

Master Thesis

The Alexander Technique  
and the Performing Musician

Anne Cecilie Røsjø Kvammen



UiO : **Department of Musicology**  
University of Oslo



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## **CHAPTER 1 – INTRODUCTION**

The Alexander Technique is both mental and physical. In fact, for me one of the great things about it, is that it reconnects the mental and the physical, in a way that reminds you of your wholeness, or one-ness[...] that's about being fully present. And then, you know, you are playing music. In the best sense of the word, you are playing music. Greg (double bass)

### ***Point of Departure***

During the last year of my vocal studies I was fortunate to get a job as an actor and singer in a musical at the National Theatre in the city of Bergen, Norway. I participated in 120 performances of “My Fair Lady”. In the middle of the 70th performance something unexpected happened to me. I was almost alone on stage, and clearly visible to the whole audience. Suddenly I felt dizzy and afraid without any particular reason. I was afraid of fainting, and my body was completely tense, as if exposed to a great danger. This was a scary and all-encompassing experience that I later described as a form of panic anxiety. At that moment, I did not understand the symptoms, and I was unable to explain what was happening to me. My first reaction was that I was mortally ill. Retrospectively, I am not able to tell if it was my thoughts going in a loop saying, “I am going to fall! I am sick!” or if it was my strained and over-working body that caused my fear. I carried the experience with me for several years, and for a long time, standing alone on a stage, be it large or small, became synonymous with a feeling of fear accompanied by a tense body. This incident illustrates how my thoughts were affecting my body and vice versa, and is the subject matter of this master thesis.

While this was happening, I wasn't able to discover the intricate interaction between mind and body. I didn't realise the fact that *how* I was using<sup>1</sup> my thoughts and my body had a significant influence on my functioning and wellbeing on stage. This lack of understanding

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The term “use” was employed by the originator of the Alexander Technique, F. M. Alexander. It addresses how we use our selves, that is, our mind and body. “Use” includes the organism as a whole, the mind and body unity.

influenced my vocal organs too. My voice became hoarse, and a doctor confirmed vocal cord nodules. I had to rest my voice for several weeks. Later, someone told me about the Alexander Technique, and I started to take lessons. Gradually I acquired an understanding of the Technique, and it became a part of my recovery. The discomfort I had felt on stage became less dominant, and I could sing for extended periods without becoming tired. The Technique was a tool I could apply while singing, and the associated insights provided a new experience of unity of mind and body.

To learn the Alexander Technique (AT) is to acquire a skill that gives us increased knowledge about how mind and body interact. I learned how, when carrying out daily activities like walking, bending or lifting, but also while singing or reciting a text, my use, mentally and physically, influenced my whole organism, and consequently my voice. The AT teacher did not focus directly on my vocal problems; rather he started to make me conscious about my overall use. One of the first discoveries I made was how I contracted my spine, especially in my neck, when I stood up from a chair. I further learned how this contraction, which appeared to influence the use of my whole body, was closely connected to my wish to succeed or to “satisfy” my teacher. I wanted to be a good Alexander Technique student, and this so-called “mental idea” disturbed and influenced the way I used my body. After some lessons which I re-discovered my use during simple, daily activities, we started to explore my use when I was singing. I experienced, to my great surprise, that if I was able to inhibit my old habitual way of using myself my voice became more powerful, sonorous and had richer overtones than earlier. My old habitual way was characterized by a strong wish to please the audience and sing with a correct posture, in order to support my breathing and to make my voice more powerful. This pattern led to a contraction in my spine, influencing my neck, my vocal organs and my breathing. Gradually I became aware of my habits that had been operating on a sub-conscious level. The Alexander Technique was an educational process that helped me take my eyes off my primary goal, and instead consider the means whereby<sup>2</sup> I reached this goal.

My starting point is as a singer and vocal teacher. When teaching students and children

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The term “means whereby” was coined by F.M. Alexander. Through his experiments he came to the conclusion that “the process must take priority over the end result” (Heirich 2005: 9).



(from beginners to advanced level), my experience is that making music and producing sound includes and activates both mind and body. To me this connection is obvious, but I find that in general we lack the words to describe the experience. I had clearly been trained to take care of the parts and not to consider the concept of mind-body unity the way I use it in this thesis. As a music student, involved in both performances and educational subjects, and before that, as a beginner on the piano, I was exposed to traditional teaching methods. To learn “technique” on the instrument was separated from interpretation of the music and the process of “expression with feelings”. My piano teacher told me how to hold my arms and my fingers, my singing teachers told me about support and how I was supposed to hold my body in the most appropriate way in order to develop a powerful and sonic voice. There was a fragmented approach to these subjects, and it is my opinion that there was an incapacity to see the body as a part of our cognition and learning, and that *how* we use ourselves, our bodies and thoughts, influences our performance abilities and skills as teachers. As mentioned earlier, this lack of coherence had major consequences to my life as a performer. The Alexander Technique provided a psychophysical approach to learning which inspired, and continues to inspire my work as performer, as well as my own teaching.

### ***The Mind - Body Problem***

Every musician knows that she is dependent upon a non-tense and well-functioning body, and how negative thoughts (such as “Here comes the difficult part!”) might disturb a musical performance and a natural and free sound. In this regard, it may appear that the relationship between mind and body is obvious to a musician. If this is the case, why have I decided to pursue this topic? Many things would indicate that we still think and react as if mind and body were two separate entities, not least when it comes to performing music and in the education of future music teachers. It is my assumption that experiences like the ones described above, within the music educational system, and experiences like the ones I had on stage, are quite common to musicians even though they know, in theory, that the mind influences the body and vice versa. Musicians often have to struggle with stage fright and strain injuries in different ways, and I believe that the educational system is based on a traditional way of thinking where the body’s role in cognition and learning is not really taken into account, and is seen and treated as an object. One example of such

“objectification” is Hege Jahren’s book “Musikk til begjær, kropp til besvær” from 2004. This book offers a traditional way of treating musician’s problems, with physical exercises and suggestions of good working positions for musicians.

Music cognition and music psychology have traditionally been understood and explained by processes in the brain, and one of the traditional research methods has been based on observations of the body’s reaction to sound stimuli. The area of music cognition has been dominated by standard cognitive science (Lars Ole Bonde 2009). In his book *Embodied Cognition* (2011) the philosopher Laurence Shapiro addresses what he calls standard cognitive science, and defines its features.

The cognitive scientist is interested in describing the ‘inner workings’ of the mind [...] We say that cognitive scientists typically view cognitive processes as computational. Commensurate with this view is the idea that cognition consists in the manipulation of symbols, where these manipulations often involve the application of rules for the purpose of deriving conclusions that go beyond the information contained in the input stream. Because cognitive operations begin with the receipt of symbolic inputs and with the production of symbolically encoded outputs, the subject matter of cognitive science lays nestled between the peripheral shells of sensor organs and motor systems, making possible an investigation of cognition that needn’t concern itself with understanding the cognizer’s environment nor with examining the interactions between the two (Shapiro 2010: 14, 28).

One of the features of standard cognitive sciences is an intellectual approach, and most of the research conducted before 1970 was characterized by a positivistic and scientific view of musicality; musicality is measurable and something we inherit. A lot of theories about musicality have underpinned this objective approach to cognition, among them Seashores theory about musicality (Jørgensen 1982). I am not going to discuss how different theories about musicality have influenced and underpinned a dualistic understanding of mind and body in this thesis, but it is important to point out that several theories have influenced the curriculum standards for years, and thus the public view of musicality.

One of the traditional views within cognitive science is that intelligent behaviour doesn’t arise from bodily experiences. The cognitive psychologist Raymond W. Gibbs states that this conception has “imposed serious limitations on the scholarly study of mental life in cognitive science” (Gibbs 2006: 3). The separation between mind and body has influenced research methods within science, but it has also influenced the broad public view on cognition and learning: Knowledge is something to be measured, something visible, and

the body is seen as a thing, an object. “My back is bothering me” is a common statement, as if the person and his back are two different things. Almost daily, most publications available on Norwegian newsstands proclaim how one can find solutions to problems that are characterized as “physical”. This disembodied view of cognition and learning has long and interdisciplinary traditions in our western culture. René Descartes is often seen as the originator and creator of these thoughts, and they have influenced our culture for centuries (Bonde 2009). Gibbs draws the line from the ancient Greeks when he addresses the underlying reasons for dualism and states:

The denial of the body in consideration of human thought has been part of the Western intellectual tradition since the time of the ancient Greeks [...] Plato viewed the body as a source of distraction in intellectual life that must be eradicated in the practice of philosophy. Separation of the mind and body and the hierarchical ordering of mind over body haunt the history of Western philosophical accounts of knowledge from Plato, Aristotle, and Augustine through Descartes and Kant [...] The Western tradition since Descartes has generally assumed that the body is a solid object and the self, in particular the mind, is an ethereal subject mysteriously infused into the body object.

How our educational system and culture are influenced by this dualistic view, was addressed by F.M. Alexander in several books. He coined the term “end-gaining” as one of the most characteristic features and habits in our culture. The term refers to how humans are driven by their desire to strive to reach a goal, to “gain an end”, without paying attention to the manner of which the goal is reached. According to the biologist Francisco Varela (1946-2001) and his co-authors Evan Thompson and Eleanor Rosch (1991), science is a “voice of authority” and a strong influence in our Western culture. The scientific study of mind has underpinned a separation of body and mind (Varela et al. 1991, Gibbs 2007). The philosopher Mark Johnson states that mind-body dualism has resulted in several misconceptions about what it is to be human, and in my opinion, this quote from Johnson summarises some of the more significant consequences of the mind-body problem:

Chief among these misconceptions are that (1) the mind is disembodied, (2) thinking transcends feeling, (3) feelings are not part of meaning and knowledge, (4) aesthetics concerns matters of mere subjective taste, and (5) the arts are a luxury (rather than being conditions of full human flourishing) (Johnson 2007: xi).

## ***Research Questions***

My aim is to contribute to a discussion of how the Alexander Technique can be a helpful tool in the life of the performing musician. This discussion is based on my empirical results, as well as on theory from the field of embodied cognition. My hypothesis is that by learning the Alexander Technique, and by choosing to use it in performing situations and in everyday life, skills acquired through the Technique can provide a new experience of wholeness in performance, communication and everyday situations. The main research question of this thesis is:

### ***How can the Alexander Technique be a useful tool for the performing musician?***

I want to explore how knowledge and awareness of the connections between mind and body when the musician is playing, and when he is not playing, might increase the musician's presence in each and every situation, and make him or her a better performer. As already mentioned, a lot of musicians are aware of the interactions between mind and body, and musicians are often consumers of different body-mind techniques that may improve their performance skills. To what degree can a master thesis about the relationship between performers and the Alexander Technique contribute to this state of affairs? I will argue that the Alexander Technique differs from other mind-body techniques in that it is not therapeutic or part of a psychological treatment, but is rather an educational process. I also believe there is a broad gap between theory about how the mind is embodied (embodied cognition) and practice. I will argue that experiences with the Alexander Technique may contribute to bridging this gap. This master thesis is an attempt to create a dialogue between the Alexander Technique and science, one that hopefully provides more scientific underpinning to the method of the Technique. The purpose of this study is to elucidate and argue how the Alexander Technique is a practical method to discover the indivisible connection between mind and body.

## **Overview**

This thesis consists of six chapters. Chapter one has hopefully given an introduction to the field I wish to explore. Chapter two is a presentation and clarification of the relevant concepts, research and literature I have used to underpin and discuss my findings. Furthermore, it is a presentation of the method, qualitative interviews, and scientific view on which I have based the thesis. Chapter three is a detailed presentation of the Alexander Technique, based on F. M. Alexander's explanation in *The Use of the Self*. Chapter four is a presentation of the empirical data, the results from qualitative interviews with six professional musicians, followed by a discussion in chapter five. Chapter six is a summary and suggests how further research on this topic may be useful.

## **CHAPTER 2 - THEORY AND METHOD**

### **2.1 CLARIFICATION OF RELEVANT CONCEPTS, RESEARCH AND LITERATURE**

Neuroscience, cognitive linguistics and philosophy are all disciplines that have brought important insights into cognitive science and the embodied paradigm. I have used concepts, research and literature that have been directly relevant to my discussion and elucidation of the Alexander Technique and the interpretation of my interviews. This thesis is, therefore, interdisciplinary in addressing how the mind and body interact. Because the concepts are closely related and interlinked with the theories and those advocating them, I have chosen to present them in one section.

#### ***The Unity of Mind and Body***

My understanding of mind-body unity is based on my practical experiences with the Alexander Technique. Books written by F. M. Alexander and other Alexander Technique teachers, and insights from within the embodied cognition approach have given me an additional theoretical framework around which I can relate these experiences.

The way we use our language contributes to reinforcing the artificial distinction between body and mind. Terms like “mind”, “body”, “feeling”, “spirit”, “the physical” and “the psychological” serve to constantly maintain this distinction. The philosopher Mark Johnson has, together with the cognitive linguist George Lakoff, contributed to the theory of how metaphors and our ability to conceptualize are constructed from our bodily experiences. (Lakoff and Johnson 2003). Every action I perform is both mental and physical. Let us consider the act of writing on a computer. I decide to write something. I push down the keys, and the way I do this, *how* this decision manifests itself physically has to do with my prior knowledge in the sense of *how* I conduct my actions, mentally and physically. It is impossible to say that my actions are purely mental or purely physical. Body and mind are inextricably woven together, and it is not until we take into account the consequences of this that we are able to experience our acts as a whole. In *Descartes Error* (1994) the neuroscientist Antonio Damasio claims:

(1)The human brain and the rest of the body constitute an in dissociable organism, integrated by means of mutually interactive biochemical and neural regulatory circuits (including endocrine,

immune, and autonomic neural components); (2) The organism interacts with the environment as an ensemble: the interaction is neither of the body alone nor of the brain alone; (3) The physiological operations that we call mind are derived from the structural and functional ensemble rather than from the brain alone: mental phenomena can be fully understood only in the context of an organism's interacting in an environment (Damasio 1994: xxi).

Damasio has a scientific approach to the topic, and throughout my work preparing this thesis I have found his research highly relevant. In *Descartes Error* he sets forth a number of statements that correlate well with my understanding of the Alexander Technique. I will attend to explain and outline these correlations when I discuss my findings. In the book quoted he confronts the ideas of René Descartes; I have already mentioned that these ideas have had a profound influence on thinking and reasoning in western culture.

Damasio's primary focus in his book has to do with the relationship between reasoning and emotions, but he never omits the body and the inescapable connections between the brain and body. He argues that emotions and feelings interact in a constant loop together with our reasoning and our ability to make decisions, and that "the mind arises from activity in neural circuits [...] Neural circuits represent the organism continuously, as it is perturbed by stimuli from the physical and sociocultural environments, and as it acts on those environments" (ibid.: 226). The way the philosopher Mark Johnson has raised questions concerning the meaning of being human has also elucidated on my understanding of the unity of mind and body. I will let this quote summarise what I understand as the essence of mind-body unity: "We are born into the world as creatures of the flesh, and it is through our bodily perceptions, movements, emotions, and feelings that meaning becomes possible and takes the forms it does" (Johnson 2007: preface).

## ***The Self***

The concept of the “self” has long traditions, especially in psychology<sup>3</sup>. According to the Professor in Psychology, Raymond Gibbs, a problem has arisen in that the notion of the self, in considerable measure, has been separated from bodily incarnation. As he maintains, we know who we are, the feeling of *me being me* comes from sensory information I get from my body:

We possess fairly detailed self-schemas that are rooted in our experiences of embodied possibilities [...] brain, body, and environment interaction gives rise to the sense of self that, again, has a feeling of some permanency (Gibbs 2006: 19, 25).

F. M. Alexander used the term “the self” in his explanations of his technique. From his point of view the word “self” covered the functioning of the whole organism, both physical and mental. In his book *The Use of the Self* he states:

...the unity of the human organism is indivisible... any change in a part means a change in the whole, and the parts of the human organism are knit so closely into a unity that any attempt to make a fundamental change in the working of a part is bound to alter the use and adjustment of the whole (Alexander 1932).

Damasio used the same designation some decades later, both in *Descartes Error* and in *Self comes to Mind* (2010). In the latter, Damasio discusses the notion of the self and points to several unequivocal answers. There is a self, he says, but the self is not a thing, it is a process. He further distinguishes between different levels of the self, we can study the self from two vantage points: self as an object and self as a subject. Damasio’s concern is about how human brains construct a conscious mind, and the self-process is indispensable for consciousness, he maintains (Damasio 2010).

As I see it, both Gibb’s and Damasio’s use of the term “the self” corresponds with Alexander’s because they all speak of the embodied self. The philosopher Shaun Gallagher (2005: 3) gives additional meaning to the term in the way I use it in this thesis: “The human body, and the way it structures human experience, also shapes the human experience of the self, and perhaps the very possibility of developing a sense of self”. Alexander teacher and author Missy Vineyard, connects bodily sensations to the concept of the self (2007):

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William James’ book *Principles of Psychology* is one of the seminal books discussing the notion of the self (James 1950).



Synthesizing this vast array of bodily information, arriving at every moment, awake and asleep, your brain creates a construct of you. It adds up these inputs and generates a sense of the whole. More than any of your other senses, it is bodily sensation that enables your brain to construct a concept of **self**: Imagine a vastly complex matrix of neurons, neurotransmitters, and electrochemical signalling, changing instant to instant, yet creating a gestalt-your mind's concept of 'you' (Vinyard 2007: 58).

When I go on to interpret my interviews, I will use the term "the self" in this broad, embodied sense. It refers to how the (interviewed) musicians see themselves as living individuals, in terms of their thoughts and actions, and how they perceive how their bodies and minds react to stimuli. Shaun Gallagher is another philosopher who is concerned with the embodied cognition approach, and he concludes on the matter of the self like this:

The human body, and the way it structures human experience, also shapes the human experience of self, and perhaps the very possibility of developing a sense of self. If the self is anything more than this, it is nonetheless and first of all this, an embodied self (Gallagher 2005: 3).

### ***Traditional Cognitive Science***

Before I give an account of the embodied cognition approach, I want to outline the scientific field from which the embodied cognition approach arose, namely traditional cognitive science. Traditional cognitive science is an interdisciplinary field; Computer science, linguistics, philosophy, biology and neuroscience are all disciplines that have contributed to research in the field. Lakoff and Johnson (1999) described traditional cognitive science as "the cognitive science of the disembodied mind". According to them, traditional cognitive science was defined within the context of traditional Anglo-American philosophy<sup>4</sup>. The main ideas pertain to how cognition (perceiving, imagining, reasoning, conceptualizing and so on) operates through the person's inner, mental representations (i.e. the person's ability to form images, ideas and concepts), and how our logical language can represent these processes. Consequently, "representational theory of mind" has become another term describing this field. According to this view are there processes of cognition which consist of inner mental representations about the outside world (Johnson 2007).

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For a broad discussion of the philosophical background of the central ideas of traditional cognitive science, see Lakoff and Johnson *Philosophy in the Flesh* 1999

The metaphor of the “mind as a computer” entailed a view about how we analyse and interpret stimuli from the outside world and transform it into concepts, images and reason (Lakoff and Johnson 1999). According to Professor in Philosophy, Laurence Shapiro, this view assumes cognition to be a one-way process consisting of an input, a stimuli from the sensory system, a processing of the stimuli in the brain, and at the end, an output to the motor systems. This has resulted in what he calls “the computational framework to understand the mind”, an assumption that we can understand processes in the brain isolated from the body and the world, also referred to as a sense-think-act-circle (Shapiro 2011). According to an embodied cognition approach, which I am going to present in the following paragraph, this is an oversimplification, and Mark Johnson describes the view as “an extremely problematic view of meaning and thought” (Johnson 2007).

Gibbs (2006) emphasizes that experiments intended to investigate perception and cognition often take place in artificial situations like a laboratory, and that the individuals being observed are often limited in their movements because the researchers seek only a theoretical understanding of processes involved in perception and cognition. These kind of methods underpin the idea that:

Cognitive processes, especially, are viewed as strictly mental phenomena that have little to do with embodied experience. The body is the vessel for the mind and brain, but has negligible importance in characterizing the essence of mental life (Gibbs 2006: 6,7).

In *Embodiment and cognitive science*, Gibbs discusses how cognition, including perception, concept-making, mental imagery, language et cetera, arises from our embodied experiences. In this regard, he asks, “How do our bodies influence the ways we think and speak?” (ibid.:1).

Proponents of the embodied cognition approach have presented ground breaking research and contributed of late to a paradigm shift. According to biologist, philosopher and neuroscientist, Francisco Varela (1946-2001), one of the great challenges to cognitive science is its third-person perspective. He claimed that the first-person perspective was an overlooked aspect in science and research on the mind. Varela is therefore a central theorist within the embodied paradigm, which I will soon return to.

### ***Towards an Embodied Cognition Approach***

Embodied cognition is an approach to cognitive research that has emerged during the last three decades. It has developed as a reaction to the representational theories of cognition and to standard cognitive science (Shapiro 2011). Lakoff and Johnson (1999) are concerned about how our western culture has influenced our way of thinking, and their book opens with three major findings within cognitive science: “The mind is inherently embodied”, “Thought is mostly unconscious”, and “Abstract concepts are largely metaphorical” (Lakoff and Johnson 1999: 3). According to them, these findings are inconsistent with our western philosophy, and if we really were to take these findings into account, it would demand a reconstruction of philosophy and our culture would have to “abandon some of its deepest philosophical assumptions” (ibid.).

According to Shapiro (2011) the embodied cognition approach is an interdisciplinary, but in many ways diversified field with different proponents. It is often presented as “an alternative or challenger or ‘next step in the evolution’ of cognitive science” (Shapiro 2011: 1)<sup>6</sup>. Gail Weiss and Honi Fern Haber address the interdisciplinary work of embodiment in their book *Perspectives on Embodiment* (1999). In their introduction they summarise some of the common features of the embodied cognition approach:

...these perspectives are united in their attempt to break down the binary opposition between nature and culture that has all too often been symbolized and reinforced by an association of the body with nature and consciousness with culture” (Weiss/ Harber 1999: xiii).

Research during the last decades leaves no doubt that the body, emotions, mind and brain interact and are involved in cognitive processes at all levels (Bonde 2009). The philosopher Shaun Gallagher refers to the growing number of studies that focus on how the mind is embodied, and states: “there is a growing consensus across a variety of disciplines that this basic fact is inescapable” (Gallagher 2005: 1). Varela et al. (1991: 27) are addressing dualism and what they call the training and practice of “Western scientists and philosophers”. By this is meant a practice totally dominated by an objectivistic and

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See Shapiro’s book *Embodied Cognition* for an introduction to different approaches within embodied cognition.

mechanical view of human beings, the consequence being a separation of mind and body.

In *The Meaning of the Body* (2007), Johnson explores how bodily processes, emotions and feelings make meaning possible. He uses the terms *embodied meaning* and *immanent meaning*, and according to him, meaning arises as a result of how our entire organism (the brain in the body) interacts with the environment. In this respect he also draws a line back to the American pragmatist John Dewey and his “principle of continuity” (Johnson 2007: 117). In *Experience and Education* (1938) Dewey sets forth his educational philosophy that has been influential to educational practices until today.

