# EMBODIMENT IN DALCROZE EURHYTHMICS

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**OULU 2004** 

Abstract in Finnish



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Academic Dissertation to be presented with the assent of the Faculty of Education, University of Oulu, for public discussion in Kuusamonsali (Auditorium YB210), Linnanmaa, on October 22nd, 2004, at 12 noon.

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ISBN 951-42-7401-6 (nid.)
ISBN 951-42-7402-4 (PDF) http://herkules.oulu.fi/isbn9514274024/
ISSN 0355-323X http://herkules.oulu.fi/issn0355323X/

OULU UNIVERSITY PRESS OULU 2004

#### Juntunen, Marja-Leena, Embodiment in Dalcroze Eurhythmics

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#### Abstract

The purpose of the present study was to interpret and understand the manifestation and meaning of embodiment in Dalcroze Eurhythmics. Dalcroze Eurhythmics is an approach to music education that builds on the ideas of Émile Jaques-Dalcroze and aims at developing musicianship in a broad sense. Following Maurice Merleau-Ponty's philosophy, in this study embodiment refers to experiencing and knowing the world subjectively through the living body-subject. The perspective of embodiment accounts for how human beings think and act holistically and how the body can be considered a constitutive element of cognition and creativity. The research questions were formulated as follows:

1. What aspects of embodiment can be found in Dalcroze Eurhythmics? 2. What are the theoretical accounts in support of the practice of applying body movement in music education from the perspective of embodiment?

These questions have been approached through research material drawn from the essential writings of Jaques-Dalcroze, commentary books, articles and studies about Dalcroze Eurhythmics, and the talk of some selected Dalcroze master teachers. The dissertation is an overview of four substudies. In the theoretical substudies, the research questions have been examined in relation to the philosophical question of the body-mind in practical music education, and in dialogue with Merleau-Ponty's notions and recent literature on embodiment.

From the perspective of embodiment, Dalcroze Eurhythmics primarily teaches habits of musical action or, more generally, 'a bodily way of being in sound', rather than a conceptual, or abstract knowledge of music. Equally, the study sheds light on the meaning and importance of consciously reflecting on 'lived experience'. It illuminates how Dalcroze teaching engages embodiment in ways that aim to reinforce the mind-body connection and facilitate personified, holistic involvement and, thus, embodied learning. The study discusses how Dalcroze Eurhythmics offers a ground for examining music's felt qualities and their relation to musical knowledge and how it turns our attention and interest towards students' lived experiences in relation to musical practices. It challenges music educators to consider that musical learning can profitably make use of holistic bodily experiences and that bodily involvement can facilitate developing a wide range of kinds of musical knowing. Furthermore, the study offers a critical viewpoint and new vocabulary in music education for explaining the practice of Dalcroze teaching.

*Keywords:* body-mind, Dalcroze Eurhythmics, embodiment, experience, knowing, Maurice Merleau-Ponty, music, music education, phenomenology, Émile Jacques-Dalcroze

#### Juntunen, Marja-Leena, Kehollisuus Dalcroze-rytmiikassa

Kasvatustieteiden tiedekunta, Kasvatustieteiden ja opettajankoulutuksen yksikkö, Oulun yliopisto, PL 2000, 90014 Oulun yliopisto 2004
Oulu, Finland

#### Tiivistelmä

Tämän tutkimuksen tarkoituksena oli ymmärtää ja tulkita kehollisuuden ilmenemistä ja merkitystä Dalcroze-rytmiikassa. Dalcroze-rytmiikka on musiikkikasvatuksen lähestymistapa, joka perustuu Émile Jaques-Dalcrozen ideoille ja joka pyrkii kehittämään muusikkoutta laajassa merkityksessä. Merleau-Pontyn filosofiaa myötäillen, tässä tutkimuksessa kehollisuus viittaa maailman subjektiiviseen kokemiseen ja tuntemiseen elävän keho-subjektin kautta. Kehollisuuden näkökulma selittää sen, kuinka ihminen ajattelee ja toimii kokonaisvaltaisesti ja kuinka kehoa voidaan pitää kognition ja luovuuden keskeisenä tekijänä. Tutkimuskysymykset muotoiltiin seuraavasti: 1. Mitä kehollisuuden näkökulmia voidaaan löytää Dalcroze-rytmiikasta? 2. Mitkä ovat kehollisuuden näkökulmasta teoreettiset argumentit liikkeen käyttämiseksi musiikkikasvatuksessa?

Näitä tutkimuskysymyksiä lähestyttiin tutkimusaineiston kautta, joka sisälsi Jaques-Dalcrozen keskeisiä kirjoituksia, Dalcroze-rytmiikkaa käsitteleviä kommentaareja, artikkeleita ja tutkimuksia sekä muutamien valittujen Dalcroze-mestariopettajien puhetta. Väitöskirja pohjautuu neljään osatutkimukseen. Teoreeettisissa osatutkimuksissa kysymyksiä tarkasteltiin suhteessa mielen ja kehon suhdetta koskevaan filosofiseen kysymykseen käytännön musiikkikasvatuksessa sekä dialogissa Merleau-Pontyn käsitteiden ja viimeaikaisen kehollisuutta käsittelevän kirjallisuuden kanssa.

Kehollisuuden näkökulmasta Dalcroze-rytmiikka opettaa ensisijaisesti musiikillisia toimintatapoja, tai yleisemmin, 'kehollista tapaa olla musiikissa', eikä niinkään käsitteellistä tai abstraktia musiikista tietämistä. Toisaalta tutkimus valottaa 'eletyn kokemuksen' jatkuvan reflektoinnin merkitystä ja tärkeyttä. Se tuo esille, miten Dalcroze-opetus oppilaiden kokonaisvaltaisen ja omakohtaisen kehollisen aktivoimisen kautta pyrkii vahvistamaan mielen ja kehon yhteyttä ja siten edistämään kokonaisvaltaista oppimista. Tutkimuksessa tarkastellaan miten Dalcroze-rytmiikka tarjoaa pohjan musiikin laadulliselle kokemiselle ja sen yhdistämiselle musiikilliseen tietämiseen ja miten se suuntaa huomiomme ja kiinnostuksemme oppilaan elettyyn kokemukseen musiikin käytännöissä. Tutkimus haastaa musiikkikasvattajat ottamaan huomioon, että musiikillisessa oppimisessa voidaan hyödyntää konaisvaltaisia kehollisia kokemuksia ja että kehollinen osallistuminen voi edistää musiikillisen tietämisen useiden eri osa-alueiden kehittymistä. Lisäksi tutkimus tarjoaa kriittisen näkökulman ja uutta sanastoa Dalcroze-opetuksen käytännön selittämiselle.

*Asiasanat:* Dalcroze-rytmiikka, fenomenologia, keho, kehollisuus, kokemus, Maurice Merleau-Ponty, musiikki, musiikkikasvatus, tieto, Émile Jacques-Dalcroze



Photo: M-L Juntunen

Movements and gestures

— understanding shaped by the listening body as a whole

## Acknowledgements

For years this study has taken over my time in ways that have not left much for other interests. Writing this thesis has been a long and demanding journey that would not have been completed without the help of numerous people. Those people have not only guided my understanding and writing but have also supported and encouraged me in many ways and, most importantly, have become an important part of my life experiences. Including those experiences, I consider this study as one significant step in my personal and professional development.

This study was carried out at the Department of Music Education, University of Oulu during the years 1999-2004. I express my deepest gratitude to my supervisors Professor Leena Hyvönen and Professor Leena Syrjälä for their guidance. Leena Hyvönen has been my supervisor since my licentiate thesis. She has inspired and supported me in many ways and has also been a caring friend. I also want to thank her for her collaboration and for sharing her experiences when we wrote together. Leena Syrjälä has particularly helped me in terms of scientific thinking and methodology.

The official referees were Docent Jaana Parvianen from the University of Tampere, Finland, and Professor Eleanor Stubley from McGill University, Montreal, Canada. I express my deepest appreciation and thanks for their critical yet constructive suggestions and encouraging comments.

I am deeply grateful to all the Dalcroze teachers in Finland, Sweden, Switzerland, and the U.S. with whom I have had a pleasure to study or work. Their expertise in teaching Dalcroze has influenced my choice to continue studying Dalcroze Eurhythmics in practice as well as scientifically. I especially thank those Dalcroze teachers in the U.S. who agreed to be interviewed and who shared their experiences with me. I hope to be able to follow their footprints in guiding students to discover the musical world and themselves through this approach. Thanks to Reinhard Ring for assistance and interesting conversations as well as for publishing my papers at the website of FIER.

Angie Hämäläinen is acknowledged for revision of English language of one of the original publications. Warmest thanks to Professor Thomas A. Regelski for improving the language of two of the original publications and the thesis, as well as for guiding comments over the years.

I want to thank all my dear colleagues and friends, in Finland and abroad, for their support and encouragement, concern and care. My closest colleagues in Oulu have helped me greatly with their supportive attitude and flexibility. My cordial thanks for invaluable comments and guiding help are due to my friend, classmate, and co-author of one substudy Heidi Westerlund and my colleague Lauri Väkevä. I thank warmly my long-standing friends Tuula, Päivi, Kristiina, Hilkka, Sanna, Anne-Maria, Minna, Tatu, and Evelio for sharing my ups and downs, joys and sorrows during this process. Thanks to Judy, Susan, Rose, and Douglas for helping me in many ways during my stay in the U.S.

Finally, I wish to owe my deepest gratitude to my parents, Terttu and Heimo Juntunen, and to my sister Riitta and her family for their loving support. Family members were important because they offered pleasant and needed breaks from my work and helped me stay in touch with the essence of life.

Finnish Cultural Foundation, the University Pharmacy Foundation of Oulu, the Foundation of Alfred Kordelin, the Finnish Konkordia Fund, and the Research Funds of the University of Oulu supported this work financially, all of which are kindly appreciated.

Helsinki, June 2004

Marja-Leena Juntunen

# List of original papers

This thesis is based on the following articles, which are referred to in the text by their Roman numerals:

- I Juntunen Marja-Leena (2002a) From the bodily experience towards internalized musical understanding: how the Dalcroze master teachers articulate their pedagogical content knowledge of the approach. 25<sup>th</sup> Biennial World Conference and Music Festival. ISME 2002. Proceedings.
- II Juntunen Marja-Leena (2002b) The practical applications of Dalcroze Eurhythmics. Nordic Research in Music Education Yearbook 6: 75–92.
- III Juntunen Marja-Leena & Westerlund Heidi (2001) Digging Dalcroze, or, dissolving the mind-body dualism: philosophical and practical remarks on the musical body in action. Music Education Research 3(2): 203–214.
- IV Juntunen Marja-Leena & Hyvönen Leena (2004) Embodiment in musical knowing: how body movement facilitates learning within Dalcroze Eurhythmics. British Journal of Music Education 21(2): 199–214.

