

The Feldenkrais Method in Practice and Performance at the Piano

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**Feldenkrais in Practice and Performance:
An Autoethnographic Investigation of Applying
Feldenkrais Principles to Piano Playing**

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Abstract

This dissertation explores the process of applying principles from the Feldenkrais Method, a form of somatic practice focused on developing physical awareness, to the author's practice as a pianist performing Western Art Music. The study examines the author's experience with the Feldenkrais Method over an 18-month period and its influence on his approach to practising, teaching, and performing at the piano which culminated in the presentation of three recitals. The research is grounded on a flexible research design which gathered data from multiple sources including literature, video recordings, reflective journaling, and interviews. Through the analysis of this data a multifaceted perspective is obtained that expresses the unique experiences, insights, and changes which occurred throughout the study.

The Feldenkrais Method promotes a holistic approach to learning, one that views the mind and body as equals in the act of music-making. The enquiry uncovered deep rooted physical habits that were inhibiting the author's ability to perform with freedom and ease. These habits were linked to broader psychological perspectives concerning anxiety and instability. The investigation drew several conclusions from the findings, these are: the importance of an inclusive physical mindset while practising, the influence of physical awareness on interpretation, developing technique on the basis of dynamic equilibrium, and the importance of cultivating physical awareness within the domain of artistic research. Furthermore, findings are also drawn concerning the elements that would characterise a piano pedagogy influenced by somatic practices through the analysis of five semi-structured interviews. These elements are firstly, an understanding of the importance of viewing the student from the border perspective of the mind and body, an aspect that is reminiscent of the Feldenkrais concept of the self-image, and secondly, the cultivation of an explorative mindset in the practice room.

Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Campbell Kelly: _____

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Introduction

The Feldenkrais Method is a somatic practice developed by Israeli physicist, engineer, and Judo master, Moshe Feldenkrais (1904-1984). The method is influenced by both traditional somatic practices such as yoga or T'ai Chi Ch'üan, and the study of twentieth-century scientific thought. This includes the study of human development and learning, physiology, and neuropsychology. The Feldenkrais Method works on two premises; firstly, that the primary language of the brain is movement, and secondly, by bringing awareness to and reducing effort in a movement, a person can improve its subjective quality and the structure of its circuit on the motor cortex (Campbell, 2015).

Feldenkrais described his method as a process of learning how to learn, with students frequently discovering, or rediscovering, improved modes of action such as walking, sitting, bending, and breathing. Fundamentally, this process can be used to improve the quality and ease of any activity in life. The current study explores this process as it applies to my practice as a pianist performing Western Art Music (Cook, 2013). It will examine how improving physical awareness through study of the Feldenkrais Method can provide the basis for a healthy approach to music both physically and mentally. Therefore, this study aims to present and discuss some of the changes that occurred in how I thought about and performed music while engaging in various aspects of the Feldenkrais Method including, lessons, literature, and interviews. This is focused through the central research question:

How has study of the Feldenkrais Method influenced my experience of practising and performing music?

This study has four overarching goals. Firstly, it aims to provide the opportunity to clarify my understanding of, and experience with, the Feldenkrais Method. Secondly, it hopes to provide an opportunity for the reader to reflect on their own experience of learning and performing music and how this method could help them. Thirdly, the study highlights how the Feldenkrais Method fosters physical freedom at the instrument – in this case the piano – and promotes both a sense of exploration in the practice room and on stage. Finally, it discusses how the Feldenkrais Method – and other somatic practices – can influence the way one thinks about teaching, interpreting, and performing music within a broader philosophical frame.

Dissertation Structure and Content

This study is structured into four chapters. **Chapter One** provides a review of existing literature on the Feldenkrais Method both as a practice and within music. This includes, firstly, the explanation of key concepts that define the Feldenkrais Method and how it is practiced, and secondly, how the method has already been utilised within music research. Subsequently, an overview of the Feldenkrais informed piano pedagogies will be explored for inclusion into this study. This chapter concludes with an analysis of the criticisms concerning the Feldenkrais Method and a discussion of how this study will be positioned within the context of existing research.

Chapter Two outlines the theoretical and methodological framework for this study. It justifies the use of a flexible research design and examines the research tenets of artistic research, autoethnography, reflexivity, and interviews. The data collection methods of reflective journaling, video recordings, and semi-structured interviews are reviewed along with any issues concerning ethics and bias. Finally, this will be placed within the context of the final thesis and the dissemination of, and access too, the study's recorded components.

Chapter Three presents the findings of the investigation. This is represented by four areas of focus that pervaded the study. These are the spine, pelvis, legs, and hands. The findings draw on data collected from recorded performances and practices, the literature concerning both piano pedagogy and the Feldenkrais Method, and interviews with pianists and music teachers that have a recognised knowledge of the Feldenkrais Method or other somatic practice. To enhance the presentation of the findings, full performances are provided as an appendix with hyperlinks to extracts appearing in footnotes (Appendix A: Full Performances).

Chapter Four provides further discussion on the findings, exploring key concepts embedded within them. This is divided into two sections; firstly, an analysis of the core features that define a pedagogy informed by somatic practices as presented through discussion with the interviewees, and secondly, a reflection on the central research revolving around the definition of aspects that have changed in my perception of practising and performing at the piano.

Reflection One: Injuries and Becoming Aware

I, like many of my colleagues, have suffered from pain and injury as a result of my practice. What were at first small issues associated with excessive tension and force were, by May 2016, full-blown and debilitating problems. A particularly frightening incident that occurred during this time was a spasm in my back which led to a numb fifth finger on my right hand. This all occurred mid-performance. What characterised this and similar incidents wasn't so much the pain but the feeling of frustration towards my inability to do what I wanted with my music and, ultimately, the inability to help myself. This frustration and helplessness had led to a great sense of disillusionment from which I considered changing career.

Throughout this scenario I was aware of various methods that promoted healthy keyboard techniques. However, the incident with my back – which was unexpected – brought the realisation that at some deep level I didn't know myself. I didn't even know that there was an issue until it was too late. Fortunately, I was lucky to have the guidance of my teacher Mark Hooper who mentioned the Feldenkrais Method. I read the works by pianist and Feldenkrais practitioner Alan Fraser (2006, 2010, 2011, 2012), and became interested in Feldenkrais's own work. What astounded me with the Feldenkrais Method was how rapid changes could occur in the way I felt and thought after doing an Awareness Through Movement (ATM) lesson. I realised that the way I had been practising was damaging and, for the first time, I began to understand the intrinsic connection between my physical injuries and my mental outlook on music-making.

The process of discovery has been enjoyable and rewarding. The frustration that has often pervaded my practising and performing has been replaced by a sense of exploration and grace of mind. There are many who would be more qualified to write similar studies, but, as the Feldenkrais Method makes clear, we all have our own unique self-image with its inaccuracies, deficiencies, and strengths. This study is my first step towards understanding myself, becoming more aware, and learning through the Feldenkrais Method.

Chapter One: Literature Review

What is Somatic Practice?

The Feldenkrais Method is an exponent from the domain of practices known as somatics. This includes practices such as the Alexander Technique, yoga, and T'ai Chi Ch'üan. The term somatic is derived from the Greek word *soma*, meaning body (Oxford Living Dictionaries, n.d.), and somatics is the study of the body from the first-person point of view (Hanna, 1986). Somatic practices are concerned with clarifying perception through the body and acknowledge the role of the body as essential for interaction with, and understanding of, the world. This contrasts the traditional Western model of thinking, known as cartesian dualism, that perceives the body as being separate from the mind that thinks.

Somatics deal with expanding awareness towards how the body moves, how it feels while moving, and its location in space – known as proprioception. Therefore, it is both a mental and a physical practice. As Kleesattel (2012) claims, “somatic practices thus share the goal of helping an individual become more mindful, more aware and more conscious” (p. 4). By refining the clarity and quality of internal perception somatics train the body to be a better learner for the mind. Fundamentally, this opposes the idea of learning as a process of mastery through repetition and habit formation, models of learning first proposed by Pavlov and Skinner (Kleesattel, 2012, p. 5). Instead, somatics take the perspective that acknowledging the subjective quality of physical experience is essential to building skill. It promotes a mind and body that can react to new stimuli with spontaneous, creative, and non-habitual thought and action.

The Feldenkrais Method

Feldenkrais developed his method in response to a severe knee injury he sustained as a young man (Feldenkrais, 1981). The injury reoccurred during World War II while fleeing from Paris to England. The medical advice given was surgery with a low probability of success. Therefore, Feldenkrais was determined to fix it himself by drawing on his broad knowledge of science and medicine. Scientifically, his method can be described as a process of neuromuscular re-education, focused on learning to coordinate the body and mind through the cultivation of awareness. Physically this requires the coordination of the muscles to efficiently utilise the structure of the

skeleton, neurologically this involves the coordination of the whole self in action (Strauss-Klein, 2017).

Feldenkrais's work is contained within a collection of books, articles, lectures, and recorded lessons from 1948 to 1981 (Zemach-Bersin, 2010). These works often challenged the dominant view of the brain at the time, by considering the brain as malleable and possessive of the potential for improvement throughout life – even in the event of serious injury¹. The Feldenkrais Method can be used in any situation where the person is seeking to improve their ability for easy, pain free, movement without resorting to external treatments such as surgery or medication. Today its uses range from injury rehabilitation, to improving athletic or creative performance.

While the Feldenkrais Method shares its roots with other somatic practices it also has many unique features. These concern how the method is taught, and the terminology it uses. This section aims to explain these unique features, focusing on the key concepts of the self-image, organic learning, conscious awareness, and dynamic equilibrium.

The self-image

The self-image is a term used within the Feldenkrais Method which refers to the mental representation of our physical and psychological being. Wurm (2016) describes it as the “contours of our body, of the relationship between its limbs, and, in other words: of spatial and temporal relationships and of our kinaesthetic sensations” (p. 30). Everything we do is connected to this individual way of perceiving ourselves. Problems arise in our ability to act when there is an imbalance, a conflict, or a lack of clarity in this representation – often in conflict with reality. As Feldenkrais states, “We act as a whole even when this wholeness is not quite perfect” (as cited in Ishida, 2003, p. 37). For him, the self-image is comprised of four elements: thought, emotion, sensation, and movement (Feldenkrais, 1990, p. 10-12):

Thought: Primarily concerned with one's level of awareness

Emotion: The emotional state while acting

Sensation: The stimulus from the five senses, including the kinaesthetic sense

¹ *Body Awareness as Healing Method* (1993) outlines Feldenkrais's work with a stroke patient called Nora. Feldenkrais describes his thought processes which resulted in the formulation of a series of unique exercise founded on principles of human learning and motor development. Subsequently, Nora's ability to read and write was restored.

Movement: The action of the musculature through the motor cortex

Feldenkrais believed that any of these four elements could be used as a basis for a method of improving the self-image. However, he considered correction through movement as the best means at our disposal, because, it is through movement that we express the other elements (Feldenkrais, 1990, p. 33).

Organic learning and academic learning

Feldenkrais distinguishes between two different forms of learning: what he terms organic and academic. Organic learning is a process that continues throughout life (Feldenkrais, 1981). This form of learning is intuitive and unconcerned with the judgment of good or bad results. It has no specific outcome or goal and is only concerned with the satisfaction of each attempt becoming less awkward. By contrast Feldenkrais (1981) terms the conscious, goal-directed, style of learning as academic learning. This form of learning is one we all experience as standardised schooling, a systematic method for acquiring skills². It is primarily through the organic process that we learn to walk, talk, and carrying out all fundamental human actions (Feldenkrais, 1990). It is this process which primarily shapes our self-image.

Feldenkrais practitioner Shafarman (1997) considers that every time a person becomes frustrated or fails to learn, the process of organic learning has failed to take place (p. 191). It has been replaced by an overly conscious – often self-conscious – approach that lacks awareness, as it encompasses the whole body, while learning. Learning in this manner requires an act of willpower and trying because we are not aware of how the body could work with more efficiency. Subsequently, through repeated attempts this excessive willpower and trying becomes habit and is felt to be normal. As a result, certain activities become naturally associated with a sense of effort and we feel that we must try harder to achieve (Feldenkrais, 1990).

The Feldenkrais Method aims to re-establish familiarity with one's ability to learn in an organic way. Many have considered this approach to be simultaneously new and intuitively true (Shafarman, 1997, p. 188). Through the Feldenkrais Method the learner becomes not only concerned with what they do but also inquisitive towards the quality of how they do it. The learner becomes aware of how to function in new ways,

² Although the Feldenkrais Method is focused towards fostering organic learning, Feldenkrais understood the importance that academic learning has had in the advancement of societies standard of living as a whole (Feldenkrais, 1981).

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often with greater sensitivity and ease. Ultimately, Feldenkrais believed that this process, to improve the learning ability of the individual through awareness, is the root of good health with respect to the mind and body (Feldenkrais, 1985, p. 152). He believed harmonious development of the self, and true mastery of a skill, is achieved through actively engaging in organic learning – a process that requires the individual to be both conscious and aware.

Conscious awareness

Feldenkrais recognised four distinct states of existence: asleep, awake, conscious, and aware (Feldenkrais, 1990). For him, these states constitute an experiential hierarchy that is related to the structure and function of the brain and nervous system. When asleep we withdraw from our perception of space and time. The function of sleep and wakefulness is coordinated by a primitive area near the base of the brain, the reticular activating system. The cerebral cortex and forebrain, which is a recent biological development in evolutionary terms, operates at approximately one-tenth the speed of the primitive brain. Its function is to differentiate between actions and emotions by influencing the reticular system. Feldenkrais suggested that it is the complexity, asymmetry, and slowness of the forebrain that makes consciousness possible (Shafarman, 1997). The ability to orientate, focus and achieve goals are the characteristics of this consciousness. This state narrows our perception and excludes aspects of experience that are irrelevant to the action at hand, but conversely this narrowing of perception could exclude aspects of experience that may prove beneficial in our ability to know ourselves and change our behaviour.

Feldenkrais understood conscious awareness, or simply awareness, to be the process of consciousness combined with knowledge. He considered awareness to be a more recent development than consciousness, involving the newest areas of the forebrain and higher order neurological complexes (Shafarman, 1997). Learning with awareness is a process of linking inner experience and the outer world, enabling us to be present and learn as a whole. We can be conscious without being aware, as is evident when we undertake a familiar task such as climbing the stairs to our front door. Being consciously aware would be to count the steps, feel the pressure under foot, the motion of the pelvis, legs, and spine as we climb. For Feldenkrais, it is this state that is conducive to actively engaging in organic learning.

Functioning derived from biological precedents

The Feldenkrais Method makes the learner aware of the standards of action that are derived from biological precedents (Wurm, 2016, p. 31). The human body is constructed such that it resists gravity without effort, and can move within the field of gravity with next to no expenditure of energy (Wurm, 2016, p. 35). This effortless movement requires the coordinated use of the whole body, with the finer muscles of the extremities working to direct the force supplied by large muscles of the lower abdomen (Feldenkrais, 1972). This necessitated by a supple use of the spine as a kinematic chain to direct energy through the torso (Feldenkrais, 1985). In contrast the experience of effort is that of uncoordinated action and, as Feldenkrais (1985) states, “the subjective feeling of wasted movement” (p. 111). Feldenkrais summarises good action as possessive of four characteristics: the absence of effort, the absence of resistance, the presence of reversibility, and uninterrupted breathing (Feldenkrais, 1985, p. 111-115). These four characteristics are what one aims to become aware of and cultivate while practising the Feldenkrais Method.