Dewey’s concern was *how* pupils possess their experiences, and that the understanding of *how* they gain their experiences should be decisive in the development of new and effective education. Dewey’s emphasis on *how* humans get their experiences became a foundation of his philosophy, and from this tenet he developed his theory of experience and its relation to education. There are two principles essential in every experience, according to Dewey, these being continuity and interaction. These principles are (continuously) being involved in the interaction between the learner and what is learned (<http://www.icels-educators-for-learning.ca>). This paraphrase from Johnson explains how Dewey’s thoughts are highly relevant in relation to the embodied cognition approach:

According to Dewey’s principle of continuity, what we call ‘body’ and ‘mind’ are simply convenient abstractions - shorthand ways of identifying aspects of ongoing organism-environment interactions - and so cognition, thought, and symbolic interaction (such as language use) must be understood as arising from organic processes. I want to trace the rejection of mind/ body dualism from the philosopher-psychologists known as the early American pragmatists (especially James and Dewey) forward through contemporary cognitive scientists [here he lists up several cognitive scientists, among them Varela] (Johnson 2007: 117).

Johnson advances the pragmatist view in relation to embodied cognition because the pragmatists argued that “*cognition is action*” (ibid: 120). The fact that Johnson refers to James’ and Dewey’s pragmatism in relation to the embodied cognition approach, is especially interesting and relevant to this thesis: Professor John Dewey was an enthusiastic pupil of F. M. Alexander for 35 years (Dimon 2013), and he wrote introductions in three of Alexander’s books (*The Constructive Conscious Control of the Individual*, *Man’s Supreme*

*Inheritance and The Use of the Self*). This may not be entirely relevant, but is a small curiosity: In the preface to his book *Constructive Conscious Control of the Individual* from 1923, F. M. Alexander writes that he regrets that he never had the opportunity to meet William James: “Unfortunately, unforeseen circumstances interfered with this plan, so I did not have the pleasure and honour of numbering him among my pupils” (Alexander 1923: x). I will return to Dewey’s philosophy in relation to Alexander technique in chapter 5.

Embodied cognition has influenced different branches of musicology in recent years. Studies within embodied musicology by Lawrence Zbikowski (2002), Hallgjerd Aksnes (2002), Steve Larson (2012), Rolf Inge Godøy and Mark Leman (2010) among others, have developed and elaborated on the embodied view in music cognition and perception.

Common features of the researchers I have chosen as representatives of the embodied cognition view, is their attempt to develop a framework within the field. They all emphasize Maurice Merleau-Ponty’s research as ground-breaking, and estimate him as a leading advocate of the embodied cognition approach. According to Varela et al. (1991: xv), Merleau-Ponty emphasized the importance of seeing our bodies “both as physical structures and as lived, experiential structures - in short as both ‘outer’ and ‘inner’, biological and phenomenological”. In this respect, it becomes impossible to separate body and mind. Being in the world means an indissoluble connection between ourselves and the world, and according to Merleau-Ponty, being in the world means being both a subject and an object (Alerby/Ferm 2005: 179). The current researchers I have quoted have led to the discovery of relationships and correlations between my inherent knowledge of the Alexander Technique, education and performing, and different theories of embodied cognition. It has been interesting to uncover matching and coincidental thoughts. I will attempt to relate and explain the Alexander Technique in light of this field, and discuss and argue why I believe the Technique is a practical manifestation of important tenets of the embodied cognition model. But before I do that, I will venture to explain some of the central terms of embodiment used in this thesis.

## 2.2 CENTRAL TERMS WITHIN THE EMBODIED COGNITION APPROACH

In this section I will present an overview of some of the central terms used within the embodied paradigm that are relevant to my discussion of the results, namely proprioception and bodily sensations, motor memory, body schema and body image, mapping and ideo-motor actions. The last term, ideo-motor actions, is not a commonly used term within the paradigm, but is included because it elucidates some important issues in this thesis. I have found it necessary to make this clarification because the terms are often interlinked and are sometimes used interchangeably.

### ***Proprioception and Bodily Sensation***

One central term used within the embodied cognition approach, and essential when learning the Alexander Technique, is the functioning of the proprioceptive system. Proprioceptive information can be understood as the sensations and feedback from muscles and joints.<sup>7</sup> Proprioceptive input from sensory organs in muscles, joints and tendons informs the brain and the nervous system, as to when and how muscles are contracting and extending. Additionally, proprioceptive impulses come from the organs of balance in the ear, and are essential to the maintenance of our balance in general. This information helps us to know where we are in space, how the limbs are related to one another and how we are moving (Alcantara 1997, Vineyard 2007). The medical scientist and the Alexander teacher David Garlick (1990) argues that proprioception is our sixth sense, but that it has become suppressed in our modern civilisation. It should be considered as one of our senses along with sight, hearing, smell, taste and touch.

Missy Vineyard discusses another designation, which includes proprioception, namely *bodily sensations*. The feeling of how we move in space, what it feels like to bend down and pick up something from the floor, stomach ache, sensations from our viscera, sore shoulders and goose bumps are all examples of bodily sensations. Vineyard also includes emotions and feelings in this collective term so as to expand the term proprioception:

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<sup>7</sup> Kinaesthesia is another technical term used to describe these sensations, but proprioception also covers inputs from the vestibular system (Vineyard 2007).

Emotions are changes in brain states that produce neurological and biochemical changes that affect our body, especially our viscera. Due to this, sensory receptors are stimulated that send signals back to the brain with lightening speed, telling it about what is happening within us. Some of these signals reach conscious awareness (Vineyard 2007: 58).

Shaun Gallagher (2005) emphasizes that proprioception is a “complex phenomenon” and a basis for “the way we come to be conscious about ourselves”:

Movement and the registration of that movement in a developing proprioceptive system (that is, a system that registers its own self movement) contributes to the self-organizing development of neuronal structures responsible not only for motor action, but for the way we come to be conscious of ourselves, to communicate with others, and to live in the surrounding world. Across the Cartesian divide, movement prefigures the lines of intentionality, gesture formulates the contours of social cognition, and, in both the most general and most specific ways, embodiment shapes the mind” (Gallagher 2005: 1).

At a conceptual level Gallagher distinguishes between proprioceptive *information* and proprioceptive *awareness*. The first is based on a traditional way of analysing the concept of proprioception: “On the one hand, neuroscientists may treat somatic proprioception as an entirely sub-personal, non-conscious function - the unconscious registration in the central nervous system of the body’s posture and limb position” (ibid.: 6). This view implies that we are not consciously aware of this information; it is a process taking place at a sub-conscious level. Proprioceptive awareness, however, indicates that we possess a conscious faculty and according to Gallagher, this latter way of defining proprioception is more widely used among psychologists and philosophers. But, “on an embodied experiential level”, he writes, “these two aspects of proprioception are fully integrated” (ibid.: 7). In part five, entitled “Musical Development”, in *The Oxford Handbook of Music Psychology*, Professor in Musicology Richard Parncutt, addresses the term “motor control” in addition to proprioception. Proprioception is developed in relation to movements and motor control, and it evolves together with the development of the spinal reflex arc, already in the first trimester of gestation (Parncutt 2009: 221). In this thesis I will explain how the ability to use and develop our proprioception is a foundation for understanding and learning the Alexander Technique.

## **Motor Memory**

*The Oxford Handbook of Music Psychology* distinguishes between the terms motor memory, motor programming, motor skills and implicit memory. Professor in Psychology, Roger Chaffin et al. writes: "Motor memory allows actions to be executed automatically by providing kinaesthetic memory of the sensory feedback from joints, muscles, and touch receptors" (Chaffin 2009: 355). The development of motor memory is dependent on our proprioception. According to Bob Snyder (2000), motor memory is a part of our implicit memory and it is stored in our long-term memory. He describes these memories as memories of muscular acts, and compares/juxtaposes implicit memory and motor memory with motor skills - see "The knowledge of *how* to do things" (Snyder 2000: 73). The knowledge of how to play on an instrument, how to swim or how to ride a bicycle are examples of how motor memory or skills are embedded in implicit memory during years of repetition. According to Garlick, a variety of skills about how one move or stands are stored in the sub-cortical levels of the brain, and accordingly the knowledge about how one perform these skills have become subconscious (Garlick 1990: 11).

## **Body Schema and Body Image**

Implicit memory and motor memory are closely connected to two central terms within embodied cognition, namely body image and body schema. According to Gallagher (2005:24) body image and body schema are closely related systems, and body image cannot exist without one's body schema. Body image, says Gallagher, "consists of a system of perceptions, attitudes, and beliefs pertaining to one's own body". It entails the representation or the awareness of our body in relation to the environment (Godøy 2010). Body schema, on the other hand is, according to Gallagher, "a system of sensory-motor capacities" which function without our awareness and functions on a level below what he calls "self-referential intentionality" (body image). The body schema encompasses motor capacities and skills one needs to move or stand (Gallagher 2005: 24). As I understand Gallagher, one's body schemas (one can have more than one body shema) is one's subconscious motor memory and implicit memory, and one does not need to be aware of how one's body schemas are functioning. In the discussion I will argue how one's body image may alter if one changes one's body schemas.



## **Mapping**

Unlike some of the scholars within the embodied cognition approach, who assert that motor memory is unchangeable, Damasio (2010) points to an aspect he calls “an overlooked aspect in the mind-body discussion”, namely the human brain’s ability to make maps, and that the brain’s “uncanny” mapping ability is a system of two-way communication. This is what makes his thoughts highly relevant to Alexander Technique:

Mapping is essential for sophisticated management, mapping and life management going hand in hand. When the brain makes maps, it *informs* itself. The information contained in the maps can be used non-consciously to guide motor behaviour efficaciously, a most desirable consequence considering that survival depends on taking the right action. But when the brain makes maps, they are also creating images, the main currency of our minds. Ultimately consciousness allows us to experience maps as images, to manipulate those images, and to apply reasoning to them [...] In brief, complex brains such as ours naturally make explicit maps of the structures that compose the body proper, in more or less detail. Inevitably brains also map the functional states naturally assumed by those body components. Because, as we have seen, brain maps are the substrate of mental images, map-making brains have the power of literally introducing the body as *content* into the mind process. Thanks to the brain, the body becomes a natural topic of the mind (Damasio 2010: 63, 89).

Damasio emphasizes that this body-to-brain interaction and mapping stands in a unique position because the mapped images of the body are constantly influencing the body they operate in. According to him, we cannot exert any direct influence on objects and events outside ourselves that we have already mapped. I will try to illustrate with an example: If a musician activates his “playing concert-maps”, this might include images of sounds in the concert hall, the music to be performed, his instrument, a feeling of nervousness, expectancy, joy, fear etc. The images, the maps covering this situation cannot directly influence the object, the concert situation itself. He can prepare the best possible way by imagining the concert hall, the podium, and he can rehearse, but he cannot directly influence the situation. A possibility only when he is at the podium, in the present situation. The body-to-brain mapping is totally different because *we are our bodies*, and we are able to influence the self constantly.

Damasio distinguishes between *interoception*, the state of the body’s interior conveyed to the brain, as well as the mapping of this interior, and *exteroception*, the signals from the external muscles and skeletal system informing of the body’s state. These signals are

constantly contributing to making maps in our brains and minds, and this is a process going on whether we are aware of it or not. He also notes that changes in the surroundings, the environment, cause changes in the body, and that the brain is informed of these changes through the body. We reorganise the maps in the brain, and adapt to the changes. Our brain maps are the substrate of mental images, and since the body is connected to the brain, the body inevitably contributes to the mind processes. “The mapped images of the body have a way of permanently influencing the very body they originate in”, claims Damasio. He states that we are able to influence the body state by implementing thoughts that change the emotion states within us. For example, if a musician constantly implements negative thoughts like “I will never be able to play the difficult passage if my hands are shaking like this!”, the body will probably respond with more shaking. We constantly receive signals from the body, neurological and chemical, such as stomach ache, pain, muscle contractions or release. A wide range of signals are continuously mapped in the brain. On the other side, the brain tells the body how to react to these signals. As Damasio puts it: “The brain tells the body what to do to maintain its even keel” (ibid).

### ***Ideomotor Actions***

According to the influential Professor of Psychology William James (1842-1910), the notion of ideomotor actions denotes how our actions are influenced by an idea, a thought, a motivation or a decision behind the act itself. Ideomotor actions may be clearly observed, as for example when one decides to run and then one runs, but ideomotor actions are sometimes concealed. James makes use of an example when one is in the middle of a discussion about a topic after a meal, and one continues to pick raisins or nuts out of a dish, eating them while arguing. He says: “I am hardly aware of what I do, but the perception of the fruit and the fleeting notion that I may eat it seem fatally to bring the act about” (James 1950: 522, 523, vol. 2). Dimon has connected this term to the Alexander Technique, calling it a “pathway of activity”. According to Dimon, when learning the Alexander Technique it is essential to address this pathway in order to discover how the motivations behind our acts are part of the total use of ourselves.

## 2.3 METHOD

### *Qualitative Research Interview*

Earlier I stated that the purpose of this study is to elucidate the Alexander Technique as a practical method to better understand the indivisible connection between mind and body. Hopefully this project will be of relevance to others, and contribute to a greater understanding of how mind and body interact. According to Professor Even Ruud (1995), qualitative studies are well suited to uncovering previously unknown phenomena in society and a researcher can discover new patterns and connections using such studies (Ruud 1995: 147).

I considered different methods before starting out this project, but came to the conclusion that qualitative research interviews are the most expedient method within the frame of a master thesis on the Alexander Technique. My aim is to relate stories of pedagogical value, stories that would have been lost in a quantitative survey. Professor of Education, Max Van Manen (1990), writes that the choice of method should harmonize with the researcher's interests as an educator, and that pedagogy requires a phenomenological sensitivity to the "lived experience" (Van Manen 1990: 2). In this respect, my pedagogical background played an essential role in the selection of method. A larger quantitative study on the Alexander Technique in relation to musicians would have been of great significance, but the framework of a master thesis limited the extent of my research. Alvesson/ Sköldböck (2008) and Ruud (1995) emphasize that it might be useful to combine several methods. In some cases statistics are used as background material in qualitative research; furthermore, qualitative research can also be extended to larger quantitative studies. In further research on this topic it would be interesting to test the validity of the knowledge I obtained through the interviews I conducted, in order to construct a larger quantitative survey in the form of a questionnaire<sup>8</sup>. My aim was to gain insight into other peoples' experiences with the Alexander Technique, and in-depth interviews gave me new and valuable insights into the musicians' processes, providing a deeper understanding of the Technique.

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8. For a larger quantitative study of the Alexander Technique in relation to back-pain, see British Medical Journal 2008; "Randomised controlled trial of Alexander technique lessons, exercise, and massage (ATEAM) for chronic and recurrent back pain".

According to Kvale and Brinkmann quantitative methods are characterized by strict formal requirements, and the lack of correspondingly stringent rules in qualitative research can appear as a challenging problem to an inexperienced researcher. I experienced that I gradually became a better interviewer, and my self-confidence increased with each interview I conducted. Qualitative interviews provided profound insight to the informants' experiences, and as far as I know, there are no earlier qualitative studies on musicians and Alexander Technique that draw upon cognitive science. Nevertheless, there are some disadvantages in using qualitative interviews, one of which is the distance between the experiential setting the informants' were describing and the present interview situation. There is a chance that the informants' remembered "wrong", that what they described was glossed over, because they thought they knew what I wanted. Another challenge is that the relational asymmetry between the interviewer and the person being interviewed may create an artificial atmosphere. It is important to reflect on how this asymmetry may have influenced the answers given. I was conscious about this dilemma when I conducted the interviews, and tried to maintain a relaxed atmosphere when I noticed that the informant was too concerned about this relational asymmetry.

Theories within embodied cognition refer to universal human experiences, namely how "embodiment shapes the mind" (in Gallagher's words), or to quote Johnson: "meaning grows from our visceral connections to life and the bodily conditions of life" (Johnson 2007: 1). In this thesis I will argue that the Alexander Technique is a practical method concerned with discovering and educating the connection between mind and body, the way Gallagher and Johnson argue. In this respect I want to suggest that the Technique contributes to this connection in a practical sense. Varela, Thompson and Rosch (1991) and Varela (1996) were concerned with the incongruity between science and experience, and one of the aims of their seminal research was to bridge the traditional gap between science and everyday, lived experience. Varela et al. emphasized the importance of dialog and circulation between cognitive science regarding the mind, and human experience. They called for a more pragmatic approach to the science of embodiment:

Without embracing the relevance and importance of everyday, lived human experience, the power and sophistication of contemporary cognitive science could generate a divided scientific culture in which our scientific conceptions of life and mind on the one hand, and our everyday, lived self-understanding on the other, become irreconcilable (Varela et al. 1991: xx).

Varela et al. further argued that cognitive science holds a unique position because it “stands at the crossroads where the natural sciences and the human sciences meet” (ibid. 13). In other words, it carries in it the possibility for dialogue between research on the phenomenological human life-world and the traditional natural science. In this respect, it is again relevant to point to Johnson who emphasizes the pragmatist ideas, “continuity of embodied experience and thought” of James and Dewey, as relevant approaches to current research (Johnson 2007: 121). Other advocates of the embodied paradigm build upon this view and one of them is Gibbs (2006). He argues that research on “embodiment” must integrate phenomenological experience as a key aspect.

Qualitative research interviews give access to lived human experience and, according to Kvale and Brinkmann (2009: 14), the method is based on phenomenological philosophy. This thesis has a hermeneutic and phenomenological starting point, and in what follows, I will give an account of the terms the way I understand these terms.

### ***A Hermeneutic and Phenomenological Point of Departure***

As mentioned above, one of the characteristics of qualitative research is that it provides insight into peoples’ lived experiences. It is the subjective experiences of the interviewees that are emphasized, and the researcher’s task is to seek deeper meaning in the individual’s experiences (Thagaard 2003). In this respect it is interesting to note Johnson’s remarks on phenomenology. According to him, phenomenology cannot be the only philosophy when it comes to study embodied cognitive processes: “What is required additionally is empirical research from the cognitive sciences of the embodied mind” (Johnson 2007: 27).

The French philosopher and psychologist Maurice Merleau-Ponty (1908-1961) elaborated on the philosophy of phenomenology in the tradition ascribed to Husserl (Kvale and Brinkmann 2009). During my research I have discovered that a lot of theories within

embodied cognition have their origin in Merleau-Ponty's philosophy. He maintained that our most basic perception and experience of the world is a process depending upon our "lived bodies". According to Van Manen, a "lived body" refers to the fact that we perceive a phenomenon as living creatures: "we are always bodily in the world [...] In our physical or bodily presence we both reveal something about ourselves and we always conceal something at the same time-not necessarily conscious or deliberately, but rather in spite of our selves" (Van Manen 1991: 103). Merleau-Ponty employed the word "pre-reflective" when he stated that we experience the world without any previous knowledge. Phenomenology developed in the tradition of Merleau-Ponty is concerned with describing the world as it emerges before we start to reflect on it. "The foundation of experience is an implied bodily knowledge. The body's relation to the world is neither mechanical, intellectual nor biological, but existential [translated from the Norwegian]" (Duesund 1995: 30).

I find the term pre-reflective somewhat problematic. Is it possible to experience and perceive the world without drawing upon our pre-knowledge of it? Conversations with the musicians have given me insights of great value. They have shared experiences from their "life world", which is one of the main issues to elucidate for a qualitative researcher. According to Kvale and Brinkmann (2009), the notion of life world is the "lived everyday world", and the researcher should seek to obtain access into this world through "unprejudiced descriptions". I have asked the informants about how the Alexander Technique has influenced their lives, but nevertheless, my approach is not strictly phenomenological. I have interpreted their narratives within a hermeneutic tradition, and according to Alvesson og Skjoldberg (2009: 193), hermeneutics is like a circle where we understand the parts on the basis of the totality, and vice versa. Van Manen also emphasizes the reflective approach during the process: "The insight into the essence of a phenomenon involves a process of reflectively appropriating, of clarifying, and of making explicit the structure of meaning of the lived experience" (Van Manen 1990: 77).

During my work with this master thesis, I have experienced the hermeneutic circle incessantly, e.g. when I conducted my first interview. The conversation provided a deeper understanding of what I wanted as being the essence of my study; I realised that I had to

be more concrete when questioning each of the informants about how the Alexander Technique was a useful skill for them. I did not ask about the informant's gestures, but after a lecture on gestures in music psychology, it became obvious that gestures had to be one of the categories in my study. The project has developed continuously within a hermeneutic circle, and it has been interesting to explore the field of cognitive science and embodiment and see its relevance to the Alexander Technique.

Even Ruud (1995) refers to Kenneth Bruscia in his article "Kvalitativ metode i musikkpedagogisk forskning" ["Qualitative research within the research of music pedagogy", my translation]:

To conduct research is to move within a circle, or a spiral. One has to be conscious about the parts, but also keep the whole picture in mind while writing. 'What is the purpose in my study? And: 'What do I want to find out?' (Ruud 1995: 141).

According to Alvesson and Skjöldberg (2008:20), a qualitative method consists of open and ambiguous empirical material, and the research is characterized by interpretation and reflection. The scientist always interprets her material, whether the study is qualitative or quantitative. It is important that she is aware of her options in the use of words and theory, and that she is aware of how her pre-understanding will influence her interpretations of the material. I have tried to have the following question in mind during my work with this thesis: How has my pre-understanding influenced the interview situations? I am a musician who has benefited a lot from the Alexander Technique. My insight and knowledge about the Technique has been invaluable, both when I conducted the interviews, and further in my interpretation of them. I experienced that I started to interpret already *while* I carried out the interviews, and asked the informants relevant follow-up questions to find out whether I had understood their answers correctly. Since I am a professional musician myself, with experiences as a solo and ensemble singer, it was easy to intuitively understand and relate the musicians' experiences to my own experiences on stage. Kvale and Brinkman (2009) point to the context and how the researcher's role and position in history and society has to be part of the interpretation:

From hermeneutics, qualitative researchers can learn to analyse their interviews as texts and look beyond the here and now in the interview situation, for example and pay attention to the contextual

interpretive horizon provided by history and tradition (see Palmer, 1969) (Kvale/Brinkmann 2009: 51).

Furthermore, they refer to the German philosopher Hans Georg Gadamer's (1900-2002) seminal book *Truth and Method* (1975): One cannot reduce knowledge to method, because one cannot omit one's pre-understanding and prejudices in one's interpretation of the world (Kvale/ Brinkmann 2009: 83).