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#### 1 Introduction

This overview is about different aspects of embodiment in Dalcroze Eurhythmics. Dalcroze Eurhythmics is an approach to music education that builds on the ideas of Émile Jaques-Dalcroze (1865–1950). Jaques-Dalcroze defines eurhythmics as education through and for music (*par* la musique et *pour* la musique), (J-D1926a). Dalcroze Eurhythmics can be seen as a process for awakening musicality and developing musicianship in a broad sense.

The roots of this study go back to my first experiences of Dalcroze Eurhythmics, which positively influenced the way I feel about myself. I had a subject called 'music and movement' as a part of my studies of music education in Sibelius Academy (1982–1988). In the beginning of these studies, I was fairly insecure, particularly with improvising at the piano. However, I felt comfortable improvising in movement with music; and that helped me open up. These studies of music and movement made me feel more confident in other situations, as well. The transformation in experience was not only due to the exercises; the teacher, the interaction with other students, and the overall positive and encouraging atmosphere in the lessons also had a significant impact. Hence, the studies of eurhythmics made experiential sense to me from the very beginning of my studies.

After my graduation, I continued to study Dalcroze Eurhythmics first, at the Institute Jaques-Dalcroze in Geneva (1988–89) and, later, at Carnegie Mellon University in Pittsburgh (1992–93) and the Longy School of Music in Boston (1999). All my studies of the approach concentrated on developing my skills as a musician and as a Dalcroze teacher. Through the study of its pedagogy, I became familiar with the principles of the approach. Most studies took place through practice and through reflection on the practice. However, they paid very little attention to the theoretical premises of the practice and hardly included Jaques-Dalcroze's writings as study materials.

When writing my licentiate thesis, I studied Jaques-Dalcroze's books and articles. It was very profitable for me to familiarize myself with his thinking and with the history of the approach. Although many Dalcroze teachers do not seem to consider Jaques-Dalcroze's texts important for Dalcroze teaching of today, reading them advanced and provided depth to my understanding concerning the practice of the approach. My licentiate thesis (Juntunen 1999) provides the background for this study.

In my licentiate thesis, I already found that Maurice Merleau-Ponty's philosophy appeared to connect positively with the ideas and empirical findings of Jaques-Dalcroze. Through my study of Merleau-Ponty's philosophy, I became acquainted with the idea of embodiment that he argued in defending the bodily basis of human experience, learning, and thinking against Cartesian mind-body separation and the general disembodiment of experience in relation to knowledge in Western culture. The idea that intellectual processes exist somehow apart from our bodies is deeply rooted in our culture. According to Lakoff & Johnson (1999), dualism has affected not only the field of philosophy and other academic disciplines but education and popular culture as well. It has also initiated setting the emotional and aesthetic regions in our culture apart from intellectual endeavors. (Ibid, 400–401.) As Hannaford (1995, 11) states, such dualism "is related to the attitude that the things we do with our bodies, and the bodily functions, sensations, and emotions that sustain life, are lower, less distinctly human. This idea is also the basis of a lot of educational theory and practice that make learning harder and less successful than it could be."

Merleau-Ponty's (e.g. 1962, 1968) writings are one outcome of the phenomenology's criticism of the mind-body dualism. During the last decades Merleau-Ponty's philosophy has motivated a growing amount of commentary (e.g. Dillon 1997, Heinämaa 1999, Langer 1989, Leder 1990, Priest 1998), as well as applications in numerous scientific areas involving innovative ideas; for instance, research in the arts and arts education (e.g. Anttila 2003a, Bowman 1998, Parviainen 1998, Rouhiainen 2003, Sheets-Johnstone 1981, 1999, Stubley 1998, 1999) and in cognitive science (e.g. Johnson 1987, Lakoff & Johnson 1980, 1999, Varela, Thompson & Rosch 1993) <sup>2</sup>.

However, the discussion in music education on embodiment and on the bodily roots of musical knowing has been relatively limited. Instead, it has been researchers in other disciplines (many of them phenomenologists) who have pointed out the embodiment of music—how music and the human body (movement) are closely related (e.g. Blacking 1977ab, Storr 1992, Clifton 1983). Music and dance were once inseparable, and still are,

<sup>&</sup>lt;sup>1</sup> The disembodied human being can be traced back to Plato who created dichotomies such as the soul versus the body (Taylor 1989, 116). In the present literature on embodiment Descartes is cited as the philosopher who, for 'modern' philosophy, separated mind and body and thus the material and spiritual from each other. According to the so-called Cartesian position, above all the capacity of mind for rational thinking makes us human beings. In this view, the individual exists only by thinking and the body can only be the object of this thinking. His famous statement, *Cogito ergo sum*, 'I think, therefore I am', implies that general knowledge can be gained only through an analytical process of itemization and abstraction. (Brooks 1993, 5, 20, Sawday 1995, 145, Stafford 1991, 35, see III & IV.) Although the strict dualistic way of thinking was not totally agreed to by any of the successors of Descartes (Alanen 2002, 15), until now, this notion has nonetheless strongly influenced the Western scientific contemplation that detaches the body completely from the processes of mind.

<sup>&</sup>lt;sup>2</sup> Nevertheless, researchers of cognitive science have been criticized for substituting the first-person perspective for the third-person perceptive, i.e., of reducing the phenomenal body-subject to an observable physical body-object in their research of the body. They have been blamed for not wanting to stay with the *experiencing* body, but rather, of attempting to find, by examining the *organic* body, the physical bases of the psychological and the cognitive functions of human beings. Consequently, the knowledge of cognitive science is claimed to be knowledge *about* the body, rather than knowledge *of* the body. (Parviainen 2000, Reuter 1999, 83.)

<sup>&</sup>lt;sup>3</sup> Ethnomusicologist, John Blacking (1977a), for example, argues that many, if not all, of music's essential processes can be found in the human body and in patterns of interaction of bodies in society (ibid., x-xi). Accordingly, Roger Sessions (1962, 22) writes, "music not only 'expresses' movement, but embodies, defines, and qualifies it". Anthony Storr (1992, 24, 78) notes that music is an activity that is rooted in bodily rhythms

for instance, in some African cultures where music and dance merge into one event in performance (see Southern 1971, Southern & Wright 2000). Gesture is a natural and much more effective way of expressing how we think about musical expression than using words. According to Bowman (1998, 291), gesture comes the closest of any non-auditory modality for representing music. In her study Vuori (2002, 162) states that when she asked young piano players to tell how they thought about music, they preferred to use gestures instead of words.

Within music education, so-called praxial philosophy, starting at the end of twentieth century, has emphasized the importance of bodily action and knowing-through-action in musical learning and knowing (Bowman 1998, 2000, Elliott 1995, Regelski 1992, 1996, 1998bc). It encourages people to make music and turns our education focus from musical appreciation of a supposedly aesthetic or otherwise intellectual kind to a processual appreciation Elliott (1995) calls 'musicing'. According to Regelski (2004), praxial theory is central to any argument for the bodily bases of musicing and of all musical 'meaning'. The notion of embodiment is central to the praxial theory of both Regelski and Bowman. Bowman (2000), in particular, urges us to recognize the body's central role in music cognition and creativity, and to identify music as a kind of embodied mode of being.

Dalcroze Eurhythmics offers a practical example of basing music teaching on embodied experiences. However, even within Dalcroze Eurhythmics, the aspect of embodiment has been poorly studied. The studies of Joseph (1982), Crumpler (1982) and Metz (1986) examine the interaction of music and movement in the general education of children. There are also some research studies about movement activities in the choral rehearsal. McCoy (1986) focuses on the issue of body movement as a means of improving musical learning and experiences of singers. Wis (1993) investigates "how the use of gesture and movement in the choral rehearsal may function as physical metaphor in order to facilitate learning and to enhance musical experience" (ibid., iii). The Dalcroze approach itself, its history and principles have been the subject for some studies (e.g. Becknell 1970, Bertolotto 1984, Juntunen 1999). The doctoral thesis of Alperson (1994) and Stone (1985) study the specific classes and teachers of Dalcroze Eurhythmics and provide a detailed description of teaching procedures.

The purpose of this study is to interpret and understand the manifestation and meaning of embodiment in Dalcroze Eurhythmics. The study aims at increasing the understanding and the vocabulary of this approach; it seeks to formulate theoretical arguments for the teaching practice from the perspective of embodiment. This study also endeavors to elucidate the applicability of Dalcroze Eurhythmics within music education. It examines how the approach builds up (musical) knowing on bodily experiences and how it attempts to develop numerous capacities of a student as a whole. My research challenges (music)

and movement and therefore advocates sense-oriented involvement in music education instead of intellectual appreciation. Clifton (1983) suggests, moreover, that there is a durable link between music and motion, which is apparent in our verbal expressions of music. The designation *movement* for a section of a symphony, concerto or sonata is proof of that. We often describe the melody with some reference to tonal movement or talk of music passing from one key to another or proceeding toward a close. Clifton suggests that certain terms, which are normally descriptive of tonal functions (such as prolongation, progression, tension, resolution, cadence, etc.), are musically meaningful because they are already known by the body. (Clifton 1983, 34–35.)

educators, especially within the Western culture, to reconsider the role of the body and the meaning of embodied experiences in (musical) knowing<sup>4</sup>.

Following Merleau-Ponty (1962), in this study embodiment refers to knowing the world subjectively through the experiences of the living body-subject. In the immediate bodily exploration of the world, the sense experiences and sensations blend with one's inner world. The body is considered a constitutive element of cognition and creativity. The perspective of embodiment accounts for how human beings think and act holistically. Pre-reflectively, we do not experience psychophysical causal relations between the mind and body.

The concept of embodiment rejects dualistic presumptions. In this study, the mind and body are considered to manifest the holistic duality, yet, without dualism. In this duality a human organism is a functional whole and the mind and body are inseparable from, although different aspects of, that wholeness (see III). I have employed a broad notion of the (lived) body based on Merleau-Ponty's writings (1962, 1968), equating it with the embodied self that perceives and acts, experiences and reasons. As Leder (1990, 5) notes, Merleau-Ponty's notion of *lived body* provides a potential mode of escape from habits of dualism deeply rooted in our culture. I have applied the term 'body-mind' launched by Dewey (1958) to emphasize the inseparable function of the mind and body in action (see II & III). The term body-mind implies that there is a body in the mind, and the mind in the body; the two things go together. Stubley (2003) applies such expressions as 'dancing minds, thinking bodies' referring to mind's capacity to do all the things that a dancer does as well as to the body's capacity to know. Anttila (2003b) suggests such notions as 'thoughtful motion' within dance and 'sensuous thinking' within academic work.