The method

The Feldenkrais Method is taught in two ways: One-on-one lessons with a Feldenkrais practitioner known as Functional Integration (FI) and group lessons called Awareness Through Movement (ATM) conducted by verbal instruction. FI and ATM often begin by laying on the back, which reduces the effect of gravity on the body and frees the nervous system for learning. While both achieve the same outcome, FI is focused towards the specific needs of the individual and ATM guides the group through a series of movements designed to bring awareness to and evoke improvement in a specific function such as breathing, extension and flexion of the spine, or freedom of the pelvis. Emphasis is placed on increasing sensitivity by conducting movements slowly and within a comfortable range of motion. This practice is supported by the Weber-Fechner law (Wurm, 2016) that states; for a wide range of human activities the least detectable change in a stimulus is proportionate to the whole stimulus. For example, while holding a 20kg weight it would be impossible to feel a fly landing on it, however, it would be possible to feel the difference if holding 5g (Wurm, 2016).

Dynamic equilibrium

The concept of dynamic equilibrium applies to several aspects of the Feldenkrais Method carrying meaning at the physical, mental, and philosophical level. Drawn from the field of medicine and cybernetics, dynamic equilibrium describes a phenomenon that is evident in many complex systems including the human body. It states that when there is a sufficiently large disturbance in a system there arises forces within the system itself to restore it to equilibrium. In terms of the human organism this is often defined as homeostasis – for example the production of antibodies to fight an infection. Subsequently, the health of a system is defined by its potential to restore equilibrium after a large disturbance. The larger the disturbance accommodated by the system the healthier it is.

Feldenkrais considered upright human posture to be the process of maintaining dynamic equilibrium through perpetual adjustment by the central nervous system (Feldenkrais, 1949). As a result, Feldenkrais defined the health of a person's central nervous system by its ability to adjust after disruption and regain a dynamic, effortless posture. This requires the harmonious use of the body as previously discussed (Feldenkrais, 1981). Therefore, a person who maintains a rigid and held posture is not able to accommodate sudden disturbances to their balance or to act spontaneously in new situations. They are prone to using the body inefficiently and subsequently become more subjectable to injuries and frustration. This state is also reflected psychologically as a fear of instability, with ridged postures being the prolonged and habitual expression of the falling reflex (Feldenkrais, 1949)³. By allowing dynamic equilibrium to manifest as a prerequisite to action the individual is also freed from this habitual state of anxiety and is able to express physical responses appropriate to the situation, ranging from assertiveness or fear to relaxation and arousal. The concept of dynamic equilibrium represents a physical and psychological state that allows for the harmonious relationship between the body, mind, and environment.

³ The Moro reflex is a phylogenetic reflex present at birth and is a significant factor in determining an infant's health (Futagi, Toribe & Suzuki, 2012).

Summary

The Feldenkrais Method views the individual from a holistic perspective. It is an approach to understanding the relationship between the way we perceive ourselves and the way we act in the world, representing a guide to healthy functioning on several levels. Physically it involves learning to use our bodies better, while mentally and philosophically it is a process of understanding how we learn, our potential, and what constitutes a healthy existence.

The Feldenkrais Method in Music Research and Pedagogy

Although this study is focused towards the exploration of the Feldenkrais Method and its influence on piano practise and performance, it is important to acknowledge past publications and authors that have made a significant contribution to piano performance and pedagogy through their incorporation of somatic principles: (Ortmann, 1929; Whiteside, 1929, 1955; Fink, 1992; Lister-Sink, 1996; Mark, Gary & Miles, 2003; Taubman & Golandsky, 2003, 2005). In turn, there are several authors that have already incorporated the Feldenkrais Method as an aspect of their music research and pedagogy: (Ishida, 2003; Kleesattel, 2012; Carpinteyro-Lara, 2014; Fraser, 2006, 2010, 2011, 2012; Aschbrenner, 2016a, 2016b). These texts will be examined to define the context and scope of the current study.

Academic research

Ishida (2003), Kleesattel (2012), and Carpinteyro-Lara (2014) explore aspects of the Feldenkrais Method within the context of university based academic music research. Therefore, their texts have undergone examination to determine a suitable level of academic rigour before publication. Ishida's *A Study in Tension and Piano Playing* (2003) utilises the Feldenkrais Method and Alexander Technique to define and overcome negative tension in piano playing. Kleesattel's *Application of Somatic Practices to Cello Playing and Pedagogy* (2012) and Caripinteyro-Lara's *Application of the Kinaesthetic Sense* (2014) explore various somatic practices, including the Feldenkrais Method, and their application to teaching, practising, and performing on the cello.

While Ishida's (2003) study sets a precedent for the application of Feldenkrais concepts to piano playing the research method varies from that intended by this study. The author presents a discourse on the concept of tension through analysis of various

literature sources but does not apply these within the context of their own artistic process. Similarly, Caripinteyro-Lara's (2014) study is focused towards teaching as opposed to the artistic process. The author presents a step-by-step mapping out of physical movements in sections from standard cello repertoire. This is intended to inform the reader of how to use their kinaesthetic sense to make better technical choices.

Kleesattel (2012) presents both the broadest analysis of somatic practices and a research method that contains elements which reflect that intended by this investigation. The author explores five different methods and how they have been applied to their practice. These are the Alexander Technique, the Feldenkrais Method, Ideokinesis, Laban Movement Analysis, and Bartenieff Fundamentals. Kleesattel (2012) discusses core aspects of these methods and provides segments of reflective writing to convey how they have changed her experience of receiving lessons, practising, and performing. While the inclusion of reflective writing throughout this study resounds with aspects of the methodology intended by the current investigation, there is a lack of both inquiry into the artistic process itself and reflection over time which serves the basis for quality autoethnography.

The craft of piano playing

A trained Feldenkrais practitioner and pianist, Fraser (2006, 2010, 2011, 2012) is the primary contributor to the field of piano technique as influenced by the Feldenkrais Method. His approach involves developing awareness of the hand and its intrinsic arch structure that is cultivated through grasping, an action he considers to be underdeveloped in many pianists who have sustained injuries (2011). Fraser's concepts are continually evolving through his online database (PianoTechnique.org, 2019) but his publications consist primarily of ATM's designed to enriching the kinesthetics sense of the hand and its function.

Fraser's work utilises concepts drawn from the Feldenkrais Method. For example, *Honing the Pianistic Self-Image* (2010) applies the concept of refining the self-image to the development of technique and expression:

Each of us approaches piano with a set of learned habits and responses: The way we think and feel about music, and the way we move our bodies to express that at the piano. This is called the pianistic self-image [...] There is a symbiotic

relationship between physical technique and musicianship, and improvement in either realm both requires, and grows out of a change in the pianistic self-image. (Fraser, 2010, p. 1-2).

This is also evident in his use of the term dynamic equilibrium when discussing such concepts. The first examples refer to dynamic equilibrium in physical action while the second as a basis for musicianship and creativity:

For the results of muscular effort to move freely through the bones and flesh of the arm into the piano, it is true that they must not be inhibited by an overly tense muscle tonus. But it is equally true that too much relaxation renders your playing ineffectual – your muscles simply do not move enough to do their job. (Fraser, 2011, p. 39).

To play the piano with command you need choice – to be so in touch with yourself physically that at any point in time you can ‘turn on a dime,’ change instantaneously the direction of your physical motion, your musical thought, your expressive intention (Fraser, 2011, p. 31).

Evidently, Fraser’s method provides an important source of information for the application of Feldenkrais’s concepts to teaching and performing at the piano and will provide an important source of information for this study. However, his approach is also influenced by several other sources including noted teachers Phil Cohen and Kemal Gekic (Fraser, 2010, 2012). Therefore, it is important to recognise that Fraser is presenting his own interpretation amongst Feldenkrais’s concepts and does not represent the only possible interpretation and application of these ideas.

Pulse patterning

Aschbrenner’s *Pulse Pattering* (2016a, 2016b) combines the pelvic clock ATM – a popular Feldenkrais lesson – with Jaques-Dalcroze eurhythmics (1921/1973). To summarise, a clock dial is imagined on a horizontal plane with the pelvis. Tilting movements of the pelvis correspond with numbers on the dial. In *Pulse Pattering* tilting the pelvis from 3:00 across to 9:00 forms the movement pathways along the length of the keyboard. Tilting from 12:00 to 6:00 represent the power pathway,

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providing rhythmic impetus. Aschbrenner (2016a, 2016b) considers these movements as fundamental to the development of an effortless technique, a point that corresponds with Feldenkrais's own understanding of effortless action.

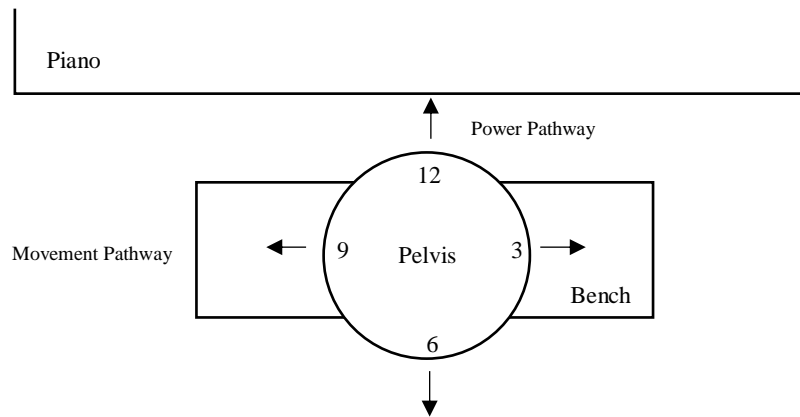


Figure 1: Pelvic Clock in Pulse Patterning

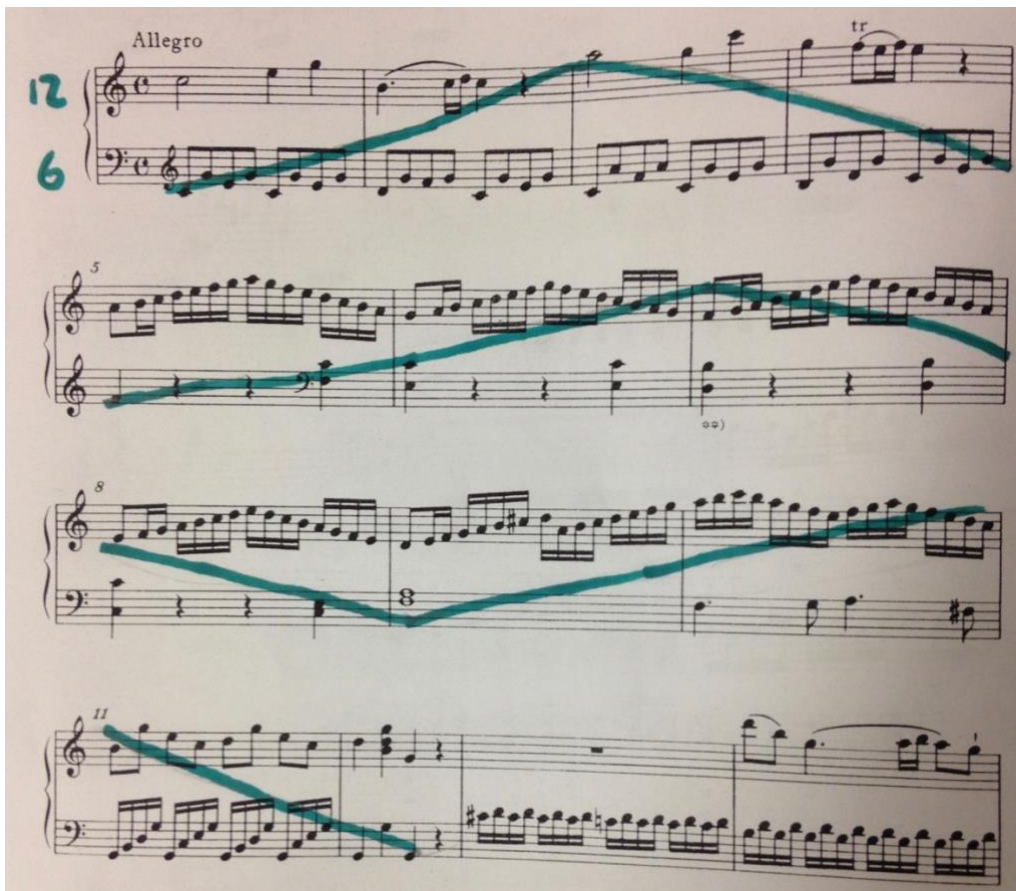


Figure 2: Use of Power Pathway to Express the Hyper-Measure in Mozart's Sonata

(The pelvis moves subtly forward and back between 12 and 6)

Criticisms

Two criticisms are pertinent to the formation of this study. Firstly, conjecture concerning the efficacy of the Feldenkrais Method as a health practice. Secondly, that Fraser's exercises may be harmful to pianists.

The Australian Government Department of Health (Baggoley, 2015) conducted a review of natural therapies to determine if they are underpinned by a credible evidence base (p. 3). The study concluded that the Feldenkrais Method failed to meet the standards of clinical efficacy and therefore was not eligible for rebates under the Australian healthcare system. The review stated that, "the effectiveness of Feldenkrais for the improvement of health outcomes in people with any clinical condition is uncertain," sighting limited quality research as the predominant factor in this verdict (p. 61). This judgement by the Australian Government does influence perceptions of the Feldenkrais Method and its viability as a practice in music. However, its application is not limited to pain relief or use in "clinical conditions" as defined by the review. The study, as it is directed towards health practices, does not reflect the range of applications the Feldenkrais Method is useful for, specifically in refining the quality of physical movement for highly skilled tasks.

Fraser's pedagogy has previously been criticised as promoting harmful practices. Milanovic, a recognised Taubman teacher (2012), suggests that some of Fraser's techniques are dangerous, stating "he simultaneously claims to be an expert on healthy technique, yet advocates exercises that may cause injury" (p. 51-53). This appears to be a valid point when reflecting on Fraser's work. Exercises such as the loading of the interosseous with weights (Fraser, 2012), thumb push-ups (Fraser, 2010), and the action of excessively pulling back the fingers appear to be extreme and often conflict with other methods devoted to healthy piano technique. In fact, these exercises could cause injury as Milanovic suggests if done incorrectly, a point that Fraser emphasises (Fraser, 2011). He rebuts this criticism explaining that if the function of the hand is constructive and functional then it can assume positions that may look extreme with ease. Furthermore, he also recognises that it is the hands ability to assume a wide variety of forms and actions safely that creates the variety of colours at the piano:

Expanding your repertoire of movements will mean learning to use the extreme ranges of physical movement rather than avoiding them. This can develop rather than hurt you if done intelligently. Only by reaching the extremes of your range

effortlessly, elegantly and free of excess tension can you utilize all your movement capabilities (Fraser, 2011, p. 35).

Such criticisms highlight an underlying issue, both semantic and conceptual, of the various approaches that exist in teaching healthy technique. They raise the question, is possessing healthy technique a process of cultivating only the movements that are considered healthy, or, is it the ability to think of, and approach, all possible positions safely? This represents an interesting aspect to be explored by the current study.