My own interest and pre-understanding of the Alexander Technique leads to the risk that I might be "too convinced" and perhaps not critical enough. My previous knowledge led to a certainty in my mind about which questions I would ask, and it is important to reflect on how this choice of questions would confirm certain biases related to my own understanding and expectations. Kvale and Brinkman emphasize the term *deliberate naiveté* as an important quality of a researcher. This term indicates that the researcher should aim for openness to the informants' experiences, and pursue to uncover new and unexpected phenomena through the interview process. With this in mind, I have tried to remain distant to the topic, and to my pre-understanding of the Technique. I have tried to be critical of my own hypotheses and assumptions by asking the informants about difficulties and challenges during their learning of the Technique, and I have been constantly aware of how my pre understanding of the AT might have influenced my interpretation of the informants' answers. I have strived to give a balanced account of my findings. On the other hand, my interest and pre-understanding of the Technique has also been a strong motivating power facilitating the accomplishment of the thesis. As experience would have it, it has been an advantage to possess adequate knowledge about the Technique, because I have been able to ask pertinent questions and to free myself from the interview guide. Kvale and Brinkmann (ibid.: 82) state: "Knowledge of the topic of the interview is in particular required for the art of posing second questions when following up the interviewee's answers".

Varela et al. (1991) writes about "a Fundamental Circularity", which matches the hermeneutic circle addressed by Alvesson and Skjöldberg, Kvale and Brinkmann. I have chosen this quote to summarise my hermeneutic-phenomenological point of departure:



A phenomenological inclined cognitive scientist reflecting on the origins of cognition might reason thus: Minds awaken in a world. We did not design our world. We simply found ourselves with it; we awoke both to ourselves and to the world we inhabit. We come to reflect on that world as we grow and live. We reflect on a world that is not made, but found, and yet it is also our structure that enables us to reflect upon this world. Thus in reflection we find ourselves in a circle: we are in a world that seems to be there before reflection begins, but that world is not separate from us (Varela, Thompson, Rosch 1991: 3).

### ***The Interviews and Interpretation Process***

The informants' insights, understanding and experiences of the Alexander Technique have enriched my own insights within the field of embodiment and deepened my Alexander Technique skills. The interviews had a semi-structured form, and in accordance with Kvale and Brinkmann, I prepared an interview guide consisting of some important main questions, such as: "How has the AT influenced your playing?", "Can you give me a concrete example of when AT skills have been useful?", and "Did you have any problems while learning the Technique?" (see attachment 1). The interview was performed as a conversation where the subjects could associate freely around each question. My first interview confirmed that a semi-structured interview was suitable for my project. The informants elaborated upon, and associated freely around the questions, and I tried to deepen their associations and thoughts with relevant follow-up questions. Kvale and Brinkmann mention *specificity* as one of twelve different aspects that a qualitative interview should be built upon. The interviewer is supposed to search for situations that are specific and provide information about a concrete occurrence. I have asked my informants to specify, in as much detail and as nuanced as possible, a musical experience where they have applied and used their Alexander Technique skills. The twelve aspects are: life world, meaning, qualitative, descriptive, specificity, deliberate naiveté, focused, ambiguity, change, sensitivity, interpersonal situation, positive experience (Kvale/ Brinkmann 2009: 28).

As addressed above, my previous knowledge of the Alexander Technique resulted in a certainty about which questions I wanted to ask the informants. As a result, I have asked some leading questions, which are traditionally regarded as dubious within research. On

the other hand, the use of leading questions is accepted within qualitative research, as long as the researcher recognizes the effect these questions may have: “The qualitative research interview is particularly well suited for employing leading questions to repeatedly check the reliability of the interviewees’ answers, as well as to verify the interviewer’s interpretations” (ibid.: 172). Even Ruud (1995) emphasizes that objectivity is not a feature of qualitative research, but rather the opposite: Empathy and controlled subjectivity are tools the researcher may use in her research in order to understand and interpret the informants’ communication of their life experiences.

### ***Categorization and Coding***

The semi-structured interviews provided a rich and heterogeneous material, and at a certain point when I was transcribing the interviews, the amount of empirical data seemed almost unmanageable. The empirical material required systematic categorization during the interpretation process, and already when I transcribed the first interview I started to categorize the answers into different groups. What did the informants’ narratives tell me? Kvale and Brinkmann emphasize the importance of applying methods to analyse the transcribed interviews to avoid feeling overwhelmed, and they encourage the researcher to enter into a dialog with the text.

*How do I go about finding the meaning of the many interesting and complex stories my interviewees told me? [...] How can the interviews assist me in extending my knowledge of the phenomena I am investigating? [...] How do I analyse what my interviewees told me in order to enrich and deepen the meaning of what they said? (Kvale/ Brinkmann 2009: 191,192).*

I tried to make general categories according to the issues from the informants’ careers. These included: problems, performance anxiety, discomfort while playing, musical and technical developments and gestures, among other things. I collected related information from the informants and categorized this using different labels. During the process of analysing, I varied between the analytic program “Hyper research”, which is a qualitative analysis tool, and the “old- fashioned” way of analysing: print-outs of the interviews and the use of coloured pencils to underline statements fitting into different categories. The “Hyper research” program was especially helpful in providing an overview, and it made it very easy to orientate myself within the text material, and to find quotes from the informants in an easy way. The categorized results address several interesting issues. For

instance, performance anxiety is a wide-ranging interdisciplinary area I could have discussed profoundly in relation to different theories. The same goes for strain injuries and gestures. Within the framework of a master thesis, I have not had the possibility to penetrate deeply into each of the categories. I have emphasized a display of the variety in the informants' answers, in accordance with the goals of the thesis: to show how the Technique may be useful to any musician, independent of which instrument she plays or her reason for starting to take Alexander Technique lessons.

### ***Notes on Notation***

I have decided to use the feminine ending when writing about both Alexander Technique students and musicians in general. I have also used the feminine ending when referring to Alexander Teachers, and I sometimes abbreviate the term "The Alexander Technique" to "AT", and I write both Alexander and Technique with big letters, in accordance with several of the books about the Technique. During the transcription work I have tried to be as faithful as possible to the original recordings, writing down small and unimportant words, pauses, laughter etc. The informants' quotes used in the text are edited to present the empirical data in the best possible way. I have for instance removed small and unimportant words and I have abbreviated some of the quotes. Three of the informants' spoke Norwegian, one spoke Norwegian but changed to English during the interview, while two of them spoke English during the whole session. I have translated the Norwegian transcriptions into English. I have used [...] to mark breaks in the text as well as my own comments.

### ***The Selection of Informants***

The empirical data in this study are derived from in-depth interviews with six musicians playing different instruments. Four of them play in professional orchestras, and two are freelance musicians; all work in Norway. One of the musicians decided to remain anonymous, while the five others chose to be presented with their full names.

How did I select the informants, and why did I choose six persons? "The number of subjects necessary depends on the purpose of a study", say Kvale and Brinkmann (2009: 113). One of the purposes of this thesis is to present the Alexander Technique as a

technique that erases the borders between mind and body, and with this in mind, it was important to choose informants with different starting points.

If the main issue would have been to elucidate how the Alexander Technique could be helpful towards addressing problems appearing to be of a physical nature, I could have chosen informants with strain injuries or chronic ailments. I could also have based my selection on my own background, and chosen only singers. An additional argument for having made a selection consisting of singers only, is F.M. Alexander's own point of departure: He was an actor with recurring voice problems. I wanted to elucidate how the Technique is applicable and relevant to different groups of instruments; hopefully more people can associate with the broader selection of informants, rather than just singers and actors. I have chosen informants with some experience of the Technique: All of them had had a minimum of 15 regular Alexander Technique lessons before I conducted the interviews. The reason for this is that I believed that advanced Alexander Technique students would give me supplementary and richer descriptions of their processes of learning the Technique. Advanced Alexander Technique students are also better equipped to give detailed information on how they have used the Technique in their careers. I have based my selection on Ruud, who said that "in a qualitative study, the number of interviewees is depending on the purpose of the study"(Ruud: 2012) In my opinion, each of the six the informants have contributed to my hypothesis about the Alexander Technique and musicians, and they have provided me new insights into the Technique, and how people experience it differently.

I have chosen musicians who have studied with the same Alexander Technique teacher. This may be a disadvantage because they are all influenced by one pedagogical point of view. On the other hand, this teacher has broad experience with musicians, and he is very conscious about how the Technique can be used and applied to his students' daily life, which I find very important. In accordance with the regulations of The Data Protection Official for Research, I applied for the informants, and I asked them to participate in the study by asking their Alexander Technique teacher first. When he confirmed their answers, I sent them a letter requesting them to participate, and explaining the purpose of the research (see attachment 2).

The informants are:

**Claire Hellweg**, 28 years old from the USA. Instrument: Horn. Freelancer. Spoke both Norwegian and English.

**Elise M. Fagerli**, 26 years old from Norway. Instrument: Trumpet. Freelancer. Spoke Norwegian.

**“Victor”**, 33 years old. Instrument: Cello. Working in a professional orchestra in Norway. Spoke English.

**Greg Koeller**, 57 years old from Boston. Instrument: double bass. Employed by the Bergen Philharmonic orchestra since 2011. Spoke English.

**Øyvind Bjorå**, 38 years old from Norway. Instrument: Violin. Concertmaster of the Norwegian National Opera orchestra since 2005. Spoke Norwegian.

**Jonna Jamsa**, 38 years old from Finland. Instrument: Oboe. Employed by the Bergen Philharmonic Orchestra since 2005. Spoke Norwegian.

## **CHAPTER 3 - THE ALEXANDER TECHNIQUE**

Mr. Alexander has found a method for detecting precisely the correlations between these two members, physical-mental, of the same whole, and for creating a new sensory consciousness of new attitudes and habits (Dewey 1923: 32)

### **3.1 EXPLORING THE USE OF THE SELF**

In this chapter I will present the process F. M. Alexander went through that led to the development of the technique named after him. I will give a thorough presentation of the process, because the issues as presented the way Alexander experienced them, are present, to a greater or lesser degree, for each student who starts the process of re-discovering and educating their use.

To learn the Alexander Technique is to gradually acquire a skill that gives insight into the interaction between body and thoughts. The Alexander Technique student learns to inhibit her immediate and habitual reaction to a stimulus and she learns to explore *how* her motivation to act is affecting the way she performs different activities. Inhibition gives the student a new possibility such that she may choose to respond to the stimulus in an integrated way. In the words of certified Alexander teacher Missy Vineyard (2007: 2): “The Alexander Technique teaches you to better understand yourself, physically and mentally [...] The Alexander Technique lets you explore your mind-body connection to help you achieve self-mastery”. I will venture to explain what this implies.

As I addressed earlier, an action, whether to write on a computer or to play an instrument, is never purely physical or purely mental. When a musician is on stage or in the rehearsal room, many decisions are made about how she plays and how she will go about solving musical and technical challenges. If she is an oboist, she gives herself a stimulus, a mental directive that activates, among other things, muscles in her hands, arms, lips, jaw, head, and neck. The lungs, back, torso and maybe her legs are other parts of her body that are

also engaged. If she is in an orchestra, she follows the conductor, she thinks about what she is playing and how to communicate the music. She is aware of her colleagues and listens to what they do. Maybe she communicates directly with the first violinist because they have a particularly demanding rhythmic section. In parallel, she may think about what to eat for lunch after the rehearsal, or what she will do when she gets home from work. It is impossible to maintain that her overall use is either of a purely physical or mental nature. It is impossible to maintain that her overall use is either of a purely physical or mental nature. As a descriptive example of this, Vineyard (2007: 4) asks: “How does a mere thought trigger nerves to send their electrochemical signals, so that simple decision (I want to stand) becomes a physical act (I am standing)?”

The informants I have interviewed learned to play their instruments while they were children. *How* they play has become automated over many years of practice, and has become part of their implicit motor memory and body image. This means that skills we perform by means of motor memory, i.e. *how* we perform these skills, lead to our body schemas becoming incorporated through years of repetition of the same pattern. To learn the Alexander Technique is to reveal habits of a physical and mental character, and the student develops an increased sensory awareness of processes that have become automatic and may otherwise seem inaccessible at first sight. In some cases, shown in the findings, ingrained motor acts may result in problems and cause pain and discomfort. In some extreme cases habitual motor acts even might lead to surgery.

### ***End-gaining***

There are numerous reasons why people end up with different problems. “This is the way I am”, “I was born like this” and “This is my way of reacting” are common explanations when our problems, whether they have a physical or a mental expression, have become persistent. “Modern civilization” and the limitations of “human design” are other examples of explanations of human problems (De Alcantara 1997). Alexander viewed these problems differently. To blame a weak back, our genes, a bad chair or a poor instrument is an impasse, according to him. Alexander always spoke of misuse of the self, and “realized that the problems lie not in what is done to you, but in what you do to yourself” (ibid.: 18). Here we are at the core of the Technique, and what Alexander saw as “The ultimate cause of

misuse [...], the universal habit of end-gaining” (loc.cit.). In the following quote, Alcantara elaborates on Alexander’s understanding of this concept:

Alexander considered most of contemporary thinking fallacious. He thought that we erred both in the diagnosis and in the therapy. Alexander found the cause of our troubles not in what is done to us, but in what we do to ourselves. He saw that the problem was not in the stimulation of modern life, but in our response to it; not in the stress but in the straining. The straining he called the misuse of the self; its cause not human design, but end-gaining [...]End-gaining is both a concept and a procedure. To diagnose the back pain of our trombonist [he use a trombonist as an example earlier in his book] as the result of a weak back is already to end-gain, even before any action is taken. This diagnosis looks at an end result, not its cause, namely the misuse of the self [...] End-gaining is the most prevalent of all habits. It is so widespread and insidious that most people do not realize that they, and others, are end-gaining all the time (Alcantara 1997: 5, 19)

A focus on relaxation on the couch *after* we have finished a workout, on the promotion we will get if we work harder, our wish to finish something, even if we are stressed or our back or shoulders hurt, are examples of end-gaining. When I pick up the phone and place it between my chin and my shoulder to speak, because I am doing something else with my hands, I end-gain. If I carry a child who is too heavy to be carried, because I am in a hurry and have to arrive on time, I end-gain. Alcantara (1997) illustrates the concept by using the example of a father screaming at a child to make her stop crying, or by the young musician eager to win a competition. They are both end-gainers. Alexander’s own end-gaining, his desire to be a good actor, to move the audience and to reach the back row was strong, but the price was high: his voice almost disappeared.

An important step in learning the Technique is to rediscover what Dimon (2012) refers to as “The Concept of Tensegrity”<sup>10</sup> or “The Body’s Elastic Latticework”:

Muscles everywhere in the body are kept lengthened by the skeletal system so that, instead of simply contracting, they are suspended within a latticework of bones while they maintain the upright stability of the trunk [...] The muscular system, then, is not simply an assortment of contracting muscles, but a complex system of elastic tissues that are kept on stretch by bones, which acts as a counterbalances, spacers, and struts. This enables muscles to do work in as efficient a manner as possible. It also enables us to maintain support in the gravitational field with a minimum of effort and strain (Dimon 2012: 2).

The Alexander Technique student develops an awareness of habits interfering with this

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The word “tensegrity”, is according to Dimon, “a combination of ‘tensional’ and ‘integrity’, a term coined by Buckminster Fuller” (Dimon 2012: 3).



tensegrity system. The habits are often achieved through years of repetition and recurrence, and to a musician this might be, among other things, how she reacts to a stimulus from a conductor, how she breaths in, how she lifts up her instrument, how she plays a solo phrasing and her part in a symphony, how she gets up from her chair, or how she thinks when she gets nervous. According to F.M. Alexander, habits are both mental and physical in nature, and most important of all, (and a statement I am going to discuss later in the thesis): *habits are not out of our conscious reach* (Alexander 1932).

The compelling power of habit was the reason why F. M. Alexander spent almost ten years developing his practical methodology, from which his theories emerged. This (the power of habits) is also one of the main reasons why the Technique is difficult to describe to someone who has never tried it. Thus it may seem like a contradiction to read about the Alexander Technique in order to develop an understanding of it, a dilemma addressed by several individuals who have learned to know the Technique well, among them certified Alexander teacher Michael Gelb:

The Alexander Technique eludes precise definition because it involves a new experience - the experience of gradually freeing oneself from the domination of fixed habits. Any attempt to put that experience into words is necessarily limited, rather like trying to explain music to someone who has never heard a note (Gelb 1994:1).

It is essential to try the Technique if one wishes to develop a deep understanding of it. F. M. Alexander wrote several books about his own process, and by studying them we can get a good idea of what the Technique is about, although it can never replace the practical experience one needs. Ted Dimon writes: "The concept that mind and body work as a functional whole is far easier to accept in theory than in practice" (Dimon 1997: 8). Regardless of this, many books are written about F. M. Alexander's discoveries. In the following I will try to give an account of the Technique the way I understand it, based on F. M. Alexander's book *The Use of the Self* (1932).

### 3.2 FREDERICK MATTHIAS ALEXANDER'S DISCOVERIES

F. M. Alexander (1869-1955) was born in Australia, and became a talented and promising actor. He suffered from chronic hoarseness, and his voice began to disappear while reciting. In order to recover the use of his voice, his doctor's advice was to rest. He had several recovery periods during his young career, but it helped him only temporarily. He was worried and impatient, and he finally asked the doctor: "Is it not likely that there is something I do when I recite that causes my problems?" The doctor agreed to this, and Alexander asked if the doctor could tell him *what* he was doing. He could not, and this became the starting point for Alexander's development of the Technique. He began a long and laborious process that went on for several years. Using mirrors, he observed himself while reciting, when speaking normally and later when carrying out other everyday activities. In *The Use of the Self*, Alexander describes a number of setbacks, and only a few instances of success during his exploratory process. Despite this, he did not give up, and his perseverance led him further into his process of discovery. He refused to believe that the problem was insoluble. His persistence led to acknowledgement from various quarters, including scientific circles. In 1974, Nikolaas Tinbergen, Nobel laureate in medicine, devoted much of his Nobel lecture "Ethology and Stress Diseases" to Alexander's discoveries. He said: "This story of perceptiveness, of intelligence and of persistence, shown by a man without medical training, is one of the true epics of medical research and practice" (Tinbergen 1974: 5).

#### ***The Process***

Alexander claimed that our use is both mental and physical. He reflects upon his own earlier understanding of mind and body, which was a traditional dualistic way of thinking, in *The Use of the Self*:

I must admit that when I began my investigation, I, in common with most people, conceived of 'body' and 'mind' as separate parts of the same organism, and consequently believed that human ills, difficulties and shortcomings could be classified as either 'mental' or 'physical' and dealt with on specifically 'mental' or 'specifically 'physical' lines. My practical experiences, however, led me to abandon this point of view and readers of my books will be aware that the technique described in them is based on the opposite conception, namely, that it is *impossible* to separate 'mental' and 'physical' processes in any form of human activity (F.M Alexander 1932: 21).

Alexander's starting point was his vocal problems, essentially manifested as physical phenomena. Since his doctors and voice teachers could not help him using their traditional methods, he decided to determine the cause of his problem by observing himself in front of a set of mirrors. When, earlier on, he had simply spoken, his reactions to the stimulus to speak were not visible to him. It was when he decided to recite, and to give himself the mental directions to start doing so, that his reactions to this stimulus gradually became visible to him.

His mental direction initiated a chain of reactions visible to him in the mirror, and one of the observations he made was that he pulled his head back, pressed down his larynx and sucked in breath through his mouth. This resulted in a hoarse and raucous sound. He further observed that he did exactly the same when he spoke normally, but in a more subtle way, i.e. "in a lesser degree". This "definite fact" encouraged him to go on:

I recited again and again in front of the mirror and found that the three tendencies I had already noticed became specially marked when I was reciting passages in which unusual demands were made upon my voice...From this I was led to conjecture that if pulling back my head, depressing my larynx and sucking in breath did indeed bring about a strain on my voice, it must constitute a misuse of the parts concerned (ibid. 27).

### ***The Primary Control***

He now believed he had found the root of the trouble, and concluded that he had to prevent or change the misuse of his head and neck. But he did not understand where to begin, and described himself as in a "maze":

Was it the sucking in of breath that caused the pulling back of the head and the depressing of the larynx? Or was it the pulling back of the head that caused the depressing of the larynx and the sucking of the breath? Or was it the depressing of the larynx that caused the sucking of breath and the pulling back of the head? (loc.cit).

He continued his laborious observations and "after some months" came to the conclusion that if he were able to prevent himself from pulling his head back when reciting, the depressing of his larynx and sucking in of breath became less apparent. Medical examinations showed that the function of the vocal cords and larynx were significantly improved, and his voice was less hoarse. All these practical experiments made him aware of the close connection between use and functioning, and it led further to the discovery of ***the primary control***. Alexander called this discovery one of his milestones; the relationship

between the head, neck and back are crucial to how we organize the rest of the body:

The importance of this discovery cannot be overestimated, for through it I was led on to the further discovery of the primary control of the workings of all the mechanisms of the human organism, and this marked the first important stage of my investigation (ibid: 28).

Dimon (2012) describes the primary control in human movement as “a basic organizing principle [...] which we must gain control of as the basis for higher levels of awareness and skill”.

### ***Use and Functioning***

The discovery of the primary control led Alexander to an increased understanding of the connection between use and functioning. When he was able to use his primary control in a more balanced satisfactory manner, he did not depress his larynx and the functioning of his voice improved. Alcantara (1997: 16) elaborates on this inter-relationship, how one’s use affect ones functioning, and he states that: “There is no distinction between ‘the thing controlled and the control itself’. It is a simple but revolutionary understanding of how we work”.

The next step in Alexander’s process was to prevent the tendency he had developed to pull his head back and down and instead to do the opposite: He wanted to experiment with moving his head forward and up when he recited. He surmised that this was ultimately leading to a shortening of his stature. He tried to extend and lengthen himself rather than shorten, and this led to several interesting findings:

1. When he thought he was moving his head forward and up, he did exactly the opposite when it came to the critical point in time when he was about to start reciting. He was not able to maintain both preventing and lengthening when he started to recite.
2. He also discovered that the misuse of his head and neck was connected to a greater pattern of misuse; “any use of my head and neck which was associated with a depressing of the larynx was also associated with a tendency to lift the chest and shorten the stature” (Alexander 1932: 28)

In other words, he could not isolate the problem and solve it only by looking at certain parts (his head and neck). He had to pay attention to the whole organism because his misuse of the parts was inseparably connected to the rest of himself. The fact that Alexander did the opposite when he thought he moved his head forward and up was an important discovery. Alexander called it “faulty sensory awareness”.

### ***Faulty Sensory Awareness***

Alexander had decided to solve his problems, but this obstacle (the fact that he thought he was doing the right thing, but realized he was doing the opposite) demotivated him, and he had to reconsider the situation. He believed he was confident and able to carry out the tasks he had decided upon - to recite and to maintain the lengthening of the body and to continue to prevent himself from pulling his head back. But he was not. He was not able to apply his findings when he started to recite:

I was indeed suffering from a delusion that is practically universal, the delusion that because we are able to do what we ‘will to do’ in acts that are habitual and involve familiar sensory experiences, we shall be equally successful in doing what we ‘will to do’ in acts which are contrary to our habit and therefore involve sensory experiences that are unfamiliar [...] the belief is very generally held that if only we are told what to do in order to correct a wrong way of doing something, we can do it, and that if we feel we are doing it, all is well. All my experience, however, goes to show that this belief is a delusion (ibid.: 32,33).