Jaques-Dalcroze's philosophic-practical vision follows Merleau-Ponty's lines of thinking. He wanted to establish communication between mind (intelligence, imagination, emotions, the soul) and matter (the body, the senses, action) so that 'intellectual man' should no longer be separated from 'physical man' (J-D 1920/1965, 163). He emphasized the principle that the "body is an inseparable ally of the mind" (J-D 1930/1985, 108). By harmonizing the functions of the body with those of the mind, it will be possible, as he argues, to ensure "free play and expansion to imagination and feeling through the state of satisfaction and joyful peace that follows" (ibid., 6). Although I have mostly used the word 'mind' when referring to Jaques-Dalcroze's statements (see III), he himself has applied the notions of the mind (l'espit) and the brain (le cerveau) inconsistently and even as synonyms (see e.g. J-D 1920/1965, 137, 170).

In Dalcroze Eurhythmics, learning happens through exploring, experiencing, analyzing and creating music. In these actions it is essential the mind and body be mutually stimulated. 'Through music' refers to Jaques-Dalcroze's belief that music, especially its rhythm, is a great educational tool, which sets up communication between our inner and outer forces. Through musical sounds Dalcroze Eurhythmics aims at reinforcing the mind-body connection and the communication between sensing, action, thinking, and feeling. (J- D 1930/1985, 54–59.)

<sup>&</sup>lt;sup>4</sup> In this study musical knowing follows the phenomenologists' (see Stubley 1992, 8) definition of knowledge as a product of a personal intentional act having social and historical dimensions. In content, musical knowing includes all the skills and understanding that musicians gain and require within a certain musical practice.

<sup>&</sup>lt;sup>5</sup> "L'homme intellectuel ne doit plus désormais être indépendant de l'homme physique" (J-D 1920/1965, 163).

In the beginning of this research project, I was interested in the importance and meaning of Jaques-Dalcroze's original ideas for current Dalcroze teaching. I also wanted to know what the Dalcroze teachers think of and how they apply the approach. This phase of the research process is manifested in the first two substudies (I & II). However, in the course of time, I became more and more interested in the theoretical accounts of the practice from the perspective of embodiment. Moreover, the issue of mind-body relation seemed increasingly central when pondering the essence of the Dalcroze principles. This process led me into more theoretical examination of Dalcroze Eurhythmics (III & IV). After the final focus of the study was determined, I have reanalyzed the first two substudies from the perspective of embodiment (see 4.1 and 4.2). Basing on the research questions of the substudies (see appendix 1) I have formulated the research questions of the whole study as follows:

- 1. What aspects of embodiment can be found in Dalcroze Eurhythmics?
- 2. What are the theoretical accounts in support of the practice of applying body movement in music education from the perspective of embodiment?

These questions have been approached through research material drawn from the essential writings of Jaques-Dalcroze, commentary books, articles and studies about Dalcroze Eurhythmics, and the talk of some selected Dalcroze master teachers (practical knowledge). In the theoretical substudies, the questions have been examined first, in relation to the philosophical question of the body-mind in practical music education (III) and then, in dialogue with Merleau-Ponty's notions and recent literature on embodiment (IV). The ontological and epistemological premises of this study are based on Merleau-Ponty's philosophy.

I have chosen embodiment as a central theme for this study as this notion seems to enlighten the arguments for applying bodily involvement in Dalcroze teaching. The perspective of embodiment offers a different way to explain the theoretical accounts of the practice than what is currently found in the Dalcroze books. The decision was partly guided by the present situation in education in which the importance and meaning of the body and bodily experiences seem to be poorly, if at all, recognized. Teaching often ignores the crucial facts of our embodiment and instead advances reason as the primary, if not exclusive, mode of knowing. Even music is often taught based on abstractions without making connections to student's concrete musical actions and experiences.

This study holds a strong practical perspective. First, my stance as a researcher could be described as 'researching music teacher'. I have applied the principles of Dalcroze Eurhythmics in my teaching for fifteen years. Through this study, I have wanted to deepen my understanding of why Dalcroze Eurhythmics "makes sense" to me, and to provide arguments for the meaning of bodily action and embodied experiences in music education. Secondly, Dalcroze Eurhythmics itself is above all a set of practical ideas for teaching. Its statements concern the practice of teaching and are relatively idealistic. The writings about it (including those of Jaques-Dalcroze) support the practice but often lack definition of notions and concepts used.

I have chosen a collection of articles as a form of research report for various reasons. After finishing my licentiate thesis, which was a monograph, I wanted to explore new possibilities as a researcher. This form of research report has helped me to set up short-

term goals and made it possible to include different research materials and methods. Furthermore, through the published articles I have been able to reach a diverse group of readers and to take part in the international discussion of the research topic.

In the following I will first present the origins and the areas of study of Dalcroze Eurhythmics (chapter 2). In chapter 3 I discuss theoretical and methodological issues and describe the research processes. Chapter 4 introduces the substudies and presents the findings of the substudies from the perspective of embodiment. Chapter 5 gathers together and discusses the several aspects of embodiment in Dalcroze Eurhythmics. In chapter 6 I describe exercises of one potential Dalcroze lesson accompanied by their theoretical accounts drawn from this study. I finish the study (chapter 7) with concluding discussion including reflection on the implications of the study, some evaluative comments, and ideas for future studies.

# 2 Basis of Dalcroze Eurhythmics

Dalcroze Eurhythmics is an approach of music education that aims at developing musicianship in a broad sense (Juntunen 1999). According to Jaques-Dalcroze, eurhythmics gets students to listen and to imbue the whole of their bodies and being with musical sounds; this, in turn, reinforces sensations, regulates habitual actions and awakens imaginative faculties (J-D 1935). He also believed that rhythmic education of both body and mind has beneficial influence on one's personal growth and well being promoting the harmony of the whole personality (J-D 1930/1985, 102).

The Dalcroze approach integrates ear-training, body movement, and improvisation. It was first called *gymnastique rythmique*, *plastique rythmique*, or merely *rythmique* (J-D 1909b, 1921a, Spector 1990, 71). Since the name *rythmique gymnastic* described only a part of the approach, John Harvey from the University of Birmingham initiated the name 'eurhythmics' to refer to it (Ingham 1920). The word comes from the Greek word *eurythmy* referring to "rhythmical order or movement" or "a graceful proportion and carriage of the body" (Oxford English Dictionary on line 2003). Spector (1990, 71) explains eurhythmics as "harmony between mind and body so as to secure rhythmic motion of the limbs". Confusion often occurs because *rhythmics* is applied when referring to only one of the areas of the approach. Additionally, *eurhythmics* is also often mistakenly associated with *eurythmics* of Steiner pedagogy. Hence, as Spector (1990, 71) and Landis and Carter (1972, 7) state, the name eurhythmics unfortunately lacks clarity that the musical–educative practice requires.

I will describe the early development and the essential aspects of Dalcroze Eurhythmics based on Jaques-Dalcroze's writings in order to provide an accurate perspective concerning all the areas of the approach. I will first look at the origins of Dalcroze Eurhythmics in relation to Jaques-Dalcroze's personal history and then I will examine the interrelation of its several areas. Because Jaques-Dalcroze (1935) wrote only

<sup>&</sup>lt;sup>6</sup> Quoted by Ingham (1920) Jaques-Dalcroze himself writes, "...I am now not speaking of my method but the ideas of which it is based, and I hope that educationists, artists, psychologists, and economists will also experiment on these lines of and create systems of training by rhythm superior to mine. I believe that such methods of education are destined to bring about great changes in the mentality of future generations."

Within Steiner pedagogy 'eurythmics' is considered a new artform including also therapeutic uses and is sometimes referred to as 'visible speech' (Wikipedia 2003).

a short description of the historical development of the approach, commentary on his writings by various experts will also be used.

#### 2.1 Biographical details and origins

### 2.1.1 Education and experimentation

Émile-Henri Jaques was born in Vienna of Swiss parents on July 6, 1865. At early age he already demonstrated exceptional musical talent. He started his musical studies at the age of six with his mother who taught according to the principles of Pestalozzi. In 1875, the family moved to Geneva. After finishing school there, Émile Jaques studied theatre and music, especially composition, in Paris. He returned to Geneva in 1885 to study with Mathias Lussy, a theoretician who strongly influenced his ideas about teaching rhythm and musical expression. (J-D 1935, Spector 1990, 1–9.)

When studying orchestral conducting and working as an assistant musical director in the opera of Algiers in 1886, Jaques got acquainted with complicated rhythms and irregular meters of Arab music (J-D 1935). He was impressed by the rhythmic sensitivity of Algerian musicians and started to think that a Western musician could also attain such capacity through systematic rhythmic education starting at an early age. When Jaques was in Algiers, his publishing company in Paris asked him to change his last name in order to distinguish him from another composer by the same name. Hence, he took the name Jaques-Dalcroze with the endorsement of his old friend Raymond Valcroze. Later, Jaques-Dalcroze continued his studies of composition with Anton Bruckner in the Conservatory of Vienna, and after with Mathis Lussy in Paris. Upon finishing his studies, he was a competent pianist, composer, conductor, singer, actor, and poet. (J-D 1935, Dénes 1965, 14, Moore 1992, 4–8, Spector 1990, 14–16.)

In 1893 Émile Jaques-Dalcroze became a professor of harmony and solfège at the Geneva Conservatory of Music. It was then that he discovered major insufficiencies in his students' musical knowing as well as in music education in general. He noticed that, although his students were very advanced technically on their instruments, they were weak in hearing and musical expression. Jaques-Dalcroze also criticized the subjects of the Conservatory as being fragmented and too specialized. Many of the textbooks seemed to be written in technical style and did not aim at developing the ability to hear the effects they described. He realized that the methods of training musicians focused on the mind alone; it did not allow the students to experience the elements of music fully. (J-D 1909b, 1920, iii, 1918a, v, 1920/1965, 5, 1935, Dutoit-Carlier 1965, 312–313, Brunet-Lecomte 1950, 79, see III.)