Positioning This Study

To position this study two factors must be considered; firstly, the gaps present in existing academic research, and secondly, the potential sources that may serve to influence and direct the current investigation. Evidently, the existing academic research is focused towards the discussion of the Feldenkrais Method and other somatic practices within the context of teaching and performing, and not the exploration and reflection on the authors utilisation of these practices. While Kleesattel (2012) does provide brief sections of reflective writing, all studies lacked depth of discussion on the experiential nature of somatics and their effects on the author over time. Furthermore, the broad scope of these investigations through exploring more than one method has resulted in a lack of depth, with the nuances of each method potentially being overlooked. Therefore, the field would benefit from an exploration of the interplay between practising the Feldenkrais Method and an author's own artistic practice.

It is evident that various sources can be utilised to develop a framework for examining the interplay between practice of the Feldenkrais Method and the artistic process. There are numerous recorded ATM's and the potential for FI's with a Feldenkrais practitioner. Furthermore, the techniques developed by Fraser and Aschbrenner provide important existing knowledge of piano pedagogy as influenced by the Feldenkrais Method. The exploration of these various sources within the context of learning and performing several solo piano works (works defined in Chapter Two) sets the foundation of this studies position within the existing body of literature. From this it is possible to formulate several secondary research questions to further direct the investigation.

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Central research question

- How has study of the Feldenkrais Method influenced my experience of practising and performing music?

Secondary research questions

- What physical aspects have I become aware of through the Feldenkrais Method and how has exploring them influenced my practice?
- How have these physical changes been utilised within the selected repertoire?
- How has the Feldenkrais Method influenced the way I think about performing music and how can this be expressed through Feldenkrais concepts?
- How does somatic practice influence one's approach to teaching music and the concept of technique?

Chapter Two: Theory and Methods

The central aim of this study is to examine the function of the body by exploring how it can work with greater ease, and subsequently, how this process is experienced from my perspective and also conveyed through teaching. Therefore, it is concerned primarily with the subtle characterisation of phenomena. This chapter sets out the methodological framework for the investigation, positioning it within the field of artistic research.

Artistic Research

This study is focused through the lens of artistic research. This practice is concerned with the artist as the subject, rather than the object, of artistic creation. As Impett (2017) summarises, “artistic research puts the production of knowledge through the artist’s practice at the centre frame” (Impett, 2017, p. 9). Therefore, artistic research is a process of documenting and disseminating the investigation of, experimentation with, and reflection on the production of art. The outcome of this process being, as Borgdorff (2012) states, to “reveal and articulate the tacit knowledge that is embodied in specific artworks and artistic processes” (p. 53). The current study examines my practice within the context of being a postgraduate student, majoring in classical piano, and performing Western Art Music (Cook, 2013). Furthermore, it documents the effects the Feldenkrais Method has on this practice over an 18-month period. Three methods were utilised to document this process: video recordings, autoethnography, and reflective journaling. Further depth was created by undertaking six semi-structured interviews. Four with recognised piano teachers that have experience with somatic practices, and two with certified Feldenkrais practitioners.

Research Design, Bias, and Ethics

This study is structured on a flexible research design. This suggests an interplay between the process of collecting data that captures and reflects upon my experience throughout the investigation and the formation of the research questions and structure (Robson, 2002). There are five components of a flexible research design recognised by Maxwell (2005) which are summarised in Figure 3. The validity of this study and its potential knowledge is underpinned by the triangulation of data from the various sources and methods (Denzin, 1988). As interviews are incorporated as an aspect of this study, ethical issues were addressed and clearance granted under GU. Ref 2017/561

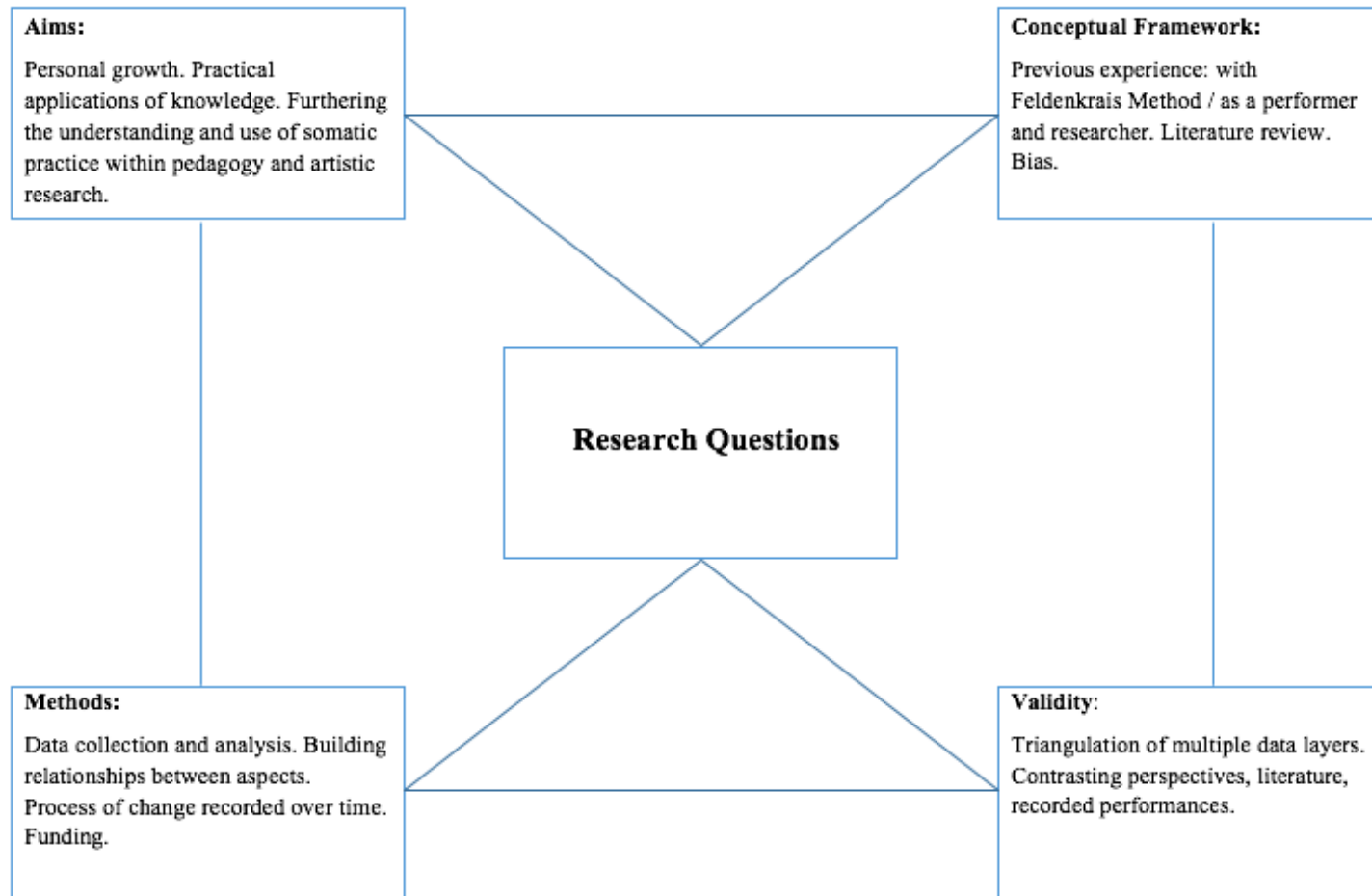


Figure 3: Maxwell's (2005) Components of a Flexible Research Design

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed). Thousand Oaks, CA: Sage Publications.

Artistic Component

The artistic component consists of five works selected on three criteria: contrast in style, contrast in technique, and degree of familiarity. Three recorded performances constitute the artistic product of this study⁴.

Selected works

W. A. Mozart: Duport Variations K.573

W. A. Mozart: Adagio in B minor K.540

W. A. Mozart: Concerto No.23 in A major K.488

R. Schumann: Symphonic Etudes Op.13 (including posthumous etudes)

L. Janáček: Sonata 1. X. 1905 “From the Street”

Performances

Recital 1: 15th of June 2017

Recital 2: 17th of December 2017 (without posthumous etudes)

Recital 3: 26th of March 2018 (with posthumous etudes)

Additional examples

Extracts from recordings of other works that were not performed have also been included where pertinent to the study’s discourse.

Works by Mozart, Schumann, and Janáček were selected on the basis that they represent contrasting stylistic periods and techniques, and because I also had a varying degree of familiarity with these composers and the selected works. I was familiar with Janáček’s sonata and his style as I had already learnt, performed, and recorded the work in 2015. Furthermore, I had completed an honours dissertation on Janáček’s piano cycle *On an Overgrown Path* in 2016. I intellectually and physically knew the concepts and techniques that underpin the performance of this work. By contrast, I had no experience in performing music by Mozart or Schumann. Therefore, these styles represented domains outside of my physical and intellectual understanding. Mentally, Mozart’s

⁴ The Queensland Conservatorium Griffith University (QCGU) Masters of Music Research (MMuR) program is conducted over 2 years. Course requirements include the completion of three performances – the first as an element of the confirmation process – and the submission of a written thesis. It is intended that the recorded performances reflect the content of the written work and that they be provided as evidence at the submission of the dissertation.

music felt intimidating to interpret and Schumann's Symphonic Etudes had felt outside my technical ability. By exploring works that varied in familiarity and style it was possible to reflect on how study of the Feldenkrais Method was utilised within various contexts and scenarios both physically and mentally.

Feldenkrais Study

The Feldenkrais Method was practiced in the form of both FI's with Feldenkrais practitioners Naomi Vear and Anna Yen. One lesson was undertaken with Vear at the piano and four lessons with Yen, two at the piano. Lessons were recorded and lasted between 1 and 1.5 hours. Audio recorded ATM's by Feldenkrais (2012), Karzen (2010), and Strauss-Klien (2019a) were undertaken throughout the research period with a list provided as an appendix (Appendix B). The piano techniques by Fraser (2010) and Aschbrenner (2016a, 2016b) were also utilised throughout the study and referred to where pertinent. Finally, regular piano lessons were also undertaken with Mark Hooper who has had experience with Dalcroze, the Alexander Technique, and The Feldenkrais Method (Appendix C: Mark Hooper).

Methods

Video documentation

Video documentation occurred continually across the research period. This process captured important artistic moments such as recitals, lessons, and experimentations in the practice room. Extracts from a past recording of Janáček's sonata taken in 2015 were included in an attempt to aid reflection and provide examples of the physical changes over time.

Reflective journaling and autoethnography

Davies (2008) considers reflexivity to be an important aspect in all forms of research stating all researchers are connected, at least in part, to the objects of their research (p. 3). This is of course a central component that underpins artistic research. Reflexivity aids both the articulation of tacit knowledge implicit of interpretation and performance. Therefore, a process of reflective journaling was undertaken throughout the investigation to document key moments of physical, theoretical, and emotional insight. Similarly, autoethnography draws on the personal experience and autobiographical nature of the relationship with the subject matter. This places the

analysis within the broader frame and interpretation of cultural and social factors (Ellis & Bochner, 2000, p. 739). Consequently, the investigation will be undertaken through a reflective lens, aided by past recordings and the discussion of prior experiences.

Semi-structured interviews

Interviews with recognised experts were undertaken in conjunction with my artistic practice. The nature of the research topic suggested a semi-structured interview design (Robson, 2002) that focused on concepts relating to practising the Feldenkrais Method and other somatic practices. As a result, questions were tailored to the individual participants while reflecting the overarching topic. This allowed for sufficient depth around the topic while offering interviewees the possibility to expand the discussion into broader cultural and social factors. In terms of design this would be categorised as a depth interview (Crabtree & Miller, 1999). The interview participants are as follows: Anna Carson, Anna Yen, Mark Griffiths, Mark Hooper, Namoi Vear, and Timothy Young (Appendix C: Interviewee Biographies).

Figure 4: Table of Interviewees and Interview Dates

Interviewee	Date
Anna Yen	28/09/17
Timothy Young	19/11/17
Anna Carson	19/11/17 and 20/11/17
Naomi Vear	19/03/18
Mark Griffiths	20/07/18
Mark Hooper	21/07/18

Final thesis

Schippers (2014) suspects that in the near future it may be indefensible to submit a text-only thesis on a creative practice (p. 5). Given the non-linear nature of the processes that lead to artistic performance Schippers suggests that the practice lends itself to innovative formats. An exemplar of this format is Emerson's *Around a Rondo* (2006) which uses 5,000 hyperlinks to reconstruct the artistic process (Schippers, 2014, p. 5). Therefore, to supplement this written component extracts from recordings are attached as hyperlinks to private YouTube videos. The YouTube hyperlinks to full performances can be accessed via Appendix A while extracts from these performances and other practise sessions have been provided as footnotes throughout the text.

Chapter Three: Findings

The findings have been evaluated from three perspectives: physical changes, the experience of these changes, and their effects on the music. Separation of these perspectives was considered, but it was determined that they be discussed together. This reflects the nature of the Feldenkrais Method as a practice that encompasses the whole self in action. The study explored numerous phenomena yet the limited length of this study has allowed for the exploration of four significant aspects. These are categorised into: spine extension and fixation, integration of the pelvis, integration of the legs, and awareness of the hand. In each of these I outline my experience before broadening the scope to consider how the issues have been discussed in the literature and by interviewees.

Spine Extension and Fixation

A central aspect of the Feldenkrais Method is the ability for the spine to function well, because it is the point of connection between the core of the body to the upper extremities. As Feldenkrais practitioner Alon (1996) describes, the spine has the vital role of coordinating the whole body:

Viewing your back from the perspective of movement quality alone, you will realise that your spine is the juncture of interactions and functions, through which the more remote parts of your body connect and balance one another. What goes on in your back is evidence of the level of communication throughout your total organism (Alon, 1996, p. 3).

Therefore, improving the function of the spine is primary to improving the coordination of the whole self.

In May 2017 I became aware that my spine would habitually extend and remain fixed while playing. Extracts from a performance of Janáček's *Sonata 1. X. 1905 movement I* from 12/06/15⁵ and a practise of Scriabin's *Etude in D# minor No.8 Op.12* from 11/03/17⁶ show this action at the piano. The timespan between these two recordings – almost two years – suggests that chronic extension and fixation of the

⁵ Extract 1: Beginning of Janáček's Sonata from 12/06/15 <https://youtu.be/VTyCwcd68Ys>

⁶ Extract 2: Beginning of Scriabin's *Etude No.8 Op.12* 11/03/17 <https://youtu.be/Xzho-VvjYs>

spine was a consistent aspect of my relationship to the instrument. Furthermore, from the perspective of technique and ease of playing this action was also dysfunctional as I would pivot forward from the sitz bones and undermine my balance. This is evident in the way I performed the fortissimo section of Janáček's *Sonata I. X. 1905 movement II* from 12/06/15⁷.

The first improvements in the function of the spine occurred prior to Recital 1. Through exploration of the spine's ability to extend and flex – a feature of many ATM's – I found that it was possible to play while inhibiting this chronic extension of the spine. This is exemplified in the following recording from Mozart's *Concerto in A major No.23 movement II* taken on the 16/05/17. The recording shows first the habitual sitting pattern⁸ and then the same passage played with the spine flexed⁹, releasing the lower back muscles. This exercise resulted – as is visually apparent – in a considerable flexion of the spine. Evidently, I had minimal control of my spine at the beginning of this study, only possessing the possibility for total extension or collapse.