In other words, he could not rely on his sensory awareness (his proprioception) in any of his actions when his implicit motor memory was activated. It “involved a condition of undue muscle tension throughout my organism”, he states.

He depended on his feelings of right and wrong, but they were no longer reliable, and he called his sensory awareness “untrustworthy”. He had to cease to trust his feelings of right and wrong. The evidence that confirmed this fact was his reflected image in the mirrors he was using. As I mentioned above, his habitual pattern did not only involve the head and neck, but his whole body. It was impossible to change a part without looking at the whole pattern of misuse. Years of training to become an actor had given him an ingrained pattern of habits. He especially recalled a teacher who was not satisfied with the way he (Alexander) walked and who repeatedly told him to “take hold of the floor with your feet” while he was standing on stage while reciting. Alexander writes that he always tried to

copy his teacher, and interpreted this instruction in such a way that actually disturbed his balance and overall use. In his introduction to *Conscious Control of the Individual*, John Dewey addresses this untrustworthiness as “a defective and lowered sensory appreciation and judgment, both of our selves and of our acts, which accompanies our wrongly-adjusted psycho-physical mechanisms.”(Dewey1923: xxi).

Let me illustrate what is meant by “wrongly-adjusted psycho-physical mechanisms” and “faulty sensory awareness” by using an example from one of my first Alexander Technique lessons: Well into the lesson I tried to describe to my teacher how I felt. He had worked a while with the functioning of my primary control, and at that time I felt I was hanging forward like a sack of potatoes, hunched in the back and crooked. He asked me to look in the mirror, and I observed myself in a state that rarely looked more erect and upright. It was a strange experience that showed me that I could no longer trust my proprioception and bodily sensations. My assumptions about what was “right” did not correspond to what I saw in the mirror.

If we connect Alexander’s (or my own) experiences in front of the mirror to the theory about body image and body schema, we can say that his body image was not appropriate anymore. His perception and presumptions about his body image, shaped by his motor acts and his implicit motor memory, did not match what he actually saw in the mirror. When he started to re-discover his primary control, and to educate his motor memory and his body schemas his body image was altered accordingly

### ***To Reveal Habitual Use***

Alexander’s desire to recite, his motivation to act, initiated a chain of habitual reactions. This chain was the way he was used to reacting to a stimulus; it felt right and natural to him. The pattern had become automatic, and he had cultivated this use through years of repetition:

I then realized that this was the use which I habitually brought into play for all my activities, that it was what I may call the ‘habitual use’ of myself, and that my desire to recite, like any other stimulus to activity, would inevitably cause this habitual wrong use to come into play and dominate any attempt I might be making to employ a better use of myself in reciting (Alexander 1932:34).

During the process he tried to reveal and discover his implicit mental and physical motor memory. He characterized his automatic habits as *irresistibly*, because it seemed almost impossible to change his ingrained pattern. Alexander found that what was automated was much stronger than he had first thought, and when his mental wish to succeed was strong, he observed that the tendencies became even more apparent. This confirmed his assumption that his voice problems were closely connected to *how* he performed the vocalization of the text, both mentally and physically. His established motor memory was activated every time he decided to recite or say anything, and his desire to recite, the motivation behind the action, activated a set of ingrained habits. This is what I referred to earlier as “the universal habit of end-gaining”.

### ***Inhibition***

*Inhibition* is a cornerstone of the Alexander Technique, and in order to explain the term I need to connect Alexander’s process to the concept of ideo-motor actions, addressed in chapter 2. According to James, an ideo-motor act is characterized by an idea, a thought, before the motor act itself. In other words, our *motivation to act* is essential when it comes to performing a motor act. At the seminar “Understanding the Technique” (2013), Dimon addressed this issue: “How action is part of a pathway of activity that begins with an idea and ends in a motor act, and why it is necessary to address this pathway in order to restore the proper working of the primary control” (Dimon 2013). According to Dimon, and the way I understand the Alexander Technique, when learning the technique one has to look to the source behind ones actions, the idea and motivation one has, *before* one actually acts. The way Alexander used himself, with his habitual and automatic motor memory, proprioception and bodily sensation, was deeply intertwined with his motivation to act - his ideo-motor actions. For this reason, uncovering the student’s motivation to act is often seen as both the most important and most difficult part of learning the Alexander Technique. Alcantara (1997) connects the habit of end-gaining to the notion of inhibition:

To inhibit is not to consent to a habitual reaction which causes a misuse, total or partial, of the self. Notice that the idea is not to inhibit misuse directly, but to aim to inhibit end-gaining, the motivation to act that causes the misuse (Alcantara 1997: 47).

Alexander’s further strategy was to try to inhibit his automatic and immediate response to

his motivation to act, the stimulus. Vineyard (2007) refers to the field of neuroscience when she explains the term *inhibition*:

In neuroscience, *excitation* is the term that refers to the activation of a neuron, which can stimulate a muscle to contract. *Inhibition* is the term that describes the opposite - a signal that causes another neuron not to be activated, thus preventing the contraction of a muscle (Vineyard 2007: 10).

According to Vineyard, Alexander “learned to prevent the neural activity that triggered his unwanted physical behavior” (loc.cit) When he was able to inhibit the muscle tension that was triggered *only by thinking* of the goal - to speak, his use was restored for the better. He then had to replace his old and automated use, his subconscious motor memory, with a new and conscious use of himself. Vineyard terms this step “thinking skills” which she describes as “specific verbal instructions that described this new and better pattern of movement” (loc.cit).

### ***Directions - Mental Instructions***

In order to explain the concept of “directions” in the context of the Alexander Technique, it is useful to take a look at how we constantly react in respect to our environment, and how we are continually sending thoughts and messages to ourselves, whether at a conscious or subconscious level. When, for example, I sing a song in front of an audience, I project messages from my brain to my body, and my body reacts to these signals. Examples of such messages are: “Who is the man looking bored?”, “this phrase is so beautiful, I have to express it with all of my heart”, “this text is especially funny, I must pronounce it clearly” and “she laughed! I did it!” At the same time, I react to different signals which appear to be of a bodily nature, be they fatigue, excitement or anxiety.

F. M. Alexander saw mental instructions as a part of our overall “use”, and, together with our implicit motor memory they may at first seem inaccessible and beyond our reach. When Alexander explained the concept of directions he talked of a process of sending messages from the brain concerning his primary control and the use of other bodily mechanisms, leading to an improvement in his functioning. During the overall process he realized that he had never thought of how he directed the use of himself. In previous sections I have tried to show how his habitual use felt natural to him. However, according



to him, his automatic way of directing was not expedient anymore: “this method of direction had led me into error, proving that the ‘feeling’ associated with this direction of my use was untrustworthy” (Alexander 1932: 35). He ultimately arrived at the conclusion that the directions he should employ to bring about a more efficient use of himself could be summed up by allowing his neck to be free, to allow his head to move forward and up, to allow his back to lengthen and widen.

What he *now* went on to discover was that it was almost impossible to separate old and unreasoned (automatic) direction from his new and conscious direction. He had continued his investigations in the belief that his mind was the superior agent, and that he was able to take control over the process. But his assumption was wrong. Alexander’s old and ingrained habits still controlled his use even though he had decided to inhibit them, and to replace them with what he called *the means whereby* of new directions. He thought he could reach the end and control the process by applying his intellectual faculties in his habitual manner. He describes this step in the process as especially confusing, but he refused to give up: “If it is possible for feeling to become untrustworthy as a means of direction, it should also be possible to make it trustworthy again”, he stated. He concluded that he had to return to the concept of inhibition: “It would be necessary for me to make the experience of receiving the stimulus to speak and of refusing to do anything immediately in response”. This was a decisive step to get out of the impasse of his habitual use. He had to force himself not to respond or do anything to gain the end. When Alexander had become aware of these automated response patterns, he could choose to stop them. He withheld consent from immediately responding to the stimulus.

### ***The Means Whereby***

According to Alexander, the “means whereby” is the “reasoned means to the gaining of an end”, and he emphasize that this includes the inhibition of the automatic and habitual use. Alexander had to inhibit his immediate wish to reach his end, or put another way, to distance himself from the end, the goal, by inhibiting his old use. He had to give up trying. When Alexander had inhibited his wish to react to a stimulus, it was then possible to employ the means whereby he needed to attain the end; in his case this was to recite. He

decided to continue to give himself “the directions for the new means whereby, instead of actually trying to ‘do’ them or to relate them to the ‘end’ of speaking” (Alexander 1932: 41). Alexander describes that he used days, weeks and months working on this step, without trying to “do” the directions. Later, when the time was right, he continued carrying out his actions.

This is a very important stage in the process of learning the Technique. To a greater or lesser extent, we are all “end-gainers” and we yearn to be “good students”. We often compare ourselves to others, and our focus tends to be on the target, the goal, rather than to the process of how we reach the end. During an Alexander lesson the pupil is told to let go of his desire to reach the end because it is so connected with his old, habitual use. I will discuss this dilemma further in the discussion section.

Alcantara suggests that the “means whereby” is in fact the “antithesis of the end-gaining principle”:

This involves the ability to wait and to make reasoned choices before acting, the awareness of your own use at all times, and the willingness to give up achieving your ends by direct means (such as yelling at a child to stop her crying). Indeed, the means-whereby principle is but an *indirect procedure* (Alcantara 1997: 20).

Alexander experienced again and again that his reaction to a stimulus (for example the decision to recite) was an automated, integrated and “habitually controlled” way of reacting. It involved his whole psycho-physical unity. He had also seen that when he decided to do the opposite of his habitual use, in what might be described as a physical manner, to move his head forward and up when he recited, he continued to do what he had always done. His proprioception and bodily sensation (employed by Vineyard, 2007) was not reliable anymore. Alexander decided that he had to replace these automated responses with a new and conscious form of control, and the first step was inhibition. The next challenge was the critical point when he was about to carry out an activity. What was the process he employed to meet the stimulus at this critical moment? The process was to maintain inhibiting and to continue the mental directions while acting.

### ***What Happens During an Alexander Technique Lesson?***

An Alexander teacher is trained to observe and discover a student's use of how her psycho-physical mechanisms are working. This process includes a re-discovery of, or emphasis on, her primary control, and an uncovering of her automatic motor memory, and the discovery of her motivation to act, her ideo-motor action. The teacher will help the student to discover her habitual use, and further guide her in discovering how he habitually responds to a stimulus. The teacher can gradually help the student to inhibit his automated motor memory when she reaches the critical moment in her respond to a stimulus, for example just before she is setting a tone on the instrument, or when she is going to sing, or she is about to lift something up from the floor.

Together with the visual information the teacher receives, the teacher's hands are, more often than not, her most important tool in this educational process. When she places her hands gently for example on the student's neck, back or shoulders, she is able to collect information about the pupil's patterns of use and while gathering this information, she is at the same time conveying information back to her student. She is trained to maintain a balanced use of her primary control and conscious control of herself by focusing on the means whereby, and this may encourage a release in the pupil's muscular tensions and may help the student to become aware of her reactions when carrying out a variety of daily activities, such as walking, bending, talking or playing an instrument. The teacher guides the pupil into a new sensory experience and helps her to restore her faulty sensory awareness. According to Garlick (1990: 25), her sixth sense – that of proprioception - is enhanced. He explains: "There is inhibition in acting unthinkingly and hence allowing the old programs to be used; and the 'directions' are used to allow the new program to be established".

### ***Scope of the Alexander Technique***

F.M. Alexander finally managed to solve his own vocal problems, and during the 1890s he decided to teach others with similar problems (Heirich 2005). His practice developed rapidly, and in 1904 he moved to London, encouraged by the surgeon J.W. Steward McKay, among others (Gelb 1994:18). Alexander continued his practices both in London and New

York, and in 1924 he started the process of establishing the first educational program based on his principles. Eventually, a three-year Training Course for teachers was opened in 1930 (loc.cit) The Alexander Technique has spread extensively, leading to the establishment of several training courses around the world, including the UK, Australia, USA, Europe and Japan. The Alexander Technique has also gradually been understood from a scientific perspective, and in 2012, a seminar was held in Paris, promoted by Rachel Zahn. The seminar addressed the embodied mind as a domain of second-person psychophysical experts, pulling together ten interdisciplinary scientists and philosophers of mind and ten teachers of the Alexander Technique. The seminar was held as a direct response to Varela's focus on *first person methodology*. He claimed: "The First person experience and the embodied experience has been given very little space" (Paris Film 2012). At the Columbia Teachers College in New York (Dewey's teaching position for several years), Alexander Technique teacher Ted Dimon is teaching a course at the Clinical Psychology Department, called the "Mind/body Unity course", based on the principles of the Alexander Technique ([www.dimoninstitute.org](http://www.dimoninstitute.org)).

## **CHAPTER 4 - RESULTS**

In this chapter I will present a number of important findings from the interviews I have conducted. Common to all participants is the experience that the Alexander Technique has caused changes in their professional careers. They all had different reasons at the outset when they started the process of learning the Technique. Two of the informants did not claim to have any specific problems before they started taking lessons, while the four others found their way to the Alexander Technique because they wanted to reduce strain injuries and muscle pain, or had a feeling of stress and discomfort while playing. By the time I had completed the interviews, all of the informants had been taking lessons for some time - a minimum of ten to fifteen lessons each. I included questions about problems and difficulties when learning the Technique during the interviewing, because I wanted to avoid a biased view of the Technique. In this chapter I will provide a description of the changes the informants have reported. I have found it helpful to sort the interviews into ten categories.

These ten categories are:

- Issues and problems present before starting with the AT
- Performance-Related Improvements
- Musical and technical developments
- Performance anxiety
- Ensemble-related situations
- Gestures
- Rehearsal issues
- Other changes
- Issues related to learning the Technique
- How do the informants apply skills from the Technique in their lives?

### ***Issues and Problems Present Before Starting With the AT***

In order to describe to what extent the musicians experienced a change in how they dealt with their sense of pain, strain injuries, stress and discomfort, I will first focus on how they were affected by such problems before they started to learn the Technique. Øyvind was concertmaster with the Trondheim Symphony Orchestra and later with the Bergen Philharmonic Orchestra. Symptoms such as neck stiffness and muscle tension were recurrent problems. He was affected by long rehearsals and late performances. He remarked:

I noticed that my work was stressful to my body, and I felt I was doing something that really wasn't good for my body. That was my experience. I could notice that my muscles grew tight and I had a lot of stiffness, especially in my neck...I searched a lot for information about how I could make it better. I wanted to improve my way of playing, in a way so that my body didn't react in a negative way. I have been searching a lot. I have had the attitude that there are people who know something I don't know...it is not natural to play eight...[laughter]...maybe not eight, but several hours a day...at the outset you have a problem, but you have to find the best way to deal with it.

Claire, a horn player, was a musically gifted child. Various teachers had given her a range of challenging tasks on the horn, which resulted in different problems that influenced her playing: "Because there are not many children who can play it right the first time.... I got more and more to do, but I did not breathe well and I was very tense... It went very fast". The fact that she was a quick learner and was given challenging things to play had consequences for her further development as a musician. She struggled with stress and had a feeling that it was never as pleasant to play as it could have been, a situation she described as follows:

It was always very uncomfortable to me to play. There was a lot of stress. I had a lot of pain in my back, especially when I was practicing. Now I understand that I was closed and tense in my body, no air could get in. I had to push the air out. But I did not understand what was happening. But I wanted it so much.

Claire was over-working, and very often over-worked musicians experience strain injuries or pain problems. In the long term, it might cause serious problems in the course of a musician's life. The bass player, Greg, was worried that the problems would force him to end his career:

I had all these problems with my right shoulder. And I could not lift my arm higher than this [showing]

without great pain. And I thought, you know, when you're a musician and something goes wrong with your body you think - 'this is the end!', 'this is terrible, what am I going to do?' When I was sleeping at night, and my arm fell off my body and dropped down in to the bed, I woke up because the pain was so bad. It was just awful.

Elise, the trumpet player, is yet another of the informants who started to take Alexander Technique lessons because she had a recurring problem. One of her issues was her breathing which she described as "strained". She also struggled with a strong feeling of nervousness during performances: "It [nerves] has prevented me from playing my best".

### ***The Alexander Technique as a Preventative Measure***

"Victor", the cellist, decided to use the Alexander Technique to prevent future problems from arising. He had seen colleagues struggle with various difficulties that hindered their careers, and feared a similar situation. He had planned for a long career, and he wanted to do what he did in a better way:

I don't have any muscle pain, I don't have any sort of problem, I don't have a sore back. I just like to make sure that I can keep... being able to play without any pain and being able to play...and maintain that for a long time. That was my goal and to do what I was doing better. [...] I think you are quite responsible if you are a musician and you don't do something pro-active.

Jonna, the oboist, had the same motivating reason. She had heard about the Alexander Technique on many occasions during her years of education in Finland, and she decided to try it because she wanted to further develop herself as a musician.

### ***Performance-Related Improvements***

In general the informants reported an increased sense of freedom while playing, and that they played with greater ease after lessons in the Technique. Øyvind said that he had tried different techniques to overcome his problems, i.e. traditional physiotherapy, naprapathy and massage, but it was not until he started lessons in the Alexander Technique that he experienced a sustainable change: "Instantly, I got the experience that this is interesting, this is logical. It is a theory that is easy to understand. I function quite well now, I think, and I have not seen a physiotherapist for many years". Claire described a profound alteration after just one lesson, and her continuous feeling of stress was reduced considerably:

It was as if my whole life was changed. The night after, when I was sleeping, I felt my whole body was under my bed. I felt so relaxed, so calm, for the first time in my life. After that moment [the lesson] I felt everything is going to be fine, it is all okay. Of course, I can still feel stressed, but it is never like it was before.

The bass player, Greg, who struggled with his painful arm, experienced that the strain injuries disappeared after approximately six lessons, and he was able to play again without pain. His simple comment on this was: "It has been great ever since. For me, it transformed my life". A career without pain led to his current job in the orchestra: "I could not have done that audition without the things I have learned from the Alexander Technique. That got me to that level that I was able to play the way that I can play."

Elise was also experiencing a lot of changes, which included her breathing: "My breathing is less strained. The flow is better. I do not constrain myself when something is difficult. I feel freer". Even "Victor", who started without any specific troubles, reported that a lot had changed, and the most obvious change was that he became consistently less tired during long orchestral rehearsals:

I guess the biggest difference I've noticed is, like if I have a five hours rehearsal, I'd be less tired than I was [...] What I really enjoy is that I have something to really think about during that time [...] Everything has changed a lot. And I guess I sit up a little better, not so much tension in my shoulders... but also my legs as well, I mean it's a whole...shabang. It's a lot of aspects, obviously. It's hard to point out one thing but...it definitely feels a lot different [...] I feel a lot more aware of myself now. Aware of what movements I am making and not making.

Awareness and consciousness of the means whereby they perform and make music is a recurring aspect of all of the informants' experiences. Jonna is one of the informants who emphasizes that the Alexander Technique has influenced her attention and presence on stage:

It has influenced me a lot. I am much freer nowadays, I perceive and react to things that happen around me, and I am able to notice if I struggle without any reason, and then I choose to do things, and to play in a way that is more comfortable, easy and natural. And then I can use my capacity on something else - musical expression and things like that.

### ***Musical and Technical Developments***

I will now take a closer look at the musical and technical alterations the informants reported. There are some improvements that recur in all six case histories, such as a more stable sound, increased energy available to make music, more overtones, richer timbre, increased rhythmical precision and less effort. In general, all of the musicians now choose technical solutions on their instruments that make them work less, thus becoming less tired. Greg has chosen to sit in in a different way when he plays because he needed to sit



lower, so his feet could be more parallel to the ground.

...for me it allowed the energy, especially in my lower body, to travel. So it didn't get stuck. And this had an immediate effect on the sound [...] The AT-teacher showed me how to get the sound out of my instrument just by drawing the bow and kind of having all of your body parts and energy working well together. It makes a lot more overtones in the sound [...] It really improved my tone a lot and made it very easy.

To make reeds is one of the greatest tasks for an oboist. Jonna relates that her sound is more resonant after she started with the Alexander Technique, and a natural consequence is that she now makes reeds that are easier to play on:

It is a big part of our job, and earlier I played on heavy reeds. Too thick, but this is in a way safe because it is more easy to control, in a way, no accident happens, but you have to use more energy and work harder to make them sound.... But nowadays it is easier to play and it gives much more. It is not comfortable to struggle nowadays, to do something with effort and muscle pain. Naturally, I started to choose easier reeds.

Claire emphasized that skills learned in the Alexander Technique contributed to a greater precision when she plays. This is a concrete example of a situation where her Alexander Technique skills resulted in exact rhythmical and sonorous precision, and as a consequence, recognition from her fellow musicians:

There was this piece that started with an octave, I had a very deep tone, and it is quite difficult to start with a low tone like that, I did it ok, but at each rehearsal it was never perfect, not like one sound, you know.. At the concert I thought about 'that' and I did 'that', and it was totally perfect... the solo horn player told me after the concert that 'it was fantastic, how did you do that?'

In this context, Claire uses the word "that" when she refers to the AT. The way different people use the principles of the Alexander Technique might change depending on how they understand the Technique at different points in time. Later in the interview, Claire explains more precisely what she thinks about when she uses the word 'that':

The 'that' that I am talking about is the raising of the attention that I learned from my Alexander teacher. Looking up, thinking out and thinking of your body as big and extended, yourself as being part of a bigger whole, rather than small and focused inward on the music stand and yourself.

Stability and increased precision are features in Elise's experiences too. She emphasized that her sound is much more stable, and she is not as affected by difficult passages in the music:

I think the sound is more stable. It is not possible to tell whether I am playing something difficult or not. It was not like that before. Then the sound grew gradually poorer. Everything was progressively worse because I strained myself [...]. What I feel when I manage to implement the Technique is a feeling of balance and harmony in my body. As if everything is flowing without any resistance. It is easy to play.

Øyvind did not point to any specific musical changes, but rather, he spoke of a total change influencing his music-making in general:

I have learned a lot. Musically, it is the most important input I have had. In relation to performing musically... Generally in relation to my playing, I experience that when I use the Technique, I have less tension in my body, and that makes me play and make music more freely... I think I have become a better violinist, a better musician.

“Victor” says skills in the Technique have helped him to get his body “out of his way”, so he can concentrate on making music:

I get less tired and I feel that my body doesn't get in the way so much. I can eliminate that part. Like before I wasn't thinking about what I was doing with my body [...] and then at some point of the rehearsal I'd find myself...[showing a collapsed body hanging over the cello]... using the cello to hold me up. So that has changed. That aspect, and that is something that I find really useful.

Jonna was concerned about how the audience also may experience her improved use: “The Alexander Technique helps me to trust what feels right and good [...] That is what the audience experience as good as well. If we enjoy, they enjoy. If we struggle...it is not fun to hear or see a musician struggling”.