Though Jaques-Dalcroze primarily criticized his students' poor musical expression, all the deficiencies of their musical performance also seemed to show weakness in rhythmic understanding and expression (J-D 1910, 1920/1965, 41). This weakness was revealed in the slowing down or speeding up of their movements, in their lack of accurate accents, in unbalanced phrasing, and so forth. Jaques-Dalcroze listed the deficits of musicianship exhibited in physical actions under the heading of arytmia (l'arythmie), (J-D 1920/1965, 136–137, 1917, 7–8, also Bachmann 1984, 109–110, see III & IV). As he saw it, arytmia

is due to disharmony between the functions of the mind and body; a lack of co-ordination between the idea and the execution of the movement, and involves the "nervous irregularity that is some cases produces, and in others is the product of, this dis-harmony" (J-D 1921/1980, 152, see also 1930/1985, 103).

Jaques-Dalcroze wanted to renew music education. He experimented with combining body movement and solfège exercises, and noticed that the students sang more musically when incorporating rhythmic gestures. He also made his students move with improvised music. (J-D 1935.) However, the Conservatory considered many of his ideas to be too modern; to begin with, the educators of the time resisted the use of movement. They also disapproved of the students' bare feet and loose clothing. As a result, Jaques-Dalcroze continued his experiments with volunteers in private facilities. (J-D 1935, Spector 1990, 69.)

Jaques-Dalcroze made several important observations. He noticed that rhythmic musical sensations activate the muscles and nervous system of the whole body (J-D 1920/1965, 5–6). Once, when walking side by side with one of his students, he noticed that the student naturally followed his changes of tempo and the length of his steps. He realized, then, that, even if a student was incapable of *performing* music with rhythmic accuracy, he could *move* rhythmically. (Spector 1990, 56.)

Jaques-Dalcroze started his experiments with professional students of music. Yet, shortly after, he extended his ideas to teaching of young children. He noticed that while his older students' musical hearing was "hindered by futile intellectual preconceptions", children spontaneously appreciated acoustic sensations and proceeded quite naturally to their analysis (J-D 1921/1980, vii, 1920/1965, 5). When teaching solfège to children, he also concluded that ear-training was not enough to awaken the love for music that he considered more important than the understanding of it (J-D 1918a, V, 1920, iii, 1920/1960, 26). Thus, he asserted that teaching should first encourage the spontaneous, intuitive movement reactions to music and only later focus on refining them. Before starting instrumental studies, he thought, children should experience music with their whole bodies, learn to move, sing, and hear. As a result, they would attain not only a love for music but also a desire to express musical feelings. (J-D 1920/1965, 12, 51–52, 1930/1985, 118–144.)

From 1903 to 1905 demonstrations of his ideas all around Europe were well-received. Audiences encouraged him to write down his ideas; and as a result, *Méthode Jaques-Dalcroze* (J-D 1906abcde) was published in 1906. (Becknell 1970, 5, Spector 1990, 2, 55, 73–76, 115.) Public recognition also encouraged him to set up a training course for teachers. The first summer course was organized in the summer of 1906 and gradually, Jaques-Dalcroze began to concentrate more fully on training teachers. (Spector 1990, 80.)

#### 2.1.2 Dalcroze Eurhythmics institutionalizes

The brothers Wolf and Harald Dhorn were thrilled by Jaques-Dalcroze's educational ideas and offered to build an institute for him at Hellerau, near Dresden. There, Jaques-Dalcroze developed his approach, incorporating elements of dance and theatre in it. (J-D 1935, Spector 1990, 2, Becknell 1970, 6.) Between 1910 and 1914, Hellerau was

attended by many well-known musicians, dancers, actors, writers, and directors; for example, Ernest Bloch, Sergei Rahmaninov, William James, George Bernard Shaw, Upton Sinclair, Isadora Duncan, Vaslav Nijinsky, and Konstantin Stanislavski. With the contribution of theses artists and input from hundreds of students, the approach was extended to various art forms and spread to countries all over the world. Schools offering Dalcroze training were opened and schools of music, dance, and theatre started to apply his educational ideas. The highlight of the work in Hellerau was the performance of the Gluck's opera *Orfeo* in 1913. All the performers were 'Dalcroze trained' and the music, movement, lighting, and space were arranged and designed to be in perfect harmony. (J-D 1935, Bertolotto 1984, 42–43, Moore 1992, 12.)

When the First World War started in 1914, Jaques-Dalcroze had to leave Hellerau. He returned to Geneva, where he was warmly received. A year after, the "Institute Jaques-Dalcroze" was opened. (J-D 1935.) Today it continues Jaques-Dalcroze's work by training teachers, and by organizing courses and conferences. The Dalcroze teacher training authorized by the Institute, offers degrees at three various levels of expertise: *Certificate, Licence* and *Diplôme Supérieur*. Today, Dalcroze training is offered in several countries of Europe, North and South America, Australia and Asia (especially in Japan, Taiwan and Korea).

Jaques-Dalcroze died in Geneva in 1950. He devoted most of his life to designing, experimenting with, improving and disseminating his approach and training teachers. He left behind a well-established approach that has been applied in various forms to various aspects of music education, by schools of dance and drama as well as in special education and music therapy (see II). Jaques-Dalcroze wrote numerous articles and books. He also left behind a vast number of compositions, including stage music, orchestral and chamber music, instrumental and vocal music, as well as songs for children (for the complete catalogue, see Dénes 1965, 461–572).

# 2.2 Interrelated areas of the approach

Dalcroze Eurhythmics includes three interrelated areas of study; they are named a little differently by various commentators. Jaques-Dalcroze (1920/1965, 57) himself defines them as "la rythmique, le solfège et l'improvisation". In English, 'la rythmique' is translated as 'rhythmic movement' (J-D 1921/1980, 60). Caldwell (1995, 13) uses the name 'rhythmics', which seems reasonable, since 'rhythmic movement' is easily confused with gymnastics and dance. I use the names rhythmics, solfège (ear-training) and improvisation. In consideration of the Finnish application of the approach, I also regard *plastique animée* <sup>8</sup> to be a fourth area that is essential to the approach (see Juntunen 1999). Though the different areas can be taught separately, which is often the case in teacher training, Dalcroze teaching commonly incorporates all the areas within one teaching process in which they intermingle and interact.

<sup>&</sup>lt;sup>8</sup> Although *plastique animèe* is sometimes translated as 'moving plastics' (see, e.g. J-D 1921/1980), I use the original French term, since it is commonly used in Dalcroze teaching even in English speaking countries.

Jaques-Dalcroze also defined specific areas of musicianship, i.e., the four main qualities of a professional musician that the approach was designed to develop. They are: (1) the feeling for or the sense of rhythm (le sentiment ryhtmique); (2) finesse of hearing (la finesse de l'oreille); (3) the faculty of spontaneously externalizing emotions (la faculté d'extériorise spontanément les sensations émotives); and (4) nervous sensibility (la sensibilité nerveuse), (J-D 1909b, 1910, 1945/1981, 227). As I analyze, a connection can be found between these four qualities and the four areas of the approach previously described. Although one subject area aims primarily to develop one specific musicianship quality (thick arrows), every area engages in some extent all the qualities presented (thin arrows), (see figure 1). The relationship between each area of study (rhythmics, solfége, improvisation, plastique animé) and the qualities of musicianship each primarily aims to develop (rhythm, hearing, expression, sensibility) will be explored separately.

# Rhythmics Solfége Improvisation Plastique animée Finesse of Spontaneous Sensibilité

AREAS OF STUDY

#### IMPORTANT QUALITIES OF A PROFESSIONAL MUSICIAN

expression

nerveuse

Sense of rhythm

hearing

Fig. 1. Illustration of the relationship between the areas of Dalcroze studies and the necessary qualities of a professional musician, as defined by Jaques-Dalcroze (Juntunen 1999, 140).

<sup>9</sup> In English translations, the term *la sensibilité nerveuse* is translated as 'nervous sensitivity' (see e.g. J-D 1921/1980, Bachmann 1991). However, since the term is fairly confusing, in what follows I will use the original French term la sensibilité nerveuse.

#### 2.2.1 Rhythmics and the sense of rhythm

"The object of rhythmic training is to regulate the natural rhythms of the body and, by their automatisation, to create definite rhythmic images in the brain" (J-D 1921/1980, 152).

For Jaques-Dalcroze (1945/1981, 227), the sense of rhythm (conscience du rythme) means the capacity to feel or 'sense' the time between movements, and is connected to the ability to control the variations of the elements of time, space, and energy in movement. The sense of rhythm is manifested in rhythmic movements, which in turn affect the rhythmic expression of musical performance. Jaques-Dalcroze was convinced that the sense of rhythm of every child could be developed by repeated exercises. (J-D 1920/1965, 33–34, 44.)

Jaques-Dalcroze (1920/1965, 38–40) argues that rhythm has its origin in natural body movements and thus is physical in nature. Accordingly, he suggests that it is most natural to develop the sense of rhythm through movement. Jaques-Dalcroze thus encouraged his students to become aware of the rhythms of their body movement, to recognize the rhythms of music, and to realize them in movement. Developing the sense of time was particularly important at the beginning of training. His teaching started, for example, by experiencing the steady pulse in walking; because walking incorporates voluntary muscles, Jaques-Dalcroze believed it is a natural basis for studying rhythm. Through awareness of walking, one can find the pulse, and by realizing accents in walking, one can practise various meters. Changes in tempo and dynamics are incorporated in the exercises from the very beginning. (J-D 1920/1965, 30–36, 39, 44.)

In the exercises involving 'rhythmics', body movement is combined with listening to music. Through movement of the whole body, music is felt, experienced, and expressed; reciprocally, the movements express what is heard, felt, understood, and known (J-D 1920/1965). Everybody has a personal way of moving and hence the movements reflect a student's personality and individuality. Especially in the beginning of training, the movements are kept natural and simple. Gradually, the language of movement is enriched as more attention is paid to the style and expressiveness of movements.

Movements can be classified into two categories: movements in place and movements in space (see figure 2). This distinction allows various combinations for use in expressing a large number of movement qualities. These movements can be further varied by high, low, or middle body positions in space, and different body parts can be coordinated or used independently. All movements are used to explore and express various qualities of music. (Choksy, Abramson, Gillespie & Woods 1986, 37.)

MOVEMENTS IN PLACE	MOVEMENTS IN SPACE
Clapping	Walking
Swinging	Running
Turning	Crawling
Conducting	Leaping
Bending	Sliding
Swaying	Galloping
Speaking	Skipping
Singing	

Fig. 2. The movement vocabulary used in Dalcroze Eurhythmics classified into two types by Choksy *et al.* (1986, 37).