Learning to incorporate this new freedom of the spine was also mentally difficult, requiring significant concentration to inhibit old habits. This manifested as a dissonance between my engrained self-image, consisting of a set of habitual physical responses and a new way of acting. This feeling of dissonance was most prominent while playing difficult music such as the scalic passages of Mozart's *Duport Variations*. If I did not focus on maintaining a supple spine while practising these passages my lower back muscles would continue to extend and fix. I recognised, from the perspective of the Feldenkrais Method, that this habitual action of bracing the spine represented two underlying psychological aspects: Firstly, a physical manifestation of my necessity to succeed, and secondly, a response to the possibility of failure¹⁰. As Feldenkrais (1990) explains, it is this underlying mentality that results in a person resorting to act through sheer will power which produces the sensations of effort and leads to physical injury:

⁷ Extract 3: Janáček Sonata fortissimo section from movement II
<https://youtu.be/JxYCxUzx5GE>

⁸ Extract 4: First theme of Mozart's *Concerto No. 23 movement II adagio* showing extended spine
<https://youtu.be/jZG-bK154w8>

⁹ Extract 5: First theme of Mozart's *Concerto No. 23 movement II adagio* showing flexed spine
https://youtu.be/A23IC_dCz78

¹⁰ The Moro reflex, or falling reflex, described previously was also understood by Feldenkrais to manifest in adult behaviour during anxiety and instability association with social situations (Enria, 2014). Here my anxiety, and the cause of my fixation, was evoked by the associated with failure in performance.

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People who know how to operate effectively do so without great preparation and without much fuss. Men of great will power tend to apply too much force instead of using moderate force more effectively. If you rely mainly on will power, you will develop your ability to strain and become accustomed to applying an enormous amount of force to actions that can be carried out with less energy, if it is properly directed and graduated. Both these ways of operating usually achieve their objective, but the former may also cause considerable damage (Feldenkrais, 1990, p. 58).

The difficulty of maintaining a supple spine occurred because it required learning a new way of acting that conflicted with both physical and psychological habits formed over many years and associated with the act of playing the piano. Changing involved not only embracing the new physical freedom that a supple spine entailed but also embracing the psychological shift from feeling in control through stability and familiarity by fixating the spine to developing a new control based on freedom, balance, and potential. As a result, the difficult passages from Mozart's *Duport Variations* were performed effortlessly, as is evident in these extracts from Recital 1¹¹ and 3¹².

Overall, the benefits of this improved action are apparent both in the video extracts and the examiner's reports from Recital 1, with Assessor 1 (Appendix D) commenting on a "fine core balance"¹³. By Recital 3 this improved action of the spine was integrated and became a natural aspect of my relationship to the instrument – a part of my self-image. This example from Schubert's *Impromptu No.3 Op.90* taken from Recital 3 shows how my spine can now subtly twist, turn, flex, and extend without effecting my core balance¹⁴.

Examples from the literature

My experience also corresponds with examples from both the Feldenkrais Method and piano pedagogy literature. This suggests that fixation of the spine is a

¹¹ Extract 6: Execution of scalic passage in Mozart's *Duport Variations* from Recital 1
<https://youtu.be/V-FkjM2CoHo>

¹² Extract 7: Execution of scalic passage in Mozart's *Duport Variations* from Recital 3
<https://youtu.be/IEQKcvuJPWQ>

¹³ The first recital of the MMuR program is assessed as an element of confirmation with examiners required to provide feedback by way of examination report. These can be accessed via Appendix D.

¹⁴ Extract 8: Encore from Recital 3 Schubert's *Impromptu No.3 Op.90*
<https://youtu.be/5LrbEXmIM5U>

common issue among pianists. The following extract from an article by Feldenkrais practitioner Rywerant (1983) describes his analysis of a seventeen-year-old piano student (M.J.) who presented with similar physical issues to those discussed here:

Upon first seeing her, my initial impression was that her shoulders were drawn back and up, with very little head movement, and almost none in the torso; the sternum was depressed and the lower thoracic vertebrae and the corresponding ribs protruded backwards. When in sitting position her hips were flexed at an obtuse angle, so that the pelvis swayed backward. There was no lordosis in the lumbar region and the muscles of the abdomen were tight. (Rywerant, 1983, p. 315)

While these physical symptoms are not identical to my own, Rywerant's initial analysis resounds with that of this study. He states, "It was as if her vertebral column functioned like a nearly inflexible stick that connected the pelvis to the head" (Rywerant, 1983, p. 315). Evidently, fixation of the spine and the absence of physical communication throughout the body was also an underlying issue for M.J.

Mark, Gary and Miles (2003), authors of *What Every Pianist Needs to Know About the Body*, also support the belief that fixation of the spine is an issue among pianists. They state that the habit of arching the back, as I initially did, is likely over-arching and considers this phenomenon to be very common (p. 44). They also describe the physical symptoms as a gripping and tensing of the lower back muscles, also similar to the symptoms discussed previously and those experienced by M.J. Furthermore, Marks recognises that the process of changing this habit can be perceived by the pianist as slouching, as was displayed in the previous examples of my playing (Mark, Gary & Miles, 2003, p. 44).

Summary

Improving the function of my spine was the first fundamental change of this investigation. The video examples have shown that over the course of the study a progression was made from a hyper-extended and fixed use of the spine to one that allowed for extension and flexion. This was also represented as psychological change, moving away from an engrained mentality of control through fixation towards one that encompassed freedom and possibility through an improved ability to move.

Additionally, the brief analysis from the literature highlighted that this issue may be a common occurrence among pianists.

Feldenkrais ATMs for awareness of the spine

Several ATM's that were helpful in discovering freedom of the spine have been added here to aid the reader in their own exploration (Appendix B):

In tune with yourself: Jerry Karzen (2010)¹⁵

- Standing legs, lifting pelvis, moving arm-triangle
- Breathing into ribs in all directions
- “Flying bird” Supine – Arms at shoulder height, pushing fingernails down into floor, then prone – Lifting fingers, hand, wrist, arm, shoulder like wings

Esalen workshop 1972: Moshe Feldenkrais (2012)

- First of Spine-Chain Series
- Wringing the Shoulder Gridle
- Abdomen and Chest Breathing
- Exploring the Extensors of the Back

Twin cities Feldenkrais: Nick Strauss-Klein (2019c)

- All lessons from series 2 *Freeing the spine, chest, shoulders, and neck* (2019c)¹⁶

¹⁵ I recommend this entire CD to any musician seeking to explore principles of the Feldenkrais Method.

¹⁶ Strauss-Klein has kindly made these ATM's freely accessible through his website *Twin cities Feldenkrais* (Strauss-Klein, 2019).

Integration of the Pelvis

In conjunction with the spine, a sophisticated use of the pelvis is also a central aspect of the Feldenkrais Method and is considered to be essential for effortless, potent, action. This section reflects on the intrinsic link between the spine and pelvis and its influence on the development of my technique and musicality. This is congruent with Feldenkrais's belief that the pelvis and spine work holistically to balance the body and direct force to the extremities. As was apparent with the use of the spine, it is also evident that I possessed an unsophisticated use of the pelvis at the beginning of this study which can be viewed in this extract from Janáček's *Sonata I.X.1905* recorded on 12/06/15. The spine and pelvis remain fixed, rocking from the sitz bones to move around the instrument¹⁷. Aschbrenner (2016a, p. 1) considers this hinge-like motion, where the torso pivots from the sitz bones, to be bigger and slower than a pulse from the pelvis.

Improving the function of the pelvis and its relationship with the spine was marked by continuous experimentation and the application of the work done during ATMs and FIs to the practice room. The first exploration to improve the function of the pelvis occurred by sitting higher and utilising the piano stool, instead of my legs, as the primary support for the body. Sitting with the pelvis and femurs supported by the stool created a position where the pelvic and abdomen muscles had to engage and work to continually balance the body. Furthermore, in this position the legs were also disengaged and the feet experienced no pressure against the floor. This sitting position can be viewed in these extracts from a practise session¹⁸ leading up to Recital 1 and also during Recital 1¹⁹.

This action, where the legs remain passive, is similar to the purpose of lying down during FIs and ATMs as it inhibits the habitual body patterns associated with standing in a field of gravity. By not pressing through the feet the standing reflex that is associated with the activation, and often fixation, of the muscles around the pelvis and lower back were inhibited (Feldenkrais, 1949). This allowed for the discovery of new freedoms within the pelvis while playing. Interestingly, Young, who was an interviewee

¹⁷ Extract 9: Janáček Sonata from 12/06/15 showing exaggerated rocking forward from the sitz bones <https://youtu.be/LgYTd0k1yf0>

¹⁸ Extract 10: Sitting position from practice session preceding Recital 1 https://youtu.be/wB1Q_Vn1yFM

¹⁹ Extract 11: Sitting position during Recital 1 <https://youtu.be/yA7Xv75jwbQ>

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not versed in the Feldenkrais Method but possessed a great knowledge of the body, shared a similar technique founded on similar reasoning later in the study:

As another way of encouraging awareness of the whole body being involved in our playing it can be useful to sit back further on the chair so that your feet are not touching the ground... this can be very informative as removing the proprioceptive messaging from the feet can bring attention to the sitz-bones on the seat, engage the core muscles in a more efficient way and connect our lower and upper bodies. Often, I notice that students without realising it can be hinging in the spine or locking the hips, dividing their bodies into two, instead of having a more holistic integration of the upper and lower body (T. Young, personal communications, November 19, 2017).

Utilising this technique improved the relationship between my spine and pelvis. It fostered an approach to the instrument that relied on the constructive involvement of the pelvis and the cultivation of a balanced core.

However, this technique also had an inherent limitation in that it only promoted a passive playing style. Similar to the previous section, inhibiting the use of the legs and fostering greater freedom of the pelvis was typified by coming to terms with my habitual ways of acting. Evidently, my legs and pelvis, similar to my spine, would habitually brace when playing difficult passages – searching for control through stability. While cultivating a functional pelvis and a holistic use of the whole torso was fundamentally a positive change, doing so was at first characterised by the mentality of not doing as opposed to the sensation of exerting effort and trying. This mentality was associated with a lack of assertive, extroverted, characteristics during Recital 1. An aspect apparent from the examiner's comments:

Try to make a stronger gear-shift to Mozart's 'allegro', which needs a bit more vitality to have wings. Sometimes, it also needed a bit more dynamic projection, and you could also experiment with some Mozartean 'playfulness'. Let the wit and good-humour sparkle. You can't be too self-effacing in front of the orchestra, so be a bit more extrovert (Appendix D: Assessor 1).

However, while the expressive playing was most striking, there remains room to explore a wider range of character. Metaphorically I would have liked the playing to smile more – to be more playful, more cheeky, more exuberant and also more dramatic at times when called for (especially in the concerto) (Appendix D: Assessor 2).

The qualities expressed by both examiners – playfulness, cheeky, exuberant – were missing from Recital 1. As a result, further exploration of how to expand from this passive technique and embody an active style of playing while maintaining a holistic use of the body is still required. This will constitute the analysis of the next section in relation to integration of the Legs.

Fullness of the lower abdomen

The second improvement in the function of the pelvis occurred on 7/03/18 after an FI with Yen. During this FI an inaccuracy in the function of the right groin/hip caused the muscles to become tight and fixed while playing, not allowing for a full range of motion to the right side. Yen and I explored the voluntary activation of these pelvic muscles and the integration of this awareness into the actions of crawling and walking. This exploration created a sense of fullness in the lower abdomen that Yen (personal communication, March 7, 2018) described as feeling like a large water balloon. Subsequently, this physical discovery influenced my playing by creating a sense of grounded-ness and control without the habitual fixation.

This improved function allowed for utilisation of Ascherbrenner's (2016a, 2016b) pulse patterning technique as is evident in the production of *fortes* without rocking the whole torso forward from the sitz bones. Examples of this are Recital 3 recordings of the *Finale* from Schumann's *Symphonic Etudes*²⁰ and Janáček's *Sonata I.X.1905*²¹. Furthermore, this greater integration of the core also allowed for better rhythmic stability and a sense of ease during difficult music, as is evident of *Etude No.6*²² from Recital 3.

²⁰ Extract 12: Pulsing from the pelvis in *Finale* of Schumann's *Symphonic Etudes* Recital 3 <https://youtu.be/vBEAbO8XTFE>

²¹ Extract 13: Pulsing from pelvis in Janáček's *Sonata movement II* Recital 3 <https://youtu.be/qK3KZan0pTA>

²² Extract 14: Large movement from the pelvis provides rhythmic stability in *Etude No.6* Recital <https://youtu.be/ZbnsZzPKzCU>

Involvement of the pelvis and a quiet posture

Over the course of this investigation it became apparent that there was a relationship between the integration of the pelvis and a quiet ergonomic posture. This was evident in the type of movements that characterised my playing when the pelvis was involved compared to when it became fixed. When the pelvis and abdomen became fixed gestures of my arms also became exaggerated. Conversely, when the abdomen was allowed to participate freely, producing a holistic involvement of the whole body, my arm movements became subtle and ergonomic.

An example that highlights this relationship occurred during an exercise which involved sitting on a balance ball while performing the theme of Mozart's *Duport Variations*. There is considerable difference in the size and quality of arm movements at the beginning of the recording²³ compared to twenty minutes later while utilising a balance ball²⁴. This shows how my arms tended to compensate for the lack of movement in the pelvis, becoming exaggerated and pulling the arms, wrists, and fingers out of alignment. However, when the pelvis began working holistically through the use of the balance ball, very little movement of the extremities was required to achieve a good sound and phrase. This relationship was also noted in Rywerant's (1983) description of M.J.'s movements before their FI lessons:

It was as if her vertebral column functioned like a nearly inflexible stick that connected the pelvis with the head. Because of this, her body movements were primarily those of moving the limbs relative to the torso; there was no movement that changed the distance and spatial relationship between the shoulder girdle and pelvis. The particular posture and movements associated with a personal pattern of motor functions constitute the self-image, which one may have of oneself. In M.J.'s case it is something like the image of a cockroach. That image needed to metamorphose into a "cat image," so that she would understand and use the vertebral column as an elastically connected series of individual vertebrae that would not only allow, but also demand, participation of the movable parts of the torso and head during movements of the limbs (Rywerant, 1983, p. 315-316).

²³ Extract 15: Playing the Theme from *Duport Variations* with pelvis locked 19/11/17
<https://youtu.be/RL2IQAIZXBI>

²⁴ Extract 16: Playing the Theme from *Duport Variations* while sitting on balance ball 19/11/17
<https://youtu.be/-6Q37H-reyI>

From a psychological perspective I understood that these exaggerated gestures reflected an attempt to appear musical and free while actually achieving very little, even inhibiting technique. It was apparent that sitting on an unstable surface while playing demanded participation of the pelvis and spine, metaphorically metamorphosing my self-image closer to the supple elastic nature reminiscent of a cat. This allowed the arms to move proportionally and holistically with the whole body. Furthermore, it also occurred to me that this relationship between the integration of the pelvis and a quiet, effortless, appearance bears relevance within a teaching context; students who display large, awkward, movements may be helped by focusing on integration of the torso rather than by refining the use of the fingers and arms. This was reflected in the approach of several interviewees who considered integration of the core to be fundamental in dealing with musical and technical difficulties.