### ***Performance Anxiety***

Performance anxiety can be a great hindrance to a professional musician, so it was natural to ask the question as to how the AT has influenced the informants' sense of performance anxiety. Each of the informants reported that the Technique is a tool that gives them the possibility to react in a different way when they become nervous, and that their capacity to overcome performance anxiety while performing is improved. They all agreed that it is not a goal to eliminate anxiety before a performance or an audition - sometimes it is necessary in order to achieve a satisfying result - the difference is in the way they handle it. Jonna stated:

I am not less nervous, but the AT has helped the way I react in the situation. Yes, I am nervous during

concerts, and in rehearsals, when I have some big solos and I feel I am in an exposed situation. And yes, the fact that I feel the adrenalin is coming, that I can't help, but again, instead of shrinking... now I have some tools...to... open up, even if I feel nervous.

Elise was one of the musicians stressing that her performance anxiety at auditions had often been a big problem:

I used to be very nervous and tense [...] I worked a lot with my Alexander teacher before a master degree's audition to handle the situation. And I feel that that audition, and all the auditions after that, have been different than earlier. I have been more comfortable. I've had more energy and ... I have more control in the situation in a way.

When learning the AT one acquires a tool and a possibility to handle nervousness in a new and conscious way. Claire claims that work with the Technique almost got her a job in the National Radio Orchestra:

The day before the audition I had an Alexander Technique lesson, and I was very nervous, and we worked on that [...] I continued to the final round of the audition. In the radio orchestra!! [laughter...she is happy]. It [her performance] was so different. At the audition I met forty horn players from all over Europe. My teacher [her horn teacher] had also helped me a lot, but the thing that was stopping me was gone, so I was now able to play my best. Which actually is very good, you know. That was an extreme feeling.

Her feeling of stress while performing solos at big concerts changed noticeably: "It is very different. Yes, I get nervous, but now I know what to do". In other words, she had a clear feeling that the AT offered her a choice. When I asked "Victor" if the AT has helped his performance anxiety, he answered:

Yeah, I think it does. It gives me something else to concentrate on. You know sometimes I feel if I concentrate on something else, rather than being obsessed with this passage or... I feel more still in my body and more settled. When I sit down I feel good and I can feel quite comfortable and that's nice! Like I feel I sit up... but [am] still nervous.

Greg is very conscious of the Alexander Technique at concerts, and says that it is a way of being fully present:

So I find that when I get nervous on stage, I check my AT-tools...And then, I'm still nervous, but it becomes irrelevant. In a sense you almost want to be nervous, it's important what we are doing on stage! But it's an energy thing, and my energy is getting stuck in all these places. If I do my Alexander, everything gets unstuck....I'm much more focused on whatever is going on with the sound. And that's about being fully present. And then, you know, you are playing music. In the best sense of the word, you are playing music.

Another effect of the Technique among the informants appears to be an increased acceptance of making mistakes when playing, whether it is during a performance or in

rehearsals, which again might result in a feeling of joy. For Claire, whose earlier performances were characterized by stress and nervousness, it has become much more fun and less stressful to play concerts now:

...even if I make a mistake, it's like totally fine, because it's just human. And It's who I am. And if you are really being who you are, and you are playing who you are, then the music is there. And I actually feel ok with that, which makes performance much more fun, less stressful, and you can focus on what's important.

A relaxed attitude towards making mistakes is something Elise also remarked upon:

I feel I have more energy, I feel simply that I have more of a sense of wholeness. And I have learned to let go when things are going wrong. Because things go wrong sometimes [laughter]. Then I don't react by tensing up my body.

### ***Ensemble Related Situations***

Several of the informants reported an increased awareness and level of attention while playing. In the previous sections I have tried to illustrate just how the skills learnt in studying the AT gave them a more precise way of playing. Jonna emphasized how an increased feeling of freedom gave her an opportunity to react and discover things that are going on around her: "I am much more aware and I can hear and pick out what they do. I can communicate while playing since I am not only in my own box where I only play my oboe, now I am more open [...] I listen to more".

Jonna experienced that she moved less, yet more economically after starting to take AT lessons, but as a solo oboist, Jonna was worried that her fellow musicians did not understand her signals when she was about to start a phrase:

Nobody said anything, but I felt that somebody was dissatisfied [...] but now, when people are used to it, I don't think it is a problem. Quite the opposite. I have more dynamic variation, and I think that helps others, just by breathing, I think it is enough to breathe the upbeat in correct tempo to show the tempo [...] I think it is more precise.

Sometimes different concert situations provide different acoustic challenges, and in the following example, Greg remarked upon how the Technique had helped him during one such challenging concert situation, while playing the St. Johns Passion.

We played St. John Passion. Big piece. And the chorus was all amateurs, the soloists was professional. Two basses, and there was one viola de gambe solo, that the cellist had to play. And then I had to play the continuo line which was supposed to be played by the cello in this alto aria. A big slow alto aria. I had to play this very supportive, very exposed kind of thing. And we didn't rehearse it. And we had this very strange acoustic. I couldn't hear anything. And the first thing I thought about was "up, up"... and play. And it was good. I think we got to the expression that Bach wanted, the savior being dead, very sad.. and the first thing was "up", "my back back". My first reaction was [showing by tensing in his body]. Ok, let's try this other thing that I know works! I start thinking about the AT then the playing, I actually play better. It's crazy.

## **Gestures**

Musicians normally use a lot of gestures when they play, whether it is gestures that directly contribute to make the sound (effective gestures or sound-producing gestures) or sound-accompanying gestures<sup>12</sup>. A natural consequence of the interview process was posing questions about how the musicians' gestures were influenced by the Technique. They all told me that their gestures had become more organic after starting to implement the AT, and interestingly, some of them use more gestures and one uses less. Øyvind emphasized that he is now free to move in the way he wants: "I experience that I have a relaxed starting point, and from there I get inspired to move, but I feel I have less tension and I feel I am more free to move". Playing the double bass demands large movements, and Greg was clear in his response: "I have more [gestures], and they are bigger...I feel that my gestures are an organic, unified thing with me... and if you have to make a big gesture, it depends on how you make that gesture".

"Victor" said that he don't have fewer gestures, but he has other gestures than before: "I am trying to make the gestures more organic...and I find new gestures that I didn't have before". On the contrary, Jonna has noticed that she now uses smaller movements than before to communicate with fellow musicians. And as a consequence she feels she has more energy:

This theater [gestures] takes a lot of energy. If you play an accent and you do a strong accent with your whole body [showing], and it sounds like an accent, but actually you have less capacity to do it properly and make it sound like an accent. I have become much more aware of this. Nowadays when I listen to a concert and see other artists I think it is quite annoying. If you close your eyes you realize

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Terms used by Francois Delalande (1988), explained and employed by Alexander Refsum Jensenius et al. (2010).

that there is no dynamic, they only pretend with their bodies [...] I think some musicians do it to fool themselves. They get a feeling that they participate and are doing a lot.

Elise thought that it is sometimes difficult to combine the AT with her musical gestures (she used the words “body language”), because her experienced that her gestures was closely connected to her habits: “It is difficult to combine. It is not that I can’t have body language when I think about the Alexander Technique, but the body language I am used to is so closely knitted to my habits”.

### ***Rehearsal Issues***

All the musicians rehearse differently after taking AT lessons. Earlier, Claire was struggling with a lot of back pain when she practiced, and she described herself as “highly strung”. She told me that she practices less, but with more quality:

I will say I practice less, but better. Very much. Now I realize the advantages of taking breaks. A day off. I think a lot differently around that now. If you take breaks, you do something good to yourself. Earlier, I thought I had to practice as much as I could. All the hours left. But that was not effective, I didn’t use my time well, I didn’t think of what I did. The number of hours that I practiced was more important than quality.

Another indirect effect is an experience that she is more present during her rehearsing: “I can be in this moment. Present. When I practice it is NOW. It is not ‘what to make for dinner?’ Earlier, I was very much like that”. Greg has similar reflections about his rehearsal process:

I don’t need to practise as much, which is a good thing with two small children at home, I don’t have so much time[...] I am much more present, I am much more here. I am trying to send my focus like this [showing by sending both his hands out from his body, wide and broad].

## ***Other changes***

### **Freedom to choose**

Some of the informants reported how the AT had influenced other aspects of their lives. Jonna told me that her AT skills helped her to distance herself from emotional conflicts and to react in a different manner: "I can maintain the freedom, consider the situation again and consider what could be a constructive reaction". Greg emphasizes how the AT provides a feeling of connection in his life: "That's the most interesting thing in my life right now [the AT]. You know I have my wife, I have two small children, I have my job, and for me, to make a connection to all those things, I do it with the AT. I really do."

The informants emphasized that the AT had given them the freedom to react in new ways. Greg related the following: "If things are not working for me, whatever it is I am doing - talking to someone, walking down the street, or playing the bass - usually I am doing something like this [he shows by lifting his shoulders], and on the one hand that is frustrating, 'Why am I doing that again!', but on the other hand you can say: 'Well, I know what the problem is!' His experience was that the skills in the Technique had given him a feeling of having a choice in the matter. He continued: "I think we make these choices, these small choices every day, for years and years and years, and you think, "this is me, this is how I am". "Victor" made a similar statement:

The thing I really like about AT is this idea that you make a choice, like becoming aware of what you are doing and you make a choice about whether that's what you want to do, and that for me is the most important thing. So you are not just doing things automatically. And I think that is really important for musicians because they just get into these old habits, and then.. it's like, are you doing this because you want to, are you doing that because it's important to the music or are you doing this because that's what you always do.....?

### ***Issues Related to Learning the Technique***

Another issue might be how different teachers explain the Technique to their students. Two of the informants had tried several teachers, and they reported that different teachers had very different approaches to the Technique. Øyvind remarked, for example:

...what I experienced with another Alexander teacher is that he did not speak during the lessons, and I did not understand what he was doing... he never told me about the principles he was working by. And he never told me what to do between the lessons, or that this was actually something I could think about between the lessons.

Different approaches and different styles of teaching are inevitable. I will come back to this challenge in the discussion. I also want to go on to claim, with the support of authors who have written books about the Alexander Technique, including F. M. Alexander himself, that learning the Technique from books or a master thesis is not possible. One has to experience it. Øyvind said: “Yes, it is difficult to get people excited about it before they have actually tried it. And... I think it is peculiar that it isn't bigger. Because I think it is so much better than so much else.”

### ***How Did the Informants Apply the AT to “Real Life”***

In this section I want to focus on various difficulties the informants had when applying the Technique to their careers and in their daily life. A recurring issue had to do with the difficulties faced when changing deeply-rooted and life-long habits in relation to their use. Elise told me that the process of unlearning her old and automated motor memory, and the education of the use of herself was sometimes very difficult and demanding:

I fight against things that I have done for 25 years - my habits, and that is very difficult sometimes. I feel I am fighting against myself to improve. It is a lot of work for me. It can be tiring... sometimes I just have to let it go. You always want an easy solution

When I asked Elise how she implemented the Technique while in ensemble situations, she emphasized the difficulties that she had had, as a leader, when she was to signal her quintet to start. She told me that her habits were strongly connected to her gestures of breathing in to show the others in the ensemble when to start. To change this pattern was a continuous and on-going process for her. *Patience* is a word Jonna use when she was asked to describe the challenges and difficulties she had experienced when learning the Technique:

It requires a lot of patience, which is the most difficult thing of all. These things [AT] are so simple, and sometimes I get so impatient and annoyed with myself...I discover I want to reach the point where I am done, finished. But maybe that is never going to happen. It is dynamic, it is a process with no end.

I have claimed that the AT is an educational process, and that a student's development is dependant upon how he or she is able to use the Technique and implement it in his or her playing, as well as in other activities. Øyvind emphasized that sometimes it was difficult to



let go of the wish to master the Technique and to be a good Alexander Technique student: “Sometimes I feel I have to manage something. That I have to be good.” If this feeling becomes too dominant during a lesson, it may hinder the student’s ability to progress in their learning of the Technique. I will elaborate on this matter in the discussion.

*How* one experiences the Alexander Technique differs from person to person; one person may have more of a “mental” and another more of a “physical” approach to the Technique. Jonna was mainly concerned with heightening her attention in her process of applying the Technique. I asked her to explain what she was thinking of when she thought of the Alexander Technique, and she answered: “Yes, it is many things at one time. It is to expand one’s attention. If I were to mention just one thing, it would be to open my attention”. I asked Greg to elaborate on his thoughts of “up, up”, which he used when playing Bach’s St. John Passion:

Anyway, ‘up, up’ in my mind refers to sending the head up, one of those formative Alexander concepts. Also ‘back back’ refers to thinking of the back of one’s body moving back in space. An elusive concept, for me, but I find when I can do it, it brings great results. I like to boil down the Alexander concepts to small phrases like that to make more it automatic to access the beneficial effects of the work.

Elise used thoughts related to her body as a way to incorporate the Technique:

The way I implement the Technique is a stepwise way of thinking before I start to play. I have my trumpet in my hand, but before I lift it to play, I go through my body from bottom to top and feel that I am movable in every joint, and that my balance is good. Then I breathe out while I lift the trumpet to my mouth. Then the first breath comes totally naturally and effortlessly. While playing I am aware of being flexible, movable and that my gaze is free. I am especially aware of letting the air in instead of breathing actively.

## **CHAPTER 5 - DISCUSSION**

“Everyone wants to be right, but no one stops to consider if their idea of right is right” (F.M. Alexander)

The interviews have confirmed both my own experience of, and assumptions about how many musicians are trained. I have affirmed how a lack of coherence between mind and body during the informants’ educational processes and careers has had certain implications, and has led to problems of different kinds, showed in the results (inhibitory nervousness, strain injuries, stress and pain problems). The interviews have further confirmed my presumptions about the Alexander Technique being a useful tool for the performing musician. In the following I want to discuss my findings and link them to current theories in the realm of embodied cognition and the Alexander Technique. First, I want to address the habit of end-gaining, and attempt to assess how most of us, to a greater or lesser extent, end up as end-gainers, and point out the consequences of this behaviour. In addition I will discuss what happened when the informants re-discovered their primary control and started the process of changing and educating their use.

### **5.1 THE PROBLEM OF END-GAINING**

Why are we so eager to reach our goals, to be “finished”, and what motivates us to reach these goals? Alcantara writes that “People often feel that failure comes from not trying hard enough, and therefore follow failure with a greater determination to succeed and a corresponding increase in their misuse” (ibid:73). “I did not try hard enough” is a fixed expression in our culture, and to try hard is a highly valued quality within music performance and music education. The myth that learning to play an instrument should cost you blood, sweat and tears is still very much alive. Dimon addresses this in his book *Elements of Skills*, and argues that “the problem of trying too hard” interferes with the process of learning a skill. If the teacher and the pupil are too concerned about reaching the goal whether it is to perform music, learning to climb or to play tennis, the pupil loses the opportunity to explore and discover the means whereby one reaches the goal, and the

profound way of learning a new skill may be lost (Dimon 2003). In other words, if this is a prevailing view during educational processes, whether at an early stage in a musician's life or later, it will probably create a lot of unnecessary tension and non-constructive habits. It may, ultimately, give students too much of a mechanical or static foundation, and lead to symptoms such as tendinitis, vocal cord nodules, pain or performance anxiety. Greg, the bass player, reflected on this problem: "Can you put all your energy into what you are doing' is a common statement. Well, I feel I have so much energy, that you don't need all that energy, it crashes that thing you are going to do. That's the essence for me".

Among many teachers there is a one-sided focus on how the performed music sounds and should sound, a view even novices are exposed to. This biased focus on the end, the resulting sound, may hinder the student's further development and learning process. A lot of instrument and singing teachers notice, hear and see problems that their students are struggling with, but they lack the ability to help them out of their predicament. To reach the goal is normally more important than *how* we reach it. As a singing teacher I know how easy it is to fall into this trap. I possess a lot of short-cuts that will help the student to produce a better sound, but short-cuts are not the solution if you want a sustainable foundation to build upon and develop further as a musician.

### ***The Ecological Aspects***

End-gaining is a complex problem, and the interaction between a human being and her environment is an essential factor when considering the complexity of end-gaining. In one of the preceding quotes (chapter 3), Alcantara stated that end-gaining is both a concept and a procedure, and is so widespread and insidious that people are neither aware of it, or the consequences of such behavior. At this point it is relevant to refer to Hubert and Stuart Dreyfus' explanation of Merleau-Ponty's theory of the intentional arc. They explain the intentional arc as a "tight connection between body and the world, viz. that, as the active body acquires skills, those skills are 'stored', not as representations in the mind, but as dispositions to respond to the solicitations of situations in the world" (Dreyfus 1999:101). In other words, the informants' earlier experiences and the way they had been educated

were stored, and influenced their reactions and pathways. Years of practicing had been stored as “dispositions” in their body, and they activated the dispositions as they responded to different situations, for example in a rehearsal or performance situation. The “dispositions” were the informants’ subconscious actions, habits precipitated through years of performance and practice, as a response to the context of which they had been a part. These habits developed through the interplay between themselves and their environment. Several advocates within the embodied approach emphasize the reciprocity between the organism and its environment. One of them is Gibbs who says:

Bodies are not culture-free objects, because all aspects of embodied experience are shaped by cultural processes. Theories of human conceptual systems should be inherently cultural in that the cognition that occurs when the body meets the world is inextricably culturally based (Gibbs 2006: 13).

Additionally, Varela et al. (1991: 163) expand on the tradition of Merleau-Ponty and suggest that cognition is a constant interaction between a person and his or her world around them, claiming: “Perception and action, sensorium and motorium are linked together as a “successfully emergent and mutually selecting pattern”. Dreyfus, Gibbs and Varela et al. substantiate the idea that we cannot explain the informants’ experience without looking at their relation to their environment. Genes and heritage, together with our response to, and interaction with, our environment, are decisive when explaining our actions.

We are, in a sense, products of our culture, and it may seem like the habit of end-gaining is more conspicuous in our Western culture than elsewhere. However, a discussion of the underlying causes of this problem is beyond the scope of this thesis. Both Alexander and Dewey, in his introductions to Alexander’s books, addressed the cultural and evolutionary forces at work in relation to human development (see Part 1 of “Mans Supreme Inheritance” by F. M. Alexander). According to Alexander, the *consequence* of this development is an impaired sensory awareness that has become totally normal for us. In Dewey’s words:

The principle is badly needed, because in all matters that concern the individual self and the conduct of its life, there is a defective and lowered sensory appreciation and judgement, both of ourselves

and of our acts, which accompanies our wrongly-adjusted psycho-physical mechanisms. It is precisely this perverted consciousness which we bring with us to the reading and comprehension of Mr. Alexander's pages, and which makes it hard for us to realize his statements as to its existence, causes and effects. We have become so used to it that we take it for granted. It forms, as he has so clearly shewn, our standard of rightness. It influences our every observation, interpretation and judgement. (Dewey in Alexander 1924: xxii)

Alexander's process resulted in a technique that enables the student to become aware and conscious of how inseparably intertwined these psycho-physical mechanisms are.

### ***The Informants' End-gaining***

I will now take a closer look at the informants' end-gaining, and how this behaviour was closely connected to their environment, culture and past experiences.

Trumpet player Elise's pattern of end-gaining was influenced by a strong wish to succeed and please the jury at her auditions, a matter of course for practically every musician.

However, her reaction to this stimulus was not really helping her to play the way she wanted. She was more conscious and stressed about the jury waiting for her to prepare, than of paying attention to herself and the music she was going to perform. Too much focus on what *the others* might think of her performance, led to increased performance anxiety during such situations. Jonna, the oboist, had another perspective regarding her pattern of end-gaining. It was influenced by Finnish culture where women are seen as very strong and independent. She was used to working hard, and as a consequence she played on heavy and thick reeds that made her use unnecessarily effort: "We are used to, and it is also something highly valued, if somebody is able to work hard". This fundamental view was the reason for her choosing thick reeds, and it made her a hard-working musician. A stressful life as a freelancer was one of the underlying reasons for the bass player, Greg's, end-gaining, and for the problems that followed:

I did all those things...I think that's kind of a stressful life. It's a great life, it's very exiting, there's always something new coming but at the same time it has no stability. So I think that can make you a little bit...tense.

Claire, the horn player, was exposed to an ambiguous culture. She said: "I always participated in a festival or something during the summer. It is a part of the American mentality". Additionally, she experienced that her teachers saw her potential and gave her

increasingly difficult tasks on the horn during her educational processes. Together with her teachers she was ambitious, but her ambitions and habitual reactions to these ambitions, her end-gaining, led to a feeling of frustration and stress. It is reasonable to believe that the tasks became too demanding too early, and that her end-gaining resulted in a wish to please all the teachers who saw her potential. As a consequence, she ended up with an unfortunate pattern of reactions that had evolved over many years. Due to her teachers, who were eager on her behalf, she adapted her horn playing skills according to the context, but in a disembodied way ("It was never really comfortable for me to play"). Øyvind, the violinist, had a wish to master the Technique, which is another manifestation of a habit - he wanted to take control of the learning process. Alcantara addresses this problem when learning the Alexander Technique:

Talking of behavior and of habit readily evokes the notion of control. Someone who recognizes the existence of an undesirable habit normally expresses a wish to control the habit, rather than being controlled by it [...] In an Alexander lesson, you will be tempted to improve your movements by controlling them. In all likelihood your movements will thereby acquire a rather unnatural, contrived quality - the contrary of what you should strive for. For your movements to become truly natural, you must give up whatever control you have of them. The very *idea* of controlling is a hindrance to changing your use (Alcantara 1997: 34).

All the informants' patterns of end-gaining were adequate solutions to their different situations, and they all had reasonable reasons to react the way they did. Their motivation to act in response to their environment and to stimuli from their context provoked their different problems. Contrary to the past or current environment, which was out of their range and difficult or impossible to change, it was possible to alter the way the informants *reacted* to different stimuli. But in order to change, they had to learn how to inhibit their old dispositions, their old use and habitual way of reacting, just as Alexander experienced when he developed the Technique. I will now try to explain how *inhibition* has to be the starting point for changing deeply-rooted patterns.

## 5.2 THE IMPORTANCE OF INHIBITION

Alcantara said, *the idea is not to inhibit misuse directly*. This may appear confusing to a fresh AT student, but it is of crucial significance. Inhibition of the motivation to act, and to reveal the motivation behind ones actions is inescapable if one wants to learn the Technique fully. Why is this a bewildering step when learning the Technique? The informants had never been asked to identify their motivation to act as a part of how they performed their motor actions, and in the first place they didn't recognize any motivation or idea behind their actions at all. Like their habits, the motivation behind their actions was subconscious.

To inhibit is the opposite of "to do", which most of us are taught from early on. When we inhibit our motivation to act, we allow ourselves to react in a new and different way. And as a consequence, inhibition gives us a possibility to choose another neural pathway, says Master of music in Education and certified Alexander teacher Kay S. Hooper:

"The word 'inhibition', as used in the Alexander world, refers to a conscious pause in the action designed to allow us to choose another neural pathway other than the one that has been well insulated by repetition" (Hooper 2010:10). Inhibition gave the informants a possibility to get out of the loop of repetition at a conscious level, unlike their old habitual way of reacting, which was dominated by subconscious motor actions.

