'contemporary' in nature (the data reflected particular moments in the passage of time and process). Thus the analysis was reflective, working both to capture striking similarities, differences, trends, themes and tendencies that presented themselves during the reflective analysis. Such analytical moments that are detected (using a system of flagging such similarities, tagging them and then pursuing the themes and tendencies) were then used in an attempt at best, and simply as juxtaposition at worst, to engage with the other modes of analysis (Gray & Malins 2004: 62, 152) in tracking the autoethnographic process of learning. Engaging with other modes of analysis points to the demands of triangulation.

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Audio-visual Recordings

It must be noted that although the audio-visual recording gives the appearance of objectivity, only the raw data on digital video disk is objective in this sense. Therefore the central concern was the 'interpretation' of that which had been captured and observed/perceived. The analysis or interpretation proceeded both longitudinally (across the sessions) and cross-sectionally within each recording moment. The recordings provided acoustic, visual and some kinaesthetic data.

The interplay amongst these sets of data was read in the discussion and comparison process against

1.   the subjective experience captured in the journal;
2.   the data located in the Maslow trajectory (and the learning strategies as theoretical underpinning).

In crude terms "what I think happened" and "what the audio-visual recording shows me doing" were loosely triangulated and juxtaposed and discussed against relevant theories of learning. Put another way, the autoethnographic raw data streams were triangulated through a personal reflective process, and then triangulated once again with the different learning theories at play. (Such learning theories were, contentiously, also triangulated 'against' each other).

1.4.5 Validity and Reliability

Journaling

As one of the chosen methods of research in this project was autoethnography, one of the central tools used in the method to capture data was journaling (Connelly & Clandinin 1990: 5), as previously demonstrated. Therefore this aspect was valid. Nevertheless, because of the obvious subjective nature of self-journaling two processes were put in place to attend to reliability, in as much as this is possible. Firstly, the journal was structured in such a way that both the capturing of experience of moments directly after they occurred but also the reflective, post-event reflection was presented. Thus the 'in the moment' (as close as this is possible) and the 'reflections on that moment post-moment' were recorded. Secondly, and in the larger

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scope of the project, reliability was enhanced by the process of reflection and comparison of the journal data, with the audio-visual.

Audio-visual Recordings

This aspect of the research process provided objective visual, auditory and kinaesthetic raw data. The observation of the audio-visual recordings supplemented the subjective data captured in the journaling process, as small details were inevitably filtered out involuntarily. Recording phenomena to audio-visual is an accepted strategy for data gathering in many ethnographic studies and therefore should be valid for autoethnographic work (Gray & Malins 2004: 110). The reliability of this data is assured by the video quality, a clear angle of what I am doing as well as good audio quality. It is acknowledged that there is a reliability discrepancy between live sound and music making, and the recorded version of such an event. These discrepancies include 'flat' imaging, the 'devaluing' of emotional involvement and a single visual perspective, for example. Nevertheless, the drop-off in reliability of the data is countered by the triangulation process.

Triangulation

It is accepted that this research project is embedded in the epistemologies of qualitative research and therefore falls squarely into the interpretive paradigm (Terre Blanche & Durrheim 1999: 6). Such an epistemology notes the subjective nature of data and evidence (and, inevitably the potentially subjective nature of both reflection and analysis). Nevertheless, in valid qualitative research the method of triangulation (that is to say, approaching the phenomenon from multiple subjective positions) allows for a thick description of the phenomenon to be achieved. It is accepted that triangulation and thick description (Geertz 1973) are reliable systems of data analysis and then data and reflection presentation. However, as will become evident, the value of this study lies not in the correlations brought about by the triangulation of the interpretations per se, but by the thickness of the multi-levelled descriptions of the unfolding events. In this sense, the demands of autoethnography as a research method are adhered to, providing a narrative that engages with transferability as its narrative target.

Ethics

This study does not have any ethical concerns as it is an autoethnographic study and as such I was the only participant in the study. Furthermore, none of the strategies used in this study were invasive.

1.5. Chapter divisions

In order to answer the research and sub-questions a scholarly survey of related fields namely performance preparation and various learning theories was conducted and is reported on in Chapter 2 of this mini-dissertation.

Chapter 3 provides, in a chronological order, the data collected. It first reflects on Phase 1 as pre- acquisition preparation and then Phase 2 as the data collection and procedure of the six research recording sessions.

Chapter 4 concerns itself with the interpretation of the data through triangulation. Trends and patterns that occur during the learning trajectory are identified and discussed. This chapter concludes with a thick description across all the theories employed and data collected in this study.

Chapter 5 concludes the study and provides the delimitations and value of the study. It concludes with offering various possible projects that can build on this project.

Chapter 2

Learning and music

2.1 Introduction

The preparation of a piano score for performance is a very unique process and one that differs from performer to performer. The process, however unique, is situated in the field of learning. It is as such deemed necessary to discuss some fundamental theories and concepts regarding learning before continuing to investigate the acquisitional shifts that occur during the preparation of a piano score for performance. Consequently, this chapter explores various theories on the processes of learning (section 2.2) so as to develop an understanding of the generic strategies of learning. Such strategies can be seen to be sequential. This is explored in section 2.3, dealing specifically with Maslow's Conscious Competence Theory,[5] which serves as a part of this study's framework. Selected methods (strategic and processual[6]) of music performance preparation will be discussed in section 2.4 so as to provide a descriptive tool to explain the data generated, the acquisitional shifts that occur and the research findings of this study that arise from such shifts (in Chapter 4).

2.2 Learning

Active research into the field of learning spans a period of more than forty years (Cassidy 2004: 419) and is still continuing — see, for example, Moon (2013). What the various theories regarding various learning styles and strategies have in common is the basic premise that there is a shift in the person who went through a process of learning. This shift is clearly delineated by the work of Packer and Goicoechea (2000: 228) who indicate that there are six basic themes within the sociocultural

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[5] It is difficult to ascertain exactly how this model came into being but several NLP practitioners (i.e Jackie Chan and Richard Bolstad) indicate that it was originally offered by Maslow. See also 2.3 below.

[6] The term 'processual' is borrowed from the field of Anthropology and refers to a non-linear emergent trajectory.

constructivist ontology of learning. These are, a) the person is constructed, b) in a social context, c) formed through practical activity, d) and formed in relationships of desire and recognition e) that can split the person, and f) motivating the search for identity. These themes have relevance in the broader context of learning and are directly applicable to this project as will be evident in later chapters.

Chaouachi, Heraz, Jraidi and Frasson (2009: S.a) state that in the learning process there are two important stages: "acquiring knowledge and restoring it later. If knowledge is well restored it means it was well assimilated". It may be argued that the concept of 'restoring' is cardinal in the process. There is, however, a double meaning to the word. In the first instance, 'restoring' might imply that the knowledge has to be conserved in its original context (an act of 'restoration', for example) and there is certainly an element of this in learning. Secondly, 'restored' might indicate 'stored in a different place' ('re-stored') following the use and application and adaptation of the knowledge to a context. In this instance, the 'new storing' is also a process of learning. One can thus posit that both of these meanings are at play in learning.

Caine et al. (2005: 2) indicate that several different processes are involved in learning but in essence all learning is "psychophysiological" in that the body and the mind are intimately and inextricably involved in the learning process. They maintain that all learners have an individual style and uniqueness (2005: 4) and will thus learn differently. The Dunn and Dunn learning style model makes use of multi-modal approach in the form of "stimulus strands", namely, environmental elements, emotional elements, sociological preferences, physiological characteristics and global vs analytical processing styles (Lovelace, 2005: 177). This approach to learning styles is comprehensive to the point where all combinations and personal uniquenesses of the individual will be identified and integrated. This notion of unique learning styles and preferences is supported by Felder and Spurlin (2005: 103). Caine et al. (2005: 6) contend that "active processing of experience" leads to "performance knowledge," in other words, knowledge that can be used with insight and effectively executed towards the successful completion of a task. It is the notion that the learning in practical music has to lead to performance that narrows the scope of this discussion regarding fundamental theories and concepts of learning.

Put another way, the practice and experience of music-making is a learning process and a generator of new knowledge or task completion.

2.2.1 Kolb's experiential learning

According to Cuthbert (2005) Kolb offers a model of experiential learning. Kolb's model is based on the theories of Dewey, Lewin and Piaget's cognitive development (Chapman 2010: 65). Kolb (1984: 38) argues that "[L]earning is the process whereby knowledge is created through transformation of experience." Petrina (2007: 163) indicates that "[O]ur conceptions, or what we conceive, influence our perceptions, or what we perceive. From what we apprehend, we comprehend and vice versa, within a cycle." Learning is therefore transforming experience into concepts via reflection which then provides structure for experimentation. "We manipulate the world so that we can change and comprehend ourselves and the world" (Petrina 2007: 164). This resonates with Packer and Goicoechea (2000: 228) who offer that learning is both a "personal and social transformation." Kolb argues that learning should take place within the experience (Petrina 2007: 163), and the success of the learning process can and should only be evaluated in the application of the knowledge in the experience (Kolb 1984: 27).

Essentially Kolb's Experiential Learning Theory consists of 4 learning modes:
- concrete experience ('Do')
- reflective observation ('Observe')
- abstract conceptualization ('Think')
- active experimentation ('Plan')

(Kolb 1984: 68, 69; Boyatzis & Kolb 1995: 3).

It can be contended that these four modes of learning will at various stages all be present in the process of readying a piece of music for performance. I will subjectively reflect on this in my 'journaling' in Chapter 3.

Kolb states that these modes follow sequentially but the learning process can begin at any stage. The following diagram visually illustrates the cyclical process:
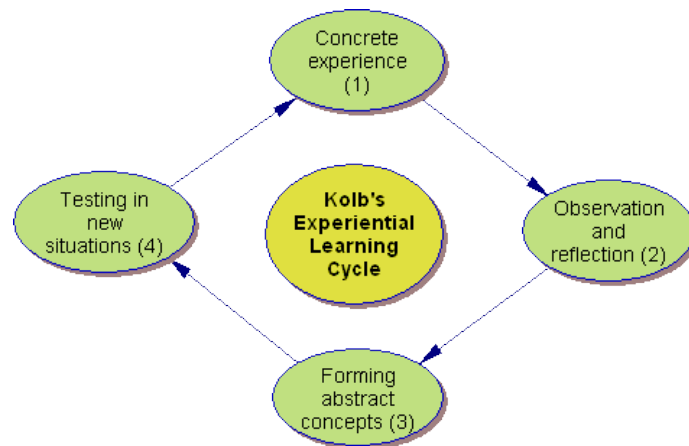
Figure 2.1: Kolb's Experiential Learning Cycle (http://www.learning-theories.com/experiential-learning-kolb.html)

Kolb (Cuthbert 2005) furthermore identified four learning styles, which he labels as assimilators, convergers, accommodators and divergers (see also Petrina 2007: 116):

- Assimilators need logical theories and plans to learn effectively. This learning style requires logical, step-by-step instruction on how to accomplish certain goals and tasks. This ties in to Kolb's first stage, namely, Concrete Experience.

- Convergers need the practical applications of these theories. This learning style requires the theory to be presented in a practical way and for examples to be used. This is similar to Kolb's third stage namely Forming Abstract Concepts.

- Accommodators thrive when dealing with situations in a "hands-on manner." This learning style includes those who need to actively participate and engage in a certain goal or task to learn effectively. Kolb's fourth stage, Testing in New Situations, can be observed here.

- Divergers like to observe and assimilate a broad spectrum of information.[7] In this learning style the preference is to gain as much information as possible and to observe rather than participate. This is related to Kolb's second stage namely Observation and Reflection.

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[7] Direct quotations in these bullets from: http://www.learning-theories.com/experiential-learning-kolb.html.

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Cuthbert (2005: 236) indicates that Kolb's four learning styles reflect the individual's unique preferences in the process of learning. These styles are contextual[8] and should be flexible. Mainemelis, Boyatzis and Kolb (1999: 5) argue for an integration and balance of the various aspects of learning. They plead for the ideal "where the learner 'touches all the bases' – experiencing, reflecting, thinking and acting – in a recursive process that is responsive to the learning situation and what is being learned." Moon (2013) offers that a more critical view of Kolb's model exists that implies that the Kolb's model is simplistic and formulaic. Much of the focus is given to phenomenological perspectives and not enough focus on tacit knowledge and how the knowledge is transferred between the various stages of learning (2013: 114). She counteracts this and indicates that the problem does not exist within the model but in "how it is used and interpreted" (Moon 2013: 115). Coffield et al. (2004a) would agree with the latter when they state that Kolb's learning model is "one of the most influential models of learning styles" (Coffield et al. 2004a: 60). Coffield et al. argue that the Kolb model is a continuous process and posit that Kolb suggests an intergrative learning style (Ibid: 61-67).

During the preparation of a score for performance the musician will access all four modes of learning and, ideally (whilst also acknowledging preferences), will draw from (and on) the four learning styles during various stages in the shift from initial contact with the music score, to the final performance product. I will subjectively reflect on the presence of Kolb's key elements during the learning trajectory in Chapter 3.

Table 2.1: Kolb's key elements applicable to this study[9]

Kolb's Experiential Learning Modes	• Concrete experience • Reflective observation • Abstract conceptualization • Active experimentation
Kolb's Four Learning Styles	• Assimilators • Convergers • Accommodators • Divergers

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[8] In this sense 'contextual' refers to where one is in the process of the learning the piece, both in terms of the instrument as well as individual preferences which pertain to past experiences, cultural paradigms and so forth all contribute to the process at that particular moment of engagement.

[9] Boyatzis & Kolb (1995); Cuthbert (2005); Kolb (1984); Mainemelis, Boyatzis & Kolb (1999).

2.2.2 Bloom's taxonomy

Bloom and his colleagues offer a different but equally applicable model of learning. This is known as Bloom's Taxonomy (Bloom 1956). The name creates the impression that it was only Bloom working on it whereas he was leading a working group. Within Bloom's Taxonomy, Bloom and his colleagues classified three basic domains in which learning takes place. These are the cognitive, affective, and psychomotor domains (Bloom 1956: 7; Bloom, Krathwohl & Masia 1964: 6; Booker 2007: 349).

The cognitive domain has to do with the acquisition of knowledge, as well as the application (Bloom 1956: 205)[10] and evaluation (Bloom 1956: 185) of that acquired knowledge. Goel (2011: 5) offers that within this domain, six levels of cognitive processing can be identified, each process leading hierarchically to "Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation." Eisner (2000: 3) posits that these levels act as building blocks and, therefore, functioning on one level is indicative of an ability to "perform at the level or levels that precede it." Research on, and development of, the taxonomy has been on-going. The six levels in the taxonomy have been reconsidered and renamed, and are, in the latest revised version known as "Remember, Understand, Apply, Analyse, Evaluate and Create" (Krathwohl 2002: 215). This is possibly a good resemblance of the process experienced by the performing musician, as any performance accesses creativity. Building on this revised taxonomy, Goel (2011) provides his own adapted and expanded version of Bloom's Taxonomy: Remember, Understand, Apply, Analyze, Create/Evaluate and Mentor. Goel's adapted categories can equally be applicable to the pianist readying a piano score for performance when replacing "Mentor" with 'perform'. Alternatively, the "Mentor" stage can be seen as the performer guiding the listener to a new understanding and appreciation of the piece.