Jaques-Dalcroze (1920/1965) argues that the relationships of body movement involving time, space, and energy have counterparts in musical expression. In the rhythmic movement exercises, students experience and become aware of the time and energy needed for a certain movement in space and understand how these elements relate to those of music. (Ibid., 37-38, 44, 142–145.) Jaques-Dalcroze also thought that all the nuances of tempo (allegro, andante, accelerando, ritenuto) and those of dynamics (forte, piano, crescendo, diminuendo) can be realized through the body, with the intensity of the experience depending on the strength of the bodily sensation (ibid., 57).

He also believed that rhythmic movement exercises would help the students to think and express themselves rhythmically (J-D 1918a, VI, 1935, 1920/1965, 57). He writes, "all who are badly organised rhythmically are awkward and clumsy in bodily gesture and movement even if the ear is musical" (J-D 1930/1985, 130). For the precise performance of rhythm, it is not enough to have grasped it intellectually and to posses a body capable of executing it; it also requires communication between the mind and body. Moreover, according to Jaques-Dalcroze, the better we know and use our body, the more joy and freedom of spirit we have. (J-D 1920/1965, 58–59.)

The study of rhythmics awakens both the bodily feeling for and the aural perception of rhythm. The goal is to be able to read, notate, and create rhythms both mentally (intérieument) and physically (extérieument). (J-D 1920/1965, 61.) Rhythmic experiences combining music and movement are stored as aural, visual, and kinaesthetic images, which can be recalled when reading, notating, composing, performing, or creating music. Perceptions, movement experiences, emotions, and thoughts are all integrated in these images (Farber & Parker 1987, Landis & Carter 1972, 24–26). In *Le rythme, la musique et l'éducation* (1920/1965), Jaques-Dalcroze classifies different goals and types of exercises of rhythmic movement and gives examples of exercises in *La rythmique I* (1916) and *II* (1918a).

<sup>&</sup>lt;sup>10</sup> Kinaesthesia means the body's ability to monitor, feel or sense movement (e.g. Smyth 1984, 122, Bloom & Lazerson 1988, 90, Ferguson 1973, 59). Kinaesthetic sense has an organizing role in perception in general (Sheets-Johnstone 1999).

## 2.2.2 Solfège and finesse of hearing

"Every sound method of teaching music must be based on the hearing, as much as emission of sounds. If the hearing faculties of a pupil are weak, they must be developed before he undertakes the study of theory." (J-D 1921/1980, 27.)

Originally the term solfège meant a song without words, used primarily for the sake of vocal training—now generally known as 'vocalise'. When singing without words, either vowels or the solmization was used. (Spector 1990, 92.) Today the term solfège refers to exercises and study that aims at building a connection between what is heard and what is written; that is, to teaching students to write melodies, rhythms and harmonies by ear and, on the other hand, translating the written music into sounds usually by singing at first sight (e.g. 'sight-singing').

For Jaques-Dalcroze, good 'hearing' is one of the most important traits of a competent musician (J-D 1945/1981, 227, 1930/1985, 49–50). The ear not only receives sounds; it is also important in guiding their perception (J-D 1920/1965, 37). However, precision of hearing involves not only the ability to recognize sounds and their relations but the ability to recognize dynamic and agogic nuances of music as well. Aural sensation creates a state of emotion as well. (J-D 1920/1965, 37, 46–47, 49, 55, 61.)

Solfège studies aim at developing the capacity of hearing, listening, remembering, and of placing any combination of sounds. Solfège especially seeks to develop the 'inner ear' (or 'inner hearing'), which is the ability to mentally produce (i.e., 'hear') exact sound images without the help of the voice or an instrument (J-D 1920/1965, 53, 91). Jaques-Dalcroze sought to develop this capacity in particular so that students are able to hear rhythms, intervals, phrasing, and dynamic nuances of music mentally when reading music; that is, in advance of and therefore as guiding performance. Solfège, therefore, is also helpful in developing a student's ability to improvise and to compose melodies vocally. (Ibid., 61, 91.)

Jaques-Dalcroze was surprised that "while musical instinct is based on the experience of the ear, a child is taught exclusively to play and sing, never to hear and listen" (J-D 1921/1980, 57, 1920/1965, 55). He realized that simply producing sounds mechanically on an instrument did not develop (inner) hearing. He even claimed that piano lessons could damage the aural and rhythmic faculties, unless they are preceded by training in rhythmic movement and for the inner ear (J-D 1920/1965, 51). He believed that music education should be based entirely on developing such hearing skills and should start at as early age as possible so the ear is well developed before studying music theory and harmony, and before reading and writing music. He stressed that the study of theory should be connected to the experience and aural analysis of music; it should be consequence of musical study, not approached as a conceptual end in itself, as was common at that time. (Ibid., 5, 12, 25, 30, 52–53, J-D 1930/1985, 121.)

Jaques-Dalcroze stresses the developing of the (inner) ear in relation to sensations of body movement. He considered the whole human body and the capacity to hear as interrelated in many ways; listening to and perceiving music involves the whole body, in other words. For example, there are people deaf from birth, can still distinguish pieces of music of different styles by means of tactile sensations, through a kind of internal

resonance. Without doubt, there is also a reciprocal interaction between hearing and the vocal system. The environment has a strong influence on as how the ear is cultivated, as well. (J-D 1920/1965, 48–49.)

### 2.2.3 Improvisation and the ability of spontaneous expression

Jaques-Dalcroze (1920/1965, 70) regarded instrumental improvisation as quick and spontaneous composition. Such spontaneous expression also includes the ability to transfer sensations into emotions, and reciprocally, to express the emotions plastically (1945/1981, 227–228). In Dalcroze Eurhythmics, students improvise by moving, singing, or playing an instrument. Overall, Dalcroze practice offers abundant possibilities for such improvisation and spontaneous expression. For Jaques-Dalcroze (1920/1965, 97), it is not enough to play correct notes; musicians should to be able to express music in a personal way; should let their own individuality and soul guide their performance. Furthermore, from this point of view, the object of art studies was not only to educate artists capable of communicating aesthetic impressions to the public but also to create audiences that are able to appreciate such artistry (J-D 1930/1985, 59). However, in order to be able to express or appreciate the feelings and 'colors' of life through art, one needs to be in contact with them first. To compose or interpret music, then, "it is absolutely necessary that musicians have personal experience of body movements and of their relation to the life of emotion" (ibid., 60). Furthermore, he urged, the teacher should regularly encourage students to explore different interpretations and should be supportive of such personal expressivity (J-D 1920/1965, 97–98).

Most of the music in his lessons he improvised, but Jaques-Dalcroze also let the students improvise during the exercises (e.g. Mark 1986, 114). He was well known for his piano improvisations. Through these he communicated how he wanted his students to move. Many of his students deeply enjoyed his music and loved moving with it. Maggie Gripenberg, a student of Jaques-Dalcroze from Finland writes about her experiences of the concluding examination in Hellerau:

I could improvise completely freely to professor Dalcroze's amazingly beautiful music. At that very moment I felt totally open-minded, became myself. I forgot everything and everybody... It was wonderful, yes, it is impossible to describe how wonderful it was to improvise to such music. ... [I] had forgotten that it was an exam! (Gripenberg 1952, 80.)<sup>11</sup>

Dalcroze teachers today still improvise a large part of the music used in the lessons. Improvising music for Dalcroze exercises is demanding, as the teacher simultaneously has to be aware of and follow the students while playing. However, it is a big advantage for the teacher to be able to 'tailor' the music for each subject and to the other particulars of the teaching situation. Because students react to the music and the teacher in turn reacts to students' responses, there is an interaction that recorded or notated music does

<sup>11</sup> Trans. by Juntunen

not allow. The music is constantly changing according to students' response; it is actually made at the same time as it is being moved to. (See II.)

Jaques-Dalcroze also stresses that students can give sonorous form to things learnt in rhythmics and solfège (various rhythms, forms, harmonies, counterpoint, dynamics, etc.) through their own improvisation. The physical touching of the instrument also engages the tactile sense (*le sens tactilo-motile*). (J-D 1920/1965, 61.) He also advocates that improvisation should be an essential part of instrumental studies because it teaches students to express spontaneously their musical thoughts and feelings through music through the instrument (J-D 1926b). Improvisation also offers a way to apply what has been learnt, to reveal musical understanding, and to develop creative facility (J-D 1920/1965, 70–74).

#### 2.2.4 Plastique animée and la sensibilité nerveuse

For Jaques-Dalcroze, *la sensibilité nerveuse* allows one to experience and recognize all the qualitative nuances of motoric activity, in the same way as the development of hearing allows precise recognition of sounds and their relations. It operates on establishing an uninterrupted connection between one's artistic ideas and the muscular system. (J-D 1945/1981, 227.) *Plastique animée* aims at achieving perfect balance in bodily actions;—a matter of being able to control all the movement qualities in relation to time, energy, and space. The sixth muscular sense (today known as kinaesthesia) plays a crucial role in achieving this control (J-D 1942, 121–123, 1920/1965, 140–141). *Plastique animée* also allows one to feel and express music *corporally*, for one's own pleasure (J-D 1920/1965, 133). In Dalcroze teaching, it entails portraying primarily the form and style of a musical work through interpretative movement and is often associated with choreography. Although such movement is itself 'composed', its expressive and spontaneous quality is emphasized.

In this connection, Jaques-Dalcroze was interested not only in renewing music education but also in enriching dance expression (see J-D 1920/1965, 1930/1985). For him, the physical exercises of gymnastics and sports are important and useful. However, he criticized the movement education of his time for limiting itself to repeating automatic movements in the same tempo and of not establishing the relationship between movement and feelings, thinking, or imagination. (J-D 1930/1985, 14–16, 28, see also 1945/1981, 155, 168.) He also noted that, although classical ballet aimed at perfecting body control and balance, it ignored the mental state of dancers that influences their movements. It is more important, he believed, for the dancer to express the sensations and feelings aroused by the music than to be technically correct. In fact, as he viewed it, dancers simultaneously create and, through experiencing their own dancing, also receive or 'sense' artistic expression. (J-D 1920/1965,132–133.)