### ***The informants' Inhibition***

To take a specific example, how did inhibition affect the way Elise reacted in an audition situation? As described earlier, her thoughts were focused on the jury, and her overall "end-gaining" in this situation was aimed at pleasing somebody else. This attitude affected both her thoughts and her actions during an audition, with performance anxiety and strained breathing as outcomes. To get her self out of her total pattern of misuse, she had to let go of, or perhaps we/I could say to distance herself from, her wish to please somebody else, i.e. the jury at auditions or her audience at concerts. Put another way she had to inhibit her automatic motor responses to her end-gaining, a pattern she described as "straining myself and closing up". Inhibition was applied at different stages in the process and by doing this she got the opportunity to choose new neural pathways less

harmful to her total use. It was not possible to eliminate the jury or the audition situation, but it was possible to distance herself from “the end” by using herself in a more conscious way, which included the principle of inhibition as a primary step. Her experience of these situations was completely different after applying her Alexander Technique skills:

Now I actually dare to take some time to prepare myself. I don't think that much about the jury sitting and waiting for me to play. I take my time, I talk with the pianist about how I want the music, tempo and things like that [...] I do it on my own terms, and that I feel has worked very well.

In Elise's case, inhibition of her overall idea as well as her repetitive thoughts and motor actions, gave her a feeling of control during audition situations. Increased understanding of the unity of mind and body made her aware of her automatic physical and mental reactions to quite a powerful stimulus, to playing concerts and carrying out auditions. In a similar way Claire regarded her Alexander Technique skills as decisive when she was auditioning for the job at the radio orchestra. She was very nervous before the audition, and applying the Alexander Technique, which included inhibiting the patterns she was used to repeating when she became nervous, led to an experience she described as totally different compared to similar situations earlier on. Jonna, who had a different background for her end-gaining (the inheritance of values from Finnish culture), had to reconsider her notions of the strong and hard-working Finnish woman, promoted through Finnish culture. She had to distance herself from underlying cultural standards because they maintained her misuse of herself:

In that way, I am quite a strong woman. I have muscles and I know how to use them. But it has worked against me...[.]I try to remind myself all the time; if I stay open and if I don't get any sound from the reeds, then I have to take the knife and scratch instead of struggling to make a sound.

Hard work was deeply engrained and valued in her culture. I have already mentioned how many of us are influenced by similar attitudes; to succeed and to achieve goals are closely linked to actively doing something, to working hard and to “pulling oneself together”. In order to progress, Jonna had to let go of, and inhibit her wish to work hard because it was closely connected to her tense and over-working self.

The source of my own problems was varied, but a contributing factor was my strong wish



to please people who believed that I had deserved my admission to a higher music educational institution, the Grieg Academy. I started to compare myself with fellow students. Singing, which earlier had been a joyful and carefree activity, became constrained and restrictive, and was connected to the misuse of myself. To produce a tone was synonymous with raising my shoulders, shortening my neck, and putting too much weight forward. The fear of not being good enough turned out to be an underlying reason for my end-gaining, and my response to this end-gaining resulted in vocal cord nodules and panic anxiety.

It was of great importance to identify the musicians' motivation to act, their ideo-motor actions, in order to change and educate their use of themselves. Regardless of the informants' underlying motives to end-gain, what happened in their bodies and brains when they constantly repeated their habits? I will address this question in the following section.

### 5.3 THE AUTOMATIC BECOMES PROBLEMATIC

A lot of music students practice and rehearse for many hours each day. Counting the number of hours of practice time is often deeply rooted in the learning culture of a successful music student. But as Claire told me, this approach was the opposite of a conscious way of rehearsing, and one symptom he experienced was a sore back. In *The Oxford Handbook of Music Psychology* (2009), Altenmüller and Schneider addresses this problem:

It is important to consider that over-practice (practice into bodily or mental fatigue) not only leads to no improvement, but to an active worsening of motor programmes [...] Furthermore, a lack of attention causes a higher probability of uneconomical movements or production of false notes which, as a consequence, are stored in the procedural memory (Altenmüller 342).

The informants' preparation encompassed both solo practicing and orchestra rehearsals, and as skilled musicians they had to maintain a high level of expertise in order to play concerts several days a week. Øyvind pointed to this "unnatural" situation as a constant challenge in his life: "Everybody agrees that it is unnatural to sit seven hours in front of a computer, and it is not natural to rehearse for eight hours, maybe not eight, but many hours a day, so...to begin with one has a problem, but one has to make the best of it".

Altenmüller and Schneider emphasize that performing music at a professional level is “probably one of the most demanding of human accomplishments”, because there are several processes going on at the same time, be it on an auditory, sensorimotor or visual level. According to them, motor and auditory skills are developed through countless repetitions and extensive training from early childhood and the skills are “mirrored in plastic adaptations of the brain on different time scales” (2009:332,333). When a musician gets tired and continues to practice, the activity is stored as procedural knowledge, and as a consequence, she practices based on inefficient habits. Neural pathways are strengthened further. What is quickly and automatically recallable is not always expedient when something is deadlocked, like a painful arm or a loop of negative thoughts before a performance. For example, if Greg had continued to think and play in his automatic, habitual way it probably would have ended his career.

Is the solution to the habit of end-gaining to overlook all ambitions and give up on trying to reach any goal at all? Maybe a musician’s tasks are too demanding, making it impossible to maintain a unity of mind and body? It may seem impossible to live a life without the habit of end-gaining, because after all, our desire to win competitions, to please our teachers or the jury *is* normal and typically human, and an important and motivating power. A musician *has* to practice a lot - this seems like an inevitable fact. Øyvind remarked: “I still have burdens demands that are beyond that which my body can bear”. One could maintain that ones way of holding the phone when doing something else *is* a practical solution and it allows one to do several things at a time. To carry somebody who is too heavy for me so as to arrive on time, *is* making me more efficient. All of this is true, but the one-sided focus on the goal prevents us from discovering the *means whereby* we achieve our goals.

Certified Alexander teacher and singing teacher Jane Ruby Heirich puts it this way:

Alexander never said that in our special kind of ‘non-doing’ we should be passive with no goals in mind. He did say that we should pay attention to the process - the means whereby we approach the end, and that if we do so the ends will take care of themselves (Heirich 2005: xviii).

If we constantly confirm our motor habits without looking at *how* we execute them, the habits remain subconscious and seem unable to grasp. We are led to think that this is how things must be, with valid reason. In the subsequent section I will address how different

scholars within the embodied cognition approach describe our motor actions and skills as a part of our subconscious life.

### ***Is Motor Memory Unconscious?***

Motor actions and motor memory are usually characterized as automated and unconscious acts that are beyond our reach. When we develop from infant-hood to children, we never pay attention to how we execute our actions. Many people who spend time around children tend to agree that the actions of a two-three year old children, and the way they explore their environment, reveals a fluidity and unity. In his introduction to the book, *How the body shapes the mind*, Gallagher claims that “at the time of our birth, our human capacities for perception and behavior have already been shaped by our movements” (Gallagher 2005: 1).

Experiences through movement during the fetal stage, allow us to develop and refine our capacity for perception (Gallagher 2005: 1). Johnson (2007) emphasizes that regardless of the fact that ones motor actions are implicit and happening at a subconscious level, they are an inevitable part of ones total experience in and of the world. He claims that our bodily experiences are a part of how humans construct meaning in a broad sense. Johnson explores how bodily processes, emotions and feelings make meaning possible. The source of meaning in a human being is deep-seated, he says, and *goes beyond the conceptual and the propositional* (Johnson 2007: 11). In other words, to understand ourselves we must look beyond words and sentences. According to him, we cannot intellectualize human experience:

I want to suggest that even at this non-conscious level, these characteristics of movement are forming the basis for both the meaning of our movements and, at the same time, the meaning of the world that we move within. I am thus using the term *meaning* in a broader sense that is common in most philosophy and linguistics [...] *The key to my entire argument is that meaning is not just what is consciously entertained in acts of feeling and thought; instead, meaning reaches deep down into our corporeal encounter with our environment* (Johnson 2007: 24, 25).

Although F.M. Alexander was concerned with raising the student’s motor actions to a conscious level, he also wrote about “the ‘education’ of the sub-consciousness below the reasoning plane”:

Acts very frequently performed become so mechanical that they can be repeated without any sense of conscious awareness by the operator. The pianist, after constant rehearsals, will perform the most intricate passage while his attention is engaged with an entirely unrelated subject, although it is particularly worthy of remark in this connexion, that when such an art as the performance of music falls temporarily into such an automatic repetition, the connoisseur will instantly recognize the loss of some quality - generally spoken of as 'feeling' - in the rendering (Alexander 1923: 23).

The view that motor skills and motor memory are going on at a subconscious level is reinforced and supported by several scholars, among them Hubert and Stuart Dreyfus. They explain how these motor and auditory skills are stored in neural networks, without our conscious awareness: "Neural networks provide a model of how the past can affect present perception and action without the brain needing to store specific memories at all" (Dreyfus 1999: 115). The *Oxford Handbook of Music Psychology* (2009) characterizes one of the main features of motor memory as implicit:

Motor memory allows actions to be executed automatically by providing kinaesthetic memory of the sensory feedback from joints, muscles, and touch receptors[...]Musicians talk about motor memory as being 'in the hands'. Perhaps the most important feature of motor memory for musicians is that it is implicit (unconscious) (Chaffin 2009: 355).

Snyder (2000) reinforces this view in his book *Music and Memory* where he writes about implicit memory. He opens the section with a statement: "The functioning of many of our cognitive processes is not available to consciousness. This includes *implicit memory*." (Snyder 2000: 72). The embodied approach to musicology, represented by Godøy and Leman (2010: 8), among others, also supports the view that our motor programs function automatically, without our awareness, and that "we have little access to these motor programs". Snyder explains this absence of consciousness and implicitness by citing the lack of language to describe the processes. "One may know how to produce a clear tone on an instrument, but not be able to *tell* anyone else how to do it" (Snyder 2000: 73). According to him, implicit memory and motor memory don't have a language component: "The groups of neurons that process these memories are probably not connected to the groups of neurons that process language; implicit and explicit memory are thought to reside in different parts of the brain (Squire, 1994:204)" (ibid.) Gallagher (2005) moderates this view, and states that the performances of a body schema, i.e. sensory-motor functions, are "close to automatic", and "the normal adult subject, in order to move around the

world, neither needs, nor has, a constant body percept. In this sense the body-in-action tends to efface itself in most of its purposive activities” (Gallagher 2005: 26).

Vineyard describes the knowledge of how we move as “information locked away in a black box within you, hidden beneath your conscious awareness” (Vineyard 2007: 4). This information and knowledge seems to be absent in most peoples’ lives. The exception is when the problems reach the “surface”, our consciousness, and we experience problems of any kind, like Greg’s painful arm, Øyvind’s tight muscles in his neck, Elise’s strained breathing or my own performance anxiety and vocal cord nodules. Gallagher (2005) discusses this question, when one’s body emerges into the “attentional field of consciousness”, and he refers to several studies on the subject:

What kinds of circumstances push the body into the attentional field of consciousness? Such circumstances include voluntary reflection (as in medical examination, vain self-inspection, or even philosophical introspection). Many studies indicate that in addition to deliberate reflection in one’s own body, the body manifests itself in consciousness in certain ‘limit-situations’, for example in fatigue, sexual excitement, experiences of pain or pleasure, sickness, certain pathologies, stress-situations, or physical challenges as in athletics or exercise (see Buytendijk 1974; Fisher 1976, 1978; Jaspers 1972; Mason 1961). Moreover, in such occurrences, the body can appear as thing-like, or object-like. In the case of fatigue or sickness, for example, it may appear as something ‘in the way’, a burden or annoyance, or impotent (Plugge 1967) (Gallagher 2005: 28).

I have tried to point out how the informants’ bodies were within their attentional field long before they started to take AT lessons: Greg was introduced to surgery to treat his problems, Øyvind had problems with aching shoulders, Elise suffered from performance anxiety and Claire was struggling with technique, and her teacher was over-focusing on issues with her lips. However, the way they were thinking of their bodies and minds was influenced by a traditional, “objective” view, and no one had ever guided them in how the body and mind interact, in a practical way. What actually happened when they continued to act in an old habitual way that was not expedient anymore? The informants were, according to Hooper (2010), constantly repeating and strengthening neural pathways:

Repeating and practicing an action strengthens pathways of communication between nerve cells. Frequently chosen pathways become encased in a substance that is much like insulation around electrical wiring. This substance, called myelin, becomes thicker and thicker as an action is repeated, thereby reducing the amount of interference from other neurological activity and speeding the response time for the chosen action (Hooper 2010: 10).

Greg adopted familiar solutions when he played, and in addition he lived a freelance life he characterized as “stressful and with little stability”. For many years it all worked well, and he got a lot of new and exciting engagements, but his shoulder problems gradually worsened, and at his worst he couldn’t lift his arm. “Victor” had a different starting point, but even though he started to take lessons to prevent future problems, he reported that he became less tired at concerts and rehearsals. He described his earlier reactions to long rehearsals as a collapse of his body, and as a rehearsal progressed he gradually sank over his cello. This was the familiar pathway of him growing tired, and this subconscious misuse probably made him even more tired.

Every one of the scholars I have quoted agrees that motor memory and motor acts are going on partially or totally at a subconscious level. Certified teacher of the Alexander Technique, Eleanor Rosenthal, emphasizes that the process of learning the AT is both conscious and unconscious, and according to her, this reciprocal aspect is one of the technique’s “greatest strengths” (1987: 2). I will return to this aspect in a subsequent section about different approaches in teaching the technique. Dimon (1999) claims that the debate about nature and nurture has influenced our assumption that motor memory is subconscious and unchangeable:

Genetic theories...have demonstrated how profoundly we are influenced by our genetic heritage; Freud and Skinner, who epitomize the nurture theories, stress the susceptibility to environmental influences and the role of conditioning. Each tendency is presented as one of a two-sided debate; those who insist on the possibilities of free will lean toward the environmental side of the debate. Both points of view, however, share a common belief that we are influenced by factors beyond our control, and so have obscured a third possibility (Dimon 1999: 3).

Based on my experiences with the Alexander Technique, and supported by theory within the technique, it is my assumption that we lack the words and language related to these processes, mainly because we lack knowledge about how we can understand, in Dimon’s words; “mind and body as a unified system and how to raise the workings of this system to a conscious level” (Dimon 1999: xiv). During different stages of the educational process, from Primary school to University, nobody taught me, neither theoretically nor practically,

about the workings of my mind-body unity. The findings from the interviews have strengthened my assumption that these experiences are not unique to me.

Isn't it reasonable to think that, without knowledge about, in Dimon's words, "the workings of this system", it is almost impossible to reflect and talk about our implicit memories and motor acts? And that a consequence of this absence of knowledge, is that we consider implicit memory and motor memory as inaccessible to consciousness? F. M. Alexander's investigations showed that information about *how* we mentally and physically carry out our tasks seems inaccessible at first sight, and Alexander himself called his cultivated use "irresistible". Nevertheless, his patient investigations revealed how it is possible to discover and re-learn the use of ourselves. In other words: We do, at least partially, have access to our ideo-motor actions, our motor memory, and we are able to develop and vitalize our proprioception and bodily sensations, and even put words to the process.

The Alexander Technique offered the informants an increased awareness of their subconscious actions. When they had their first lessons in Alexander Technique, they learned the opposite of subconscious "education", addressed by several of the scholars I have quoted. They started a process of re-discovering their primary control, and learned to recognize how their motivation to act influenced the workings of their primary control. They were taught to be conscious and aware of their proprioception and bodily sensations (which included, according to Vineyard (2007), feelings and emotions as well). Significant questions during their educational process were: *How* did they react to different stimuli, *how* did they respond and interact with the environment, mentally and physically? The informants' motor memory or motor habits, the way they subconsciously performed their tasks, was not expedient anymore, because their habits brought them to an impasse, with symptoms of strain injuries, stress and other difficulties. When Elise was auditioning and became nervous, she had the habit of over-focusing on her nerves, which again resulted in a strained body and strained breathing. After lessons in the Alexander Technique she found a new approach:

I have learned a way to think. First, during my warming-up when I get nervous I do not fight it, like I always did before: 'oh, no, here come the nerves...Now I am getting nervous, this is not good!', and

then I panic. And I go into a tense mode where I just want to survive. I have learned that it is okay that I have these feelings.

I will now elaborate on how the Technique embraces both mind and body, and I will try to explain why Alexander called it an educational process.

#### **5.4 THE EDUCATIONAL PROCESS**

To learn the Alexander Technique can be a lifelong process. John Dewey states, on the basis of his own personal experiences in learning the Technique, that; “its full meaning dawns upon one only slowly and with new meanings continually opening up” (Dewey 1923: xxi). It offers no quick fix, and the process of educating ones use is sometimes a test of patience. I have previously stated that the AT is not a treatment but an educational process that can be applied to everything we do. I will try to elucidate this educational aspect by pointing to two of the informants’ experiences, Claire and Greg.

Claire spoke a lot about her general feeling of stress, and the lack of sonority in her horn playing before she started to take AT lessons. When she was seventeen, she had a famous horn teacher, well known in her home country. Retrospectively, she became aware of how his way of teaching contributed to her problems. She described him as a talented musician, without any specific problems himself, “for him, it was always easy to play”, she said. Most likely, he did *not* see how Claire was given too demanding tasks on her instrument at an early stage, and how this contributed to a general feeling of stress in his young student. She reported a feeling of discomfort and pain, associated with worrying thoughts before concerts. In her example, both Claire’s teacher and she herself were end-gaining. They were caught in the “trap” where one wants to make progress and achieve results, without looking at *the means whereby* they achieved their goals. When she started her process of learning the Alexander Technique, she was first showed how her primary control and her body’s elastic latticework, were supposed to function: “He pulled my shoulder and my arm backwards. But it felt...and he did this with one arm, and I was totally lopsided. I am not exaggerating! I felt like this, you know” [Showing this]. In this situation, her teacher’s hands-on work was giving Claire an experience of how her primary control was supposed to function. Her first reaction was that her arm was in a strange place and imbalanced in



relation to the opposite side of her body. Her body image had started to change, but the strong influence from her faulty sensory awareness, her old body image of right and wrong, gave her a lopsided feeling. However, when the teacher had worked on her primary control during the lesson, it influenced what is usually described as a “mental state”, and she felt calmer than ever before (see page 55). She described the experience as a quieting inside of her. When I asked her if she was able to apply the new discoveries and bring them into her life after the lesson, she answered:

In the beginning, I didn't understand what it was. My first experience [at the lesson] was that he had done something to me. And I thought he was going to do it again, you know. I did not understand this was something I could do, or that it was me that had done it, actually. [She pauses, and then I ask her if she was able to integrate the technique at that present stage] It develops little by little, much more now than before [...]But I continue to take lessons.

The experience of re-discovering the primary control may be overwhelming already during the first lesson, or, the experience might be a process that comes gradually dependent on how strong the student's habitual patterns of misuse are. The next step in Claire's (and everybody else's) process was to re-discover how the habits were closely connected to her thoughts. For example, how a simple act - to stand up from a chair or lift her instrument, was interlinked with her thoughts. According to Dimon (2013), this is the pathway the student has to address in order to restore the workings of the primary control. What happened in her mind and body when the teacher told her to stand up or act as if she was about to play? Greg remembered this experience clearly. He had a number of lessons, working on simple, daily activities, but in one lesson the teacher wanted him to connect his new experiences with playing the bass. According to him, it was an interesting experience:

I worked with my teacher for about six weeks or so before I brought the bass in to him and I remember the first time he taught me about the bass I didn't have the instrument with me, so - he got me standing the way you should stand, using my body correctly in an Alexander Technique-way, and he said 'ok - now act like you are going to play the bass'. I took a step forward and I leaned into it, and I did this with my mouth [squeezing his mouth]. Oh, ok...interesting. So I stopped doing that. And I started doing something else. And it's been great ever since.

At this point in the process he was able to recognize his old habit of leaning into the bass and squeezing his mouth. Greg had repeated this pathway when playing the double bass for several years. When he got a stimulus, an input saying “I am going to play”, he acted in his familiar and well-known way. Later in the interview he illustrated his old way of playing

by contracting in his spine, leaning forward into the bass, and pushing his chin forward. His primary control, the relationship between his head, neck and back became disturbed and unbalanced. When his old motor actions were “out of the way”, and Greg had discovered his overall use and learned to inhibit both his motivation to act (which brought him into his habitual pattern of contracting his spine and leaning into the bass), and his habitual reaction to this motivation, he felt he had more opportunities with his instrument:

And I remember I was drawing the bow one day, and we worked on this and we worked on that, and finally we were getting this sound coming out of the bass... And I was playing on open string, I wasn't using my left hand at all, and he said; “Is that enough sound?” I said: “yes, it is”, and I was really just expending no energy at all, but this sound was cruising out of the bass. And he said, “What if you wanted to play louder?” And then I played louder, and he said “What did you do to play louder?” and I said, “I just thought louder”. You know, because it makes this kind of immediate thing. You have the aspect, the part of you that thinks “What did you do?” I didn't do anything. I just thought louder. And then there is nothing between you and your intention.

In *Elements of Skill* (2003), Dimon suggests a new approach to the learning of skills. Based on the works of both Alexander and Dewey, he re-phrases their ideas and shows how they can create a foundation for education. Dewey's concept of “doing and undergoing” must constitute a learning process, he states. This practical approach is totally in line with Alexander's ideas.

I have tried, referring to Claire's and Greg's experiences, to elucidate how the Alexander teacher guides and helps the student so that they discover how their habitual use may interfere in daily activities, or in these cases, the informants' playing. Gelb (1994:50) stresses that the importance of giving the student an experience of re-discovering the primary control is not the goal and an end in itself, “but rather a preparation for activity”. If the student is helped to inhibit her old habitual patterns of motor memory, and further maintain a balanced head-neck-back relationship during her activities, “the quality of action changes”, says Gelb. This is what Greg experienced during his lessons. The Alexander teacher guided him towards the means whereby, which involved re-discovery of the primary control, inhibition, and the conscious control through which she was able to perform the tasks in a new and, in all senses, more healthy way.

## ***Remapping***

In this respect it is interesting to connect the informants' experiences to Damasio's theory of mapping. According to Damasio, the brain has the ability to make maps, and to continuously be able to alter or change these maps. I claim that the Alexander Technique is a practical method to elucidate the process of mapping. Each of the informants went through a process of re-mapping during their own experiences with the Alexander Technique. When Claire experienced herself as lopsided, she had to re-map her old image of right and wrong. What earlier on had felt right, suddenly felt different and strange compared to her new experience; this is what Alexander referred to as faulty sensory awareness. Based on her earlier experiences of right and wrong, she most likely wanted to control the process, wanting to maintain the feeling she had from the lesson. As I have stated earlier, this is also a form of end-gaining. Damasio (2010: 96) claims that mapping is a constant process, a two-way communication: "Body and brain are engaged in a continuous interactive dance". When learning the Alexander Technique one has to accept that the process is dynamic and that it feels different at different levels.