A further development that Krathwohl (2002: 217) highlights is the acknowledgement of four different knowledge types[11] namely "factual, conceptual, procedural and metacognitive". Factual knowledge is seen as the most basic form of

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[10] Also referred to by Bloom (1956: 168) as "production."
[11] The original taxonomy only acknowledges the first three (Krathwohl 2002: 214).

knowledge; this is followed by conceptual knowledge which deals with the interrelationships within a larger structure; then comes procedural knowledge which deals with how to accomplish a certain goal (what procedure must be followed) and lastly the metacognitive, which is "an awareness and knowledge of one's own cognition" (Krathwohl 2002: 214). Pintrich (2002: 220, 221) breaks metacognitive knowledge down into "strategic knowledge", "knowledge about cognitive tasks" and "self-knowledge". All three these sub-sections of metacognitive knowledge are accessed at various stages during the preparation of a piano score for performance.

Booker indicates that unfortunately the cognitive domain gained preference over the other domains in North America and that this provides a skewed view of the taxonomy (Booker 2007). This may be due to the fact that the first book published about the taxonomy (Bloom 1956) dealt with the cognitive domain. For optimal learning to take place, the other domains (namely, the affective and the psychomotor) are of equal importance, as Booker points out (2007: 349).

The affective domain is the emotional aspect of learning, which includes the prioritizing and valuing of experiences, activities and information. Bloom, Krathwohl, and Masia (1964), in the second book on the taxonomy, offer five levels of the affective domain. These are: Receiving, Responding, Valuing, Organizing, and Internalizing of values or "characterisation by a value."[12] The affective domain acknowledges that in the learning process there is a continuous and lively interplay (Bloom et al 1964: 25) between the inner and the outer (Hackney 1995: 214). The affective engagement during preparation of a music score for performance and in performance alike, traces all five levels of the affective domain.

The psychomotor domain deals with the physical activity or movement as well as the mental perception thereof (Bloom et al 1964: 7) and the strategic and task driven nature of the domain (see metacognition, above). This domain is practice-based and the skills usually require a large amount of repetition and practice.[13] Three scholars provided levels for the Psychomotor domain. They are Dave (1970; 1967, cited in

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[12] As indexed in Bloom et al. 1964: xii-xiv.
[13] (Clark n.d.)

Lloyd & Esjeholm 2010; Huitt 2003), Harrow (1972) and Simpson (1972). The levels as defined by Dave are most applicable to this study.

(i) Practical activity (a taxonomy of psychomotor skill)

| Imitation | Manipulation | Precision | Articulation | Naturalisation |
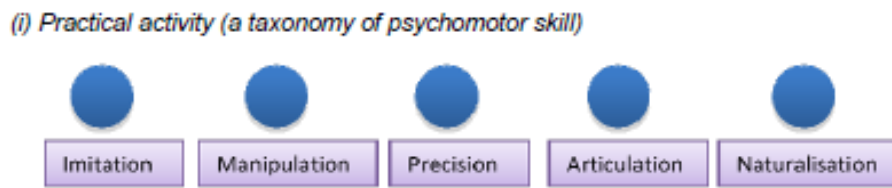
Figure 2.2: A taxonomy of psychomotor levels (Lloyd & Esjeholm 2010: 6)

Chapman (2006) provides behaviour descriptions for each of these levels:

Imitation: "copy action of another; observe and replicate"

Manipulation: "reproduce activity from instruction or memory"

Precision: "execute skill reliably, independent of help"

Articulation: "adapt and integrate expertise to satisfy a non-standard objective"

Naturalisation: "automated, unconscious mastery of activity and related skills at strategic level".

Lister and Leaney (2003) write that Bloom's taxonomy follows a developmental trajectory. Churches (2008: 1) supports this, referring to the taxonomy as a "…categorized and ordered…" "….continuum…." Forehand (2012) warns however that the taxonomy was always intended to be a "work in progress" and should not be viewed as static. Vieyra (2006: 8) provides a typical example of a skewed reading of Bloom's taxonomy where the cognitive domain, and specifically the lower level skills within the domain, are separated from the other domains present in the complete and current taxonomy. Vieyra (2006: 10) offers that Bloom's taxonomy, when viewed in this manner, becomes "anti-holistic". Counteracting this example Forehand (2012) indicates that especially the revised version of the taxonomy (Anderson & Krathwohl 2001) is an excellent teachers' tool as it aligns "standards and educational goals, objectives, products, and activities."

During the longitudinal learning process movng towards becoming a professional musician, the performer proceeds through all these psychomotor levels of learning. When readying a music score for performance, precision, articulation and naturalisation will be present. From the discussion on Bloom's taxonomy above, it is

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evident that the musician engages with the cognitive, affective and psychomotor domains of learning. This is congruent to Petrina's (2007: 23) argument that a functional relationship exists between these three domains during the learning process. I will subjectively reflect on the presence of Bloom's key elements during the learning trajectory in Chapter 3.

Table 2.2: Bloom's key elements applicable to this study[14]

Cognitive Domain	Remember, Understand, Apply, Analyse, Evaluate, Create, Perform Meta-cognitive: "strategic knowledge", "knowledge about cognitive tasks" and "self-knowledge"
Affective Domain	Receiving, Responding, Valuing, Organizing, and Internalizing of values
Psychomotor Domain	Imitation, Manipulation, Precision, Articulation, Naturalisation

2.2.3 Whole Brain Learning

Two other theories which are in fact very similar to each other that deserve to be mentioned in this study are those of Ned Herrmann and Kobus Neethling. They both offer a metaphorical model for whole-brain learning and each of these models has an assessment to determine thinking and learning preferences.

Ned Herrmann's approach is known as the Herrmann International's Whole Brain® Thinking (Herrmann International 1981-2012) and it is accompanied by The Herrmann Brain Dominance Instrument® (HBDI®). Coffield, Moseley, Hall, and Ecclestone (2004a: 27) offer that Herrmann's approach is "compatible with several other models" on learning. Drawing from the work of McClean, Sperry, Cazzinga and Bogden, Herrmann (1995; de Boer, Steyn & Du Toit 2001) posits that the brain consists of four thinking structures constructed out of the two brain hemispheres and the two limbic halves. He thus combined the triune brain and the two-hemisphere theories (Hermann, 1995; de Boer et al. 2001; Coetzee, Munro, de Boer 2004). Hermann stresses that these four structures are interconnected. It is on these four

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[14] Bloom (1956); Booker (2007); Chapman (2006); Goel (2011); Lloyd & Esjeholm (2010); Krathwohl (2002); Krathwohl, Bloom & Masia (1964); Pintrich (2002).

structures that Herrmann bases the four metaphorical thinking quadrants. Life experiences dictate brain preferences which then influence thinking and learning choices. Through research Herrmann concluded that various careers have various preference profiles which lead to various thinking, learning and communication styles (Herrmann 1995; de Boer et al. 2001).

WHOLE BRAIN MODEL

Upper Mode Thinking Processes

Upper Left

A

LOGICAL ANALYTICAL FACT - BASED QUANTITATIVE

Upper Right

D

HOLISTIC INTUITIVE INTEGRATING SYNTHESIZING

Left Mode Thinking Processes

Right Mode Thinking Processes

ORGANIZED SEQUENTIAL PLANNED DETAILED

INTERPERSONAL FEELING - BASED KINESTHETIC EMOTIONAL

Lower Left

B

C

Lower Right

Lower Mode Thinking Processes

Figure 2.3: Herrmann Whole Brain Model (Herrmann 1995: 155)

Herrmann however offers that the accessing of all four quadrants in a learning process ensures optimal and deep-structure learning (Herrmann 1995; de Boer, et al, 2001; Coetzee, et al. 2004). Herrmann provides several shorthand terms for these quadrants, for example "fact, form, feeling and fantasy" (Herrmann 1995: 422). 'Fact' refers to the A quadrant in figure 2. 3, 'form' to the B quadrant, 'feeling' to the C quadrant, and 'fantasy' to the D quadrant. The descriptors within each quadrant in the figure refer to the preferred methods of dealing with information and new information in the learning process. In a study towards a Masters degree Campbell (2008: 5) executed an action research project investigating the use of Herrmann's Whole Brain Model in violin teaching. During the empirical phase of this study the Herrmann Whole Brain Model was deliberately applied over two terms, during the individual violin lessons of five participants. Assessment of the efficacy of the lessons included subjective reports from the reasearcher who was the teacher, from

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the participants themselves and from the accompanists of the participants. Campbell reports a positive outcome and specifically refers to the students' change in attitude and increased motivation to practise (2008: 135).

Building on the work of Herrmann and Torrence, Neethling defined the metaphorical four quadrants NBI™ Profile (Neethling 2000). He developed various 'Brain Instruments,' which are assessments to determine thinking, learning and communication preferences in various fields such as business and education. A further development within the NBI is the eight dimensions (Neethling 2000) — two dimensions in each metaphorical quadrant. The various assessments are computer-based and are administered and interpreted by a qualified NBI practitioner. In order to gain understanding into my own learning preferences, I took part in an NBI assessment and received feedback from a qualified NBI practitioner. Figure 2.4 below provides my NBI™ Profile, indicating my thinking and learning preferences.
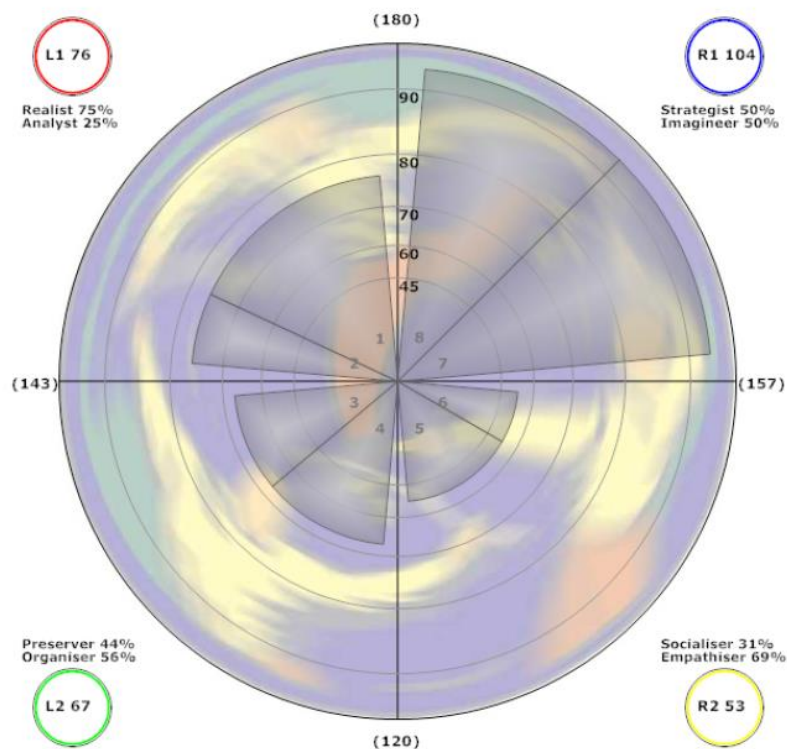
Figure 2.4: My NBI™ Profile as provided on the "adult assessment feedback"

From figure 2.4, it is observed that I initially prefer to experience and experiment, to take risks, to question, to integrate ideas, to explore alternatives. I am comfortable

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with factual data. I like to deal with any factual knowledge in an analytical manner. I seem to be somewhat disorganised in my learning and thinking preferences and I prefer to not engage with people on an emotional level during learning and thinking processes. This personally unique profile directly influences how I prepare a music score for performance. I will subjectively reflect on the key elements of Whole-Brain thinking during the learning trajectory in Chapter 3. Table 2.3 summarises the key descriptors of each of the four metaphorical quadrants.

Table 2.3: Key elements of Whole-Brain Thinking applicable to this study[15]

Top left (A or L1): Fact	Analyses, Logic, Objective, Critical
Bottom left (B or L2): Form	Planned, Structured, Detailed, Organised
Bottom Right (C or R2): Feeling	Receptive, Responsive, Nurturing, Sensitive
Top Right (D or R1): Fantasy	Idealistic, strategizing, visionary, unconventional

Whether the Herrmann or Neethling model is more applicable is not relevant to this project. What is of importance is that the musician preparing for performance will in all likelihood access all four metaphorical quadrants during the preparation process. As indicated by Campbell (2008: 131) when all four quadrants were deliberately accessed in her study there were various positive outcomes observed in her participants.

Leonard and Straus (1997: 1) posit Whole brain learning as admitting and abiding to various "cognitive approaches for assimilating data and solving problems". Felder (1996) states that effective and efficient work is reliant on accessing the various approaches (1996) and learning styles, and advocates skills development in the various non-preferential areas. From the field of the performing arts Munro and Coetzee (2007: 104-106) adapt the metaphorical four quadrant model to foreground the bodymind in preparation towards, and in, the performance itself. By doing this, they support Kozik-Rosabal's (2001: 104-105) argument that "bodies are minds" as well as Caine et al's (2005: 30-34) extended review of the notion that effective learning can only happen when the learner experiences a positive emotion. This adapted model points towards the idea of embodied cognition as offered by Ignatow (2007: 122,123) where the importance of both body and emotion for knowledge building is stressed.

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[15] de Boer, et al. (2001); du Toit, et al. (2001); Herrmann (1995); Neethling (2000); Munro & Coetzee (2007).
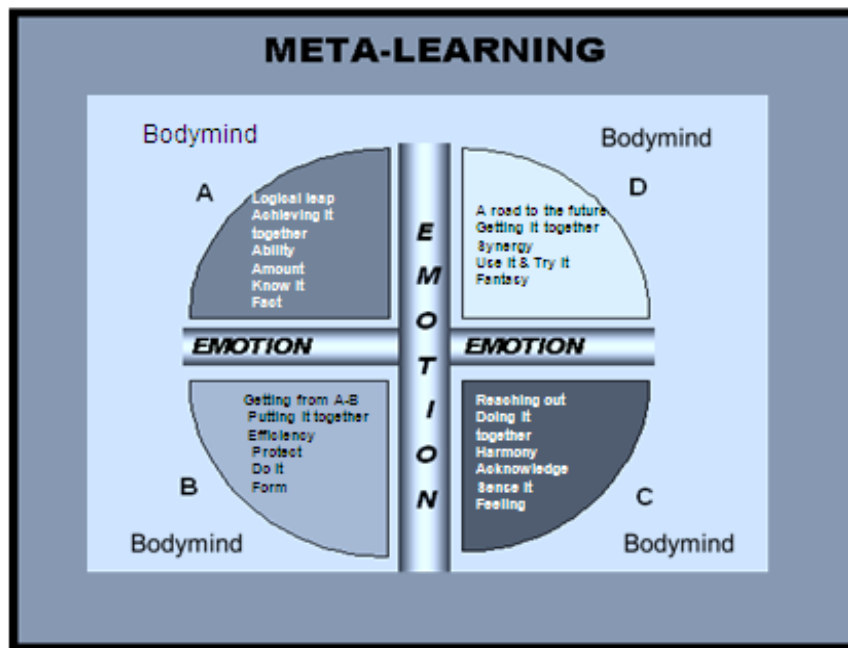
Munro & Coetzee 2007:105

Figure 2.5: The adapted model (Munro & Coetzee 2007:105)

Although Munro and Coetzee (2007) do not indicate being influenced by Kolb or Bloom, it is feasible to argue that their adapted model encapsulates the essence of both the Kolb and Bloom theories. For the musician the learning of a piece of music towards performance certainly has some factual elements, it takes place within, and is dictated by specific form, it has to express a certain feeling embedded in the score and the performer will express a certain amount of 'fantasy' that might be seen as being unique to the performer. The emotional environment in which the learning of the piece takes place will influence the learning process for the musician. The learning process will be executed through and within the bodymind where the mind will determine the body and where the body will influence the mind. But due to the intensely unique process of learning, it can certainly not be argued that every musician will follow one or another mode, theory or style of learning.