Examples from interviewees

Both Vear and Griffiths commented on the importance that understanding and improving the function of the core had on their ability to teach effectively. Both believed that focus on this aspect was sometimes more beneficial to fostering their student's sense of musicality and confidence than focus on refining the action of the fingers. Vear reflects on her student's ability to play the melodic phrase from Burgmuller's *Swallows Op.100* was improved by exploring the relationship between the hip joints and the arms:

He could imagine the flowing melody he wanted, but wasn't able to execute it – it just felt like he was stabbing at these notes. And we did a mini Awareness Through Movement lesson exploring the movement of the hip joints in relation to the rest of the body. After that his arms felt lighter and more connected to his feet, so when he played it again that turning and reaching [of the left hand over the right] was coming from his pelvis and his sits bones, and his hip joints were more able to participate with it. His playing had an effortless quality, and the singing melody he was after was there (N. Vear, personal communication, March 19, 2018).

Griffiths describes a similar scenario in the process of solving his student's difficulty with Chopin's *Etude Op.10 No.5*. It involved the cultivation of a focal impulse (Ito, 2013) as opposed to greater articulation of the fingers. Griffiths also highlights how fostering the involvement of the whole body contributed to a confident, expressive, performance mentality:

When I was teaching the other day, I was going to say [plays] to sort of make your black keys sparkle... Can you use more finger articulation or something? But I didn't do that, I just said the opposite... I said, for goodness sake, sit up and gigue [moves] ... you know, use the focal impulse of your body... and then the playing glistened. So, the problem with the sound wasn't necessarily one of technique or needing more partial practise or that the bridge of the hand was faulty... it was purely just a shift of mindset and I have found that to be common with a number of students, where the expressivity of their playing isn't optimal if their mindset's not confident (M. Griffiths, personal communication, July 20, 2018).

While Vear's and Griffiths' approaches to this concept differ, the underlying principle remains the same. Both expressed the importance that fostering awareness and integration of the core has towards developing the physical and expressive aspects of musical performance.

This concept may also be pertinent – as it was for me – to advanced musicians whose instrument specific pedagogy may not totally express the importance of such a holistic concept. This was evident of Yen's remarks who has worked extensively with students at QCGU in her capacity as a Feldenkrais practitioner. She expresses the opinion that tertiary students do not often intrinsically have awareness of their core but do come to understand how important it is to the development of their craft:

It is different for everyone, but there are a few things... one is that people tend to use too much effort for everything. Some musicians try to get everything 'right'. So, it's the attention and the intention – whilst trying to get it right and be perfect, that is, being goal oriented... they may not be aware of the connection between the feet, the pelvis, the sternum and the head and how that affects your breathing. People compartmentalise – they think 'well just breath better'.

Actually, you'll breath better if you're whole skeletal organisation is better. Where you're self-organized so that your skeleton is holding you up in gravity rather than your bigger muscles, then your muscles are free to do the movement work, including breathing and playing more effortlessly. What I've discovered, which is wonderful, is that when musicians realise that it's their whole self playing the instrument, they're really open to exploring how to function more efficiently, with less effort, while playing (A. Yen, personal communication, September 28, 2017).

Summary

Becoming aware of and integrating the pelvis has had a substantial influence on my practice. By applying the work done during ATMs and FIs to the practice room, a new level of ease, control, and clarity in expression was achieved during performance. These elements are most notable in Recital 3 when the improved function of the spine and pelvis had become assimilated. The importance of this theme is also supported by the literature and the interviewees, which suggests that exploring and improving the use of the spine and pelvis is fundamental to playing at a high level with comfort and expressivity.

Feldenkrais ATMs for awareness of the pelvis

Several ATM's that were helpful in the process of integrating the pelvis have been added here to aid the reader in their own exploration:

In tune with yourself: Jerry Karzen (2010)

- Lift pelvis, circles around shoulder-girdle
- Breathing into ribs in all directions

Esalen workshop 1972: Moshe Feldenkrais (2012)

- Tilting Cross-Legs
- Theme and Variations of the Right Hip Joint
- Intro to Dial Movement of the Pelvis
- Centring for Strength in Pelvis and Intelligence in Extremities

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Twin cities Feldenkrais: Nick Strauss-Klein (2019c)

- Your Navigational Pelvis
- The Buttocks

Integration of the Legs

As discussed in the preceding section, my legs had the tendency to be proprioceptively misleading with their involvement resulting in rigidity of the pelvis as opposed to greater mobility. This section is concerned with how the legs were eventually used functionally, working with the pelvis instead of against it to facilitate further physical integration and a more holistic approach to the instrument. Furthermore, this also represented a musical progression from the passive style of playing that pervaded the start of the investigation towards an ability to engage in an assertive, active, style of performance with the legs being used to create intensity and momentum. Finally, this exploration also uncovered several contrasting views held by a number of interviewees and pedagogues concerning the use of the legs at the piano.

The first time use of the legs was explicitly recommended to me was during discussion with Carson and Young. Carson suggested pushing through the legs as a way of facilitating the involvement of the whole body and the action of the hands. This replaced the previously discussed habit of leaning forward from the sitz bones and pulling the body off balance:

It's always better to aim for integrated movement that copies natural movement patterns we make with our body. In this fortissimo passage rather than just leaning your torso towards the piano it would be more effective to harness the power of your whole body to increase the dynamic. First, I would suggest pressing into your feet so you feel like you are just about to stand up. This 'active sitting' wakes up receptors in your feet which communicate with the core muscles. Also, your legs will be ready to support you and help move your body around the range of the keyboard as needed. Although this is a firm foundation it should never be rigid! Rather you need to train yourself to have a continued awareness of where your feet are and how they connect with the ground and then decide if it's appropriate for that moment. Once this connection with your feet is established it's possible to work on integrated movement through the whole body. In this passage it also seems you could utilise the natural movement available in the shoulder girdle – our most mobile joint. The easiest way is to think of a natural throwing movement – throwing starts from the feet with energy rebounding up through the legs through the pelvis and culminates in a reach through the shoulder girdle. When you simply moved the whole torso

forward this restricted your ‘reach’ through the shoulder girdle and upper arm and therefore and limited possible sound production (A. Carson, personal communications, November 20, 2017).

Similarly, Young also suggested the exercise of squatting while playing as a way to promote further involvement of the legs (T. Young, personal communications, November 19, 2017). These two practices, when done correctly, helped to integrate the whole body and provided further intensity to loud passages. However, it was difficult to implement these actions at first given the tendency for my pelvis to fixate when the legs became active. Therefore, these ideas were not utilised effectively during the three recitals. For example, in Recital 2 the left leg is drawn back under the seat with the body falling into the keyboard. As a result, the legs did not support the body during playing but undermined the balanced sitting position²⁵. Additionally, in Recital 1 and 3 the legs remained motionless, as previously discussed, with the physical focus being placed on awareness of the pelvis and spine.

While exploration of the legs was not implemented effectively during recitals, greater awareness and understanding of the legs was discovered as a result of the aforementioned FI with Yen on 7/03/18. The freedom of the pelvis discovered during this FI allowed for a new placement of the legs, with the thighs slanting outwards as opposed to remaining horizontal with the floor (Figure 5). This placement was reminiscent of a popular ATM concerned with drawing the legs to a semi-supine position and pushing through them to lift the pelvis, a movement Yen described as reminiscent of the motion of a frog’s legs (personal communication, September 28, 2017). Pushing through the legs in this position facilitated the functional use of the legs as Carson (personal communications, November 20, 2017) and Young (personal communications, November 19, 2017) described, feeling easier than when the legs were arranged horizontally²⁶.

²⁵ Extract 17: Leg undermining balanced sitting position in Recital 2
<https://youtu.be/NQIJAIRtb3E>

²⁶ Extract 18: Pulsing through legs in Liszt’s *Ballad No.2* using new placement of legs
<https://youtu.be/p3HAdaHSxmo>

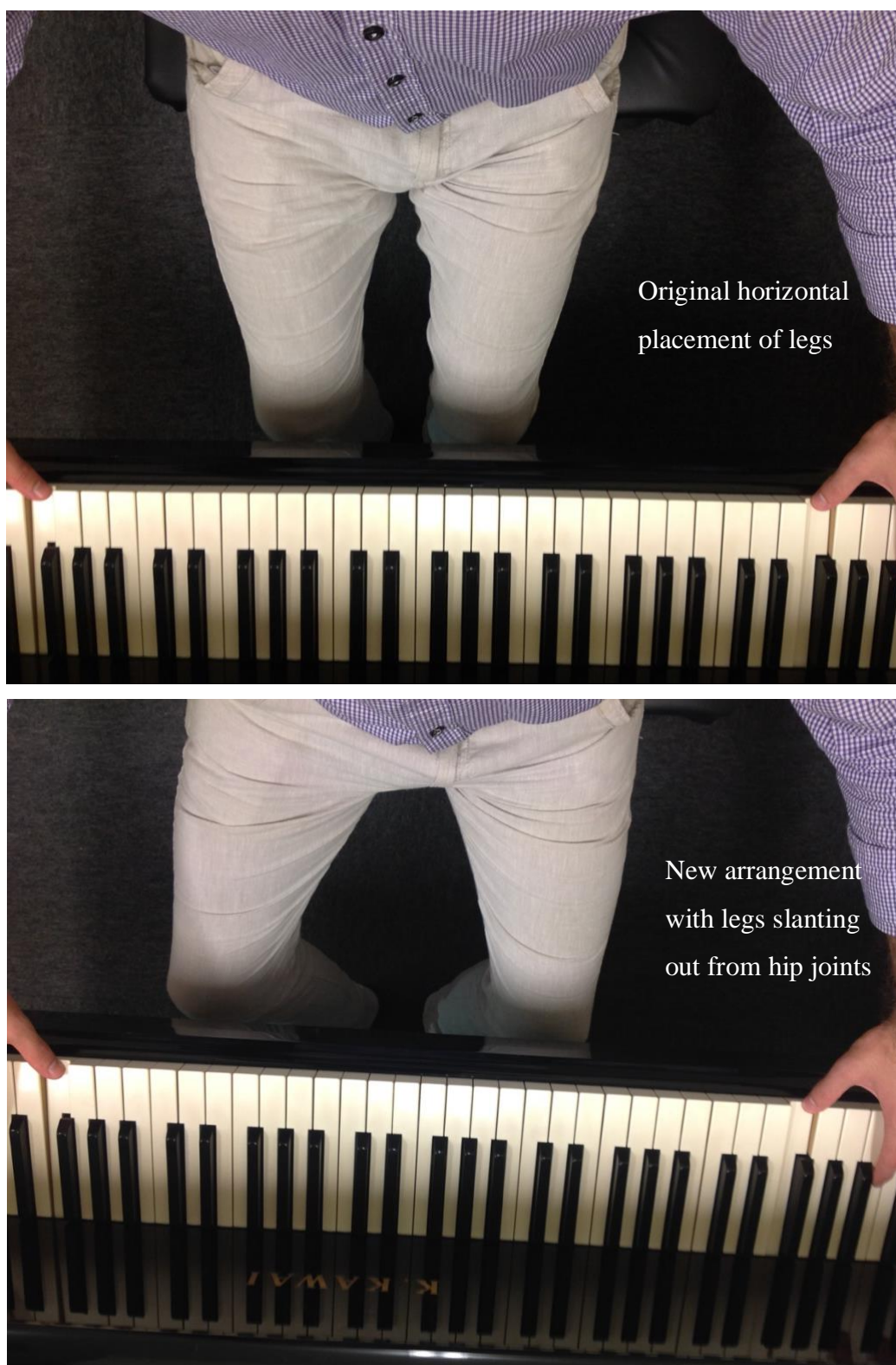


Figure 5: Alternate Arrangement of the Legs

Contrasting approaches to the use of the legs

During the course of this investigation two contrasting views were encountered concerning the use of the pianist's legs at the piano. Interviewees and pedagogical texts expressed either that the legs be actively involved and their use be cultivated, or that they remain passive as involvement inhibits the freedom of the pelvis. Furthermore, the way the legs could be utilised actively in performance also varied, with each source recommending a different approach.

In accordance with the ideas expressed by Young and Carson, Aschbrenner also recognised the use of the legs as an important aspect of playing the piano, suggesting the legs be used to pulse – which he describes as posting – during rhythmic passages and loud chords (2016b). This aligns with the views of Young and Carson yet differs in application as Carson recommends using the feet to provide a firm foundation, without rigidity, for sustained intensity of the music. Mark, Gary and Miles (2003) also express a similar view, stating that when the sitting position is balanced the legs can be utilised and placed in many different positions. This was evident in the preceding analysis, as the legs could not be utilised until a sufficient level of awareness was achieved with the pelvis.

In contrast, Fraser (2010) believes use of the legs is unnecessary and leads to negative effects of fixation in the pelvis and also the production of a harsh tone. He advocates that the legs should stretch out in front of the body allowing the piano stool to be the primary support. In *Honing the Pianistic Self-Image* (2010) Fraser discusses his belief that even Vladimir Horowitz's legs worked against his ideal posture:

His posture really does seem ideal, and the sonic results he gets would seem to bear this out. But observe his legs in side profile. When he plays loud chords and the like he will often put his left foot back and press the ground with it, using it as a stabilizer to generate power up through his torso and on into his fingertips. I believe this is an error in strategy. The contraction of his leg muscles as well as muscles around the pelvis and lower abdomen will interfere with the whole arrangement I describe above (Fraser, 2010, p.338).

Summary

This aspect of the investigation shows that there is a polarisation of opinion concerning the use of the legs. Several sources agree that the legs be involved, yet how they are involved varies significantly. Fraser (2010) has a divergent view, considering the involvement of the legs to have negative effects, undermining tone production and the freedom of the pelvis. This disparity between pedagogues represents an important field of inquiry, one that is ultimately beyond the scope of the current investigation. However, the findings presented by my own experience suggest that use of the legs is founded on a sophisticated understanding and awareness of the pelvis. They can be used effectively to create further intensity and aid technique by integrating the whole body into playing, but only on the basis that they facilitate and enhance movement of the core and arms as opposed to inhibiting it and leading to rigidity.

Feldenkrais ATMs for awareness of the legs

Several ATM's that were helpful in the process of integrating the legs have been recommended here to aid the reader in their own exploration:

In tune with yourself: Jerry Karzen (2010)

- Sitting on chairs – Fundamentals in sitting, especially for musicians.

Esalen workshop 1972: Moshe Feldenkrais (2012)

- Restoring Life to Hamstrings

Twin cities Feldenkrais: Nick Strauss-Klein (2019c)

- All lessons from series 1 *Integrating the Legs for Standing, Walking, and Running* (2019b).

Awareness of the Hand

Cultivation of the hand's grasping action was intrinsically linked with the development of a healthy, virtuosic, piano technique. This study defined a relationship between the tonus of the muscles that produce the grasping action and specific musical effects. Developing the hand's function in piano playing was guided through practise of Fraser's (2010, 2011, 2012) ATM's which focused on the cultivation of awareness towards the hand's muscles and the function of grasping. Interestingly, Young and Carson expressed a similar view independently from Fraser on how the hand should function at the piano which adds validity to the importance of this analysis.