## ***Mapping off the Track***

F.M. Alexander experienced that the signals from his body were untrustworthy and he called them faulty sensory awareness (p.45). Fortunately, he applied reasoning to the process, and decided not to trust his feelings of right and wrong. It was the same in the case of Claire. Her feeling of lop-sidedness felt wrong, but she learned that her feeling was untrustworthy. The Alexander teacher helped her to apply reasoning to the process. Both Claire's and Elise's performance anxiety and feelings of stress related to their performances disturbed their performance levels at auditions, and without being helped to re-discover the interaction, the two-way communication between body and mind, they continued to end-gain (being too concerned about the jury waiting, the results, the problems with the lips, etc.) As I have discussed above, when the informants reacted to stimuli through their automatic way of thinking and reacting, their neural pathways were strengthened. Øyvind had done this for years, and his shoulder problems increased; Greg's sleep was disturbed because of his aching arm; Elise suffered from performance anxiety and Claire's habitual use was reflected in her lip problems, among others. The way they

continually mapped the signals from their body and the way they acted on those signals, their two-way communication, did not work well for them anymore. Luckily for “Victor” and Jonna, their use had not caused pain or problems, but nevertheless, a lot of things changed for the better after they had taken Alexander Technique lessons. To a greater or lesser extent, before the informants’ began taking lessons, their maps did not match the terrain. Dewey addressed the faulty sensory awareness when he argued that the principles were badly needed: “in all matters that concern the individual self and the conduct of its life, there is a defective and lowered sensory appreciation and judgement, both of ourselves and of our acts, which accompanies our wrongly-adjusted psycho-physical mechanisms” (Dewey 1923: xxi and xxii).

At this point it is relevant to draw upon Damasio’s notion of “ultimate consciousness” and relate it to Alexander’s notion of “conscious control of the self”. Damasio says: “Ultimate consciousness allows us to experience maps as images, to manipulate those images, and to apply reasoning to them” (Damasio 2010: 63). I have stated that the Alexander Technique offers an intelligent approach to our tasks and development of skills, and is something Dimon refers to as the “third possibility”:

The idea that, as human beings, we are capable of self-direction; that we can rise above genetic heritage and environmental influences by realizing our full capacities for conscious awareness and control in every phase of human life (Dimon 1999: 3).

Gallagher (2005: 2) also addresses questions around consciousness, among them those concerning the structuring of consciousness. “What role does embodiment play in the structuring process?” and; “How does the fact of embodiment, the fact that consciousness is embodied, *affect*, and perhaps, *effect*, intentional experience?” Gallagher argues that an awareness of the body is a part of the way the subject structures his or her consciousness; it is a part of the phenomenal field, even though the awareness of it is marginal: “It determines or influences all other aspects of experience”, he states. Related to the findings outlined in this thesis, we can further ask: What happens in the structuring process if we *change* the way we use ourselves?

## 5.5 THE OUTCOME OF THE EDUCATIONAL PROCESS

As I see it, the AT and its implicit emphasis on conscious control make us able to optimize our potential further. The principle of conscious control is an excellent way of enhancing and refining the inevitable two-way connection between mind and body.

When Greg was in a performance with hearing issues he had to rely on his new skills. He used inhibition and conscious control to overcome the situation, and it all worked out well. As mentioned earlier, the way we think of the Alexander Technique may vary from person to person, and in that particular situation Greg focused on his directions, especially thinking of his back (“back back”). His automatic motor memory and established way of reacting in this situation was to tense his body, because he was stressed and influenced by stressing thoughts (he had not heard the soloist he was accompanying, and they had not had the time to rehearse). According to the interviews, all of the informants experienced sustainable changes when they implemented the Technique in their daily lives as musicians, thus re-mapping themselves. We have also seen that the changes became lasting because they started a process of educating themselves and modifying their total use unlike the fragmented approaches some of them had tried before.

### ***Expansion of Attention***

One important aspect of Alexander Technique education is the expansion of one’s attention, mentioned by several of the informants. I will now return to theories that discuss the reciprocity between the outer world and the self. Gibbs (2006) refers to the philosopher Drew Leder when he addresses the connection between the world and the self: Leder uses an example from his own life as he was walking down a pathway in the forest. He was concerned with his own problems and describes himself as “caught up” in his own worries, so that the beautiful landscape did not influence him or penetrate his awareness. If we compare this picture with one of the informants’ narratives, we find similarities: Greg describes the habitual pattern when he gets nervous as a constant stream of activity from his brain: “And I notice when I get nervous that my brain starts to talk to me a lot: ‘Do this, make sure you do that, don’t do this’ and so on, this is constant. That’s

how it is for me". Like Leder when walking, Greg got stuck and caught up in his own thoughts. The result of this way of reacting is a hunched body:

And I notice that when my brain starts doing that, my physical reflection on that is [showing by hunching his body], you know, oh - and that doesn't seem good. So I need to stop that 'da, da, da...' [thoughts that do not help him].

In Gibbs's example with Leder he describes an important and meaningful shift: Gradually his mind quiets down and he becomes aware of the sounds and the presence of nature around him. When his mind quiets he is able to pay attention to the world surrounding him. It is interesting to examine which factors cause the quieting of his mind. Is the movement of his muscles and limbs giving him a "movement" in his mind as well, so that his attention shifts from problem-orientation to awareness of the surroundings? Or is there a "mental" explanation - his increased awareness of the landscape and nature gives him an increased feeling of calm and peace? It is impossible to say whether it is the body or the mind that causes the change. It is a total ongoing interaction. In Gibbs's example with Leder, one gets the feeling that the shift of attention is something that happens accidentally and is beyond his control. When a student is learning the Alexander technique she experiences a fine-tuning of the collaboration between mind and body, and she learns how her attention may influence the interplay. When I asked Greg to elaborate on how the Alexander Technique could help him to expand his attention, he answered:

The 'that' that I am talking about is the raising of the attention that I learned from my Alexander teacher. Looking up, thinking out and thinking of your body as big and extended, yourself as being part of a bigger whole, rather than small and focused inward on the music stand and yourself.

With his increased understanding of the Alexander Technique, Greg developed a strong awareness of his bodily sensations. He was able to analyze how the narrowing of his attention (thoughts when he got nervous) was influencing his body. Gallagher (2005) discusses to what degree our attention towards our bodies influences our body image and body schema, and he states: "Whether and to what degree body awareness is a constant feature of consciousness is not only a matter of individual differences, and differences in situation, but will also depend on precisely what one means by 'awareness' (Gallagher 2005: 28).

As addressed earlier, to play an instrument demands muscular activity at a highly coordinated level. Many musicians have been taught by several teachers during their careers, and they have tried different approaches in order to overcome technical challenges on their instruments. They may be aware of what they are doing, but to what extent are they aware of how their attention influences their actions? Claire was totally aware of her technique and especially her lip problems. Both she, and her teacher, had the opinion that it was her lips that caused her problems, and if she could solve the lip-problem everything would be fine. She was end-gaining because her attention was one-tracked, and directed towards her problem. In the interview she points out that it was when she abandoned her conviction about her troublesome lips, and started to look at her overall use, that she experienced real change:

I always thought I had problems with the lip muscles. And now, when I don't think about the lip muscles, but of my whole body, now, when it works out well, then I notice that I develop my lip muscles [...] but I couldn't develop it earlier, because the whole body, everything has to work together [....] You cannot think directly of the thing you want to change.

When Greg has the experience of being nervous and caught up in his own thoughts, his solution is to check his Alexander Technique-tools to get out of his habitual way of reacting:

To make that [the habitual thoughts] stop, do this [at this point he shows me what happens when he frees his neck and thinks of his back], then everything calms. So I find that when I get nervous on stage, I check my Alexander Technique-tools. It is especially my back.

In this situation it helps him to think about his back, and that everything is attached to his back. "If I do my Alexander, everything gets unstuck [...] and I don't pay any attention to it [he does not dwell so much on his looped thinking]". In other words, Greg solves his nervousness with a shift of attention from his thoughts in a loop to an increased awareness of what Alexander called "directions" (see page 48).

Jonna often starts from a different angle. She talks about raising or expanding her attention:

And also when I play at the podium, and we play and I have a big solo and I feel that the adrenalin is coming, I become extra aware of everything I have learned from the Alexander Technique-lessons[...] Being alert about everything that happens, far away, not only my music stand and: 'here it comes!!'

She tries to be aware of all the other “things” going on around her, what her fellow musicians are doing, the audience and the room. She tries to expand her attention so it includes “everything that happens”. She says, for example, that the AT-skills give her the ability to concentrate on musical challenges, so that she may decide to play in a more efficient way.

Greg and Jonna provide different examples of the process of the shift of attention, from inner to outer, but common to them both is that they chose a “third possibility”: conscious control. They take control over the situation when they use their Alexander Technique tools although their approaches are different. The AT- teacher helps the student to raise her attention away from the problem and closer to her overall use and it provides an indirect effect, as described by Claire:

I guess, the only thing I would say what I think is really cool about the Technique is that I started because I cared so much about playing the horn well, because that was like the center of my life, and then the more I studied the Alexander Technique, the less I cared about playing the horn well. And the better I played, the more...I feel it has made a huge difference in my life, and that’s what I’m most grateful for, but I play so much better. And I don’t feel the horn playing is the center of my life anymore, but now its like I’m getting close to what I always wanted to do. Like doing well at auditions, and having a job. I feel like I am a professional horn player, I have that level. And I always wanted that so much and when I started with this [the Alexander Technique], I wanted it less, and I had it more. And I just think that is so crazy and so cool you know [laughing].

### ***Vitalizing Proprioception***

To reveal motor habits requires a developed sense of proprioception, and during his process, Alexander’s proprioception was revitalized and developed. The way Alexander performed a text felt familiar and right if he performed it the way he always had performed it, in his familiar motor-habitual pattern. Furthermore, he came to the conclusion that his overall wish to succeed, his end-gaining, was closely connected to how he performed his actions. But is it possible to maintain a constant consciousness of how we act when we perform daily activities? A constant consciousness of how we execute our actions is impossible and is not the main purpose when learning the Alexander Technique. It would probably bring us to an impasse of self-centredness and narcissism. That would be to end-gain, and would be the opposite of the *conscious control of the individual* that Alexander spoke of. Conscious control, on the contrary, is entirely different: it is to learn to inhibit the



habitual pattern that is activated when one gets a stimulus (from oneself or the outside world), and to replace old and unconscious use with new and consciously directed use. Without this important perspective on the technique, we become nothing but “glorified body mechanisms”, a description employed by Dimon (London 2013). I have already stated that in the process of learning a new skill, the student has to “let go” of the wish to master it, and maintain a distance to her goal. Like any other skill, one learns to trust it gradually, and refining it can be a lifelong process.

A trained Alexander teacher is able to tell when her student is too concerned about being a good student or wanting to be a perfect “Alexandrian”, totally in line with the ultimate habit of end-gaining. It is often observed in the student’s whole manner of being, because her attention gets fixed or locked. To discover what is going on, the teacher combines hands-on work with a verbalisation of the process. She may ask what is on the student’s mind, and hopefully reveal the student’s end-gaining. The student gets the opportunity to discover how her attention and body are interacting when she is end-gaining.

Gallagher asks: Does intentional action, for example, involve an explicit or implicit awareness of the body? (Gallagher 2005: 2). He sees awareness of one’s body, even though it is marginal awareness, as an important component of conscious experience, claiming that it “is a part of a framework that is likely to determine or influence all other aspects of experience” (ibid.) When Gallagher writes about body image, he emphasizes this:

It is important to note that our beliefs and attitudes towards our bodies, even if non-conscious, will have an effect on how we perceive our bodies and the bodies of others. In this sense, the body image is not inert or simply an ideational product of cognitive acts; it plays an active role in shaping our perceptions (Gallagher 2005: 26).

### ***The Alexander Technique Provides a New Choice***

We are constantly receiving information from the outside world, and *how* we interpret this information is of the utmost importance when learning the AT. The Technique gave the musicians an alternative way to react to stimuli. For some of them, this was essential, for example in concert or audition situations. The fact that skills from the Technique gave them a genuine choice, is something they all emphasized, and as we have seen, it brought them further along in their careers, in one form or another. Greg interpreted his previous

manner of making choices in this way: “I think we make this choice, (or) these small choices every day, for years and years and years, and you think 'This is me, This is how I am!’”

### ***The Musicians’ Gestures***

Another finding from the interviews is that the musicians have experienced that working with the AT, and improving their proprioception, enhanced their quality of movement. I will now relate these findings to research on musical gestures. Systematic studies of musical gestures are an expanding field of research within the embodied paradigm. A number of studies have been published in recent years, among them by Godøy and Leman (2010) and Jensenius (2009). Godøy and Lemans' (2010: 1) primary focus is the relationship between sound and movement. They claim:

Music is basically a combination of sound and movement, and [...] music means something to us because of this combination [...] we believe that musical experiences are inseparable from the sensations of movement, and hence, that studying these gestures, what we call musical gestures, ought to be of high priority in music research (Godøy/Leman 2010: preface, 3).

The research of Jensenius, Godøy and Leman has contributed to a framework and distinction between what they call “body-related gestures and sound-related gestures”. The framework captures different dimensions of musical gestures, among them sound-producing gestures, communicative gestures, ancillary gestures, sound facilitating or sound accompanying gestures. Although they emphasize that the word “gestures” is used with many different connotations, they choose to employ the word instead of “movement”. This is because they claim that “the notion of gesture somehow blurs the distinction between movement and meaning”. According to Godøy and Leman, gestures are used to express meaning. They distinguish between two dimensions, the primary and secondary focus:

One could say that the primary focus is on the extension, namely the human body and its movements in space, whereas the secondary focus is on intention, namely that which is imagined and anticipated. However, it is hard to separate the primary focus from the secondary focus. The reason is that not all movements can be considered to be genuine gestures. In order to call a movement a genuine gesture, it is required that this movement is in some way a carrier of expression and meaning (ibid: 5).

My agenda was to ask the informants about their gestures in relation to the AT. Did their skills in AT influence the way they gestured while playing music? As we have seen, the answer is undoubtedly yes, but this is not unambiguous. One of them answered that her

gestures were smaller and more economical, while others replied that their gestures had become bigger and more organic. Jonna was convinced that reduced gestures gave her increased energy, and I think she is pointing at something important and highly relevant to musicians. If our motor memory is a deeply-rooted pattern that may lead us into trouble for example pain of some kind, are not our playing gestures part of that pattern? When I asked Jonna if her reduced gestures were precise enough to lead a whole group of woodwind instruments in a symphony orchestra, she replied: “Yes, I think it is more precise. The signs you have to give as a leader, if they are subtle, they are more precise”.

If we continue to study musical gestures solely as expressions of meaning, I think we omit the fact that a lot of musical gestures are simply bad habits and part of an ingrained pattern that might harm the musician in the long run. To look at the means whereby and how we execute our motor habits is to invert this focus: The motivation to act, the questions about why musicians are gesturing the way they do, has to be relevant and a source of uncovering the musicians’ gestures as a part of their total use of themselves. In this respect, the Alexander Technique can sometimes be mistaken for a technique that eliminates musicians’ gestures. When the gestures are a part of, and an expression of, a general misuse of the self, the gestures vanish naturally after working with the Technique. As an example, one of the causes of my own voice problems was that I lifted my chest too much when I was breathing in. My teachers had taught me about the importance of “support” while singing, and my understanding of the word made me work too hard when I breathed in, and when I continued to sing. One could say that this had become an ancillary gesture, in the words of Godøy and Leman, “a carrier of expression of meaning”, but it was totally useless, and had no importance of meaning; rather it most definitely got me into trouble. It is important to remember that the partial misuse (lifting my chest) was inseparable from the misuse of my primary control. I used to make this gesture because I *thought* I had to lift my chest to get enough air, an act that was closely connected to my motivation, that of expressing myself as a singer. The outcome of *my* AT-skills led to fewer gestures and a more sonorous voice. Jonna had a similar experience, describing musicians’ gestures as “a theatre”, and she was concerned how these acquired movements stole a lot of energy from the process of music-making itself.

Nevertheless, if we look at other informants, fewer and reduced gestures were not always the outcome. Several of them expressed that they felt an increased freedom of movement after employing the Technique, and that their gestures had become more organic. Greg reported that his gestures had become bigger and different. The fact that the gestures are different than earlier is interesting: When the informants were no longer trapped in their old habitual loop of thinking and moving, other gestures emerged. Greg remarked: “Sometimes I think: ‘I didn’t use to do that! It [the gesture] is an outside manifestation of what’s going on inside. And if it’s connected that way, it is good” In general, the informants’ quality of movement was enhanced through their experiences with the Alexander Technique, whether manifesting itself in terms of reduced or increased gestures.

In this respect, it is again relevant to draw upon the philosopher Mark Johnson, who addresses questions about how the quality of movement influences the way we experience the world:

Movement is [...] one of the principal ways by which we learn the meaning of things and acquire our ever-growing sense of what our world is like. There is no movement without the space we move in, the things we move, and the qualities of movement, which are at the same time both the qualities of the world we experience and the qualities of ourselves as doers and experiencers (Johnson 2007: 21).

To me, this quote from Johnson underpins my assumptions about how the AT is useful to a musician (or to anybody else): If one begins the process of educating one’s use, then the quality of movement is enhanced, one’s proprioception is awakened, and one is able to experience the “world”, be it making music, teaching, walking or speaking, in a different and more unified way. The fact that something changes without being directly focussed upon or worked with in isolation, is one of the interesting effects the Technique may have. In other words, education of the self causes indirect changes.

## **5.6 THE TRADITIONAL WAY OF TREATING PROBLEMS**

The dualistic and objective way of treating mind and body leads to many people choosing traditional solutions when it comes to treating their problems. A traditional way of solving problems of various kinds, be they more mental or physical in nature, is to treat and focus upon the symptoms directly. Surgery, conversational therapy, massage, traditional

physiotherapy, different relaxation techniques, medication and exercises are common solutions. According to Dimon (1999) it is problematic that such traditional treatment lack a deeper understanding of the underlying reasons behind the problems. In disregarding a deeper understanding of how the mind and body function, such treatment will inevitably remain superficial:

Understanding mind and body as a unified system (and how to raise the workings of this system to a conscious level) is one of the key problems in the mind/ body field, and yet it has hardly even begun to be articulated as a subject matter. Part of the reason for this omission is that the search for cures has obscured the need to understand underlying causes. When we suffer from a symptom, we are so oriented toward its removal that we hardly know how to look at the underlying functions from which it may stem (Dimon 1999: xiv).

When I suffered from vocal cord nodules during my studies at the Grieg Academy, I was recommended to abstain from singing and speech for several weeks. I also tried speech therapy and experienced a change for the better, but none of the solutions removed the underlying reasons for my problems. Some of the informants relate similar stories. Øyvind tried several treatments to sort out the problems he had with his shoulders:

No matter whom I went to, no matter what they were doing, they said that my shoulders pointed forward. I could see it myself, it was only a matter of looking in the mirror - okay, my shoulders are pointing forward, but what am I to do? One said I had to train my back muscles, and I stood and stretched using a rubber band [...] But I just grew even stiffer when I started to tighten my back as well. So actually, it did not help me.

Elise was examined by specialists, and x-rays showed that her back was crooked. After lessons in the Alexander Technique, her conclusion was that it was her habitual, sub-conscious way of using herself that contributed to her problems: "I have realized that it was me holding my back in a crooked way. There was nothing wrong with me. I have a different perspective now".

A traditional approach, when dealing with back trouble, is based on a mechanical view of the body: One has to strengthen the muscles in the abdomen and back in order to recover. It is necessary to DO something active to get out of the impasse. This mechanical and objective view of how to solve such problems is on going in our society. When Øyvind needed help to reduce the problems in his shoulders, he experienced that different therapists gave him exercises so that he could strengthen his muscles. The result of this practice was a worsening of the symptoms because he continued to use his thoughts and

body in his old habitual way while implementing his new exercises. He transferred his old use into new tasks. He compares the Alexander Technique with traditional physiotherapy:

Okay, you go and see a physiotherapist and he or she tells you to exercise three times a week for 20 minutes. Then I think; how many hours is there in one week, and how much can it really change my body if I use one hour every week to practise these exercises? There are so many more hours in a week! This technique [the Alexander Technique] in a way addresses all the hours. One can practice [on the technique] all the time. It is very effective.

Greg was placed in an MR machine, and the specialists' advise for him and his troublesome arm was surgery: "They took pictures of my shoulder and they said 'yes, you have some bone loss in you shoulder, and here is your appointment for surgery'. And I thought 'well, just wait here!" All of the informants were enabled to see their whole pattern of use during their Alexander lessons, and gradually they were able to choose another way to react to different stimuli. I will elaborate on the informants' use later in this discussion.

### ***The Alexander Technique Versus Other Mind-Body Techniques***

If one reads Dewey's introduction to Alexander's *Constructive Conscious Control of the Individual* from 1923, one may be led to assume that it is from a contemporary book:

The world is flooded at present with various systems for relieving the ills that human flesh is heir to, such as systems of exercise for rectifying posture, methods of mental, psychological and spiritual healing, so that, except when there happens to be an emotional wave sweeping the country, the very suggestion that there is fundamental truth in an unfamiliar principle is likely to call out the feeling that one more person, reasonably sensible about most things, has fallen for another one of the "cure-alls" that abound. "How", it will be asked, "can the technique of Mr. Alexander be different from these other systems?" (Dewey 1923: xxiii)

We constantly hear how we can ease our pains and increase the quality of life. This quote from Dewey tells us that this matter has occupied people for decades. In later years, there has been a growing interest in different mind-body techniques, based on the view that mind and body are connected (i.e., Yoga, Mindfulness, Pilates). An interesting question is why interest in these techniques has been growing.

I believe that the huge variety of mind-body techniques are often based on good intentions, but that several lack the ability to influence a specific situation when it is really needed, be it in a performing context or in another kind of stressful setting. Varela et al.'s area of interest was Buddhist meditative practice. They addressed the disconnection the

meditator discovers between mind and experience, and this they say, is the “padding of habits and preconceptions, the armor with which one habitually distances oneself from one’s experience” (Varela et al. 1991: 25). They pointed to Buddhist meditative practice as a tool to break habits, and that the meditator is gradually able to tame the mind’s restlessness (ibid.: 26). The use of Buddhist meditation as a tool to break habits is just one approach to how the individual may experience unity of mind and body. I want to argue that the Alexander Technique offers another approach, namely a practical method that one can use anytime and anywhere while awake, in Øyvind’s words: “You don’t need to set aside time to do it, in a way one practices all the time [...] it is very effective”.

If we continue to act in our old habitual way after a period of meditation, recovery or exercises, there is still a possibility that the symptoms will return, just as Alexander experienced while developing the technique. The Alexander Technique is, as I see it, a more tangible tool than other mind-body technique, because one can transfer the learned skills to any activity in life – including meditation!