In addition to expressing dynamic and agogic qualities, Jaques-Dalcroze wanted to explore and develop all possible ways to apply body movement to express other rhythmic features as well. Through *plastique animée* he sought to encourage the 'movers' to express natural and spontaneous reactions and individual images, not just to repeat learned series of movements or to be guided by supposedly fixed aesthetic ambitions. He

wanted the both dancers and musicians to replace their intellectual thinking with spontaneous feelings, to fuse instinctively with music (J-D 1920/1965, 141). Such plastic movement within the Dalcroze approach, then, is always connected to personal experiences and feelings. The internal experience—sensitivity towards music and its expression—is more important than the qualities of external performance. (Ibid., 132–133.)

Plastic movement aims at expressing music and embodying all shades of it, making it visible. It is also possible that music is created by the people moving together 'in silence', incorporated in the steps, in collective movement and in consistent rhythms uniting in harmony. (J-D 1920/1965, 134, 141.) Because of his emphasis on the meaning of expressive and controlled movement, many people connected his teaching only to dance. However, Jaques-Dalcroze denied this and stressed that all his exercises were primarily aimed at developing musicianship (J-D 1927, 1935).

## 3 Theoretical and methodological premises

The theoretical framework of my research is drawn from Merleau-Ponty's (1908–1961) phenomenology. In my substudies, I have also referred to praxial philosophy of music and music education (see 3.2), as it points out the importance of action in musical knowing. My study's general interpretative stance and the methodology used belong to the interpretive hermeneutic tradition (see 3.3). The research materials and methods of this study are multifaceted and are discussed in section 3.4.

The real importance and meaning of Merleau-Ponty's philosophy for my study started to become clear only during the second half of my research process when examining the actual role of the body and body movement in knowing more profoundly. Actually, Merleau-Ponty's philosophy has ended up being more than a mere framework for this study; it is the theoretical foundation, the viewpoint through which I have interpreted the manifestation and meaning of embodiment in Dalcroze Eurhythmics. Merleau-Ponty's phenomenological philosophy has been chosen as a frame of reference because he seems to have struggled with the same challenges in a theoretical way within philosophy as Jaques-Dalcroze did in a practical way within music education. Merleau-Ponty's work can be interpreted as an effort to unify the world and our experience of it and to turn our attention to the importance of embodied, pre-reflective experience. Jaques-Dalcroze suggests that we come to know the musical world and ourselves through meaningful mind-body exploration and experiences that combine music and movement. Merleau-Ponty and Jaques-Dalcroze shared the milieu of the early twentieth century with an emphasis on human individuality. They also shared the French cultural climate, which was very different from that of German and that has had an undeniable influence on their writings. This is manifest, for example, in how they call attention to emotions, subjective experiences, and individuality as well as in their profuse writing styles. They apparently never met each other, but would likely have enjoyed very much doing so. In what follows, the basic ideas of Merleau-Ponty that are relevant for my study are summarized.

# 3.1 Merleau-Ponty's phenomenology

## 3.1.1 Primacy of phenomenology, perception, and experience

Merleau-Ponty presents the central themes of his philosophy in *Phenomenology of Perception* (1962). He defines phenomenology as a study of essences; it is a philosophy for which the world is always already there before any possible analysis (M-P 1962, vii–xi). The task of phenomenology is "to reveal the mystery of the world and of reason" (ibid., xxi). Regarding my study, the essential themes of his phenomenology are: (a) the critique of Cartesian intellectualism, (b) the lived body, being-in-the-world and knowing the world through the body, (c) the first person perspective minus mind-body dualism, (d) intersubjectivity, and (e) the notions of habit, gesture (speech), and reversibility.

The central feature of Merleau-Ponty's writing is his critique of Cartesian intellectualism; but he is also critical of empiricism (e.g. M-P 1962, 28). His critique is above all a critique of so-called 'objective thinking'. For Merleau-Ponty, objective thinking (analysis and reflection)—when detached from the lived experience—separates us from our selves, the world in which we live, and from other people with whom we interact. Yet, the objective world of science is not unreal for him; it is abstract and ideal. (Ibid., x-xvii.)

Phenomenologists in general challenge both the Cartesian and empiricist ideas of consciousness, 'true *knowledge*', and meaning. In the Cartesian tradition, searching for a ground for knowledge stands for *thinking*, while empiricism seeks the *causal explanations of the phenomena*. (Heinämaa 1999, 51.) In contrast, the central notion in phenomenology is the primal and subjective *experience of the phenomena*<sup>12</sup>. That which is to be analyzed, explained, understood, and so on should always be the phenomenon of the world we experience daily. "The world is not what I think, but what I live through" (M-P 1962, xvi–xvii). All my knowledge of the world, I gain through the subjective experience of being in the world. Also, all theoretic thinking, all achievements of science, is based on the stratum of the primordial experiences which are attained through our bodily interaction with the world. (M-P 1962, viii, 27–29, 57–59, 82, 1964b/1989, 13.)

Thus, perception is our primary way of knowing the world. The body is both a sensing and a sensed organism. It perceives sensuous qualities of taste and smell as well as of visual, aural, and tactile nature. It is also the location of the affective and kinaesthetic sensations. Moreover, the body engages and enables the understanding of spatiality where things or other bodies are in some relationship with my body (M-P 1962, 90–97, 100, 148). Perception is achieved with the whole body 'all at once' rather than in a separate realm of 'mind'. In perception, the senses communicate and interact with each other (ibid., 225). The phenomenon in which senses co-exist and overlap, in which "the sight of sounds and the hearing of colours exist as phenomena", Merleau-Ponty calls "synaesthetic experience" (ibid., 229). (See also IV.)

Merleau-Ponty (1962) criticizes the research model in psychology and physiology that describes sense experience as a projection of the external world caused by sensory and

<sup>&</sup>lt;sup>12</sup> For Merleau-Ponty (1962, 96), experience means "to hold inner communication with the world, the body and other people".

nervous mechanisms, and that regards such experiences as detached from affective and motor functions. As a result of that model, perception of the external world becomes detached from the internal, subjective Ego. The living body, then, becomes an exterior without an interior, and subjectivity becomes an interior without an exterior. (Ibid., 52–59.)

Perception, for Merleau-Ponty, is associated with the pre-reflective and pre-attentional mode of experience, and that mode is the foundation of conscious thought and reflection. When I perceive, I am pre-reflectively aware of the world; I belong to the world as a whole without paying attention to any distinct entities. Reflection, in contrast, objectifies the world; what is inseparable in lived experience, gets separated by reflective thinking. (M-P 1962, 46–47, 329.) Furthermore, Merleau-Ponty regards all our so-called 'external' and 'internal' perceptions, even our 'innermost' feelings and thoughts, as being the products of a ceaseless dialectical interaction between the phenomenal body and the preobjective world (ibid., xi, also Langer 1989, 158).

A perception, in his view, is always context-dependent and must be viewed as meaning-filled; it is, therefore, not properly described as the sum of physiological sensations. Perception involves the whole sensing body; there is no separation of the 'physiological' and the 'psychic' (M-P 1962, 87). Furthermore, 'things' are conceivable only as they are perceived. As he writes, "[t]he thing is inseparable form a person perceiving it, and can never be actually *in itself*" (ibid., 320, italics original). Consequently, all meaning and understanding is related *to* something. "Perception opens a window on to things. This means that it is directed ... towards a *truth in itself* in which the reason underlying all appearances is to be found" (ibid., 54, italics original). This tendency for perceptual consciousness to be directed towards the world Merleau-Ponty calls "intentionality" (ibid., 137–139).

However, Langer (1989, 174) argues that bodily experience cannot be adequately studied in abstraction from the belonging of the body-subject to a particular culture. In this light, the Merleau-Ponty's description of perception could be much more culturally specific. This does not mean, though, that Merleau-Ponty ignores or denies the cultural and historical aspects of human life. To the contrary, through people's involvement and interaction in the world, he takes us to be wholly cultural and social beings through people's involvement and interaction in the world, although individual, subjective factors also direct our lives. (M-P 1962, 170, 349, 450, 1964/1982, 118–120.)

In the psychological model Merleau-Ponty criticizes that subjects are treated as entirely determinant objects that *then* act upon the things around them. In contrast, for Merleau-Ponty (1962), subjects are determined *by* engagement with their surroundings. A subject is not a neutral observer but, rather, a situated participant in an ongoing, openended, socio-historical drama (Langer 1989, ix). Thus, knowledge cannot be severed from culture, language, and history; it comes into being through our concrete coexistence with others and the world (ibid.). For Merleau-Ponty, too, the cultural world is always already present; it can be known and verified through the perception and understanding of human actions, including observing those of other persons (M-P 1962, 348). Through others, then, we also learn and adopt cultural behaviour. Intersubjectivity and culture are thus closely tied.

#### 3.1.2 The lived body-subject

As mentioned earlier, Merleau-Ponty argues against the Cartesian notion of mind-body dualism. According to Descartes' metaphysical thesis, mind is essentially an immaterial substance, which could in principle exist without the material world (Descartes 1975, 101, see also III & IV). Merleau-Ponty rejects the idea that our thoughts are some kind of immaterial substance. He also rejects the dualistic 'mental interior – physical exterior' distinction and replaces it with a new concept of the subject: a subject who perceives the world is essentially physical, or rather, psychophysical. As he puts it, "[t]he body of another, like my own, is not inhabited". Instead, I am my body. (M-P 1962, 349.)

The perspective of the lived body—meaning the living, breathing, acting, and thinking bodily self—is the means by which Merleau-Ponty reinterprets the Cartesian separation of mind-body. His thesis that the self is a body-subject posits the reality of consciousness and subjectivity as well as that we are essentially physical beings. For him, then, subjectivity is physical. Merleau-Ponty reminds us that the body should not be regarded as an object simply because there is no possibility of disengaging from it. The lived experience of a particular body thus denies the detachment of subject from object, mind from body, and so on. Thinking of self as an object is neither necessary nor sufficient for pre-reflective knowledge of self as a body-subject. (M-P 1962, 27–29, 82, 144, 206, 430.)

Psychophysical wholeness is manifest in each experience of the phenomenal world. The conceptual sorting of matter/mental, physical/spiritual, and other similar dualisms, has no meaning in immediate lived experience. The distinction between mind and body is the result of thinking and reflection; it does not exist in immediate experience. This means that although physical and mental worlds exist, intuitively or pre-reflectively in naïve or primal consciousness, so to speak, we are not aware of living in two worlds, one inner mental and the other external and physical. We do not draw a distinction between a thing and perception of it; nor there are psychophysical, causal relations between the mind and body. (M-P 1962, 407-408, 1965, 188-189.) "Naive consciousness does not see in the soul the cause of the movements of the body nor does it put the soul in the body as the pilot in this ship" (M-P 1965, 188). There is nothing mental that, so to speak, resides 'in' the body. Rather, pre-reflectively we think and experience that the humans, including ourselves, act holistically as fully embedded in the world. (See also Priest 1998, 68, 71.) Nevertheless, Merleau-Ponty accepts the Cartesian thesis that, qualitatively, consciousness and physical objects are radically distinct, neither of them being a substance. There is, then, a commonsense and compelling gap between the physical and psychophysical. (Ibid., 54, 226.) In this light, it is possible to talk about duality without dualism in relation to the mind-body (see III).