The grasping action

Fraser believes that the action of grasping, characterised by a movement from the metacarpophalangeal joint (MCP)²⁷, is essential to healthy technique. He recognises that this movement is produced by muscle groups located in the palm known as the thenars, lumbricals, and interossei (Figure 6, 7 & 8). These muscle groups work holistically with the muscles located in the forearm (long and deep flexors) which curl the fingers – an action that if used excessively is recognised by several piano methods to induce repetitive strain injuries (Fraser, 2011; Taubman & Golandsky, 2005; Lister-Sink, 1996). Fraser (2011) considers that this grasping motion cultivates the intrinsic arch of the hand with the MCP joint as the keystone. In turn, this joint functions as the primary point of balance in the hand and arm while playing. Both Young (personal communications, November 19, 2017) and Fraser (PianoTechnique.org, 2019) likened the role of the MCP joint to that of the pelvis in walking, being integral to agility, balance and power²⁸.

²⁷ Extract 19: Opening and closing of the hand with a flexion predominantly from the MCP joint of the hand <https://youtu.be/x3b3QGuVbvU>

²⁸ Both pedagogues also mentioned how this concept was influenced by the work of Neuhaus, famous Russian piano pedagogue and author of *The art of piano playing* (Neuhaus, 1958/1973) (Fraser, 2010; T. Young, personal communications, November 19, 2017).

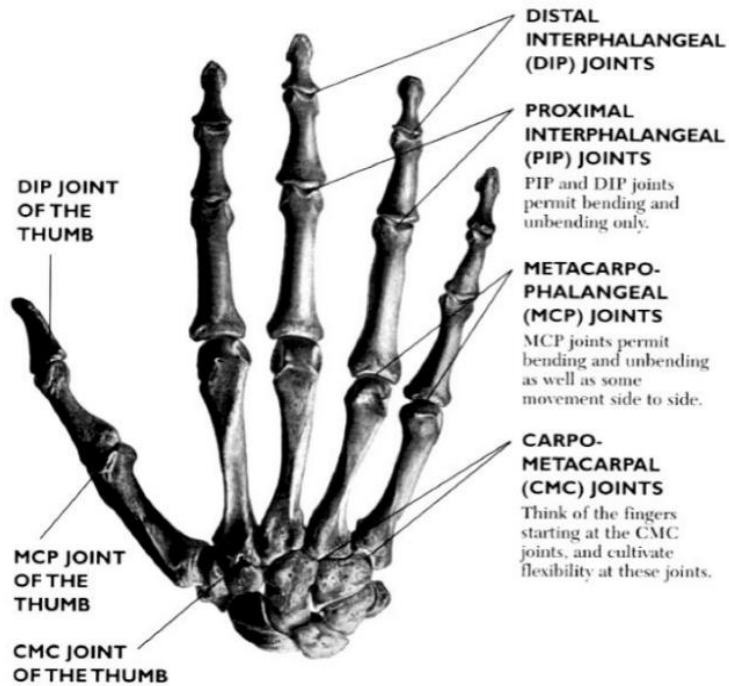


Figure 6: Right Hand's Skeleton Showing MCP Joint (Mark, Gary & Miles, 2003)

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[Image Redacted]

Figure 7: Flexion from the MCP Joint

Standring, S. (Ed.). (2016). Wrist and hand. In *Grey's anatomy* (pp. 862-894). Retrieved from <https://www.clinicalkey.com.au/#!/content/3-s2.0-B9780702052309000509>

[Image Redacted]

Figure 8: Muscle Groups of the Left Hand

Paulsen, F., & Waschke, J. (Eds.). (2013). Upper extremities. In *Sobotta atlas of human anatomy: General anatomy and musculoskeletal system* (15th ed., Vol. 1) (pp. 127-242). Munich, Germany: Urban and Fisher. Retrieved from <https://www.clinicalkey.com.au/#!/content/3-s2.0-B9780702052514500122>

Tonus of the hands grasping

Varying the degree of muscular tonus with respect to this grasping action was explored across all three recitals. During Recital 1, in addition to the exploration of the pelvis and spine, a lower tonus of the palm muscles was utilised. The sensations that accompanied this lowered tonus was the feeling of the hand having fainted, or as Fraser describes, the sensation of rope fingers (2010). This approach promoted the involvement of the forearm and upper arm to support the movement of the hand along the piano. Musically, this approach created a physical feeling of ease and flow that is reflected in the open, diffuse, sound of Recital 1. However, this approach in conjunction with the broader physical changes mentioned earlier was again associated with the production of a passive playing style and a lack of articulation, with Assessor 1 (Appendix D) suggesting aspects of Recital 1 lacked intensity – for example the legato of Mozart's *Adagio K.540*²⁹.

²⁹ Extract 20: Legato from Mozart's *Adagio K.540* during Recital 1
<https://youtu.be/6ZZSTzXX8pU>

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By contrast, Recital 2 utilised a higher tonus of the hand. Subjectively this level of muscular engagement felt excessive and caused my fingers to splay at times while playing³⁰. Although feeling excessive, this vigorous grasping motion provided greater articulation and intensity compared to Recital 1, an aspect evident in the legato passages from Mozart's *Adagio K.540*³¹. Furthermore, this approach was effective for bright, virtuosic playing that suited the bravura quality of Schumann's *Symphonic Etudes* – for example *Etude 4*³². Finally, having experienced the extremes of this action, a balanced approach was taken towards Recital 3. Here both qualities were utilised in an effort to produce the widest variety of tone colours and characters. The rope fingers were useful in the production of a diffuse sound. This is evident in the fortissimo from the first movement of Janáček's sonata³³, and the high tonus in the production of intense legato and highly contrasted voicing, for example this Schumann Posthumous Etude³⁴. This analysis highlights the idea that tonal characteristics such as a bright and highly contrasted voicing can be expressed through the cultivation of a high muscular tonus, while reflective, open, and diffuse qualities are expressed through the opposite. In turn, understanding and experiencing these opposing physical styles allows for greater control of interpretive decisions. This represents a basis for approaching interpretation through physical awareness and sensation.

Internalisation

Definition of these contrasting physical approaches provides the basis for discussion of physical internalisation, a phenomenon I explored throughout the investigation. The extracts shown previously exhibit little visual difference in physical appearance between extremes of tonus. However, subjectively each physical approach produced a different kinaesthetic, emotional, and sonic result that was reflected in the musical outcome. Evidently, the exploration of these different qualities was predominantly internal, relying on kinaesthetic sensation rather than physical appearance. This is also reflected in the approach of the Feldenkrais Method where

³⁰ Extract 21: Example of fingers splaying during Recital 2 <https://youtu.be/IgN-4AN6Qxk>

³¹ Extract 22: Legato from Mozart's *Adagio K.540* during Recital 2 <https://youtu.be/9t9X2vEdSAs>

³² Extract 23: Schumann's *Etude No.4* from Recital 2 https://youtu.be/Khj_pFyZ1wc

³³ Extract 24: Producing a large forte utilising low tonus of the hand during Recital 3 https://youtu.be/8HMGLZ_ReXo

³⁴ Extract 25: Highly contrasted voicing in Schumann's posthumous etude during Recital 3 <https://youtu.be/w63oSUGuL7s>

internalisation of movements is a distinctive feature³⁵. In reference to the hands, this phenomenon was also expressed by Carson who found learning to use this grasping action had been a predominately internal process:

To gain more control of the palmar muscles you need to rely on feeling very subtle sensations in your hand as, of course, you can't actually see what is happening in the palm as you play. It is also necessary to be able to quickly adjust a studied technical movement to accommodate different external conditions, for example a different instrument or acoustic. This requires fine proprioception coupled with the ability to stay present and aware of your body from moment to moment. A mindful movement practice such as yoga can be very beneficial as it not only improves proprioception and kinaesthetic awareness but also develops the habit to stay connected with your body at all times (A. Carson, personal communications, November 20, 2017).

Summary

Becoming aware of and utilising the grasping action of the hand was intrinsically linked to the development of a healthy, virtuosic, technique. By developing this action at various degrees of muscular tonus it was possible to create different playing styles that produced contrasting physical sensations and musical effects. This also highlighted an underlying aspect of working through somatic methods where the learning and change was understood as an internal, felt, process rather than one led by visual cues or external stimulus.

³⁵ Fraser believes that the stillness of Horowitz's during performance is not due to fixation but an extreme example of physical freedom that has been refined and internalised, with some movements being so refined that they appear to be non-existent (Fraser, 2011).

Reflection Two: Practising with Awareness December 2018

As I sit to practise I search through the sensations of my body. The pressure of my sitz bones on the stool and my heels against the ground. The sense of a supple spine and open breathing. The freedom of my head, neck, and shoulder girdle. All these sensations are represented in my mind's eye – my self-image – with increasing clarity. This improved sensitivity is also conveyed to the instrument. For example, being aware of the various degrees the key can be depressed before reaching the key-bed, and even what part of the finger touches the key surface – from the tip to the pad and even the sides.

When dealing with a difficult passage I am aware of the habit for my body to tighten and my breathing to become abrupt. Instead of being controlled by this habit I now have the awareness and choice to remain supple. Remaining balanced and free, uninhibited by feelings of inability. Instead of trying and struggling I can engage my pelvis, legs and hands meaningfully during virtuosic passages. This makes me feel confident and potent.

Awareness of my body has made learning new pieces a process of exploration. I can call upon different sensations to evoke different musical outcomes, even to the same musical phrase. I can activate my muscles to produce vigorous, bright, bravura playing or sit back and remain supple to express a reflective, lyrical atmosphere.

While pains still occur – although mild and less frequent – they are now a potential for further exploration and growth. Where once I would not have known what to do, I now feel empowered. Being aware while learning I can explore and discover new and contrasting approaches to old problems, enriching my physical sensations which in turn provides the means for true growth.

Chapter Four: Discussion

This chapter explores two fundamental aspects embedded within the findings. These are directed towards, firstly, defining the core features of pedagogy influenced by somatic practice, and secondly, reflections on the central research question. The former will draw further from discussions with interviewees, while the latter will draw from my own investigations presented in the previous chapter and subsequently draw conclusions on how this study has influenced my practise and performance at the piano. This will be followed by an evaluation of the study's limitations and the formulation of future research projects that incorporate study of the Feldenkrais Method within a musical domain.

Features of Piano Pedagogy Influenced by Somatic Practice

Evidently, the interviewees come from diverse backgrounds (Appendix C), yet analysis shows there are underlying similarities in their approaches to teaching and interpretation. As all interviewees found somatic practices to be a significant influence on their practice as performers and teachers, the similarities between their practices can be considered a manifestation of this shared experience. In turn, the research defined two aspects that were characteristic of piano teaching influenced by somatics. The first was to view their students from perspectives similar to Feldenkrais's concept of the self-image. The second was to consider exploration and variation as a fundamental aspect of practising.

The individual as a whole: The self-image and piano teaching

Several interviewees considered teaching to be a process of enquiry within various aspects of a student's physiological and psychological being, often utilising a concept similar to Feldenkrais self-image. In turn, the interviewees recognised that a student's limited ability to learn was a product of an imbalance or inability to perceive one of these elements. This fostered an approach to teaching that focused on inquiry within these elements and to work on the aspects that were deficient. This allowed for the teacher and the student to zoom in on specific aspects both physically and mentally without losing sight of the whole person and the music-making process as it encompasses the whole being.

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This was evident in Griffiths approach where he reflects on coming to the realisation after completion of this doctoral thesis (Griffiths, 2017) that all his students possessed a range of abilities and that this represents an important aspect of teaching effectively:

It's so multifaceted and prior to my PhD, I don't think that I realised to what extent that students can vary in their ability to plan and process movement. While one student may have good body awareness and be skilled in copying movement at the piano, another may have such poor proprioception that they may find recognising one finger from another challenging. This of course changes the way that I might approach their instruction, and may make a gestural approach to piano pedagogy either impractical or not of primary importance, at least not in the way that I thought it once was (M. Griffiths, personal communication, July 20, 2018).

Here Griffiths discusses the specific ability of kinaesthetic sensitivity, an aspect of sensation and movement. He acknowledges that some students possess greater sensitivity than others and that the better his understanding of their abilities the more effectively he can tailor his teaching to the student's needs.

Similarly, Young reflects on how this awareness can also apply to numerous other aspects of a student's ability. He understands competency to be associated with the degree of knowledge or awareness a student possesses in several fields such as the kinaesthetic sense, aural ability, or theoretical understanding. He recognises that each student has a varying degree of skill in these domains and that improvement of each reflects an improvement in the whole self:

My students are all so different and they are all so unique. Physiologically they all have different hands and different bodies so you know that certain technical considerations are going to be easier or more challenging. As a teacher you have to approach this on a case-by-case basis. They will therefore have strengths and weaknesses. Further to this, their talent will be intrinsically linked to other elements. Some will have exceptional aural memory, others do not but may have terrific motor memory. Some will have great analytical brains and others may have strong visual or even photographic memories. There are just so many

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variables in the combinations. The key is to know your strengths and be aware of your weaknesses. To fully develop one's potential, I have always believed that the closer you can bring all of these factors up to the same level the stronger you're going to be. The brain can then integrate this information creating a more holistic approach (T. Young, personal communications, November 19, 2017).

Evidently, Young's understanding also resounds with Feldenkrais's concept of the self-image, as each of the areas he defines reflect an element of either sensation, movement, emotions, or intellect.

As a Feldenkrais practitioner, Vear's use of the self-image is more explicit, with the influence of her training evident in the way she approaches teaching at the piano. Vear defines four fields of enquiry that reflect the concept of the self-image, these are: the ear, eye, hand, and brain. Utilising this framework allows her and the student to zoom in on deficiencies and improve them without losing sight of the broader context:

I often summarise it for students as “the ear, the eye, the hand and the brain.” The brain represents the cognitive aspect, the hand the whole body – the physical dimension – so the movement and the sense of touch, the ear the aural sense and the eye the visual sense. And the eye includes seeing the notation, the geography of the keyboard, and also what the hands are doing. Improvement comes through deepening our experience of each of these areas and their relationship to each other. When a student's struggling with a section, I'll ask them what aspect needs clarifying. Do they need some more information about the sound? Is it the fingers needing the whole arm to be there, or have they lost their connection to the feet? Or is it that their eyes aren't grasping the meaning or looking ahead fast enough? Having zoomed in on the area we want to strengthen, I then engage the student in a process of enquiry to explore it further. My role is to help them be detectives, responsible for their own learning, seeking out the juicy learning that's ripe in this moment. We're continually developing awareness of the whole of the music and the whole of the person in their environment (N. Vear, personal communication, March 19, 2018).

Finally, Hooper reflects on how a diverse range of practices, including training as psychotherapist, manifested as an approach to teaching that combines technical

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development and psychological awareness. He represents this process through three elements: the mind, the body, and the emotions. Again, this approach reflects Feldenkrais's concept of the self-image:

So suddenly I was marrying in my mind the idea of technical development and psychological awareness, that the two need to go hand in hand for me. Other people might be different in what works for them. But for me, and a lot of the people I was teaching, I could see, particularly in adults, that the issues were often psychological behind what the pianistic and expressive difficulties were or conversely what the abilities were. So, I have tried to develop, allow myself to develop, by having this marrying in my mind of my body and my understanding of myself psychologically. I believe there are three elements to human beings, Mind, Body and Emotions. My body is being used to express and experience through the senses, my mind is being used to think, experience feelings and be aware intellectually, but ultimately my emotional life is the often unseen root behind all experiences of the body and mind. To be aware of that and work with it is what I try to do when I practice (M. Hooper, personal communication, July 21, 2018).