Gibbs (2006: 25) refers to the Alexander Technique under the heading “What do we notice about our bodies?” He classifies the technique using the same label as other practices that “enhance one’s felt understanding of one’s body” (loc.cit) When the Alexander Technique is categorized as a “body-technique”, I am concerned that people will continue to associate it exclusively with body-techniques. My point is that unlike many traditional body-techniques that enhance one’s felt understanding of the body, the Alexander Technique offers both a mental and a physical approach. I maintain that the AT can help us direct our attention away from our goals and pay attention to the process, the *means whereby* we achieve the goals. And I would argue that it is an educational process because it offers an intelligent approach that can be applied to everything we do, whether it is learning to play an instrument, a new sport or simply in performing daily activities. The Technique can help us to find new pathways of communication between nerve cells because when we reveal *the motivation behind our actions* we are able to choose to inhibit those motivations, and as a consequence, it is possible to choose another and more efficient way to perform the tasks.

## 5.7 PROBLEMS RELATED TO LEARNING THE ALEXANDER TECHNIQUE

Learning the AT is to develop and acquire a new skill. This may be a confusing statement, because when learning the Technique one has to let go of ones wish to be right. I have tried to explain how end-gaining is a universal habit. One wants to be good and juggle both ones career and other tasks in life.

Varela et al. (1991: 29) address the same problem of the students desire to be a successful learner in connection with meditative practice: "If we consider meditation as 'the training of meditative virtuosity' we move towards an impasse". According to them, the process of learning to meditate is 'the letting go of habits of mindlessness, as an *unlearning* rather than a learning". Their view is transferable and relevant to the process of learning the AT. As an example, primary control is not a thing one acquires: "everybody who is born with a head, a neck, and a back already has a Primary Control. What you may acquire, develop, and refine, however, is a certain way of using your Primary Control" (Alcantara 1997: 26). This is also a view emphasized by Gelb (1994: 44). He says: "The Primary Control is a dynamic, ever-changing relationship that functions all the time, for better or worse, in every position".

Øyvind calls his wish to be a good student a "trap", and understands that this may be a reason why people resist the process of taking Alexander lessons or quit after one or two lessons. One may start out wishing to alter something, but the student may quickly realize that the changes involved may be a discipline demanding patience. He adds: "not everybody is interested in spending 500 kroner to get a feeling that you are not good". Øyvind puts his finger on a very important aspect, namely the fact that the Alexander Technique is a process of patience and persistence. It is a process of re-discovering, and in many ways is consistent with Varela et al.'s view: "This unlearning may take training and effort, but it is a different sense of effort from the acquiring of something new" (Varela et al. 1991). To uncover and discover how automatic motor actions are interlinked with motivation to act is a slow process. This is another reason why I refer to the Alexander Technique as an educational process: If one really wants to change, and to experience sustainable changes, one cannot overlook the importance of one's individual, patient



efforts in learning the Technique. Concert pianist and certified Alexander teacher, Nelly Ben-Or emphasizes that the Technique is not “a panacea”, and is concerned that the student has to understand the AT in a profound way if she wants to bring the Technique into the performance of music:

To think that the technique will take care of various challenges in playing or singing is to have an unrealistic belief that improving one’s use will make one play, without problems, extremely complex and demanding stretches of music...Real changes, real moments of freedom from habitual, and mostly unconsciously induced, difficulties in the performance of music take considerable time (Ben-Or 1998: 27).

Dualism and traditional cognitive science have permeated educational systems for years. I believe that they are still profoundly grounded in the way we think, treat human illnesses, and educate children, and this basic view is making it difficult to embrace a practical method that demands a focus on the underlying causes to human problems, namely how our use influences our functioning.

It is sometimes very difficult to let go of ones wish to be right, and to do this to contradicts what one has been told since childhood. This is a dilemma that novices and forthcoming students may find difficult to accept. Re-mapping is a test of patience. Elise emphasised that her process of change was difficult and demanding because she tried to change her usual and habitual respond to a stimulus, a way of reacting that had grown stronger over 25 years. She pertinently reflected that this was a process of “fighting against myself”. Jonna said she wanted to reach the point when she was finished, the point where she *mastered* her Alexander Technique skills and was able to apply the knowledge to her career and to her everyday life. Later she realised that changing automatic and habitual ways of reacting was a never-ending process. To learn the AT may be a lifelong process, if one allows it to be.

### ***How the Alexander Technique is Often Misunderstood***

One of the greatest challenges when communicating the Alexander Technique, and a major task for every Alexander teacher today, is confronting many common misunderstandings of the Technique. I have already mentioned Gibbs’s categorization of the Technique, and how

he refers to it as a body-technique. Another common misunderstanding related to Gibbs's view is that the AT is all about posture. Gelb (1994: 44) tries to address this common misunderstanding. He says: "The main concern of the Alexander technique, however, is not to teach better positions but to teach the better Use of ourselves that results in better positions". People associate the Technique with posture because one indirect effect when learning the technique is more often than not an upright and balanced posture. According to certified Alexander teacher Eleanor Rosenthal, "the most visible results of work in the Alexander Technique are improvements in posture and body mechanics. Learning the technique is a way of achieving good posture without strain" (Rosenthal 1987: 1). These changes are visible, and often referred to as "physical", but it is important to emphasize that this is a side-effect, an indirect outcome, not a goal in itself. "There is no such thing as a 'right position, but there is such a thing as a right direction", (F. M. Alexander 2000).

Jonna related another example of a typical misunderstanding of the Technique. She spoke of her former teacher in Finland, who was influenced by the Alexander Technique, and he communicated some of the principles to her. Unfortunately, he gave her only parts of the picture, and this led to her misunderstanding the technique in a way which I think is quite common: "To me he only communicated 'inhibition'. I became afraid of doing things properly. Afraid of doing what I had to do". The idea of inhibition, communicated by her teacher, resulted in a passiveness. This is the total opposite of what the Alexander Technique encourages when it is well communicated.

I have also mentioned that an Alexander teacher typically works with her hands on the student, with the intention of giving the student a new sensory experience. The physical body is, in a sense, a way in. The physical body provides access to the process of learning the Technique, but, as I have attempted to point out in this thesis, the Technique cannot be reduced to concerns about the student's physical body alone. Sometimes it may seem impossible to avoid such misunderstandings because peoples' pre-knowledge and prejudices are generally based on a dualistic philosophy. Misinterpretations concerning positions and the positioning of the head are natural because we are brought up to think about ourselves as "objects", and that one position is correct, another is wrong. Other reasons for such misinterpretations are the many superficial presentations of the

Technique on various web sites and in books, unable to avoid the dualistic “trap”.

### ***Different Ways of Teaching the Alexander Technique***

An important aspect, and surely the source of many misunderstandings, is how different teachers communicate the principles of the Alexander Technique in different ways. Some teachers use many words when they teach, and endeavour to make the student conscious about the process of re-discovering their primary control. The teacher can also help the student to identify her motivations behind her actions. By doing this, the student is able to reflect on her own process, and in my understanding, this makes it easier to discover similar processes when alone. Greg reported that he stopped going to his original Alexander lessons because the teacher did not explain the principles to him. He did not feel he could use the Technique in his daily life: “It didn’t really speak to me and it didn’t really move me, and eventually I stopped going [...] The thing I liked about my teacher is that he really teaches you how to practice the Alexander Technique”. In my opinion, a teacher conversing about the process and explaining it can augment ones understanding of the Alexander Technique. A teacher might expect that the process of re-discovering the primary control will “sort itself out” at a subconscious level, because the working of the primary control is something innate. The outcome of this might then be that the student will experience the technique as something mysterious and unclear, leading to all kind of misunderstandings.

What characterizes a good teacher? In my opinion, a teacher (of the AT or in any other field) must be able to communicate her message in a clear and convincing way. And most important of all, the student has to understand how to apply the acquired knowledge and relate it to her own life, whether that is in a professional musical career, or in performing daily activities like cutting bread, emptying the dishwasher, or being together with other family members. One has to benefit from the new skills in everyday life. Otherwise, the Alexander Technique will fall into line with other “training” or “treatment” programs that we do separately from other things in life. According to Rosenthal, this was one of F.M. Alexander’s intentions. She claims:

Alexander's objective was to teach people a skill that would help them improve the way they executed *all* of the activities of their daily lives. Sitting in a chair, playing a viola, doing an arabesque, solving a mathematical problem - one 'uses oneself' in everything one does, and the Technique is about learning to use oneself better [...] the Alexander teacher is not expected to be an expert in his students' fields. Instead, he has a different expertise. He knows how people's habits interfere with their functioning, and he knows how to help them overcome those habits (Rosenthal 1987: 1).

### ***Is the Word "Technique" Problematic?***

In the following I want to reflect on whether the word "technique" might be problematic or not. As we have seen, to understand the world, our mind makes maps, and we conceptualize. For a musician the word "technique" may give associations to something rigid, inflexible and strict. This is because the word is often separated from music-making. Simply stated, a common view among musicians is that one practices "technique", which doesn't include one's emotions, for example, or one practices the interpretation of music, an activity that in fact includes emotions. This is one of the reasons why I find it difficult to explain the Alexander Technique to people who have never tried it; the word "technique" can simply give them the wrong associations. "Technique" is a skill you master or not; a common feature when learning new skills – linked to our whole conception of learning something new – succinctly described by Dimon (2003), is by trying hard, the opposite of the technique an Alexander student is learning. Nevertheless, to learn the Technique *is* to acquire a new skill, and as the informants have reported, to learn the Technique has given them a tool that is far-reaching both in the context of performing music and in their lives as human beings.

### **5.8 BRIDGING THE GAP BETWEEN THEORY AND PRACTICE**

In 1991, Varela et al. suggested a more pragmatic approach within the field of embodiment. They were concerned about the fact that "the status of the self or cognizing subject" should not be relegated to a "purely theoretical pursuit". They also emphasised that embodiment has a double sense in that it covers both the lived, experiencing body and at the same time the multiple cognitive processes in a living body. (Varela et al. 1991: xvii). Varela (1996) proposes a *research direction*, a new approach to cognitive science, namely neurophenomenology. He was concerned about 1<sup>st</sup> person methodologies, and he addressed "the missing experiential data in current research on human consciousness. It

contributed directly to the development of the new academic field of ‘subjectivity research’” (*Paris 2012-film*).

The current research in the tradition from Varela, together with the pragmatist view of Dewey, and several of the theorists presented in this thesis, has underpinned my assumptions that that the Alexander Technique is a practical method incorporating valuable insights, that make a significant contribution to the science of the embodied mind.

## **CHAPTER 6 – FINAL REFLECTIONS**

I will now return to the frightening experience I had while on stage performing “My Fair Lady”. When my body was reacting as if I was being exposed to a great danger, signals from my body were going to my brain and back again, telling me “This is not normal, I am seriously ill, I have to get away, I am going to die!” Unfortunately, this pattern accompanied me into my daily activities as well, for example when walking over wide, open squares and market-places, as if I believed that I was still on stage. As I see it, *if* I had been able to see how my body and thoughts were interlinked, and been able to apply a more conscious use at that time, I would most likely not have become trapped in a maze of anxiety.

The Alexander Technique is a tool that has given the informants the possibility of using themselves in a more natural way by applying conscious thinking. Their potential was utilized more fully. Damasio states that any theory of consciousness that does not take into account body to brain mapping is doomed to fail. This is because “the mapped images of the body have a way of permanently influencing the very body they originate in”(Damasio 2010: 90). Based on the results of this thesis, and with my increased knowledge about the embodied cognition approach in relation to the Alexander Technique, I couldn’t agree more. I think it is essential to apply Damasio’s statements to educational processes as well, and as I see it, the Alexander Technique is a practical manifestation of how it is possible to approach this challenge. Dewey stated that it is *how* we experience that is interesting when it comes to education (Dewey 1938). The Alexander Technique shows the student the profound connection and fundamental intertwining of thinking and acting, and this valuable insight is relevant to any activity or facet of an individual’s life.

In “Brain Science Podcast” (2011) Shapiro states that “I think embodied cognition, if it continues to make progress and move along, will shape how the ordinary person thinks about minds, just as cognitive science has shaped how the ordinary person thinks about minds whether they realise that they are indebted to this movement or not”. This statement has encouraged my work on this thesis, and it is my hope that increased attention towards the practical method of F.M. Alexander may contribute to the development of “how the ordinary person thinks about minds”, and to the understanding

of how the body and mind are inseparably woven together. If we neglect this fact, there is a risk that we will continue to search, to put it in Alexander's appropriate words, for: "truth amidst the mass of methods, systems, 'cures' and treatments in what are called 'physical', 'mental' and 'spiritual' spheres" (Alexander 1924: preface). Alexander argued that human development and growth is never-ending (Alcantara 1997). In this thesis I have attempted to elucidate the Technique as a process of self-discovery which may have far-reaching potential if one initiates the process of investigating it. In so doing, the Technique becomes "A Skill for Life"; a term coined by Dewey, which in my view is a term that embodies the very essence of the Alexander Technique.

## BIBLIOGRAPHY:

Aksnes, Hallgjerd 2002. *Perspectives of Musical Meaning. A Study Based on Selected Works by Geirr Tveitt*, Oslo: Unipub AS.

Alcantara, Pedro de 1997. *Indirect Procedures- A Musician's Guide to the Alexander technique*, New York: Oxford University Press.

Alcantara, Pedro de 1999. *The Alexander Technique, A skill for life*, Spain: The Crowood press Ltd.

Alerby/Ferm 2005. "Learning Music: Embodied Experience in the Life-World" in *Philosophy of Music Education Review*, Vol.13, No.2, pp. 177-185

Alexander, F.M. 1924. *Conscious Control of the individual*, United States: E.P. Dutton &Company

Alexander, F. M. 1932: *The Use of the Self*, Great Britain: Methuen og Co.Ltd. (reissued 2001 by Orion books Ltd.)

Alexander, F. M. 2000: *Aphorisms*, Great Britain: Mouritz.

Alvesson, Mats and Sköldbberg, Kaj 2008. *Tolkning och refleksjon. Vetenskaps filosofi och kvalitativ metod*, Lund: Studentlitteratur AB.

Ben- Or, Nelly 2000. "Conceptions and misconceptions" in *Direction Journal*, Vol. 1, nr. 8, Australia: Fyncot Pty Ltd.

Chaffin et al. 2009. "Performing from memory", in Hallam et al. (red), *The Oxford Handbook of Music Psychology*, Oxford: Oxford University Press.

Damasio, Antonio 1994. *Descartes' Error. Emotion, Reason, and the Human Brain*, New York: Penguin Books.

Damasio, Antonio 2010. *Self comes to mind*. New York: Pantheon Books, a division of Random House, Inc.

Dewey, John 1923. "Introduction" in F.M. Alexander *The Conscious Control of the Individual*, New York: E.P. Dutton &co., inc.



- Dewey, John 1938. *Experience and Education*. Indiana: Kappa Delta Pi.
- Dimon, Theodore 1999. *The Undivided Self*. California: North Atlantic Books.
- Dimon, Theodore 2003. *The Elements of Skills, a conscious approach to learning*. California: North Atlantic Books.
- Dimon, Theodore 2012. "The Organization of Movement. Four talks on the Primary Control" [Received copy at the seminar "Understanding the Technique" with Dr. Theodore Dimon in London, September 2013].
- Dimon, Theodore 2013. "Understanding the Technique" [lecture], University of London, 29.09.13.
- Embodied Cognition with Lawrence Shapiro*, Brain science podcast, host Ginger Campell, 25.03.11. [15.07.13].
- Gelb, Michael 1988. *Body learning, an introduction to the Alexander Technique*, Great Britain: MPG Books Ltd.
- Dreyfus 1999. *Perspectives on Embodiment. The Intersections of Nature and Culture*, New York and London: Routledge
- Duesund, Liv 1999. *Kropp, kunnskap og selvoppfatning*, Oslo: Universitetsforlaget.
- Gallagher, Shaun 2005. *How the body shapes the mind*. Oxford: Oxford University Press.
- Garlick, David. *The lost Sixth Sense, A medical scientist looks at the Alexander Technique*. New South Wales: Centatime NSW Pty Ltd.
- Gibbs, Raymond W. 2006. *Embodiment and Cognitive Science*, New York: Cambridge University Press.
- Godøy, Rolf Inge 2012. "Musikk og bevegelse", lecture at Department of Musicology, University of Oslo [07.03.2012].
- Godøy, Rolf Inge / Marc Leman et al. 2010. *Musical gestures. Sound, movement and meaning*, New York and London: Routledge.
- Hallam/Cross/Thaut 2009. *The Oxford Handbook of Music Psychology* Oxford: Oxford University Press.

- Heirich, Jane Ruby 2005. *Voice and the Alexander Technique. Active Explorations for speaking and singing*, California: Autumn Press.
- Hooper, Kay S. "Ambient Awareness: Training Attention in an ADD World", in *Direction Journal*, number 8, 2010, vol.3 p.9-13.
- Jahren, Hege 2004: *Musikk til begjær, kropp til besvær*, Oslo: Gyldendal Norsk Forlag AS.
- James, William 1950: *Principles of Psychology*, New York. Dover Publications, Inc.
- Jensenius, Alexander Refsum 2009: *Musikk og Bevegelse*, Oslo: Unipub.
- "John Dewey's Philosophy of Experience and Education", [http://www.icels-educatorsfor-learning.ca/index.php?option=com\\_content&view=article&id=53&Itemid=68](http://www.icels-educatorsfor-learning.ca/index.php?option=com_content&view=article&id=53&Itemid=68)<http://> [27.08.13]
- Johnson, Mark 2007. *The Meaning of the Body*, Chicago: The University of Chicago Press.
- Jørgensen, Harald 1982: *Fire musikalitetsteorier*, Oslo: Aschehoug & co.
- Kvale/ Brinkmann 2009: *Interviews. Learning the Craft of Qualitative Research Interviewing*. US: Sage Publications, Inc.
- Lakoff/ Johnson 1999: *Philosophy in the Flesh, The embodied mind and its challenge to Western thought*, New York: Basic Books.
- Lakoff /Johnson 2003: *Metaphors we live by* The University of Chicago Press, Chicago and London.
- Larson, Steve 2012: *Musical Forces: Motion, metaphor, and meaning in music*. Bloomington: Indiana University Press.
- "Mind/body Unity Course", <http://www.dimoninstitute.org> [02.04.13]
- Manen, Max van 1990: *Researching Lived Experience. Human science for an Action Sensitive Pedagogy*, Canada: The University of Western Ontario.
- Parncutt, Richard 2009. "Prenatal development and the phylogeny and ontogeny of music", in Hallam et al. (red), *The Oxford Handbook of Music Psychology*, Oxford: Oxford University Press.
- Paris 2012 Film: "The Embodied Mind. A domain of second-person psychophysical experts"*  
 Edited by Christophe Farion. <http://www.alexanderscience.org/embodied-mind-project/paris-2012-film.html> [seen 04.09.2013]

- “Randomised controlled trial of Alexander technique lessons, exercise, and massage (ATEAM) for chronic and recurrent back pain” in *British Medical Journal*, 2008; 337: a884. Published: 19.08.2008.
- Rosenthal, Eleanor: “The Alexander Technique: What it is and how it works, Work with three musicians” in *Medical Problems of Performing Artists*, 1987, Hanley and Belfus inc.
- Ruud, Even 1995: “Kvalitativ metode I musikkpedagogisk forskning” i (red.) Jørgensen, H. og Hanken, I.M *Norsk Musikkpedagogisk forskning. NMH-publikasjoner (2)*, ss. 139-152.
- Ruud, Even 2012: *Kvalitativ metode, det kvalitative forskningsintervjuet, musikkpsykologi og musikkterapiden*, [lecture], University of Oslo, Department of Musicology. 17.01 2012.
- Shapiro, Laurence 2011: *Embodied Cognition*, USA and Canada: Routledge.
- Tinbergen, Nikolaas 1974: “Ethology and Stress Diseases”, Nobel Lecture after received Nobel Prize for Physiology and Medicine.
- Thagaard, Tove 2003. *Systematikk og innlevelse*, Bergen: Fagbokforlaget.
- Varela, F.J., Thompson, E. and Rosch, E. 1991. *The Embodied Mind. Cognitive Science and Human Experience*, Cambridge, MA: The MIT Press.
- Varela, F.J. 1996. “Neurophenomenology A Methodological Remedy for the Hard Problem”, in *Journal of Consciousness Studies*, 3, no. 4, pp.330-49.
- Vineyard, Missy 2007. *How you stand, How you move, How you live*, Camebridge, Da Capo Press.
- Weiss/ Harber 1999. *Perspectives on Embodiment. The Intersections of Nature and Culture*, New York and London: Routledge.
- Zbikowski, Lawrence Michael 2002. *Conceptualizing Music: Cognitive, structure theory, and analysis*, Oxford: Oxford University Press.

## Attachment 1

### **Interview Guide**

Explain the purpose of the study, the scale, and the method to the participant.

1. Age, instrument, education
2. How did you get to know the AT?
3. Why did you start to take lessons, and for how long have you been taking AT lessons?
4. If it was problems of any kind that made you start, can you say something about the extension of the problems?
5. Have you tried any treatment to cure the problems?
6. If you have the opinion that the lessons have changed something, in what way is things changed? (sonority, breathing, technical challenges, performance anxiety, motivation, experience of joy/ fear)
7. Practicing (is your practicing changed? In what way?)
8. Have you noticed any other changes in your life after starting to take lessons?
9. Give a description of your playing after an AT-lesson.
10. How would you describe the Technique to somebody never tried it?
11. Has there been something problematic in learning the Technique?
12. Do you want to add something?

Request for participation in an interview providing research material for a Master Thesis

I am a master student at the Department of Musicology, University of Oslo. I am conducting a research project for my Master Thesis, and the subject is the Alexander Technique and the performing musician. I am going to study how musicians draw upon the Alexander Technique in their careers. To investigate this, I wish to interview six musicians playing different instruments, from different orchestras in Norway.

The questions will concern how the Alexander Technique has been useful to you as a musician, and how you use the Technique in your every day work as a musician. I also wish to ask questions about strain injuries, and about the effects of the Technique.

I am going to use a recording device and take notes while we talk. The interview will take approximately one hour, and we will find an appropriate time and place together.

It is voluntary to participate in the study, and you may resign from the project at any time, without giving any reason for this. If you resign, all collected data will be depersonalized. You are free to choose whether you want to be anonymous or not in this study. The recordings and the collected data will be deleted when the thesis is finished, at the end of 2013. Please sign and return the attached Declaration of Informed Consent if you would like to participate in this study.

If you have questions, please call 917 63317, or email me at [annececilie@tele2.no](mailto:annececilie@tele2.no). You may also contact my supervisor, Hallgjerd Aksnes at the Department of Musicology. Her email address is [hallgjerd.aksnes@imv.uio.no](mailto:hallgjerd.aksnes@imv.uio.no).

This study is reported to the Data Protection Official for Research, NSD.

Kind regards,

Anne Cecilie Røsjø Kvammen

Selvbyggerveien 93

0591 Oslo

#### Declaration of Informed Consent

I have received information about the study on the Alexander Technique and the performing musician, and I agree to participate in the study.

I wish/ do not wish to be anonymous (delete what's inappropriate).

Signature \_\_\_\_\_

TL.ph number \_\_\_\_\_