Dos Santos and Hentschke (2011: 273) report that in their research, undergraduate piano students used different strategies in the preparation of a piano score for performance. They further indicate that it is in general accepted that several influences determine the preparation process, thus supporting the argument made above. These influences range from previous training, expectations, goals and social

needs, and would also include musical knowledge. The outcome of Burwell and Shipton's (2011) study can be paralleled to Dos Santos and Hentschke's findings. They indicate that although the amount of practise time does play a significant role, it is not the only marker for success in performance. Practise times during a week and behaviour during practice amongst other dynamics, play a role towards success in performance. They conclude their study by offering that the outcomes "have revealed some of the complexity involved when individual student characteristics are taken into account" (Burwell & Shipton 2011: 269).

Although the specific learning style used during acquisition of a music piece is accepted as individual and unique (Hallam 2001a: 8) it is in general accepted that the acquisition process happens over a specific timespan and that there is a specific continuum or trajectory from the moment the pianist is confronted with the score, until the execution of the piece during performance. To provide markers for this continuum, this study relies on Maslow's Conscious Competence Theory.

2.3 Maslow's Conscious Competence Theory

Wiggins (2011: 355), in an article specifically referring to music and memory, indicates that "learning is an act of the individual resulting from experience in a sociocultural context." In this sense, the learning (as an act of acquisition of something) occurs in a particular sociocultural (in this sense, a musical) context but the learning, because it is time bound, is emergent, as are the results of the learning (drawing on Bloom, above, these would include the comprehension, the synthesis and the creative, for example). Thus it is generally accepted that the process of learning happens in phases and over time. It can therefore be foreseen that these phases, however generic, may not be the same for everyone.

One of a multitude of learning theories is the Conscious Competency Theory. The conscious competency theory is a theory most possibly posited by Abraham Maslow (Miller et al. 2011). Shirran, Shirran and Graham (2012: 195) refer to it as "Maslow's learning cycle." O'Brien (2012: 61) indicates that the model as it is known today was developed by "Gordon Training International" based on Maslow's work. As such it will in this study be referred to as Maslow's Coscious Competency Theory. Maslow

defines four specific phases of learning (Hendricks 2002: 75). These are unconscious incompetence, conscious incompetence, conscious competence and unconscious competence. In 1982 Howell suggested a fifth phase namely, "unconscious super competence" (Tung 1993: 472-473). This aspect will not be considered here.

The Conscious Competence Ladder

Level 4: Unconscious Competence

Level 3: Conscious Competence

Level 2: Conscious Incompetence

Level 1: Unconscious Incompetence
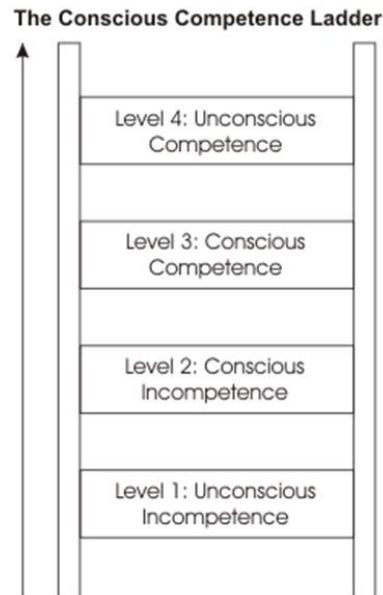
Figure 2.6: Maslow's Conscious Competence Ladder
(http://www.mindtools.com/pages/article/newISS_96.htm)

The Conscious Competency Theory claims that on level 1 a person is not aware of not being incompetent at executing a specific task. This is usually someone who has never attempted a certain task and has no prior knowledge or experience of that task. On level 2 a person is acutely aware of his or her incompetence regarding the execution of that specific task. This is usually someone who has begun to accumulate some knowledge, experience and a basic understanding regarding the task. Speculatively it can be argued that in this phase the person begins to attempt to find ways that can be used to solve the problem. Strategically, this is about *finding* the ways but it does not imply *mastery* of those ways.[16] Level 3 is the phase where a person has to deliberately focus on the task itself to be able to execute it. This is someone who has gained a competent level, that is to say, the requisite amount of

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[16] By way of an analogy one might envision the following conversation here: "I know that I have a problem, and I know that I am not sure that I can solve the problem, but perhaps I know someone who can solve the problem, or might teach me how to solve the problem."

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knowledge, experience, skill and understanding regarding the solving of a certain task or the executing of a function at a conscious and deliberate level. Level 4 is the phase of unconscious competence where there is not a deliberate focus on the execution of the task but, in this specific case, on multi-layered 'musicking'.[17] Speculatively, therefore, at this level there has been a shift from 'executing the tasks determined by the instructions contained in the sheet music', for example, to the 'task' of making music. As such, the competence to perform the first task is no longer a deliberate one as the psychomotor demands have become unconsciously controllable and executable, and therefore the second task of providing the aesthetic (or affective) dimension, so to speak, to the music-making forms the core engagement. This level of the Conscious Competency Ladder is congruent to Chaffin and Login's (2006:127) argument that "[P]erformances must be practiced to the point that they can be delivered automatically in order to ensure reliability under the pressures of the concert stage". A performer who functions on this level is a person who has a large amount of knowledge, experience, skill and comprehensive understanding regarding a certain task. The difference between level four and Howell's level five (1982; Howell & Fleishman 1982) is, as described by Tung (1993: 473), "one of degree. Phase 5 is characterized by peak performance." This research project utilises the Conscious Competency Ladder as offered by Maslow and as such, Howell's level five will not be referred to further.

As offered in Chapter 1, during my undergraduate studies in Music (BMus), I was made aware of these four phases of learning. I discovered through experiential learning the value of awareness of these four phases during the acquisition of a music piece. These four phases provides a continuum or trajectory over time for the acquisition of a new piece of music. As this study is autoethnographic in design, I set out to use the four phases of the Conscious Competence Theory to map the various acquisitional shifts in the learning process of a piano score. It was foreseen that during each of the four phases I would, from my personal and unique perspective and profile, engage a different set of skills and knowledge.

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[17] 'Musicking' refers to the active process of making music (see, amongst others, Elliot 1995 & 2009; Small 1998).

According to Talbot (2004) various competency models exist. He critiques the notion of a competency model within the medical field and offers that there is a difference between competence and competency (Talbot 2004: 588). He further cautions against an over-simplified "template". As indicated earlier, this study uses the four levels of the Maslow Conscious Competency Theory to provide markers or benchmarks for shifts during the learning trajectory over time. As such, the model as utilized in this study does not refer to competency and is not an over-simplification. The four levels of learning can accommodate various learning styles or modes. The four levels furthermore allow for the tracing of various activities during the various points in the trajectory of the acquisition process. During these four phases I may, for example, access various learning styles suitable to my unique profile and the demands of that particular point, whilst drawing from various performance acquisition practices.

2.4 Performance acquisition

Richie and Williamon (2007: 308) indicate that musical performers work "countless hours refining their skills." Thompson et al. (2006: 99) offer that the long-term preparation to becoming a performer is a multi-modal learning process in which "exceptional motor skills… (and) an extensive knowledge of musical structure and performance traditions" are mastered. During this longitudinal and deliberate process (Lehmann & Ericsson, 1997: 44, 48) a specific vocabulary, which includes concepts like "cadential sequence, tonic chord, (and) passing note" (Sloboda 1985: 5), as well as a skill set (Sloboda 1985: 7) specific to musicking are developed. During their education, pianists learn to identify patterns as well as common compositional techniques such as "scales, arpeggios, chords, harmonic progressions, diatonic triads and other more complex patterns" (Chaffin & Imreh 2002b: 166). Many of these skills are acquired through technical drills, studying music theory as well as experience gained from learning many pieces for performance.

Another important skill is fingering. Fingering is a continuous consideration for the pianist as good fingering can determine aspects such as a smooth legato or the ease of rapid passage playing. Discovering a 'good fingering' often takes time and experimentation and is a testimony to the longitudinal educational process of the

pianist. Chaffin and Imreh (2002b: 168) identify two main criteria for choosing fingering: "how well it suits a particular interpretation and its ease of execution."

There are, furthermore, often technical difficulties that must be conquered, for example jumps (large intervals), polyphonic writing, and fast and complicated passages, to name a few. As the pianist becomes more experienced and skilled, problem-solving becomes a large part of the pianist's training and preparation for performance. The solution to technical difficulties is often not apparent and the pianist must experiment (drawing on memory, psychomotor attempts at solving the difficulty, and reflective practices that bring about decisions that need to be made) to seek the best solution. The potential to experiment and reach a solution that proves to be efficient reflects years and years of "effective practice." Effective practicing, as defined by Hallam (1997: 181), is "that which achieves the desired end-product, in as short a time as possible, without interfering negatively with longer-term goals." The pianist must thus find ways to conquer any difficulties as efficiently as possible, through adhering to and drawing upon his personal, unique qualities and preferences, through an effective 'trial and error and reflection' loop, as well as the demands of the specific score/piece. This is supported by Dos Santos and Hentschke who state that "practice depends on the nature and context of the task and on the interests and engagements of the musician" (2011: 273). To this can be added, drawing on the Maslow ladder, the stage at which the practice needs to occur.

It is often assumed that there is a certain general process and strategy to learning and preparing a music score for performance. Musicians are taught from childhood to follow the generally accepted process of familiarising oneself with a piece — learning the notes,[18] adhering to interpretational/musical demands provided by the composer, adding one's own subjective emotional response to the piece, and performing the piece whilst coping with one's nerves (that is to say the potential psychophysical stumbling blocks or potential impediments to competing the task

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[18] I define and experience "learning the notes" as a rather complex process of moving from the visual observation of dots on a page, through recognition of what those dots (notes) represent, to the strategy of determining the acoustic equivalent of the note representation as it is to be found on the piano, to determining the finger that is to be used (and the fingers for the sequence of notes) and then practicing that sequence so that I do not have to consider the finger, the sequence or the meaning of the representation.

successfully before an audience. These might include fear and memory lapses, for example). However, this is an oversimplified view of the acquisitional shifts that a performer goes through when preparing a score for performance. The preparation of a piano score for performance is, as indicated earlier, a very unique process that differs from performer to performer. Sloboda (1985: 93) indicates that pianists may each have a unique set of rehearsal strategies that they find efficient. This is supported by Jørgensen (2004: 85) who indicates that performers have "idiosyncratic views" regarding "effective practice." Practice or rehearsal strategies are dependent on each pianist's preceding exposure, training and profile. Hallam (2001a: 7, 8) offers that these individual strategies are shared, explored and experimented with during the longitudinal process of training the performer adheres to from a young age.

2.4.1 Reid's Five Levels

It is inevitable that, preceding the level of competency in which this research is placed, there is a long and continuous process of mastering the instrument. Lehmann and Ericsson (1997: 44) emphasize that the process happens accumulatively and gradually over an extensive period of time. Reid (2001: 28) offers five complex focal engagements on the journey of learning to successfully play an instrument. These are:

- Instrument (or voice) (level 1): learning an instrument (voice)
- Elements (level 2): learning an instrument and some musical elements
- Musical meaning (level 3): learning musical meaning
- Communicating (level 4): learning to communicate musical meaning
- Expressing meaning (level 5): learning to express personal meaning

It is evident that these 5 levels do not specifically apply to the learning of a specific piece but in essence provide the trajectory from the onset of learning to play the instrument. It can be argued that the first three levels belong primarily to the on-going process of mastering the instrument; levels 3 to 5 emphasize acquisition of musicianship and can be related to specific pieces. Reid's 5 levels are thus in this study viewed as the crossover between studying and achieving skills and

competencies related to the instrument, on the one hand, and learning to play and perform a specific piece of music on the other. Sloboda (1985: 94) proposes that the successful performance of a piece is evidence of "the interaction of the specific knowledge of this piece alone with general knowledge acquired over a wide range of musical experience." In lieu of this, this study may be placed on Reid's levels 3 to 5 as it is assumed that the research subject (myself – see the methodology in section 1.4.1 on autoethnography) has mastered the instrument and that level 1 and level 2 have taken place successfully. As indicated before, then, the research concentrates on the preparation of Brahms' *Intermezzo* Op. 119 No. 1 for performance.

2.4.2 Six stages of practice

Chaffin and Logan (2006: 113; emphasis added) state that during practice the performer focuses primarily on "critical *technical* features" as well as "*interpretative* performance cues." Linking this to Bloom's taxonomy, this can be seen as a cognitive engagement with the psychomotor skills and competencies, on the one hand, and the affective competencies and expectations on the other. It can thus be foreseen that activities and functioning during the preparation process will be complex and definite shifts will be made. However unique[19] this multi-modal learning process may be, several trends and activities that form the basis for the studying of a new score can be observed. The trends as outlined by Chaffin et al. (2002: 240-246) will now be described and considered. They indicate six stages of practice, namely:

- Scouting it out
- Section by section
- The grey stage
- Putting it together
- Polishing
- Maintenance.

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[19] Burwell and Shipton (2011: 255) contend that "individual practice remains a unique and solitary activity".

Stage 1: Scouting it out

During this stage, Chaffin and Imreh (2002b: 166) suggest that "…a pianist must identify familiar patterns of notes, make decisions about fingering, and decide how to cope with passages containing technical difficulties." This stage is about gaining an overview of the score and determining superficially which parts will need more work and what the main structure of the score is so it may be better understood as well as segmented for the next stage of practice. The performer will do a basic form and harmonic analysis of the work and then scout out any technically and musically challenging passages for closer scrutiny at a later stage. This takes place in the conscious incompetence phase.

Stage 2: Section by section

"The main task of this stage is to establish motor memory" (Chaffin et al. 2002: 240). The pianist is now mainly concerned with what fingering to use and how the technical difficulties can be overcome. The piece is tackled by the pianist on the piano, in small sections and only placed into proper context during later stages. During this stage the pianist must ensure that deliberate practice occurs which means reflecting and evaluating of all actions during the practise process. According to Lehmann and Ericsson (1997: 47) "deliberate practice has well-defined goals and the outcome is monitored carefully to see if the goals have been met." By the end of this stage the 'notes' are fluent but not yet fully automatic and decisions concerning the music itself have not yet been addressed. This can be seen as the beginnings of conscious competence.

Stage 3: The grey stage

The grey stage is significantly a "transition" stage and so it moves backward and forward across strategies, reflections, decisions and competencies. This means that during the grey stage the work is still very fresh and 'unstable' in the pianist's mind and this will cause fresh challenges as to how to 'stabilize' the work in the mind. The pianist must strive for a fully automatic response while playing the work. This often

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requires experimentation and much reflection about what worked or not. Work on the technical difficulties may still continue and the pianist will strive to make these parts automatic. The pianist must also start connecting the small sections systematically from the previous stage into larger wholes. The piece also starts becoming more and more stable in the pianist's memory during this stage. The pianist will now also be more concerned with the musical aspects of the work and will form a basic interpretation of the work which will evolve up to and beyond the first performance.

Stage 4: Putting it together

"In performance, a pianist does not have time to think[20] of every feature [of the piece]. Each must be known so well that it occurs without conscious thought, leaving the pianist free to attend to the instrument, hall and, audience" (Chaffin & Imreh 2002b: 169). During this stage, the object is to play through the entire score, preferably from memory. Once the score is firmly in the memory the pianist will proceed to the next stage. At this point there is a tension between 'conscious memory' (that might require certain conscious clues), or triggers to recall certain transitions, progressions or complexities (also known as 'mneumonics'), and 'unconscious memory' where the hand-eye-brain-memory (in short, the body/mind integration) interaction seems inevitable and 'unconscious.' This stage may mark the shift from conscious competence to unconscious competence.