Additionally, Hooper recognises this approach as effective for mature students because their difficulties are often a manifestation of some psychological aspect rather than a physical one. This resounds with elements of my own investigation presented in Chapter Three where it was understood that fixation of the spine and pelvis represented an emotional attempt to find control and stability.

This section highlights how the process of enquiry within several domains that make up the student's being, or from the perspective of the Feldenkrais Method their self-image, is a trait that is prevalent within several of the interviewees approach to teaching. The interviewees recognised that this is an important concept which can help guide the learning process and identify aspects that are deficient while ultimately maintaining a perspective that connects the whole person's mind and body.

Exploration, experimentation, and variation in the practice room

The second characteristic of a pedagogy influenced by somatics is the propensity to view experimentation and variation as an important concept to be developed during teaching and practising. This concept was applied to both technical development and the creative process, with exploration being considered the basis for developing physical and creative freedom. This was defined pertinently by two interviewees, Vear and Hooper, who expressed the concept most succinctly.

During the investigation Vear described the Feldenkrais Method as an experimenting tool for learning through physical exploration. She articulates how this framework promotes freedom in three ways; clarifying one's intentions, providing more options for movement, and promoting greater confidence:

[The Feldenkrais Method] is also an experimenting tool. When you get on the floor and do a lesson it's deliberately taking you out of your everyday context and putting you in this laboratory where you can explore movement in a non-habitual way. And that is a large part of what helps your brain to rewire and find those patterns. Ultimately, the Method is about learning how to learn, which is the fundamental skill that we need for life (N. Vear, personal communication, March 19, 2018).

Clarifying your intention is so critical because it all starts in the brain. What was the intention? Do you even know what you were trying to do? Are you actually doing that or something else? And if you're doing something else, where in the chain did that happen? As Feldenkrais said, "If you know what you're doing, you can do what you want" (N. Vear, personal communication, March 19, 2018).

A big part of Feldenkrais is about giving people choices, giving them options. What are ten different ways of playing this phrase, this piece? Because unless you've explored those different options how could you really know which one you like better? (N. Vear, personal communication, March 19, 2018).

Then, of course it's getting rid of all the things that are in the way: the tension, the trying hard. For example: "When you're playing those bars, you sound stiff

and afraid. What are you afraid of?" The fact that there's fear is not a problem. It's a little flag telling us there's something to learn, something to investigate. Often the student might be trying not to be afraid or trying to just get through it and they haven't bothered to stop and find out what's going on. Stopping to calmly and objectively look at it reveals something concrete we can explore – perhaps an uncomfortable leap or some harmonies they haven't made sense of. And having explored that for a little while, suddenly it's not a problem anymore [...] That bit of fear is gone (N. Vear, personal communication, March 19, 2018).

Hooper understood the process of practising and teaching in a similar way to Vear's Feldenkrais-influenced approach, believing that the practice studio should serve as a laboratory for developing freedom of interpretation. His image of an inverted pyramid moving from a single idea to numerous possibilities reflects the approach of a Feldenkrais ATM; starting with a single way of moving before discovering numerous variations:

My teacher in London use to always say – Practising is like being a scientist. You're always experimenting. Training to find new ways and new things. New ideas. You're always in a process of experimentation and I love that. I'll tell you a lovely image I developed from him. A lot of people practice in what I call the shape of a pyramid. They start with infinite possibilities and then they practice and narrow it down till they have their performance and they do it 'this way', and the idea is that they get so good with muscle memory they can repeat their performance so they come to the pinnacle which is this performance which they aim for. Fair enough. He taught me to stand the pyramid on its top, start with one idea. Then experiment and increase it till you've explored so many possibilities that you've got an infinite ability to be different depending on how you feel on the day, the piano, the acoustic. For example, pedalling. How much do you need to be free with pedalling? Hugely. Because it changes enormously from performance to performance depending upon what room you're in, whether you're in a studio a concert hall, which concert hall. So, if you don't have the freedom in your pedalling won't adapt and be as good (M. Hooper, personal communication, July 21, 2018).

Both Vear and Hooper consider exploration, experimentation and variation as a fundamental aspect of the practice room. Vear's influence stems from her study of the Feldenkrais Method and Hooper's from study of psychotherapy, the Alexander Technique, the Feldenkrais Method, and study at the Royal College of Music (M. Hooper, personal communication, July 21, 2018). Furthermore, their ideas of exploration and variation reflect the process of exploration presented in Chapter Three. Here the mentality of experimentation evoked both awareness of deep-rooted habits and provided the framework to explore new physical experiences for overcoming them. From the perspective of interpretation and creativity, the Feldenkrais Method also provided the basis for developing different sensations – for example to understand and use a high or low tonus of the hand – and subsequently broaden the possibility for interpretation through the greater physical access to a wider variety of characters and tone colours.

Summary

Analysis of the interviewees responses has revealed two underlying themes associated with the study of somatics. These themes express approaches to teaching and interpretation founded on broader concepts embedded within somatic practices. Additionally, these concepts have also been defined within terms of the Feldenkrais Method – which has served as the central focus throughout this investigation. The first theme concerned approaching teaching as a process of enquiry within aspects that represent, from the perspective of the Feldenkrais Method, the student's self-image. This was shown to aid the teaching process by pinpointing deficiencies in a student's learning while maintaining a sense of wholeness. The second theme was to regard exploration and experimentation as an essential aspect to be cultivated in the practice room. Additionally, these two themes were also reflected throughout my own investigation of the Feldenkrais Method, constituting core characteristics that lead to improvement both physically and psychologically.

How has the Feldenkrais Method Influenced My Practice?

This section reflects on the central research question outlined during the introduction. It attempts to define the core concepts that have pervaded the study and consequently influenced how I approach practising and performing. Four important aspects will be discussed: Awareness of the core should precede work on the extremities, the effects of a physically passive or active approach on musical character and interpretation, utilising Feldenkrais's concept of dynamic equilibrium as a basis for technical development, and the effects of developing conscious awareness on understanding the phenomenology of the performing body and how this could influence future artistic research approaches and methodologies.

Working with the core before the extremities

The investigation presented in Chapter Three highlights how my learning was focused predominantly towards awareness of the spine, pelvis, and legs before reflecting on the function of the hand. This overarching theme represents a mode of learning where importance is directed towards promoting functionality of the core as opposed to focusing on common physical aspects associated with piano playing such as the arms, hands, and fingers. This reflects a central tenet of the Feldenkrais Method which considers that efficient and effortless action requires the integration of the whole body, especially the core. This change in perspective, where greater importance is placed on the function of the core over that of the fingers, is evident when comparing recorded extracts from before this study with Recital 3. Fundamentally, the Feldenkrais Method has provided tools – a language – to readjust my perspective of what are the important physical aspects to be aware of and cultivate while practising. In more practical terms, learning from this perspective has suggested to me that finesse and control without fixation is achieved by developing the whole body's relationship to the instrument and to the music, a concept that is similar to several established concepts and pedagogies such as Eurhythmics (Jaques-Dalcroze, 1921/1973), focal impulse (Ito, 2013), pulse patterning (Aschbrenner, 2016a, 2016b), and the work by Whiteside (1929, 1955).

Passive and active playing

Chapter Three has also defined a relationship between the degree of muscular activation and its effects on interpretation and tone colour. This was distilled into opposite attitudes characterised as either a passive or active playing style. Characteristics of passive playing were a balanced sitting position, passive use of the legs, and lower tonus of the hand, while the characteristics of active playing were muscular activation of the core, legs, and hands – often pushing through the legs to provide greater momentum. The former was synonymous with a reflective, dreamy, diffuse interpretation and sound quality, while the latter with an intense, bravura quality. Becoming aware of the subtle differences in physical sensation between these two styles allowed for greater conscious control of musical character and sound representing an approach to interpretation informed by physical sensation.

Dynamic equilibrium as a basis for technique

These opposing, yet functional, playing styles mentioned above represent in the broadest sense an approach to technical development constructed on Feldenkrais's concept of dynamic equilibrium. To reiterate from the literature review, this is the notion that the health of a system is assessed by its ability to regain equilibrium after a large disturbance. When applied to assessing the health of pianistic technique, one's technique would be considered healthier if it has a greater potential for movement between physical extremes without becoming stuck or, metaphorically, being tipped over the edge. Approaching technical development from this perspective has several benefits. The most predominant being that it bypasses terms such as relaxation and tension which can, for semantic reasons, lead to confusion and misinterpretation (Wheatley-Brown, 2011). Furthermore, it cultivates a mentality that is concerned with viewing problems and music-making within a framework of sensation, balance, and proportion as opposed to the notion of right and wrong.

Conscious awareness and the phenomenology of the performing body

Artistic research methodologies have been increasingly focused towards understanding and interpreting the experience of the performer within the context of interpretation and performance. This is evident from the work of researchers such as Dogantan-Dack (2011), Cumming (2000), and Davidson (2000, 2002, 2005, 2007) who have made significant enquiry into examining and understanding the role of the body, from the way it moves to the way it experiences the world, during music-making. The development of this field of research has required the creation of new methodological and epistemological approaches. Dogantan-Dack's essay *In the Beginning there was Gesture* (2011) concludes with a reference to this fact, recognising that to understand the phenomenology of the body that performs music will require the formulation of new methodologies, conceptualisations, and terminologies. It is my belief that the true development of these ideas lies first in assessing, understanding, and developing the awareness of the performers themselves, a step which should precede the analysis of experience within a performance context.

As the Feldenkrais Method and this study have expressed, there is often a disconnect between our perceived awareness and actuality. Evidently, building awareness and physical understanding does not in fact come naturally but is built like the strength of a muscle, requiring time and practise. Considering that artistic research requires the performer to be aware of their intentions, movements, and sensations, it is evident that a sufficient level of awareness is key in articulating these aspects accurately and with sufficient depth. I pose that artistic researchers would benefit from a deeper level of self-awareness and self-analysis of their bodies as this would contribute to the production of deeper forms of tacit knowledge. Ultimately, cultivating more awareness as it is taught through the Feldenkrais Method would be a valuable tool for researchers in their development of future artistic research approaches and the formulation of research methodologies.

Summary

Evidently, the Feldenkrais Method has deeply influenced the way I practice and perform music. It has fostered awareness towards a holistic use of the body, expressing the importance of a functional core as essential for support of the arms and fingers during playing. This awareness of the whole body has allowed for greater sensitivity towards the way muscular activation can influence interpretation, allowing for greater contrast in the expression of character and tone colours. These contrasting approaches represent a fundamental shift in the way I perceive healthy technical development. Rather than becoming fixated with a particular way of playing, I now aim for the ability to play in many different ways, exploring primarily through physical sensation. This can be understood as a process of cultivating dynamic equilibrium and the potential for movement in my practice. Finally, it is evident that the advances in artistic research have correspondingly promoted the development of new physical perceptions that require researchers to be acutely aware of their bodies. It is my belief that somatic practices could provide a positive influence on this perception and the nature of future artistic research methodologies.

Limitations and Further Research

This study's central limitation might be seen to be its absence of quantitative data collection and analysis. The lack of quantifiable data makes this study of limited use in justifying and promoting the Feldenkrais Method to government bodies and musical institutions. However, the approach of this study has offered the opportunity to express, at the individual level, how the practice of building awareness can influence the artistic process and promote healthy practices at the instrument. Subsequently, the limitations of this study are a product of several factors including the research methodology, the modes of data collection, and fundamentally the want to express my personal relationship with the material. Given this dissertation's relatively modest length, it was important to limit the scope of the research as to ensure sufficient depth and quality of analysis.

As the Feldenkrais Method has many applications for musicians, I recommend more extended longitudinal studies that focus on the collection of both qualitative and quantitative data. A hypothetical research project that would incorporate this criterion is a longitudinal group study of participants undertaking the Feldenkrais Method over a period of 6 to 12 months followed by additional data collections 6 to 12 months post participation. This study could collect both qualitative and quantitative data that assesses, for example: the participants' perceptions of playing, their perceived improvements, and the frequency of injuries or pains that they experienced as a result of their practice. Furthermore, such a study may be undertaken within the context of an undergraduate music program where it is recognised that injuries are prevalent and a need for physical awareness is paramount.

An additional limitation of this study is my lack of formal training in the Feldenkrais Method. To become a certified Feldenkrais practitioner requires 3 to 4 years training which includes participation in both face-to-face components and home-based practice (Australian Feldenkrais Guild, 2019). This includes attending yearly seminars as well as working under a registered practitioner. In total the process requires at least 800 hours of training (Feldenkrais Guild, 2019). It is evident that a study which combines the investigation of becoming a Feldenkrais practitioner with that of the artistic process is beyond the scope and timeframe of this study. However, it does present the opportunity for a future project, most evidently as a doctoral dissertation, that investigates becoming a Feldenkrais practitioner in conjunction with the artistic process of a performing musician. An example of how such an investigation could be

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structured is Milanovic's (2011) *Learning and Teaching Healthy Piano Technique: Training as an Instructor in the Taubman Approach*. This dissertation explores the author's training in a method of piano pedagogy while also reflecting on her practice as a musician. Fundamentally, future research, both of the qualitative and quantitative kind, is essential to ensuring that the Feldenkrais Method and its potential benefits for musicians are recognised increasingly. The publication of high-quality research should provide the necessary foundations to ensure the method has the authority to be viewed as a viable option for musicians seeking approaches to healthy physical and mental development at their instrument.

Conclusion

This investigation has explored how study of the Feldenkrais Method, a practice concerned with cultivating awareness through movement, has influenced my artistic practice. These influences have been both physical and psychological, and are evident in how I now practise and perform music. Physically, changes are apparent in the way I now relate to the instrument, with improvement in aspects such as the spine or pelvis being recognised as conducive to creating a feeling of freedom, improved technical ability, confidence, and creativity. Psychologically, changes are evident in the way I now view concepts such as technical development, the idea of maintaining control without fixation, or the production of different musical characters and tone colours. Fundamentally, these changes have grown out of a greater awareness towards my self-image, a process of refining my perception of self which in turn dictates how I act in the world.

When this analysis is developed within the broader perspective of teaching and learning, it is evident that several of the changes experienced at the individual level were also discernible as underlying aspects of pedagogies influenced by somatic practices. The analysis of five semi-structure interviews revealed two underlying concepts that pervaded the interviewee's approaches to teaching despite their diverse backgrounds. The first was to view teaching as a process of enquiry within the student's self-image, and the second was that exploration and variation represents the basis for physical and creative freedom. As these concepts appeared consistently across the interviews, it was understood that they are aspects developed from a shared familiarity of, and experience with, somatic practices.

Finally, it is clear that the practice of training physical awareness and the investigation of artistic practices for performing musicians are intrinsically linked. It is also clear that the former can influence the quality of the latter. This is apparent throughout the current discourse and also upon reflection of current methodological practices within artistic research. Essentially, the more developed a researcher's physical awareness the more likely they will be able to articulate their investigations with a degree of quality and depth. Therefore, it is my belief that practices such as the Feldenkrais Method could provide a framework for understanding and developing an artistic researcher's level of awareness which will subsequently improve their ability to articulate what they are doing and how within their research.