Leder notes that, although Merleau-Ponty writes about 'one's own body' (*corps propre*), he does not refer to the first person perspective only. The notion of lived-body refers to subject and object, the first-person and third-person perspectives alike; it includes intellectual cognition along with visceral and sensori-motor capacities. By this notion Merleau-Ponty avoids the dualistic opposition not merely between mind and body per se, but between *Leib* (living body) and *Korper* (physical body), the distinction in German language often employed by philosophers. (Leder 1990, 5–7.)

For Merleau-Ponty (1962), both the first-person and the third-person perspectives are present in perception. The body is simultaneously a sensuous body that perceives itself and the world, and a thing-like body that is sensed or perceived as an object. When my right hand touches my left hand, I am touching and being touched, thus giving me 'double sensations' (M-P 1962, 93). The practical, action modes of the body-subject are inseparable from the perceiving (or reciprocally in-formed [sic]) body-subject. Hence, perception involves the perceiving subject in a situation, rather than positioning him as a spectator who has somehow extracted himself from the situation. Action and perception are therefore interconnected; or as Merleau-Ponty puts it, "every perceptual habit is still a motor habit" (M-P 1962, 153). Perception then, is not merely a passive phase before sensory stimulation but, as Merleau-Ponty suggests, an active and 'creative receptivity'. Consequently, once again, there is no *lived* distinction between the act of perceiving and the thing perceived.

This conclusion becomes clearer in his later philosophy, where the reversibility thesis and the figure of the chiasm become an important ontological motif for arguing how and why the distinction between perception and object perceived is false (see M-P 1968, 130–155). The role of tacit reflexivity is explained in *Phenomenology of Perception* under the heading of the tacit *cogito*, hence within the context of a consciousness-object distinction. This seems to imply corporeal reflectivity, an 'I can' that is our primordial contact with the world through the body (M-P 1962, 137–139). Subsequently, however, in the *Visible and Invisible* (M-P 1968), the same requirement for reflexivity is explicated under the heading of reversibility of flesh, a framework that does not depend on the consciousness-object distinction. According to Dillon (1997, 103), it is the same account in both works. There has been no reversal of Merleau-Ponty's position; rather, there has been a development in his thinking by which he finds language more adequate to his thought and to the phenomenal world he describes.

In *The Visible and the Invisible* (M-P 1968), the relation of body to the world is inverted: "It is by flesh of the world that in the last analysis one can understand the lived body (*corps propre*) — The flesh of the world is of the Being-seen, i.e., is a Being that is *eminently percipi*, and it is by it that we can understand the *percipere*" (ibid., 250, italics original). The primacy of the *percipi* is therefore a law of Being, of existence; and Merleau-Ponty defines the lived body as, "this perceived that we call my body" (ibid.). Insofar as it is perceived by itself, my body perceives. That is, before being corporeal, my body is flesh holding onto the flesh of the world with which it can participate (Maldiney 2000, 70).

The reversibility thesis (see M-P 1968, 130–155) implies that my body is two-dimensional; it is at once phenomenal body and objective body, the body as sensible and the body as sentient. In his words, "the body sensed and the body sentient are as the obverse and reverse" (ibid., 138); in other words, each is the other side of the other. It is a matter of an ambiguous set-up in which the body can alternate between the roles of sensing and being sensed. Thus, as already noted before, the reversibility is never realized as such; only one of the two states occurs. (Ibid., 136, 147–148, 263.)

For Merleau-Ponty, the phenomenon of reversibility occurs within one sense at a time—for example, of seeing and being visible, of touching and being touched, of listening and being heard—but it also occurs between different senses and between senses and the world. Furthermore, reversibility exists between the action of perceiving

and the action of expression (Parvianen 1998, 65). This kind of reversibility is manifest, for example, in 'sight-singing' (see 2.2.2). As discussed earlier, reversibility also exists between sensing people. In Merleau-Ponty's words, it "makes the organs of my body communicate and founds transitivity from one body to other" (M-P 1968, 143). In addition, there is reversibility of speech (or gesture) and of it's meaning based on the mute world of sensing (ibid., 154–155). (See IV.) According to Dillon (1997, 149), the reversibility thesis marks the culmination of Merleau-Ponty's "attempt to recast the traditional disjunction between perceiver and perceived"—in other words, his continuous attempt to eliminate an ontology based on dualistic categories. (See also IV.)

As there is an identity of the perceiving and the perceived, there is also a difference, a separation, which Merleau-Ponty (1968) calls divergence, or a gap (*écart*). This means that a touched thing, for example, is "separate from, independent of, more than the touching reveals its presence and conceals what lies beyond its touch" (Dillon 1997, 163). When the reversibility occurs between two bodies, "neither body need be reduced to what becomes manifest to one at the moment of contact. Phenomenal bodies ... transcend their apprehension." (Ibid., 164.) The body-subject tacitly understands that it does not perceive the entirety of the phenomenon it reveals (M-P 1968, 126, 135, 147–148, Rouhiainen 2003, 105). This aspect will be discussed further in the next section.

#### 3.1.3 The body in knowing

In his writings, Merleau-Ponty (1962) studies how we come to know the world through the body by 'being-in-the-world' and he thus tries to acknowledge the subjectivity of human experience. For Merleau-Ponty, the body uses its "own parts as a general source of symbols for the world" (ibid., 237) and it is through the body that we can understand the world and find "significance not only to the natural objects, but also to cultural objects like words" (ibid., 235). Before becoming an indication for a concept, word is "first of all an event which grips my body, and this circumscribes the area of significance to which is has a relevance" (ibid.). The sounds of words are empty unless the body's perceptual experience fills them (ibid., 193).

For Merleau-Ponty, the body schema (*le schéma corporel*) provides one with the prereflective knowledge of the location of one's body parts; the reference of the spatiality of situation is one of the ways in which the limbs enter into objects (M-P 1962, 98, 100, 1945, 114). One's movements directly intend the final situation. This happens at the pre-reflective level of knowing through what in psychology is called kinaesthetic sensations. Merleau-Ponty refers to bodily intentionality; that is, intentionality "initiates a movement through space merely to attain the objective initially given at the starting point" (M-P 1962, 94). If my hand wants to grasp a ball, I do not have to think of grasping, my body knows where the ball is and how to get hold of it.

<sup>&</sup>lt;sup>13</sup> I use the English term 'body schema' for the expression 'le schema corporel' although Colin Smith (the translator of the English edition used) has translated it as 'body image'. As Tiemersma (1989, 2) notes, the psychological term 'body image' refers rather to "conscious representation or conception of the body". In some places (e.g. M-P 1962, 206) Smith does use the translation 'body schema'.

By perceiving the world through the body, in living experience 'self-other-things' comes into being (M-P 1962, 57). When writing about *the act of learning* Merleau-Ponty stresses the importance of "circumscribed ignorance" (ibid., 28). This implies that in learning we need to know what we are looking for, yet simultaneously, we need to be ignorant of it, or otherwise we would not be searching. This 'empty' but already determinate intention implies attention. Attention presupposes a new way for consciousness to be present to its objects. In the act of attention one locates the bodily point being touched. Attention creates a field, either perceptual or mental, for exploration, which happens through movements or thoughts; it brings "to light the object of attention itself". (Ibid., 29.)

In the exploration of the object, the bodily movements and the object (or the world) reciprocally come into being. In this act of knowing, one also becomes aware of one's own body and rediscovers one's self by establishing the contact between the world and the body (M-P 1962, 206). Merleau-Ponty replaces the dualistic scheme whereby subjectivity defines itself by excluding the body object by a model of corporeal reflexivity. The tacit cogito and its refined version, the reversibility of flesh, provide another ground for the *cogito*. (Dillon 1997, 110.) For Merleau-Ponty, consciousness is not a matter of 'I think that' but of 'I can' (ibid., 137); it is "being-toward-the-thing through the intermediary of the body" (ibid., 138-139). The bodily 'I can', the tacit cogito of pre-reflective experience, is anonymous or pre-personal. However, it includes "not only the ability to move, grasp, perceive, etc., but also the ability to think" (Dillon 1997, 110). As Dillon (ibid.) notes, thought is "conceived as an extension of body's perceptual powers, a development of the reflexivity that is latent in perception". This anonymous perception in not accompanied by 'I think', but yet it has a reflective character. The reflection "transforms the world by introducing an 'I' into it," as Dillon (1997, 110) writes about Merleau-Ponty's understanding of reflective act. Thus, 'there is the sun' becomes 'I see the sun' (ibid.). Through this reflexivity, I become aware of myself as a knower.

The following example of Damasio (2000, 10) adjusted to another setting may clarify this phenomenon. Imagine listening to music and constructing the meaning of sounds, in this case, finding the pulse. The sensory images of what you perceive externally and the related images you recall occupy most of the scope of your mind. But at the same time other things go on in your mind. Your mind displays something sufficient to indicate that *you* rather than anyone else are doing the listening and the understanding of music. There is a presence of you as potential actor on, and observer and owner of, the things imagined in a particular relationship with some object. According to Damasio, this first-person perspective—the consciousness of self—begins as a feeling. As he writes, "[c]onsciousness *feels* like a feeling, and if it feels like a feeling, it may well be a feeling" (ibid., 312, italics original).

In knowing the world and our self, 'the other' is also of crucial importance. It is possible to interpret and understand the behaviour and the action of others by analogy with and through the kind of inner experience that reveals the significance and intention

<sup>&</sup>lt;sup>14</sup> According to Damasio (2000, 25), the "sense of self in the act of knowing an object is an infusion of *new* knowledge, continuously created within the brain as long as "objects", actually present or recalled, interact with the organism and cause it to change" (italics original).

of perceived action (M-P 1962, 348). Similarly, as we understand a new kind of behaviour we understand the things involved, since the significance of a thing is embodied by engaging it (ibid., 319–320). Comprehending the actions of other people, then, happens in dialogue with our own being (M-P 1964/1982, 168–169, 1973/1991, 139). As their landscapes interweave and actions between people fit together, as I sense the other and reciprocally become sensed by the other, the intertwining or intersection of understanding between them occurs (M-P 1968, 142).