Stage 5: Polishing

"There are two new features of practice at this time: the use of slow practice and playing for practice audiences. Slow practice checks and strengthens conceptual memory by lessening the contribution of the motor memory" (Chaffin et al. 2002: 243). The interpretation of the score must be revisited and refined during this process. Thompson et al. (2006: 99) argue that a specific musical score provides detailed information regarding the construction of the piece itself but it does not provide detailed information regarding "the expressive nuances that are needed to

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[20] It must be born in mind that the authors here are referring to 'conscious and deliberate thinking' (such as might happen during the 'conscious competence stage') which indeed does not happen during the unconscious competence stage. However, to consider that there is 'no thinking' in terms of 'no brain activity' misses the idea that so much of the performance event is 'controlled' through unconscious 'thinking.'

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bring music to life" (Ibid). An individual interpretation must emerge from a series of decisions concerning the score, the style and the personally unique character of the performer. This may come about as the pianist 'listens to' the potential music emanating from his fingers from moment to moment, in a state of 'aesthetic reflection.' It seems as if this stage will cement the unconscious competence phase.

Stage 6: Maintenance

Regular 'run-throughs' must now take place to maintain all ideas and motions fresh until the day of performance and beyond. Slow practice is still very important and the pianist must continue to explore the musicality of the piece to keep gaining a deeper understanding of, and connection to, the music. Maintenance combats memory (both muscle memory and music memory) loss. It may even be argued that 'maintenance mentors memory', drawing on the mentoring argument of Goel's (2011) reworking of Bloom (as considered earlier).

2.4.3 Jørgensen's strategies and processes

Acknowledging the individual process of effective practising, Jørgensen (2004: 85) offers the importance of phases in practicing. According to him all effective practising has to include "planning and preparation", "execution", "observation" and "evaluation" (Ibid). Furthermore, Jørgensen (2004: 86) offers three self-regulating processes at play when preparing a piece for performance. These are:

- Forethought: the thought processes and personal beliefs that precede efforts to engage in a task
- Performance/volitional control: processes that occur during the learning that affect concentration and performance
- Self-reflection: the learner's reaction and subsequent response to the experience (Jørgensen 2004: 86).

The first two processes (forethought and performance control) offered by Jørgensen will, in this study, be captured in the journaling process which will, in turn lead to the reflection on that which has been captured. Self-reflection, according to Jørgensen, is the third process. The interrelationship between these three processes contributes to self-regulated learning which, according to Dos Santos and Gerlin (2011: 431) is

indicative of metacognition. This argument echoes an earlier contribution by Richie and Williamon (2007: 311) that stresses the importance of the congruency between self-efficacy (the ability to do things) and self-regulation (the ability to control what one is doing) towards success as a performer.

One can argue that Jørgensen's three self-regulating processes do not necessarily take place sequentially but may simultaneously be present during the learning continuum. Indeed, it is when these processes are out of balance that one may encounter problems in performance. If self-regulation is downplayed, control over the material is diminished, leading to strange and unusual (and perhaps 'out of control') performance moments. When self-regulation becomes dominant, self-censorship before the event can occur, and doubt about the ability to perform (or perform more difficult moments in the piece) can stifle the self-efficacy. It is foreseen that these three processes will be present during any and all of the phases offered by Jørgensen and the stages described by Chaffin et al. (2002) discussed above.

This research project combined the above outlined stages and processes within at least three of the four levels outlined in the Maslow Theory on Conscious Competency. It set out to trace the discoveries and changes made in the phases applicable to the process of preparing a score for performance. The levels of the Conscious Competence Theory had as such a temporal and organisational function both in the execution of the study and in the ensuing narrative on/of the study. As I proceed through the various levels of learning, accessing the various stages of practice and execute the relevant activities, shifts in learning activity may take place.

2.5 Conclusion

The purpose of this chapter has been to document and describe selected theoretical positions that engage with and speak to the learning process in general and to the musical performance aspect in particular. In turn, the purpose of the literature overview was to present theoretical positions of learning as selected 'lenses' which will be used to 'look at' and 'reflect upon' the raw data generated out of the autoethnographic documentation and reflection process. In this sense, therefore, the different lenses are used as different points in the triangulation process, where the

lenses are brought to bear from different positions on the same phemonena, and the same body of reflection.

Thus this chapter documented several models and styles of learning such as Kolb's experiential learning and Bloom's taxonomy that may be present during the performance acquisition process. It was argued that the acquisition process of a piano score towards performance takes place within a specific timespan and a specific continuum or trajectory will exist for the acquisition process. It was offered that Maslow's Conscious Competence Theory provides markers for this continuum. Within this continuum, different strategies may be accessed in the preparation of a piano score for performance of which Chaffin and Imreh's six stages are deemed most applicable to this study.

Chapter 3 presents an expanded and detailed discussion of the research procedure and methodology as noted in Chapter 1. Furthermore, it provides the data collected over the 2 phases (phase 1 speaks to the pre-preparation to the performance acquisition and phase 2 contains the six documented acquisition sessions).

Chapter 3

The research process: data collection and analysis

3.1 Introduction

As indicated in Chapter 1, the aim of the study is to explore, track and document the acquisitional shifts during the preparation process towards a piano performance by executing an inductive and autoethnographic study, so that the potential coherence between these shifts, levels of learning, and subjective responses at intervals during this process can be traced and, ultimately, triangulated using extant theories. Chapter 2 noted that the research processes take place within the learning continuum suggested by Maslow's Conscious Competency Theory. Within this learning continuum, the learning styles and theories discussed in Chapter 2 will be applied to the autoethnographic data and reflection.

The preliminary step in the process (referred to as Phase 1 in 1.4.3) was the preparation before the practising started. This initiated the chronological trajectory of the learning continuum.

3.2 Phase 1: Pre- acquisition preparation

This phase functioned as a preparatory phase.

3.2.1 Becoming familiar with the score

During this part of the learning process the performer must familiarise themselves with the score. To do this the performer will research historical information regarding the composer and piece. Then the performer will execute a basic analysis of the piece in terms of harmonic and motivic development as well as technically so as to ascertain where the difficulties may lie.

Brahms *Intermezzo* Op. 119 No. 1 in b minor[21]

In 1886 Brahms settled permanently in Vienna and it is during these years that he wrote many of his great works, including four Symphonies, the Piano Concerto No. 2, the Violin Concerto, the Clarinet Quintet as well as the Op.119 set of piano pieces.

In a letter which Brahms sent to Clara Schumann he tells her about a new piece he has written. It is clear that Brahms is very enthusiastic about his new piece and would like to hear Clara's opinion. It is uncertain whether this piece was written specifically for her or not. This, in my opinion, only adds to the intrigue of an already-enigmatic piece.

> "..I'm tempted to copy out a small piano piece for you, because I would like to know how you get along with it. It is crawling with dissonances! These are deemed appropriate and can be explained—but maybe you don't like their taste, in which case I wish they were less appropriate but appetizing and to your taste. The little piece is exceptionally melancholy and to say 'to be played very slowly' isn't saying enough. Every measure and every note must sound like a ritard[ando], as if one wanted to suck melancholy out of each and every one, with a wantonness and contentment derived from the aforementioned dissonances! God Almighty, this description will surely whet your appetite!" (Avins 1997: 706).

It can be argued that this *Intermezzo* is written in a compressed sonata form. The theme (t1) is introduced in the exposition (A) (example 3.1).

Example 3.1: *Intermezzo* Op. 119 No. 1, Theme 1, mm. 1-3

The motif (m1) in bar 4 is further developed in bar 5 (beneath the right hand melody) with shorter note values and the use of double thirds (example 3.2).

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[21] Please see Addendum A for the complete score.

Example 3.2: *Intermezzo* **Op. 119 No. 1, mm. 4-5**

Brahms then alternates between the original material (bar 4 and 6) and the new variation (bar 5 and 7) with an even more complex version occurring in bar 8 (example 3.3).

Example 3.3: *Intermezzo* **Op. 119 No. 1, mm. 7-8**

This material is directly related to the material found in bar 14 which is the same pattern of notes with a longer note value (example 3.4).

Example 3.4: *Intermezzo* **Op. 119 No. 1, mm. 14-15**

Another new motivic idea (m2) is introduced in the bass of bar 4 (example 3.5).

Example 3.5: *Intermezzo* **Op. 119 No. 1, mm. 4**

The motive 2, introduced for the first time in the left hand in bar 4, becomes significant in bar 12 when it alternates between the two hands in a descending line which simultaneously facilitates the modulation b minor to F# major (example 3.6). The motif is perfectly mirrored in the bass a compound 4th apart. This brings the section to a close in the dominant key of b minor (F# major). The developed version m2 is used again against the m1 motif in the final bar of this section.

Example 3.6: *Intermezzo* **Op. 119 No. 1, mm. [upbeat to] 12-16**

The new section begins in bar 17 in the relative major of b minor (D major) (example 3.7). It is 28 bars long and can be divided into two 14-bar sections (B1 and B2). The main idea of the middle section is a development of m2 and consists of 4 episodes. Each episode is a development of the play on intervals (minor 3rd, Major 3rd, Perfect 4th) as well as harmonic development leading towards a climax in bar 24. Bar 24 is significant in that it is the start of a much longer phrase leading towards the conclusion of section B1. Bars 24-30 is a development of the material found in bars 14 and 15 (section A).

Example 3.7: *Intermezzo* Op. 119 No. 1, mm. 12-30

The first indications of a move back towards b minor is the e# found in bar 30 (leading note in b minor). The chromatic movement in the bass (example 3.8) makes the key ambiguous and serves as a counterpoint to the repetition of the material found in the previous two bars in the lower part of the right hand.

Example 3.8: *Intermezzo* Op. 119 No. 1, mm. 27-30

The 5-step chromatic movement is only found in two other parts of the piece, which is bar 45 to the first note of bar 47 (example 3.9) and bar 32-34 (example 3.10).

Example 3.9: *Intermezzo* **Op. 119 No. 1, mm. 45-47**
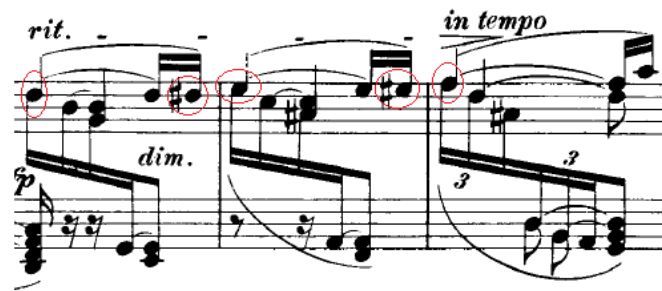
Example 3.10: *Intermezzo* **Op. 119 No. 1, mm. 32 (2nd beat)-34**

Section B2 (bar 31-44) is 14 bars long and begins with a further development of the material found at the beginning of section B1. Slowly Brahms returns to b minor. In bar 33 and 34 there is an chromatically ascending melody in the bass line with the notes A#, to B, C natural (the Neapolitan 6th in b minor) which then resolves to a B.

Example 3.11: *Intermezzo* **Op. 119 No. 1, mm. 32 (2nd beat)-34**

Hereafter follows a return of m2 (bar 35) which flows into the piece's climax in bar 37 which introduces a triplet accompanying figure for the first time (example 3.12). The triplets are derived from the bass accompaniment seen earlier in the piece (for example from bar 25, see example 3.13).

Example 3.12: *Intermezzo* **Op. 119 No. 1, mm. 37**

Example 3.13*: Intermezzo* **Op. 119 No. 1, mm. 25**

Once again the A-B-C natural-B is used as part of the triplets (example 3.14). A descending sequence of a rhythmically modified m2 then follows. This leads to bar 47 which can be seen as the dominant preparation for the return to the original key. A type of "false entry" occurs in bar 45. This refers to material similar to the main theme returning but occurs a 3rd lower than in the exposition. The true recapitulation of the main theme occurs in bar 47 with a developed accompanying figure of richer harmonies and triplets from bar 47.

Example 3.14: *Intermezzo* **Op. 119 No. 1, mm. 37-48**

 A further development of m2 occurs in bars 58-60 (this time a 3rd lower than in section A) and again in bars 62-64 (example 3.15). This is the codetta of the piece. Bar 61 and 65 are similar with bar 65 being more harmonically ambiguous as the harmony unravels to the tonic chord of b minor. This chord in b minor is the first clear tonic chord of b minor in the entire piece.

Example 3.15: *Intermezzo* **Op. 119 No. 1, mm. 55-67**

Familiar patterns of notes and decisions regarding fingering

This piece is foundationally based on broken chords, chords and open intervals. This aids the performer greatly due to the familiarity of these compositional techniques. The performer would have come across these patterns during scale and technical exercise practice. Therefore the fingerings in general are easy to decide on. Identifying these patterns beforehand gives the pianist the advantage of knowing which fingerings to use from the start. This ensures that the pianist will not have to relearn other fingerings later.

Passages containing technical difficulties

Identifying the technically difficult parts aids the performer in prioritising the various challenges the piece represents. The more challenging the technical requirements the longer it will take to master them. Identifying these challenges also allows the performer to plan how to circumvent them.

The challenge is to separate the melody notes from the notes that 'colour in' the harmony and texture. The long melodic notes must be sustained so that the phrase doesn't end prematurely. For example, during this sub-phrase (example 3.16):

Example 3.16: *Intermezzo* **Op. 119 No. 1, mm. 1-4**

The top line should be easily distinguishable to the listener. The notes underneath should be played a little softer than the top line as these notes are simply harmonic colour and texture. The way to accomplish this would be to concentrate the weight of

the arm and hand in the fingers used to play the melody and to lighten the part of the hand responsible for the other notes.

Passages like the following one are challenging because of the wide range the left hand covers with the arpeggios and broken chords combined with the octaves and chords in the right hand (example 3.17). The difficulty is to maintain a legato sound and to keep the phrase flowing. This can be accomplished by rapid hand position changes and pedalling to give the illusion of legato as well as keeping the hands as close to the keys as possible.

Example 3.17: *Intermezzo* **Op. 119 No. 1, mm. 24-26**

Musical aspects and basic interpretation

Taking note of the phrasing, dynamics, various cadences and climaxes aids me as the performer in preparing the basic interpretation of the piece. This knowledge provides the basic interpretative framework for any performer. This *intermezzo* should be played very slowly even though it is only marked "*Adagio.*" Brahms explicitly mentions this in his letter to Clara Schumann:

> The little piece is exceptionally melancholy and to say 'to be played very slowly' isn't saying enough. Every measure and every note must sound like a ritard[ando], as if one wanted to suck melancholy out of each and every one, with a wantonness and contentment derived from the aforementioned dissonances! God Almighty, this description will surely whet your appetite![22]

The mood does slightly change (and thus the tempo as well) in the middle section (from bar 17 to approximately 42) which is in the relative major key of b minor (D

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[22] Avins (1997: 706).

major). Here one can play with a slightly more upbeat feeling before returning to the original tempo when the first section returns again (bar 47) before the coda (bar 58). One should also strive to keep the melody as clear and as *dolce* as possible. The harmonies are very dissonant and if the melodic elements are not clear then the piece can be very confusing to the pianist as well as the listener. Thus the difficulty is in finding a tempo which is slow enough but still allows the phrases and melodic elements to be presented as clearly and beautifully as possible. In other words, the lines of the pieces must not be compromised by the tempo.

Individual interpretation choices

This is where I, as the performer, decide how to add my own ideas to the interpretation. This typically occurs over a long period of time consisting of experimentation and exploration. Individualised musical ideas about a piece typically take a long time to coalesce.

What I strive to accomplish in this piece is to allow the melancholic spirit to dominate as much as possible. To do this I will employ a slow tempo and attempt to make dynamic contrasts and melodic/harmonic contrasts as vast as possible within the indications given by Brahms. This will serve to highlight details for the listener. Making use of a beautiful tone as well as manipulating dynamic levels such as extreme *pianissimo* will enhance the melancholic effect of the piece. The dynamic levels in this piece, in my opinion, should be very subdued even if the score marking is *forte*. The notes that are non-melodic should be thought of as even softer than the melody notes to make the contrast even greater.