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I believe returning to Feldenkrais's own description of his method as a process of learning how to learn is a pertinent point to conclude this study, as it summarises an essential element of all somatic practices. The concept of learning in a somatic way is characterised by a concern with the quality of the activity as opposed to the quality of the end result. Hence, learning how to learn means to shift our focus from the end result to the process itself. In turn, improving the process will improve the result by making it more refined, holistic, and enjoyable. While in theory such a concept may seem straight forward and simple to apply, the reality is that it requires a considerable shift in perspective towards what one is doing. It requires one to not only pay attention to how one moves in space and how the body works, but also to one's emotions and the reactions one has to specific situations. This, as the current study has shown, often requires coming to terms with deep rooted aspects of ourselves. Fundamentally, when these two sides of the coin, the mind and body, work in a reciprocal fashion there is potential for potent learning to take place. When applied to the study of music this approach can develop into a style of learning, playing, and interpreting music that will be self-reliant and unique to the individual, with the primary teacher becoming the learner's own body.

Appendices

Appendix A: Recorded Performances

Recital 1

<https://youtu.be/ftG9m4iWBuE>

W. A. Mozart: Duport Variations K.573

W. A. Mozart: Adagio in B minor K.540

W. A. Mozart: Concerto No.23 in A major K.488

(Due to recording error the majority of Movement I was not recorded)

Recital 2

<https://youtu.be/EPnvOGyamjM>

W. A. Mozart: Duport Variations K.573

W. A. Mozart: Adagio in B minor K.540 (Due to recording error the last 4 bars were not recorded)

L. Janáček: Sonata 1. X. 1905 “From the Street”

R. Schumann: Symphonic Etudes Op.13 (Due to recording error the last part of the Finale was not recorded)

R. Schubert: Impromptu No.3 Op.90 (Encore)

Recital 3

<https://youtu.be/VfRnq0OwZS4>

W. A. Mozart: Duport Variations K.573

L. Janáček: Sonata 1. X. 1905 “From the Street”

R. Schumann: Symphonic Etudes Op.13 (with posthumous)

R. Schubert: Impromptu No.3 Op.90 (Encore)

Appendix B: List of Recorded ATM's Conducted

In tune with yourself: Jerry Karzen

Karzen, J. (2010). *In tune with yourself: Feldenkrais for musicians* [CD]. Vienna, Austria: Feldenkrais Resources.

- Standing legs, lifting pelvis, moving arm-triangle
- Lift pelvis, circles around shoulder-girdle
- Breathing into ribs in all directions
- Twisting hands with interlaced fingers
- “How the use of yourself determines how you become” – Talk
- Wrists and Ribcage. “Butterfly-Lesson”.
- Moving jaw & counting teeth with tongue
- Right arm in shoulder height, on the floor, moving golden ball from hand to sternum
- “Flying bird” Supine – Arms at shoulder height, pushing fingernails down into floor, then prone – Lifting fingers, hand, wrist, arm, shoulder like wings.
- Sitting on chairs – Fundamentals in sitting, especially for musicians.
- Elbow standing on the floor, moving wrist & fingers, supine

Esalen workshop 1972: Moshe Feldenkrais

Feldenkrais, M. (2012). *Esalen workshop with Dr. Moshe Feldenkrais* [CD]. (n.p.):

Feldenkrais Resources.

- Introduction and General Remarks
- Scanning and General Remarks
- Lying on the Stomach and Lifting the Head
- Tilting Cross-Legs
- Theme and Variations of the Right Hip Joint
- Intro to Dial Movement of the Pelvis
- First of Spine-Chain Series
- Tilting Legs Right and Left – Lying on Stomach
- Wringing the Shoulder Gridle
- Restoring Life to Hamstrings
- Re-education of the Eyes
- Differentiation of Head Movement
- Abdomen and Chest Breathing
- Head Through the Gate
- Mobilization of the Right Side Only
- Furthering the Learning of the First lesson
- Left Shoulder Differentiation and Reintegration into the Self Image
- Raising the Entire Self to Function with a Live Shoulder
- Exploring the Extensors of the Back
- Centring for Strength in Pelvis and Intelligence in Extremities

Twin cities Feldenkrais: Nick Strauss-Klein

Strauss-Klein, N. (2019b). *ATM series 1: Integrating the legs for standing, walking, and running* [Audio file]. Retrieved from <https://twincitiesfeldenkrais.com/classes-lessons/audio-lessons/atm-series-1-integrating-the-legs/>

- Tilting, Bending and Straightening the Legs
- Flexion, Foundation, and the Feet
- Activating the Arches
- The Buttocks
- Integrating the Legs
- Your Navigational Pelvis
- Freeing your Breath, Lengthening from Heels to Head
- The Anti-Gravity Lesson

Strauss-Klein, N. (2019c). *ATM series 2: Freeing the spine, chest, shoulders, and neck* [Audio file]. Retrieved from <https://twincitiesfeldenkrais.com/classes-lessons/audio-lessons/atm-series-2-freeing-the-spine-chest-shoulders-and-neck/>

- The Ultimate Self-Hug
- The Periscope
- Softening the Ribs
- Spine like a Chain, Freeing the Shoulder Girdle
- Coordination of the Flexor Muscles and of the Extensors
- Chanukkah, the Candle Holder Lesson
- Standing and Supine Side-bending
- Spine Like a Chain, with a Bias
- Legs Crossed, Freeing the Spine and Chest Part 1
- Legs Crossed, Freeing the Spine and Chest Part 2

Appendix C: Interviewee Biographies

Anna Carson

Founder of the Australian Yoga and Music Academy (AYAMA), Anna Carson enjoys a varied career as a pianist, pedagogue, and yoga teacher. After graduating from the University of Queensland as a student of Max Olding, Anna continued her studies at the Australian National Academy of Music in Melbourne. Anna has performed as soloist with many of Australia's leading orchestras and continues to present concerts throughout Australia. In 2012, Anna completed her initial yoga teacher training at the Australian Yoga Academy and has subsequently attended many short courses with teachers from varied physical disciplines. Drawing on her combined knowledge, Anna has taught 'Yoga for Musicians' classes at the AYAMA studio, Queensland Conservatorium, Monash University, the Australian National Academy of Music, the Australasian Piano Pedagogy Conference and the Sydney Piano Teachers Festival.

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Anna Yen

Anna Yen is a Feldenkrais Method practitioner, performer, theatre-maker, director, writer and circus / physical teacher. Anna teaches Feldenkrais Method's Awareness Through Movement at the Queensland Conservatorium Griffith University. Her PlayMoves – Movement Workshops for Performance, which integrates performance skills, creativity and the Feldenkrais Method – has been invited to Hobart, Melbourne, Perth, Wollongong, Cairns, Townsville, Bellbrae, Sydney and Brisbane. She has been a guest teacher at QUT, UQ, Circus Oz, Circus WOW and many schools, festivals and communities. Anna is a trainer at Vulcana in Brisbane and recently taught Feldenkrais at Newcastle Juggling Convention. She is currently teaching a Feldenkrais inspired sequence 'Wake Up!' to help performers and nonperformers wake up at any time of day.

Mark Griffiths

Dr. Mark Griffiths has established a distinguished portfolio career in teaching, examining, adjudication and research. He is a graduate of Queensland Conservatorium Griffith University, where he has been a tertiary and pre-tertiary lecturer for the past twenty years. His professional activities are informed by ongoing reflective practice with student cohorts from early childhood to adults of tertiary level. Mark's doctoral research, completed in 2017, focused on investigating pedagogical strategies used to foster expressive performance skills within pre-tertiary pianists. His research interests lie in reflective practice, expressive performance, one-to-one pedagogy, gesture, and movement analysis. An influential clinician, Dr. Griffiths has led piano masterclasses in Queensland and Victoria. He regularly speaks at pedagogy symposia, and adjudicates competitions and eisteddfods across Australia.

Mark Hooper

Mark Hooper is a graduate of the Queensland Conservatorium of Music and Royal College of Music, London.

He has performed extensively, throughout Australasia, Europe and Canada. In England Mark has performed solo at London's Wigmore Hall, Purcell Room, at the Picadilly Festival, at Eton College and regularly in Oxford where he lived for 23 years. As well as solo recital performances Mark has performed concertos by Bach, Mozart, Beethoven, Saint Saens and Tchaikovsky and worked in close collaboration with Sir Peter Maxwell Davies, Steve Reich, Mitsuko Uchida, Charles Rosen, Andre Tchaikovsky and Menahem Pressler. Mark has performed in concert with Yehudi Menuhin, Tamas Vasary, Peter Wallfisch and Zara Nelsova.

In 1995 Mark performed solo concerts in Berlin and Potsdam as part of a cultural festival sponsored by the Australian Government celebrating Australian artists and their art. In subsequent years he gave Master Classes and concerts at Potsdam University and in Berlin.

Whilst a student at the Queensland Conservatorium of Music, Mark was trained and began to teach for the Yamaha Junior Music Course. This propelled him to continually refine and expand his teaching methods. At the Royal College of Music, London he trained, alongside piano, in Dalcroze Eurhythmics and completed its Teachers Diploma. Personal experience of the Alexander Technique and Feldenkrais Therapies have further shaped his 'wholistic' approach to music education and experience. Mark has always taught all ages (from 3.5 years old to the elderly beginner) and does so to expand his own experience.

From 2006-2011 Mark taught piano students from various colleges at Oxford University. In recent years Mark has given lectures, master classes and recitals at Australian, Thai, Philipino and German Universities with a particular interest in the psychological as well as physical preparation of the performer.

Mark has given Piano Master Classes at the 'Sound Thinking' Kodaly International Music Summer School (Brisbane) for the past 4 years.

As well as his work as a musician, Mark is a psychotherapist with a Masters Degree, and in that role he was the founder and coordinator of the Oxford Men's Counselling Service. As well as working with individual clients Mark also lectured and ran group therapy at his training organisation, The Minster Centre, Middlesex University.

Naomi Vear

A Canberra-based music educator and Feldenkrais practitioner, Naomi Vear enjoys working with students to find new possibilities for creative expression through music. Ms. Vear's personal journey with chronic pain led her to undertake professional training in The Feldenkrais Method®, graduating from the Feldenkrais Institute of Australia in 2016. Her work in The Method® continues to deepen her understanding of the learning process and provide strategies for finding greater freedom and authenticity in music-making.

Ms. Vear graduated from the Australian National University with a Bachelor of Arts, 1st Class Honours in Musicology (2000), receiving the Alice Moyle Musicology Prize and a university medal for her thesis studying the contribution of singer and music educator Ellen Christian to musical life in Australia. Her subsequent employment in the Music and Manuscript Sections of the National Library of Australia included work on the collections of Australian composers Peter Sculthorpe and Elena Kats-Chernin and research for the Library's publication, *A Collector's Book of Sheet Music Covers*.

Completing a Master of Music in aural pedagogy at ANU in 2005, Ms. Vear continued to broaden her perspective on music education through training to Intermediate Level with Dalcroze Australia (2008) and a Diploma of Music Pedagogy from the Kodály Pedagogical Institute of Music in Kecskemét, Hungary (2009). In addition to maintaining a private piano studio, Ms. Vear has taught aural and theory in the ANU School of Music College Music Program and classroom music at Covenant College Christian School. She has also conducted the Canberra Youth Choir and accompanied several choirs, including The Resonants, Canberra Men's Choir and Canberra Youth Choir. A former member of The Resonants, she also enjoys historic ballroom dancing.

Timothy Young

Timothy Young is Head of Piano and Chamber Music at the Australian Academy of Music and a founding member of Ensemble Liaison. Timothy has toured Australia with violinist Ray Chen for Musica Viva, performed with the Australian String Quartet, the Australian Brass Quintet, The Sculthorpe Wind Quintet, the ANAM orchestra, the Melbourne Chamber Orchestra and most recently as soloist with the Australian World Orchestra. Frequent festival appearances recently include the Australian Festival of Chamber Music in Townsville, Huntington Festival, Canberra International Music Festival, the Novi Sad Music Summer Festival in Serbia, the Kotor Arts International Festival in Montenegro and the opening recital at the Capraia Festival of Music in Italy. His internationally acclaimed discography includes numerous recordings for the Tall Poppies and Melba labels and his most recent release was the complete works of Percy Grainger for two pianos with Penelope Thwaites for the Heritage label UK.

Appendix D: Examiner Reports from Recital 1

Assessor 1

Variations: a very stylish and beautifully refined performance. Only a few small inaccuracies but the musical conception of each variation was sufficiently strong that flow was not broken. Very well done. When you get this to the stage of 100% accuracy, it's going to be wonderful and authoritative.

Adagio: very fine performance, a suitably restrained interpretation. There was a very beautiful and effective range of colours. Dynamics and articulations rendered with great precision. In a few moments, I would have liked a more intense legato, and perhaps a clearer definition between the legato and *detaché* attack. Pedal used with effective restraint, to create some very fine textures.

Concerto: The calm restraint of the adagio was a little too much carried over into the concerto 1st movement—try to make a stronger gear-shift to Mozart's 'allegro', which needs a bit more vitality to have wings. Sometimes, it also needed a bit more dynamic projection, and you could also experiment with some Mozartean 'playfulness'. Let the wit and good-humour sparkle. You can't be too self-effacing in front of the orchestra, so be a bit more extrovert. This is one of the concertos that needs a sophisticated 'chamber music' approach, and I sense that you have the ability to do this very well—something to work towards. The 3rd movement was very elegant, but make sure to keep the *assai* tempo—it was a bit on the edge of being too slow for my taste. I think you can afford to develop some slightly more extravagant gestures, musically, and you can design the physical movements so that they don't disturb your fine core balance. Some memory problems, but well recovered.

Overall, a very interesting and enjoyable recital. The relationship to your research was obvious and seems to be productive. Your playing has some distinctive qualities, and I will be keen to see how these develop.

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Assessor 2

Mozart Duport Variations, B minor Adagio, A major Concerto 15 June 2017

The all-Mozart program was well suited to explore the research issues around Feldenkrais's ideas regarding balance.

The performance included much genuinely beautiful piano playing – poised, expressive with a beautiful sound quality and well-judged textures. There were a few slips in concentration (most noticeably in the last movement of the concerto) and rhythmic discipline, but on the whole these detracted little from overall impression of some sensitive and highly sympathetic Mozart playing. However, while the expressive playing was most striking, there remains room to explore a wider range of character. Metaphorically I would have liked the playing to smile more – to be more playful, more cheeky, more exuberant and also more dramatic at times when called for (especially in the concerto). Just a few specific points: I would have liked the crotchet pulse to have come across more in the Adagio – not that it needed to be faster, but just a sense of feeling the larger rhythmic units rather than the sense of counting quaver pulse throughout. I did enjoy your 2-note slurs. I think you could make more of those rhetorical rests more in both the Adagio and the concerto 2nd movement – perhaps explore having them longer rather than shorter than written. Also check the dotted rhythms at the end of the 2nd movement – I think you've learnt them at double speed. But these are obvious small points within what was overall a very satisfying performance of this highly exposing music.

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