These two activities concluded the first phase of the study. Following this, there were six practice sessions in this study, seven to ten days apart. These practice sessions were defined as the sessions of formal practicing (Zhukov 2009) in front of the piano during which certain practising strategies were accessed. The time that lapsed between these formal practise sessions were not 'dead time,' as I continued with my daily practice of other pieces as well as technical development, weekly lessons, informal practising and mental practice (Coffman 1990; Zhukov 2009). It is acknowledged that all these activities contributed to enhance the progress made in

the six formal practice sessions as offered by Coffman (1990). The actual duration of each of these sessions was approximately between thirty to forty minutes and these sessions formed part of my daily practise schedule. Please note that the duration of the practise session is provided not as an indication of the quality of practice (see Duke, Simmons & Cash 2009: 311).

3.3 Phase 2: Data collection and Procedure

The research methods used in each of these practice sessions as a means of capturing and eventually reflecting upon the autoethnographic data (as explained in Chapter 1 of this document) were:

•   Journaling;
•   Audio-visual recordings and the reflections on eachpractice session.

3.3.1 Journaling

Journaling took place directly after each practice session. I devised a semi-structured table in which I 'journalled' after each research recording session and again reflectively later. As indicated in Chapter 1, the content of this 'journal table' is based on a table used and reflected upon by Chaffin et al. (2002: 141) regarding their stages of practising. I adapted their table by adding rows for information concerning applicable theories of learning, perceived levels of learning, stages, and potential interference from and awareness of the camera when applicable. It was initially planned to only journal directly after each recording session. As an autoethnographic note I realised that I habitually shift into a non-verbal mode during practice; as such, journaling directly after each session was extremely difficult for me. Consequently, I revisited the 'journal table' of each session again some time after the session when I felt that could verbally reflect on the experiences of the session.

In the data provided on each session below, following the journal of each session, key matters arising from the journal information of each session are provided.

3.3.2 Audio-visual recordings

Audio-visual recordings were made of each of the formal practice sessions. These recordings allow for a real-time playback of both auditory and visual data. These recordings were viewed after completion of all six recording sessions. I did not view the recordings between the six sessions as I did not want the observations to influence the very subjective learning process in any way. (It could also be argued that such viewing might have influenced unduly the 'normal' acquisition process, as it would engage with a set of stimuli that would not normally be present in such a process). When viewing these sessions, notes were made regarding patterns observed. I chose to not determine before viewing these recordings, 'what to look for' but to note any auditory and visual information that 'stood out'. As I was watching myself in practice mode, some distance was created although it was still a subjective observation as I interpreted the auditory and visual information observed from an autoethnographic perspective — for example, I recognised a specific body movement as one of frustration as it is a familiar event in my body. Similarly, viewing the sessions created a recall of the actual session. This is consistent with Chaffin's (2011: 696) argument that when musicians watch audio-visual material of their own practice sessions they provide "musical understanding and insight" which are more accurate than just self-report through recall.[23] The "dynamic information" (Gray & Malins 2004: 110) gained from observing these audio-visual recordings thus provided limited objective reflections on the six recording sessions as it was still interpreted subjectively drawing from my own 'lived experience.' The information gained through these observations provided an added dimension in the autoethnographic process.

Following the observations and interpretations I made from the audio-visual recordings of each session, key matters arising from these observations are provided. Subsequently, a review of scholarship provided information regarding effective practising (for example Chaffin 2011; Duke, Simmons & Cash 2009; Zhukov 2009). The valuable information gained from this scholarship was used to

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[23] It can also be suggested that such 'feedback' is often presented by the teacher during coaching sessions, which was not part of this particular project.

substantiate through triangulation the subjective observations made. This is provided in 4.2.6.

3.4 Data of practice session 1

In the first session I was confronted with the sheet music at the piano, thus in a formal practice set-up, for the first time.

3.4.1. Journal

Journal entries were initially completed immediately after the practice session and revisited later. Directly after each recording session it was very difficult to put my observations and reflections into words which is why I revisited my journal entries and expanded on my initial comments. Initial comments are provided in bold. Comments added later are not in bold.

Table 3.1: Journal session 1

TOPICS	Subjective comments
Basic	
Fingering	**Sorted out basic fingering of first page.** As I worked through the notes I attempted to sort out the fingering immediately.
Technical	**Identified most challenging passages.**
Patterns	**Established awareness of basic motivic patterns.** I identified the basic building blocks of the piece so that I was aware of what material was related and what material was new.
Interpretation	
Phrasing	
Tempo	
Dynamics/Pedal	
Miscellaneous	**Top line must be brought out regardless of thirds or other "secondary" material.** The melodic and harmonic material is often written in the same register on the piano so it is a challenge to separate them for the listener.
Performance	
Memory	
Musical Structure	**Basic musical structure is ABA, rhythmically similar.**
Use of score	
Attention	
Metacognitive	
Evaluation	**Piece not challenging but requires careful phrasing and beautiful tone.** The notes themselves are technically easy but the challenge lies in phrasing the music well and giving the melodic line a beautiful singing tone which simultaneously keeping the harmonic notes slightly understated.
Affect	

Learning Process	**Motor memory is being established.**
Research	
Plans and strategy	**Lots of slow practise with a metronome until the notes are comfortable.**
Slow practice	**Very slow to figure out patterns and prevent the wrong notes being learnt.**
Metronome	**3x with metronome, slow down tempo each time.**
Fatigue	
Editor	
Research specific observations	
Awareness audio-visual recording	**Slight awareness.** Being recorded on audio-visual is not a new experience but is one associated with stress because I want my playing to be perfect.
Kolb	**Concrete experience, Reflective observation and Active experimentation:** At this stage the most learning is taking place by trying the music on the piano and experimenting with what works the best which includes reflecting on the various processes used.
Bloom	**Predominantly Cognitive and Psychomotor**
Whole Brain thinking	**Fact, Form.**
Conscious competence phase	**Conscious Incompetence[24].** At this point I am now aware of what work must be done and what I must accomplish in this piece.
Stage of practice	**Stage 1 and 2: Scouting it out and Section by section**

Key matters arising from the journal of session 1

Gleaning from the journal of session 1, my main focus was on the basic elements such as fingering, technical demands and patterns. I subjectively report the following from the first journaling session:

- I functioned in Stage 1 and 2 as provided by Chaffin and Imreh (Scouting it out and Section by section).

- I engaged with Kolb's Concrete Experience, Reflective Observation and Active Experimentation levels.

- I predominantly accessed Bloom's Cognitive and Psychomotor domains.

- From the theory on Whole Brain Thinking I utilised the Fact and Form quadrants.

- On Maslow's competency ladder I experience Conscious Incompetence.

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[24] Observations regarding the Conscious Competence Ladder are made in terms of the learning process of the piece, not the act of playing piano in general.

3.4.2 Observations from audio-visual real-time playback session 1

During this first session I gain a thorough overview of the notes by playing through the piece very slowly and correcting any mistakes along the way. I try out different fingerings and begin solidifying the familiar patterns I recognize (for example, familiar chords, broken chords, arpeggios etc.) This is all congruent with "[S]couting it out" (Practice Stage 1: Chaffin and Imreh).

I also begin making use of 'deliberate practice' which includes reflecting on what I have just played, chunking the music down into small sections as well as problem solving. I also revisit previous decisions again and re-evaluate what I have done. Slow practice is used throughout including increasing tempo with the aid of a metronome. I also play certain sections in a few different ways (i.e. changing the rhythm, note groupings).

Throughout the session it can be observed that my body always remains relaxed and that I am totally focussed on the task at hand. My concentration never wavers for a second and I am almost in a trance-like state. My visual focus remains mostly on the score and my spatial awareness is focussed on my hands as I navigate the keys. It is evident that I engage in heightened tactile awareness.

As the session progressed the tempo at which I could comfortably play the notes increased. This indicates that the basic note learning phase of this specific section is already complete during this session. As I became more comfortable with the notes my visual orientation increasingly shifted to include the piano. This indicates the beginnings of the memorisation process.

Key observations arising from the audio-visual observation session 1

- My main focus is on the basic elements and patterns
- I engaged in 'deliberate practise'
- Slow practise appeared thoughout
- Relaxed body

- Heightened tactile awareness

- Prolonged concentration

- Trance-like state

The triangulation of the key findings during session 1 will be provided in table form in the next chapter.

3.5 Data of practice session 2

This session builds on session 1.

3.5.1 Journal

Journal entries were initially completed immediately after the practice session and revisited later.

Table 3.2: Journal session 2

TOPICS	Subjective comments
Basic	
Fingering	**Straightforward.** Because many of the patterns are made up of familiar note groupings (scales, triads, arpeggios etc.) the fingering is self-explanatory.
Technical	**Much easier to bring the melody out. Jumps were easy.**
Patterns	**Many repeating ideas, themes and motifs.** Due to the piece being in ABA form, a significant amount of similarities occur in motivic and thematic elements.
Interpretation	
Phrasing	**Better feel for the phrasing.** When the notes become 'comfortable' it is easier to focus on the line and direction of the music.
Tempo	**More "*a tempo*" today as notes flow better.**
Dynamics/Pedal	**Paid more attention to dynamics but will experiment and explore further.**
Miscellaneous	**Greater contrasts must be made.** Greater contrasts in terms of dynamics, separating the steps of a sequence (getting louder or softer as the sequence progresses). Greater contrasts between sections of the piece, for example, the middle section should be very contrasting to the first and last sections.
Performance	
Memory	
Musical Structure	**Themes and ideas more complex when occurring for a 2nd time.** In the last section the main material undergoes motivic and harmonic development
Use of score	**More awareness of markings.**
Attention	**Still learning notes but also began focussing on tone and dynamics**
Metacognitive	
Evaluation	**Notes are much easier today. Was able to start focussing on phrasing, score markings and interpretation.**
Affect	

Learning Process	**Motor memory being established. Musical ideas being formed.** This is the beginning of the discovery of one's one musical ideas about the piece. The more you experiment and play the piece, the more your ideas begin to take shape.
Research	
Plans and strategy	**Solidify memory and form interpretative concepts of piece.**
Slow practice	
Metronome	**Use for fixing note mistakes. Very slow tempo as well as decreasing the speed.**
Fatigue	
Editor	**Not using editor's fingering.** Some of the edited fingers were not what I found most comfortable or most practical.
Research specific observations	
Awareness audio-visual recording	**No awareness.**
Kolb	**Concrete experience, Reflective observation and Active experimentation**
Bloom	**Predominantly Cognitive and Psychomotor**
Whole Brain thinking	**Fact, Form, Feeling**
Conscious competence phase	**Conscious Incompetence to Conscious Competence.** I am beginning to master the piece on a conscious level. This means I still need to think consciously about the piece and often still make mistakes or hesitate due to the fact that I am not completely consciously competent yet.
Stage of practice	**Stage 2 and 3: Section by Section and The Grey Stage**

Key matters arising from the journal of session 2

Gleaning from the journal of session 2, my main focus was on the basic elements and interpretation. I subjectively report the following:

- I functioned in Stage 2 and 3 as provided by Chaffin and Imreh (Section by section and "the grey stage").
- I engaged predominantly with Kolb's Concrete Experience, Reflective Observation and Active Experimentation levels.
- I predominantly accessed Bloom's Cognitive and Psychomotor domains.
- From the theory on Whole Brain Thinking I utilised the Fact, Form and Feeling quadrants.
- On the competency ladder I moved from Conscious Incompetence toward Conscious Competence.

3.5.2 Observations from audio-visual real-time playback session 2

I start the second session at the middle section and begin by getting a feel for the notes. Reassessment of the previous session's decisions takes place and some fingering is changed. The notes are much more comfortable and it is much easier to shape the phrases more clearly and to play with dynamic variation and contrasts (e.g. contrasting the various steps within a sequence). There is a more coherent distinction between melody and harmony.

During this session I often take more time to cognitively solve problems before applying the solutions practically. This is demonstrated by me at times pausing to look at the score and then pausing slightly more before executing the next phase. This was due to my analysis of the score to identify important patterns in the music. Small sections are focussed on and practise methods, such as separate hands and slow practice, are applied. Making variations of material is also done at times. This aids in making the original material easier to play, once the variations are mastered.

My body remains very relaxed throughout the session and my concentration remains constant throughout the session. There is a slight moment of inner frustration during a particular passage but it passes within seconds. This is demonstrated through my body patterning and facial expression. My visual awareness is much more on my hands during this session as there are some tricky passages requiring hands crossing over.

The tempo is markedly faster than the first session as the notes are much more comfortable. I once again made use of a metronome for very slow practising, progressively slowing the tempo down to fix note problems.

Key observations arising from the audio-visual observation session 2

- My main focus is on the basic elements and revisiting decisions made previously
- 'Deliberate practise' took place

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- Conscious problem solving
- Slow practice was used deliberately
- Practise tempo at times markedly faster than during the first session
- Relaxed body
- Heightened tactile awareness
- Prolonged concentration
- Visual focus often on hands, not on sheet music

The triangulation of the key findings during session 2 will be provided in table form in the next chapter.

3.6 Data of practice session 3

This session builds on session 2.

3.6.1 Journal

As with sessions 1 and 2, journal entries were initially completed immediately after the practice session and revisited later.

Table 3.3: Journal session 3

TOPICS	Subjective comments
Basic	
Fingering	
Technical	
Patterns	
Interpretation	
Phrasing	**Phrasing clearer and accentuates melody.** When the phrasing as written then melody assumes its proper shape. Being able to link the phrases and sub-phrases adds to the musical value of the performance.
Tempo	**Still unsure of proper tempo. Will research it.** Even though Brahms' instructions regarding the tempo are clear, it was interesting to observe what tempo other pianists chose.
Dynamics/Pedal	**Dynamics within the overall indicated dynamic range can be clearer.** Meaning that different levels of "piano", "pianissimo" and "forte" must be implemented. It provides more character and interest to the piece.
Miscellaneous	
Performance	
Memory	**Memory will be solidified during the next week.**
Musical Structure	
Use of score	

Attention	**Attention on rich tone and melodic clarity.** This was my main focus until the very end of the study. I really wanted to have a beautiful tone and be able to bring the melody out as clearly as possible.
Metacognitive	
Evaluation	
Affect	**Should be very melancholic and mysterious.**
Learning Process	**Ready for memorisation.**
Research	
Plans and strategy	**Pattern and harmonic memorisation.**
Slow practice	**Will help with memorisation.**
Metronome	
Fatigue	
Editor	
Research specific observations	
Awareness audio-visual recording	**No awareness.**
Kolb	**Concrete experience, Reflective observation and Active experimentation**
Bloom	**Predominantly Cognitive and Psychomotor**
Whole Brain thinking	**Fact, Form, Feeling**
Conscious competence phase	**Conscious Competence.** By now I am competent at playing the piece (with sheet music) but there are many things that still need conscious focus though.
Stage of practice	**Stage 4: The grey stage.**

Key matters arising from the journal of session 3

Gleaning from the journal of session 3, my main focus was on the musical interpretation. Memorization took place, although it was not a primary focus. After completing the journal I realised that I had memorised sections of the piece. I subjectively report the following:

- I functioned in Stage 4 (the grey stage) as provided by Chaffin and Imreh.
- I subjectively report that I engaged with Kolb's Concrete Experience, Reflective Observation and Active Experimentation levels.
- I predominantly accessed Bloom's Cognitive and Psychomotor domains
- From the theory on Whole Brain Thinking I utilised the Fact, Form and Feeling quadrants.
- On the competency ladder I functioned with conscious competence.

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3.6.2 Observations from audio-visual real-time playback session 3

During this session it is obvious that my playing presents much more musical expressivity than before. The phrases are much clearer and the music flows very naturally. A much more delicate touch is observed and the melody is highlighted with a rich tone while the interpretation of the harmony notes provided the emotional background.

The session begins with a general play-through to determine progress made in the previous sessions. Mistakes still occur and with each one I stop to correct them. Isolating each problem area is vitally important. The piece is now reaching the stage where I need to be creative in figuring out solutions to my problems, for example, practising the material in increasingly complex variations. Separate hands practise at a very slow tempo helps in ironing out any difficulties. I begin paying even more attention to the voicing of the different chords so that the top line always remains clear.

I observe that I am able to remain completely relaxed throughout this session and my concentration remains unbroken for the duration of the session. Momentary reflections on each action keep my attention focussed on what needed the most work.

Tempo is no longer an issue and might be slightly too fast. This is contrary to what I indicate in my journal. This shows how subjective experience may be distorted when still in the learning phases of the piece. Later on the subjective experience of the performance-in-action can be dove-tailed more accurately to what might be the expectations of the listener. I feel very comfortable with the notes aside from the few problem areas remaining. My awareness shifts from reading the score with my tactile sense guiding my fingers to looking at my hands and allowing my visual sense and my memory to guide my fingers. This aids my memorisation of the piece.

Key observations arising from the audio-visual observation session 3

- Musical interpretation

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- Emotional content
- Deliberate practice
- Complete relaxation
- Prolonged concentration
- Tactile and visual senses lead to memory recall

The triangulation of the key findings during session 3 will be provided in table form in the next chapter.

3.7 Data of practice session 4

This session builds on session 3.

3.7.1 Journal

As with the previous sessions, journal entries were initially completed immediately after the practice session and revisited later.

Table 3.4: Journal session 4

TOPICS	Subjective comments
Basic	
Fingering	
Technical	
Patterns	**Using various sequences to memorise the piece faster.** By recognising a pattern, how many times it repeats and what differs each time makes the piece much easier to remember.
Interpretation	
Phrasing	**Still trying to get the melody clearer.** This will be an on-going battle until I have built up a lot of experience with the piece.
Tempo	
Dynamics/Pedal	
Miscellaneous	
Performance	
Memory	**Mostly memorised, just the coda still to go.**
Musical Structure	
Use of score	
Attention	**Still with the notes. As memory improves this will change.** As memorisation of the piece is completed my attention will have shifted from the notes to the musical ideas behind the notes because I will be unconsciously competent at the notes.
Metacognitive	
Evaluation	
Affect	

Learning Process	**Memorisation almost complete.**
Research	
Plans and strategy	**Complete memory map of the piece. Will then begin to polish the details.**
Slow practice	
Metronome	
Fatigue	
Editor	
Research specific observations	
Awareness audio-visual recording	**No awareness.**
Kolb	**Concrete experience, Reflective observation, Active experimentation as well as Abstract conceptualization:** The abstract conceptualization begins to become a focal point as the interpretation of the notes becomes the main concern. Forming abstract ideas about the music and its meaning requires much reflection and experimentation.
Bloom	**Predominantly Affective and Psychomotor**
Whole Brain thinking	**Fact, Form, Feeling**
Conscious competence phase	**Conscious competence:** The piece is now solidifying in my memory and the interpretational ideas about the piece are taking form.
Stage of practice	**Stage 4: Putting it together**

Key matters arising from the journal of session 4

Gleaning from the journal of session 4, my main focus was on completing the memorisation process and continuing to mould my interpretation of the piece. My subjective reflections were:

- I functioned in Stage 4 as provided by Chaffin and Imreh (Putting it together).

- I subjectively report that I engaged with all of Kolb's levels (Concrete experience, Reflective observation, Active experimentation as well as Abstract conceptualization).

- I predominantly accessed Bloom's Psychomotor and Affective domains.

- From the theory on Whole Brain Thinking I utilised the Fact, Form and Feeling quadrants.

- On the competency ladder I am at the level of conscious competency.

3.7.2 Observations from audio-visual real-time playback session 4

From the beginning of the session the melody is very clear and is played with a beautiful ringing tone. The phrasing is much clearer and sounds very natural. As before, it can be noted that a great amount of concentration and relaxed awareness took place. The spatial and visual awareness remains primarily at the keyboard and hands.

During this session there was a focus on memorisation. This is evident in that I focus more on my hands and purposefully ignore the printed music, unless a mistake is made or a new section is being memorised. A small section is repeated until it is memorised. Each section is then linked with the previously memorised section. This is known as 'chunking.' There are still note mistakes due to this being an active memorisation process (i.e. practising with the specific goal of memorisation). Therefore even parts of the pieces that are less known are attempted from memory, analysed and corrected until they were memorised. Establishing cues (both visual and auditory) is essential for this memorisation process as it aids in quickly re-linking the sections that were memorised separately. During this process a heightened awareness of the harmonic relationships between all the notes occurs. This is achieved by playing each harmony as a chord. This also aids in solidifying hand-positions for the motor memory.

Key observations arising from the audio-visual observation session 4

- Produced good musical playing
- Spatial and visual awareness primarily on keyboard and hands
- Relaxed body
- Ease of movement during playing
- Seemed very focused — in a trance-like state
- Focus on memorisation (chunking and linking)
- Deliberate practice in some areas
- Establishing cues

The triangulation of the key findings during session 4 will be provided in table form in the next chapter.

3.8 Data of practice session 5

This session builds on session 4.

3.8.1 Journal

As with the previous four sessions, journal entries were initially completed immediately after the practice session and revisited later.

Table 3.5: Journal session 5

TOPICS	Subjective comments
Basic	
Fingering	
Technical	
Patterns	
Interpretation	
Phrasing	
Tempo	**Tempo slightly too fast. Must be more melancholic.** The notes are very comfortable now and are easy to play; therefore the tempo tends to rush at times.
Dynamics/Pedal	
Miscellaneous	
Performance	
Memory	**Couple of memory lapses but memory is generally good.**
Musical Structure	
Use of score	
Attention	**My attention should be more focussed on the musical aspects rather than the notes.** During this session I was actively memorising the music therefore my attention was fully focussed on what note/chord/sequence came next.
Metacognitive	
Evaluation	**Musical ideas will take many performances to perfect. Memory becoming more solid.** For musical ideas to form a mature interpretation one must be very experienced in performing the piece. Experimentation is also very important as long as it isn't contrary to the composer's wishes.
Affect	**Piece feels very melancholic.**
Learning Process	**Final finishing touches to memory.** Memory must now become a fully unconscious act. When this occurs then my conscious mind is free to experiment with the musicality.
Research	
Plans and strategy	
Slow practice	**More slow practise to help solidify memory.**
Metronome	
Fatigue	

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Editor	
Research specific observations	
Awareness audio-visual recording	**Awareness during the "performance".**
Kolb	**Concrete experience, Reflective observation, Active experimentation and abstract conceptualization**
Bloom	**Predominantly Psychomotor and Affective**
Whole Brain thinking	**Fact, Form, Feeling, Fantasy**
Conscious competence phase	**Conscious competence-unconscious competence**
Stage of practice	**Stage 4 and 5: Putting it together and Polishing**

Key matters arising from the journal of session 5

Gleaning from the journal of session 5, my main focus was on the final stages of solidifying the piece in my memory as well as forming the interpretation of the piece through experimentation. I subjectively report the following:

- I functioned in Stage 4 and 5 as provided by Chaffin and Imreh (Putting it together and Polishing).
- I subjectively report that I engaged with all of Kolb's levels (Concrete experience, Reflective observation, Active experimentation as well as Abstract conceptualization).
- I predominantly accessed Bloom's Psychomotor and Affective domains.
- From the theory on Whole Brain Thinking I utilised the Fact, Form, Feeling and Fantasy quadrants.
- On the competency ladder I was moving towards unconscious competence.

3.8.2 Observations from audio-visual real-time playback session 5

This session begins with slow practise and chordal playing to highlight harmonic relationships, as well as separate hands practise. This serves to reinforce the notes in the memory and thus strengthens the melody. Each time a mistake occurs I stop and fix it. Thereafter the section is repeated until there are no mistakes. I first attempted to correct mistakes from memory and only used the score when this

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failed. The sheet music is mainly there as quick reference material in case of a memory lapse.

To intensify my tactile and auditory senses I often close my eyes. One can argue that this gives the brain a different way of perceiving the music being played which, in turn, serves in adding another dimension to the memorisation of the piece. This means when I perform it in concert I will be able to rely on more than one of my senses to help recall the piece in case another sense fails.

For the duration of the 'practise' part of the session I remain very relaxed, with no visible tension. During the performance, as my memory became unstable in sections, my face would show signs of tension accompanied by notes errors. It is apparent that there is too much conscious thought occurring with regards to the notes. This shows insecurity about the piece and an unstable memory. The musicality was well handled and attention to phrasing and sound was good. Following the 'performance,' I read through the score to mentally cement the passages where my memory faltered.

Key observations arising from the audio-visual observation session 5

- Remained relaxed
- Slow practice and separate hands practice
- Focus on stabilising memory
- Put more focus on intensifying tactile sense, removing visual sense
- Sheet music a last resort to fixing memory lapses
- Musical playing

The triangulation of the key findings during session 5 will be provided in table form in the next chapter.

3.9 Data of practice session 6

This session builds on session 5.

3.9.1 Journal

As with the previous five sessions, journal entries were initially completed immediately after the practice session and revisited later

Table 3.6: Journal session 6

TOPICS	Subjective comments
Basic	
Fingering	
Technical	
Patterns	
Interpretation	
Phrasing	**Phrasing felt more natural and flowing.**
Tempo	**Tempo was better. It helped create the mood.**[25]
Dynamics/Pedal	
Miscellaneous	
Performance	
Memory	**Memory still not perfect but slightly more solid.**
Musical Structure	
Use of score	**Score used for checking minor details.**
Attention	**Attention is still on the notes too much but is better than last time.**
Metacognitive	
Evaluation	**A few more days should be enough to fix memory.**
Affect	**Mood was much better but could be more intense.**
Learning Process	
Research	
Plans and strategy	**More slow practice and repetition.**
Slow practice	
Metronome	
Fatigue	
Editor	
Research specific observations	
Awareness sensors	**Little awareness.**
Awareness audio-visual recording	**Little awareness.**
Kolb	**Concrete experience, Reflective observation, Active experimentation and abstract conceptualization**
Bloom	**Predominantly Affective**
Whole Brain thinking	**Form, Feeling, Fantasy**

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[25] Revisiting my journal, I realized the potential ambiguitity of the word 'mood'. In this case it refers to the mood of the music.

Conscious competence phase	**Unconscious competence.**
Stage of practice	**Stage 5 and 6: Polishing and Maintenance.**

Key matters arising from the journal of session 6

Gleaning from the journal of session six, my main focus was on the interpretation and performance of the work. My subjective reflections were:

- I functioned in Stages five and six as provided by Chaffin and Imreh (Polishing and Maintenance).
- I subjectively report that I engaged with all of Kolb's levels (Concrete experience, Reflective observation, Active experimentation and abstract conceptualization).
- I predominantly accessed Bloom's Affective domain.
- From the theory on Whole Brain Thinking I utilised the Form, Feeling and Fantasy quadrants.
- On the competency ladder I achieved unconscious competence.

3.9.2 Observations from audio-visual real-time playback session 6

I stay very relaxed and focussed throughout the session with only momentary indications of frustration at encountered problems. Visual shifts between hands and score were observed. More of my focus is on my hands as my memory recall is becoming more and more secure.

Each time memory lapses or note mistakes occur or an uneven tempo is audible, I check the score. This is to ensure that each mistake is immediately corrected to aid in solidifying those parts in the memory. At times I look up and away from piano which is a pattern that I use often when I perform from memory. As memory recall settles my hand movements in space started to indicate musical phrasing. I thus move from purely economy of movement and functionality to expressing musical involvement.

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Deliberate practice occurs, particularly in revisiting phrases, especially those that serve as 'hooks' which link certain sections in my memory. Slow practice is still a big part of the polishing process.

My body movements and gestures demonstrate economy of movement and at times it can be observed that body movements are not just functional but also expressive to support musicality.

I start to play from memory with the score still open in front of me.

I display prolonged focus. It seems as if I am in a trance-like state, indulging in the musicking.

I observed the following when playing from memory without the score in front of me:
First 'performance' from memory:
I immediately sat with good body integration and take a deep breath in preparation before starting. An observable shift from economic use of movement (for function only) to expressive body movement occurs, for example, the reinforcement of musical phrasing is observable in my hands and lower arm movements. Deep breathing congruent to phrasing occurs throughout the performance. One memory slip occurred which was observed as a slight interruption and left me slightly agitated. I repeated the phrase, using only functional movement and then fell back into the trance-like state. As I proceeded to the end, I again engaged in expressive movement and breath congruent to phrasing of music. After the last bar, it seems as though I kept my focus and concentration on the paino for a few seconds after the last bar had been played. I then took a deep breath and relaxed. It was as if I was coming out of a trance. I immediately went back to the score and revisited the phrase in which I had the memory lapse. Some deliberate practice took place i.e. separate hands, variation in tempo.

Second 'performance' from memory:
No memory lapses occurred this time. Many of the same observations can be made during this memorized performance as before. This time I seemed more secure and

even more relaxed. This is evident in the times where I look up and away from the piano as I only do this when I feel comfortable when performing a piece.

Key observations arising from the audio-visual observation session 6

- Relaxed body
- Breathing was congruent to phrasing
- Heightened visual, tactile and spatial awareness
- Focussed on shaping the sound – musical playing
- Trance-like state

The triangulation of the key findings during session 6 will be provided in table form in the next chapter**.**

3.10 Conclusion

The purpose of Chapter 3 has been to present the research process and methodology of the data collection for the study, and the chapter contained the autoethnographic data (including tentative correlations with the theoretical lenses, as part of the beginning of the triangulation process) for both Phase 1 (as pre-acquisition preparation) and Phase 2 (as the data collection and procedure of the six practice sessions). Sections 3.4 to 3.9 above presented the data collected and provided a possible interpretation of the data separately. Consequently, Chapter 4 will concern itself with the interpretation of the data in relation to the review of scholarship provided in Chapter 2 as a form of triangulation to explain, interpret and critique the documented acquisition process. Trends and patterns that occur during the learning trajectory are identified and discussed. Chapter 4 concludes with an interweaving of all the theories employed and data collected in this study as part of the triangulation process and the development of the thick description that result in the narrative that is this study.

Chapter 4

Data interpretation

4.1 Introduction

Chapter 2 presented learning strategies in general and learning stages in music acquisition. Chapter 3 provided an expanded description of the various data clusters accumulated across the six practice sessions as revealed through the various research methods. The purpose of this chapter therefore is to attempt a collation of the learning strategies and the data collected through autoethnographic means by bring the learning strategies as 'triangulation lenses' to bear on the autoethnographic data and reflection.

4.2 Discussion of data accumulated over the 6 sessions

As this is an autoethnographic study drawing from qualitative methodologies, the interpretation relies strongly on the personal experience and the reflection on the personal experience. Furthermore, the findings are transferable because of the nature of the thick descriptions that occur in the emerging narrative. Table 4.1 provides an overview of the shifts observed in the various methods utilized in this study. The content encapsulated in the table reflects

- The shifts subjectively experienced and reflected upon in the journal tables with specific reference to the Maslow's competency ladder, Chaffin and Imreh's stages, Kolb, Bloom and Whole-brain learning. Critically it should be noted that, as the autoethnographic reflections emerged from the practice sessions, so, to be able to 'reflect' on what appeared to be materialising, I had to draw on terms, theories and concepts that would assist in the reflection — these are presented in the table as my preliminary conclusions;
- Key elements observed in the audio-visual recordings.

The purpose of presenting the data in a table is to provide these various sub-sections simultaneously in order to offer a holistic view of each session. After the table the trajectory of each of the sub-sections across the six sessions is explicated.

It would appear that the next logical step would have been to attempt a comparison across the trajectories of all the sub-sections. However, firstly, the sub-sections do not speak directly to each other as they come from different paradigms and therefore, secondly there cannot be enough control of variables to provide reliable and generalizable conclusions. Nevertheless the narratives of the six trajectories provide complex tendencies that can contribute to the triangulation process that in turn could contribute to the understanding of and the identification with the acquisition process. This is in line with the nature of transferability in qualitative research.

In the sections that follow the Table 4.1 I engage in a narrative way with each of the theories as I see them pertaining to the autoethographic data and reflection. In this sense I attempt a correlation between the data and reflection on the one side, and the narrative trajectory suggested by the various theories. The goal eventually is to weave the different theoretical strands and their engagement with the ethnographic data together to form a coherent narrative of the acquisition process, based on the thick descriptions created by the triangulation process between autoethnographic data, reflection and their disparate theory weaves.

Table 4.1: An overview of the shifts observed and reflected upon autoethnographically in the various methods utilized in this study

Session	Competence ladder	Stages Chaffen & Imreh	Kolb	Bloom	Whole-brain	Audio-visual observations
1	Conscious Incompetence.	1 & 2: Scouting it out and section by section.	Concrete experience; Reflective observation; Active experimentation.	Predominantly Cognitive and Psychomotor.	Fact and Form.	Basic elements and patterns; 'deliberate practise'; Slow practise; Relaxed body; Heightened tactile awareness; Prolonged concentration; Trance-like state.
2	Conscious Incompetence to Conscious Competence.	2 & 3: Section by Section and The Grey Stage.	Concrete experience; Reflective observation; Active experimentation.	Predominantly Cognitive and Psychomotor.	Fact, Form, and Feeling.	Basic elements and revisiting decisions made previously; 'Deliberate practise; Conscious problem solving; Slow practise; Practise tempo at times markedly faster than during the 1st session; Relaxed body; Heightened tactile awareness; Prolonged concentration;

						Visual focus often on hands, not on sheet music.
3	Conscious Competence.	Stage 3: The grey stage.	Concrete experience; Reflective observation; Active experimentation.	Predominantly Cognitive and Psychomotor.	Fact, Form, and Feeling.	Musical interpretation; Emotional content; Deliberate practice; Complete relaxation; Prolonged concentration; Tactile and visual senses lead to memory recall.
4	Conscious competence.	Stage 4: Putting it together.	Concrete experience; Reflective observation; Active experimentation; Abstract conceptualization.	Predominantly Affective and Psychomotor.	Fact, Form and Feeling.	Produced good musical playing; Spatial and visual awareness primarily on keyboard and hands; Relaxed body; Ease of movement during playing; Seemed very focused in a trance-like state; Focus on memorisation (chunking and linking); Deliberate practice in some areas; Establishing cues.
5	Conscious competence to Unconscious competence	Stage 4 and 5: Putting it together and Polishing	Concrete experience; Reflective observation; Active	Predominantly Psychomotor and Affective	Fact, Form, Feeling, Fantasy	Remained relaxed; Slow practice; Separate hands practice; Stabilising memory;

			Experimen-tation; Abstract conceptualization.			Intensifying tactile sense; Removing visual sense; Sheet music a last resort to fixing memory lapses; Musical playing.
6	Unconscious competence.	Stage 5 and 6: Polishing and Mainte-nance.	Concrete experience; Reflective observation; Active experimentation; Abstract conceptualization.	Predominantly Affective.	Form, Feeling, and Fantasy.	Relaxed body; Breathing congruent to phrasing; Heightened visual, tactile and spatial awareness; Focussed on shaping the sound – musical playing; Trance-like state.

4.2.1 Maslow Conscious Competency theory as trajectory for this study

From the data presented in this chapter and summarised in table 4.1, it is evident that the acquisition of the Brahms' *Intermezzo* Op. 119 No. 1, from the initial decision to learn this specific piece for this study, to the end of the last session where I deemed myself ready to perform the piece from memory in public, I followed the trajectory of Maslow's Conscious Competency Theory. It is acknowledged that during any of the four levels/modes, there are shifts backwards and forwards to the other level/mode. When I thus refer here to 'being in' a specific mode or functioning on a specific level, it is implied that I functioned *primarily* in that mode/at that level but that the organic interplay between these modes is always fluid with a certain amount of simultaneous presence and that the modes are not purely sequential.

I was very briefly in the unconscious incompetence mode before I started studying the piece as I was unaware of any of the specific demands of the piece (beyond the general knowledge of Brahms, for example) and nor aware whether my skills and experience as a pianist would have an impact on the learning trajectory. I was thus in a state of 'not knowing'. I was in the conscious incompetence mode during the pre-practice preparation phase. During this period I familiarized myself with the score: gained historical information regarding the composer and the piece; conducted a basic analysis of the harmonic and motivic development; identified note patterns for easier learning and memorisation; made preliminary decisions regarding fingering; identified technically difficult parts; determined musical aspects and basic interpretations which led to preliminary choices of interpretation (Chaffin et al. 2002). It was clear that during this conscious incompetence period I, by default, engaged in "mental practicing" (Coffman 1990).

During practice session 1, I was in the conscious incompetence mode, not knowing whether the decisions that I had made during the pre-practice preparation phase would be applicable during the actual formal practice. I shifted to the conscious competence mode during session 2, moving through what I perceived as a fluid engagement with elements of the various learning approaches discussed and reflected upon in this study. This was the phase in which I found ways to 'solve the problem'. I deliberately focussed on and gained knowledge, experience, skill and

understanding regarding the playing of the piece to the extent that I was able to execute it consciously and deliberately. I stayed in the conscious competence mode for sessions 3 and 4 and shifted towards the unconscious competence mode during session 5. During a reflection afterwards I realized that I shifted from deliberately focusing on the task of 'playing the piece' to multi-layered musicking (see Elliot 2009).

I primarily function in the unconscious competence mode during the 6th session. Subjectively I reported in the reflection after this session that I was no longer engaged with the psychomotor tasks but revelling in the affective and aesthetic qualities of the music. Although I have indicated in 2.3 that this study does not engage with the fifth phase of competence namely the "unconscious super competence" as offered by Tung (1993: 472-473), I speculatively offer that during the maintenance stage (Chaffin & Imreh 2002) as well as the actual performance, the pianist will function in this fifth phase. Within the continuum or trajectory provided by the Conscious Competence model, I accessed various learning modes or domains from the primary learning theories delineated in Chapter 2.

4.2.2 My subjective reflection drawing on Chaffin et al.'s six stages of practice

As indicated in 2.4.2, Chaffin et al. (2002: 240-246) offer six stages of practice. Each stage has certain characteristics that define that stage. Taking these characteristics into account and reflecting on them in my journaling sessions (see journal tables above), I subjectively conclude that I adhered to the trends and activities as outlined by Chaffin and Imreh in the six stages. From the emerging narrative one notes that it was a fluid learning experience but I adhered to the linear progression of the six stages. During the pre-practice preparation phase I was "scouting it out" as I was gaining an overview of the score; deciding what areas would need more attention during the practice sessions; executing a basic form and harmonic analysis, and defining technically and musically challenging passages.

I started session 1 in this stage and moved to the second, "section by section," stage, during which I established "motor memory" (Chaffin et al. 2002: 240). I deliberately and slowly practised certain passages. During session 2, I progressed

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from the second stage where the notes were mostly fluent but not yet automatic into the third or "the grey stage." I remained in "the grey stage" for session 3. I subjectively reported that I experienced this as a transition where I shifted continuously between music-making strategies that include deliberate and/or slow practice, experimentation with expression, exploration of musical aspects and memory.

Session 4 was about "putting it together" or stage four. I experienced a mostly stable memory of the piece. I subjectively reported the establishing of cues[26] and an affective 'enjoyment' of the music. In the audio-visual recording of this session, I observed a spatial and visual awareness that may be indicative of the 'freedom' that Chaffin and Imreh (2202b:169) refer to. During session 5, I moved from "putting it together" to "polishing," which is stage five during which slow practice took place and the interpretation was revisited. I started session 6 in stage five "polishing" but concluded this session in stage six, namely in "maintenance," when I played the piece the second time from memory. It was evident that I was focussing on the emotional connection I had to the music, or, as I reported on the audio-visual recording of this session, the 'shaping of the sound.' Chaffin (2011: 690) asserts the importance of memory retrieval during practice on "reliable performance speeds." Some of these stages were clearly observable in the audio-visual recordings as will be indicated in 4.2.6, below.

4.2.3 My subjective reflection drawing on Kolb's experiential learning

Coffield, Moseley, Hall and Ecclestone (2004a: 60) posit that Kolb's cycle of experiential learning is "one on the most influential models of learning styles." When acquiring a score of music for performance, the learning inevitably cannot be divorced from the experience, and the efficacy of the process is demonstrated by the acquisition of the knowledge and skills in the performance, congruent to what Kolb (1984: 27) deems necessary for learning. With Kolb's four learning modes as discussed in 2.2.1 in mind, I reflected on the modes I perceived to access during the six sessions. During sessions 1 to 3, I engaged in three of the four learning modes

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[26] Chaffin (2011) indicates the importance of various cues in the practising process i.e. retrieval cues, structural cues and performance cues.

namely concrete experience, reflective observation and active experimentation. These three stages were interrelated and interactive during these sessions and determined by whether the one had a stronger presence than the other. It is thus evident that I acquired knowledge and insight into the task of performing the piece through a process of fluid and active transformation, which is consistent with how Kolb (1984: 38) views learning.

During sessions 4 to 6, abstract conceptualisation as a mode was added not in a hierarchical order but in a "spiral" or "spring formation" (Moon 2013: 117). All four these modes were interrelated and interactive in the acquisition process during these three sessions. This interrelatedness is consistent with what Coffield et al. (2004a:61) describe as a "continuous process" and reflects Moon's (2013) assertion that experiential learning relies on feedback (Moon 2013: 117) and reflection (Moon 2013: 7).

Speculatively, I offer, drawing on the autoethonographic narrative, that Kolb's various learning styles were all present at certain moments during the acquisition trajectory but, as I perceived these as directly linked to the four learning modes (as indicated in 2.2.1), I did not specifically reflect on them in the journals. The perception of Kolb's learning styles directly feeding into the four learning modes is supported by Coffield et al. (2004a: 60).

4.2.4 My subjective reflection engaging with Bloom's taxonomy

Having discussed Bloom's taxonomy in 2.2.2, I reflected, in my journals, on the use of the various domains of learning as determined by Bloom and his colleagues (Booker 2007: 349) during the six sessions. Again, the narrative points to the constant fluidity between the various domains. I categorised the processes engaged with in sessions 1 to 3 as primarily in the cognitive and psychomotor domains. I actively worked towards understanding, applying, analysing and evaluating (see Churches 2008) the various composites of the piece. In retrospect, I realize that the four different knowledge types as offered by Krathwohl (2002: 217), namely the "factual, conceptual, procedural and metacognitive" were definitely at play either simultaneously or sequentially during the acquisition trajectory. The taxonomy of the

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psychomotor domain (Lloyd & Esjeholm 2010: 6) includes "manipulation, precision and articulation" — these three were continuously present during deliberate practice and repetition.

Sessions 4 and 5, I categorised as predominantly within the psychomotor and affective domains. I subjectively recall that I shift into the "naturalisation" (Lloyd & Esjeholm 2010: 6) aspect of the psychomotor domain. The emotional aspects of the music as well as of the musicking increasingly gained prominence. It shifted towards a lively interplay (Bloom et al. 1964: 25) between the self and the musicking. Session 6 was predominantly executed in the affective domain where I emersed myself in the musicking and entered a 'receive and repond'[27] interaction with the music. Recalling and reflecting on the use of the various levels within each domain was not always possible as I experienced an interwoven simultaneous presence of all the levels. This reflects Petrina's (2007: 23) notion that a functional relationship exists between these three domains and the various levels within each domain. I also did not experience these levels as a clear-cut hierarchy. In this sense I took cognisance of Vieyra's (2006:8) warning that the separation of the various domains will impede learning as learning should be holistic. It should be argued that the narrative of the emergence of the performance demonstrates this interwovenness.

4.2.5 My subjective reflection on accessing the various whole brain learning quadrants

Although my own learning preference (as provided in figure 2.4) is primarily in the 'fantasy' quadrant, followed by 'fact,' then 'form' with the 'feeling' quadrant not as a preference, I accessed the quadrants as necessary in the specific sessions for the acquisition process.This can be equated with the notion that specific tasks or jobs relate to specific quadrants (Felder 1996; Leonard & Strauss 1997). During the journaling process I subjectively reported that session 1 primarily accessed the 'fact' and 'form' quadrants. With reference to Table 2.3 I subjectively reported that I was deliberately engaging with the music to find logic within the piece and my execution of the piece. I critically assessed and analysed the piece as well as the acquisition

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[27] Receive and respond are two of the five levels of the affective domain as indicated by Bloom et al (1964).

process — clearly elements of the 'fact' metaphorical quadrant. I drew from the 'form' quadrant in the sense that I paid attention to detail and I used a structured and planned approach — all evident of the 'form' quadrant. In Session 2 to 4 I accessed the 'fact', 'form' and 'feeling' quadrants. Progressively I became more receptive and responsive to the 'music' in the piece; I became increasingly more sensitive to the emotional qualities embedded in the piece — providing evidence of the presence of the 'feeling' quadrant. After session 5, I 'journalled' that I was aware of accessing all four quadrants during the session. This was when I brought my own emotional response, interpretation and expressive meaning (Reid, 2001: 28) to the musicking.

According to my subjective experience of session 6, I primarily accessed the 'form', 'feeling' and 'fantasy' quadrants. Autoethnographically I experienced the process as a bodymind activity, thus agreeing with the Munro and Coetzee (2007: 105) model (see 2.2.3) which offers that learning is a bodymind activity. Again, congruent to this model, my emotions during the sessions were definitely influenced by subjective experience of the session and probably influenced the acquisition process, consistent with Munro and Coetzee's argument that no learning is devoid of emotion (2007: 104).

4.2.6 Commenting on the core elements from the audio-visual observations

As I indicated in 3.3.2 expansive scholarship exists on effective practising. I used some of this existing scholarship to substantiate the subjective observations and interpretations made. When critically focussing on the core elements from the auditory and visual observations made from watching the recordings, it is interesting to note that some of the activities reflect Chaffin et al.'s (2002) six stages of learning. An example of this is "stabilising memory,….Sheet music a last resort to fixing memory lapses,….Musical playing" indicated in session 5 as sub-elements of stage 4 (Putting it together) and stage 5 (Polishing).

In an attempt to interpretatively cluster the various observations drawn from a "first person perspective" (Chaffin 2011: 696) of the reflection arising from the engagement with the audio-visual, I provide four thematic strategies used during the acquisition.

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Learning the piece

These are the strategies that I observed during the six formal practice sessions that I have used to acquire technical competency with regards to the specific piece:

- Basic elements and patterns;
- Deliberate practise;
- Slow practise;
- Prolonged concentration;
- Revisiting decisions made previously;
- Practice various tempo's;
- Using a metronome;
- Separate hands practice;
- Conscious problem solving.

Placing these in the acquisition trajectory, it is observed that these strategies were observed earlier in the process and were decreasingly present during the later stages. During the conscious incompetence and conscious competence phases, these methods yielded results and the remaining sessions were dedicated to practicing the musical aspects of the piece in greater detail. Due to the spiraling nature of learning they were still accessed when necessary, even during the sixth practice session.

Memory strategies

These are all the strategies that I observe that I have used to memorise the piece over the acquisition trajectory:

- Heightened tactile awareness;
- Visual focus often on hands, not on sheet music;
- Tactile and visual senses lead to memory recall;
- Spatial and visual awareness primarily on keyboard and hands;
- Intensifying tactile sense, removing visual sense;
- Spatial and visual awareness primarily on keyboard and hands;
- Heightened visual, tactile and spatial awareness;
- Focus on memorisation (chunking and linking);
- Establishing cues;

- Stabilising memory;
- Sheet music a last resort to fixing memory lapses.

Reflecting on the observations made over the six practice sessions, it is evident that I engaged with my senses during the memorisation process. Visual awareness and tactile awareness were important in the solidification of what can be referred to as 'muscle memory". I offer that initially the focus was on the sheet music and in order to 'play what I've read' I had a heightened sense of my hands moving on the piano. As I became more comfortable with the score, I increased my awareness of space, only to move back to the narrow focus on the sheet music when necessary. Cues were established by identifying various sections within the piece and using these sections as "markers" for the memory.

Musical acquisition

These thematic strategies observed for acquisition of the musicality of the piece over the acquisition trajectory were:

- Musical interpretation;
- Emotional content;
- Produce musical playing;
- Establish cues;
- Breath congruent to phrasing;
- Focussed on shaping the sound.

A key part of musical acquisition is identifying the underling "architecture" of the piece. This includes sections, phrases, climax points as well as points of tension and where the tension resolves. Once familiar with the architecture which took place primarily during conscious incompetence and less so during the conscious competence phases, I explored the musicality of the piece.

These thematic strategies are consistent with what scholarship indicates as effective practising strategies (Chaffin 2011; Hallam 2001a; Hallam 2001b; Zhukov 2009; Nielsen 1999; Duke et al 2009). Following Zhukov (2009: 5) and Jørgenson (2000), this can of course be attributed to my training, as both these scholars indicate the

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importance of teachers informing developing musicians regarding effective strategies of practice.

Body usage during acquisition

It is evident from the observations that I rely on my body during acquisition of a piece. The thematic strategies emerging in order to perform the piece with ease and effiency through "function and expression" (Hackney 1995: 45-46) are the following:

- Relaxed body;
- Ease of movement during playing;
- Seemed very focused;
- Remained relaxed;
- Breathing congruent to phrasing;
- Trance-like state.

Revisiting the observations made over the acquisition trajectory of my body usage, I conclude that I accessed and maintained a centred and relaxed body and moved mostly with ease and efficiency. My body needed to remain as relaxed as possible to avoid unnecessary tension to allow a full range of motion. Excess (excessive) tension can lead to loss of finger control due to stiff muscles. This will affect the sound, dynamics and even note accuracy. Integrating my breathing with the musical phrasing supported fluid movements which supported technical execution as well as musicality. Examples of scholarship that support my subjective experiences regarding my body usage during musicking are to be found in Keller and Rieger (2009) and Chaffin (2001: 293-294).

When entering the unconscious competence phase there is an observable shift from functional movement to what I interpret as expressive movement. These observations may correlate with research done by van Zijl and Luck (2012) on body movement, emotions and expressions during playing. It may also loosely refer to Lamont's (2012: 589) argument regarding "strong experiences of music performance" that lead to a sense of happiness.

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Further observations were made regarding bodymind aspects for example; the frequent appearance of a "trance-like state". Most of the time I seemed completely relaxed with only small movements indicating irritability during the conscious incompetence and conscious competence phases. This can possibly be correlated to the concept of flow which is "...when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile" (Csikszentmihalyi 2002: 3). Csikszentmihalyi (2002) further equates flow with self-actualisation and satisfaction. However, as it was not a sub-aim of the study to determine the presence of flow during the acquisition process; it can at this stage merely be noted and presented as a possible further research area.

4.3 Conclusion

This chapter reflected on the various acquisitional shifts during the preparation process towards a piano performance drawing from the various methods as established in Chapters 1 and 2 of this study namely the use of a journal and the observations of audio-vidual recordings of the six practice sessions. Due to the autoethnographic nature of the study (see 1.4.1), the reflection was subjective. This chapter presented, through a triangulation of the learning theories and autoethnographic observations, a thick description of the acquisition process of a piano score as it is presented in this case study.

The following chapter will commence with an attempt to reflect on the outcomes of the study. It will also point to the potential shortfalls of the study and offer suggestions for further study.

Chapter 5

Summation

5.1 Introduction

The purpose of this chapter is to summarise the findings of the previous chapters as well as to note any shortcomings about this study. Further research possibilities will also be speculated upon and a conclusion to this study will be drawn.

As stated in Chapter 1 this study explored, tracked and documented the acquisitional shifts during the piano performance preparation process by (1) executing a research project following an autoethnographic approach, so that (2) the potential coherence between the abovementioned shifts, levels of learning, and subjective responses at intervals during this process could be traced, (3) with the aim of better understanding my personal acquisition process, which may (4) be of benefit for and applicable to other musicians. In the last instance this is the purpose of qualitative research, namely to allow transferability to occur because of the thick descriptions that are from the research narrative.

Brief overviews of Chapters 2, 3 and 4 will be provided to summarise the findings.

5.2 Overview of this study

In Chapter 2, scholarly material concerning various models of learning were discussed and reviewed. This included Maslow's Conscious Competence Theory, Kolb's Experiential Learning Theory, Bloom's Taxonomy and Whole-brain learning drawing on both the Herrmann and Neethling models. The reason for the scholarly review of these various models and theories was to place the acquisition process in the field of learning. Chaffin and Logan's six stages of practice was presented, as it is a model that is specific to this study in particular as it deals directly with performance acquisition and suggests a longitudinal approach and trajectory.

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The choices made regarding the various methods and theories drawn upon in this study were determined by two reasons: firstly, as this is an autoethnographic tracing of the acquisition process, I set out to connect the trajectory of the data that was gathered from the autoethnographic part of the study with potential 'lenses' that could be used to explain, justify or (potentially) contradict the acquisition trajectory. As such the various models and theories were presented to provide such lenses. Following from this I tentatively wanted to use such lenses subjectively (in keeping with the autoethnographic approach) to develop a 'toolbox' of terms, concepts and theories that might assist me in the documentation and reflection process during the autoethnographic phase of the study. The added advantage was that such theories would later be used (in Chapter 4) to provide the strategic triangulation process.

Chapter 3 provided an expanded report on both phases accessed in the research procedure. Phase 1 was the pre-acquisition preparation phase and the purpose of this was to familiarize myself with the chosen score namely the *Intermezzo* Op. 119, No. 1 in b minor by Johannes Brahms. In phase 2, the various models discussed in chapter 2 were used to subjectively trace the trajectory of my acquisition progress.

To focus my subjective experiences during the study, I autoethnographically captured and then reflected upon my personal process of acquisition in accordance with the learning theories and models provided in Chapter 2, through journaling. The journals contain thoughts and reflections regarding a number of topics as adapted from the Chaffin and Imreh table (2002a:141). The adapted structure of the journals allowed for subjective reflections on two related concerns:

- The first matter was the acquisition process relating to the elements (and sub-elements) that contribute to the various stages as defined by Chaffin et al. (2002) namely basic, interpretation, performance and the metacognitive
- The second matter, proceeding from the first, was to describe and then engage with (particularly through the awareness that came about because of the obserations that arose from the audio-visual recording) subjective reflections on the process placed within Maslow's Conscious Competency Theory. This occurred with specific reference to the stages of practice,

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reflecting upon the various learning theories and models: Kolb's experiential learning, Bloom's taxonomy, and Whole Brain thinking.

Each session was audio-visually recorded and was, after completion of the practical phase of this project, autoethnographically observed and reflected upon tracing and noting observable habits, reactions and practises. As indicated in Chapter 1 section 1.3.4 the aim with the use of the audio-visual recordings was to capture "dynamic information" (Gray & Malins 2004: 110) that could aid in tracing the acquisition trajectory. During the observation of these recordings (as offered in 3.2), I tried to remain as 'objective' as possible but the interpretation of the observation still remained subjective as I recognised certain body patterns, movements and facial expressions as familiar events in my body. This process is validated by Chaffin's (2011: 696) argument that musicians provide in-depth and valuable in-sight regarding their own practice strategies when viewing recorded material of their practice sessions. It was of interest to note (in 4.2.8) that some of the observations supported the subjective experience of the six stages of practice as defined by Chaffin et al. (2002), for example a visual focus trajectory was observed where the focus moved from looking at the score and hands; to just the hands; to alternating between looking at the hands and away from the piano. A common observation was the appearance of what seems to be a trance-like state and acute attention which is possibly consistent with scholarship regarding expressive performance (van Zijl & Luck 2012) and flow (Csikszentmihalyi (2002) as indicated in Chapter 4.

The interaction, therefore, of the journal, the engagement with the audiovisual recording (through observation) and the application from a subjective point of view of the learning theories, allowed for a tentative triangulation to occur, based on acquiring the tools from theory to describe or explain the acquisition process.

Chapter 4 dealt with the analysis and discussion of the data leading to a description of the trajectory of the acquisition process. In essence, Chapter 4 demonstrated a move from the autoethnographic to the more formal triangulation process, in the search for higher order trends and tendencies (both in phenomena and in theory). Nevertheless, it is still acknowledged that such higher order trends might only occur

following transferabilty (in line with the demands of the narrative arising from thick descriptions and reader identification).

The data was provided in table 4.1 and then summarised. Each of the sub-sections provided in the columns of the table was autoethnographically traced over the acquisition timeline. These outcomes where correlated with existing scholarship on the various patterns. As posited in Chapter 1, scholarship has already produced research that ties *selected* elements of each strategy with *selected* other research investigations. This study, however, set out to weave all of them together (in a thick narrative description) along the single trajectory of a sequence of events, namely the acquisition of a piece of music for performance.

As this was an autoethnographic study no conclusive outcome was defined but several trends were observed in Chapter 3 and discussed in Chapter 4, arising from the research narrative. Nevertheless, each of these trends as documented in Chapters 3 and 4 potentially could become a research project in its own right as indicated below. However, critically, these multi-stranded engagements led to a thick description of the events, creating a complex and interwoven narrative of events, descriptions, theories, interpretations (both subjective and triangulated) and a document that fosters transferability.

5.3 Suggestions for further research

Several possible research projects are suggested below:
- Separate research projects which focus on each of the various learning theories and models in relation to the performance acquisition of a music score can be formulated. These projects can each investigate the learning theory (for example Kolb) in-depth and apply the theory to the acquisition process.
- A study focussing on the acquisition process as offered by Chaffin and Imreh (2002a; Chaffin et al. 2002) may contribute to the understanding of the acquisition trajectory. Such a project could focus more closely on each of the six stages of the learning process to provide an accurate and solid theory for the trajectory of general performance acquisition.

- A study on the value of 'journalling' as a method of feedback during the acquisition process of learning a music work would be useful as it will contribute to the understanding of the value of the reflective process in performance acquisition.

- Investigating the value of audio-visual recordings as providing "dynamic information" to reflect upon acquisition process could be a possible avenue of research. The effect of a detailed audio-visual analysis and how the results influence the learning process could be very valuable. The development of an audio-visual analysis model to facilitate self-appraisal, specifically for this purpose would be very useful.

- Conducting a longitudinal study which includes several professional musicians as participants would be effective in order to establish a potential norm for the learning process of performing musicians. The findings of this study could potentially then be applied to the majority of musicians which may help many in improving their learning processes.

5.4 Shortfalls of this study

Autoethnographic research has strengths but also limitations. This research project focussed on my reflections, thoughts, opinions and my subjective observations. This study provided me with a clear indication of how I learn a piece of music and although it may inspire or educate others it by no means provides a norm or recipe for others to follow. This is in line with the qualitative understandings of transferability. What it does contain, therefore, is a comprehensive description of the entire process which may lead others to identify (and identify with) shared experiences. Central to this attempt to avoid the "this is what I experienced and this is what I observed and therefore this is the subjective truth" potential accusation, the system of triangulation is a vital ingredient for two reasons: firstly is provides a body of recognised (and therefore shared) terms and concepts (which in turn aids in the notions of transferability), and secondly it provides a level of objectivity through recognition, comparison and contrast. This is particularly useful in autoethnographic studies, as this approach does not necessarily provide a level of authentication, but a complexity of context.

Nevertheless, this study contains much speculation (due to reflection and self-reporting) and not enough definite outcomes are observed. This is of course a shortfall if seen against the possible demands of generalizability so central to quantitative methods. Here, however, mostly non-conclusive evidence is provided as this study primarily deals with subjective observations and opinions. The study of a music score for performance is usually a unique process (Sloboda 1985: 93) for each individual therefore an autoethnographical study of this nature could not be much more specific and definite than is to be found in this project. Nevertheless it can be argued that the multi-stranded approach taken adds a level of reliability to the findings, offering a thick description that attempts to allow for engagement with the process.

5.5 Concluding remarks

This study was autoethnographic at its core. My concluding remarks will thus be written from that perspective. The process was valuable for me as the performer-researcher. It was an insightful experience as I was forced to pay attention to my process of acquisition of a piano score towards performance. I gained clear and complex understandings regarding my acquisition shifts. It confirmed for me the applicability of the Conscious Competence Ladder as a trajectory of acquisition. Within this trajectory, I do adhere to the stages of practice as defined and described by Chaffin et al. (2002). I subjectively commented on the various learning theories and models. I will not deliberately choose to adhere to these strategies during the acquisition of future piano scores. What did contribute positively to my understanding of my acquisitional shifts was the self-reflection with specific reference to the whole-brain process. It was of value to note that although my own thinking preference is in the 'fantasy quadrant' (as shared in figure 2.4) I do access the other metaphorical thinking quadrants as needed for the acquisition process.

The process of journaling was valuable in the sense that I had to recall and revisit my acquisition process. From a subjective perspective, it contributed to meta-cognition — it contributed to 'practising my understanding of practising', so to speak.

The observation and interpretation of the audio-visual material after the six practice sessions were helpful when comparing the visual and auditory observations with information regarding my subjective reporting of the six stages.

The project in and of itself adhered to Jørgensen's (2004: 86) notion of the three processes of effective practising (as discussed in 2.4.3). The interactive engagement with the various research methods fostered self-regulation that contributed to metacognition of the process as argued for by Dos Santos and Gerlin (2011: 431). In a spiralling effect the metacognition led to increased self-efficacy and self-regulation which in turn encouraged increased metacognition. This can be viewed as congruent to Richie and Williamon's (2007: 311) strategy for success as a performer.

A thick description presented through a triangulation process may provide musicians and music educators with a way into investigating, describing and understanding the subjective experiences of the piano performer's trajectory of the acquisition of a piano score. Furthermore, within the culture of music acquisition, the observations, reflections and arguments offered in this mini-dissertation, may assist in identifying and bench-marking the obstacles, processes and potential strategies within the acquisition process for piano performers.

As this was an authoethnographic process, the value that this acquisition trajectory had for me is the primary outcome of this study. Spry (2001: 726, 727) offers that autoethnographic research "…is generated in the liminal spaces between experience and language, between the known and the unknown, between the somatic and semantic. The text and the body that generates it cannot be separated." This study demonstrates this position at work.

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Addendum A

Brahms *Intermezzo* Op. 119 No. 1 in b minor[28]

Four Piano Pieces

Intermezzo
B Minor
Op. 119, No. 1

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[28] (Mandyszewski 1926).