Yet, in this existing synergy among different organisms there is also a gap that differentiates them but that also facilitates learning. Although 'I sense the other' and 'the other senses me', I can never totally reach and know the other's perceptual experience. Therefore, the reversibility between 'I sense the other' and 'the other senses me' is asymmetrical, as Dillon (1997, 168) notes; the reversibility is not perfectly realized in fact (M-P 1968, 147). "I shall never in all strictness be able to think the other person's thought" (M-P 1964/1982, 169); and, similarly, the other will never experience and understand the things as I do. Because of this gap, the other can show me ways of being in the world that I have not known before. Furthermore, this gap can help us to discover our world since the standpoints of the other and of ours are reciprocally interchangeable. (Rouhiainen 2003, 126–127.) Merleau-Ponty even states, "all knowledge of man by man ... is the taking up by each ... of the act of others". When learning and perceiving from another it is not a question of positing of an object, but rather, it is a question of "a communication with a way of being". (M-P 1964/1991, 93.)

To point to an essential relationship between thought and body, Merleau-Ponty turns to a discussion of speech and gesture. As Wis (1993) notes, while the acts of speaking and hearing are associated with the body, the process of thinking is associated with the mind and is not usually regarded as being dependent on bodily involvement. Classically, speech is viewed as translated thought. (Ibid., 40.) Merleau-Ponty (1968) refutes the paradigm of a stimulus-response connection and views speech and gesture as *completed* thought. Language is a subject's act of "taking up of a position in the world of his meanings" (M-P 1962, 193). Our experience shows us that even familiar objects appear indeterminate until we remember their names; consequently, naming *is* recognition (Langer 1989, 58). Thought is not realized or completed until expressed in words or in some overt action other than words. Thought is therefore dependent upon bodily involvement; thought and expression are one and the same. (M-P 1962, 174–199.) Likewise, we could say there is no thinking that parallels or follows; listening is thinking (Langer 1989, 59). (See IV.)

As there is no translational act in expressing thoughts through gestures or words, the words evoke bodily meaning reciprocally and directly for Merleau-Ponty. The word is "first of all an event which grips my body, and this grip circumscribes the area of significance to which is has reference" (M-P 1962, 235). In M. Langer's (1989, 61) analysis of Merleau-Ponty's notion of gesture she writes: "Communication and comprehension of a gesture are achieved through the establishing of a reciprocity between another's intention and my own." Both his intention and mine 'inhabit' the body. Our interaction involves a pre-reflective act of structuring the world. Expression and comprehension are achieved through the body first and foremost; any intellectual clarification comes later. Communication thus understood is no more mysterious than is

the perception of objects; for in both cases we experience a bodily presence that is prior to any scientific conception of the event. (Ibid.)

#### 3.1.4 Various modes or levels of knowing

For Merleau-Ponty, the pre-reflective level of knowing is essential. Pre-reflectively the body perceives anonymously, before any sense of the reflective "I" appears. Every perception is presented to us anonymously, thus, according to Merleau-Ponty, it would be more precise to say that 'one perceives in me' that to say that 'I perceive'. (M-P 1962, 80, 215.)

When I become aware of my movements, there is some mind connection with them; the movements are mindful even though I am not aware of 'minding them' (Stubley 2003). This already implies the involvement of a degree of reflection for Merleau-Ponty. Yet, as I have suggested in my substudies (II & IV), this level of knowing can also be interpreted as a transition between the pre-reflective and reflective domains of knowing—the latter being the level of language. It means being mindful of actions, yet, without reflective thinking. The actions are not consciously 'thought through', yet are mindful.

Merleau-Ponty refers to what can be called the body's 'mindful skilfulness' by means of the notion of habit. For him, habit is "knowledge in the hands, which is forthcoming only when bodily effort is made, and cannot be formulated in detachment from that effort" (M-P 1962, 144). Through the acquisition of habit, the body 'understands'; the body 'catches' and 'comprehends' movement through mindful action. The acquisition of a habit is "the motor grasping of a motor significance" (ibid., 143). A movement is learnt when the body has incorporated it into its 'world' (ibid., 139). The body's skilfulness is not, however, mechanistic, static, nor unchanging; our habitual mode of being is constantly being altered (in however small ways). Such habit is far more like a competence, or a flexible skill, a power of action and reaction, which can be mobilized mindfully under different conditions to achieve different effects. (M-P 1962, 143, Crossley 1994, 12.) Habits are body's way of interacting with the world. Acquiring a new habit enriches the body schema and generates new or richer understanding and meaning of movement (M-P 1962, 153).

This practical and embodied 'intelligence' can be illustrated by physical, activity-based learning that commonly occurs in musical studies. To learn to play an instrument is neither a matter of intellectual analysis and reconstruction nor a mechanical recording of impressions. It is a question, rather, of the bodily comprehension of a "motor significance" that enables me to perform music without having to think about the physical actions. The musical instrument is thus comparable to the blind man's stick, which has ceased to be a mere object for him, and instead, is just as integral to his motility as if it were another leg (M-P 1962, 143). (See also IV.) However, learning new habits and changing old ones requires awareness. Thus the kind of habits described by Merleau-Ponty manifest a mindful level of knowing—a position which is in total agreement with the pragmatist's conception of habit (see e.g. Murphy 1990). This

mindfulness is seen when, for example, a wrong note is noticed—even though we are not concentrating on noticing wrong notes—and then mindfully corrected.

For Merleau-Ponty, such corporeal reflectivity remains tacit—silent and unexpressed, whereas reflection is thematized through language and thought (M-P 1962, 218–219). When tacit reflectivity—the tacit *cogito*—expresses itself in language, it takes the form of 'I think'. Through language the 'I' of subjectivity, the agent who thinks, comes into being. (M-P 1962, 404.) Explicit reflection means interpreting and understanding the perceptual phenomenon rather than trying to find 'the truth'; it is an active effort to grasp the meaning of an experience (M-P 1964a/1989, 64). However, as Priest notes, it does not follow from the fact that I have to think about my experience that I have to reflect on it *while* I am having it; and from the fact that I do not reflect upon my experience while I am having it, it does not follow that I cannot later remember what it is like (Priest 1998, 69). I can reflect upon my experience through my own memory of the lived experience.

In order to pass from an original lived experience to the essences, that is, to grasp the significance of the experience, it is necessary to "actively intervene" (M-P 1968, 111). This implies further exploring the relationships between things in experience and transferring the experiences to new situations, thus achieving a distance from the experience that brings it and our self "wholly to the transparency of the imaginary" (ibid.). What is experienced is reflected on by questioning and imaginatively changing and extending its qualities. "That which remains invariable through these changes is the essence of the phenomenon in question" (M-P 1964a/1989, 70, italics original). For Merleau-Ponty, in reflective understanding of an initially pre-reflective experience there is a shift in the mode of our being. Through this active "intervention" we become responsible for our history, conceptions and actions (M-P 1962, xx).

Merleau-Ponty's phenomenology has been criticized for not acknowledging the importance of reflection enough. However, he does not underestimate reflection but, rather, emphasizes that the reflective ideal of positing thought must be based on the pre-reflective experience of the thing (e.g. M-P 1962, 57). As he writes, "reflection does not itself grasp its full significance unless it refers to the unreflective fund of experience which it presupposes, upon which it draws" (ibid., 242). His point is simply that 'I can'—corporeal reflectivity—precedes and facilitates 'I think' (ibid., 137). Subsequent reflective thinking tries to make the pre-reflective experience understandable. He writes:

"It is a question not of putting the perceptual faith in place of reflection, but on the contrary of taking into account the total situation, which involves reference from the one to the other. What is given is not a massive and opaque world, or a universe of adequate thought; it is a reflection which turns back over the density of the world in order to clarify it, but which, coming second, reflects back to it only its own light" (M-P 1968, 35).

Reflection thus allows not only "my presence to myself, but also the possibility of an 'outside spectator'" provided that I do not distance myself from the world and the experience of it (M-P 1962, xii). As an outside spectator I can reflect also the actions and experiences of other people, which is the typical setting of the researcher. It is important to note that reflection can be directed not only towards my own lived experiences, but towards itself: I can become aware of my reflecting. Such reflection, then, becomes a creative receptivity of lived experience in itself. In Merleau-Ponty's words, "[m]y

reflection cannot be unaware of itself as an event, and so it appears to itself in this light of a truly creative act" (ibid., x).

Although reflection enables us to understand our past experiences and is therefore essential, lived relations between self and other 'things' or people can never be grasped perfectly by consciousness since the body-subject is never entirely present-to-itself. Reflection offers only a reconstruction of our earlier experiences (M-P 1962, ix-x). Meaningful behaviour is lived through, rather than thematized and reflected upon, and this ensures that the actions of a particular individual can be meaningful without him/her being fully or reflectively aware of the meaning that the actions create or embody. This is evident, for example, in musical actions that are learned through repetition and corporeal reflexivity within a certain musical culture. This interpretation of knowing by Merleau-Ponty is distinct from common understanding of it.

#### 3.2 Praxial philosophy of music education

In the substudies, I have referred to the so-called praxial philosophy of music education. Reference to "praxial philosophy" appeared for the first time in 1990 in the text of Philip Alperson (Regelski 1998c). Music education scholars Thomas A. Regelski, David J. Elliott and Wayne D. Bowman have further elucidated implications of the notions of *music as praxis* and *music education as praxis*. As Goble (2003, 24–25) states, their writings have been "in the forefront of dialogue concerning the philosophy of the music education profession in North America for the past decade" They have taken on the task independently, though each of them has also acknowledged and adopted some aspects of the others' thinking (see Goble 2003). In the third substudy, the ideas of Jaques-Dalcroze and Elliott (1995) are examined in relation to recent philosophical discussion on the question of the 'body-mind' with particular reference to the views of John Dewey's philosophy. In other substudies (II & IV), I have also referred to the ideas of Regelski (1994, 1996, 1998b) and Bowman (1998, 2000).

Praxial philosophy of music aims to understand, from a philosophical viewpoint, what music means to people in actual situations of use. It studies in particular the functional character of music: making, teaching, and enjoying music. (Alperson 1991, 234.) In fact, the Greek word praxis can be translated as "action" or "acting" (Regelski 1998c). According to Alperson (1991, 233), the so-called "praxial" view of music education attempts "to understand [music] in terms of the variety of meaning and values evidenced in actual practice in particular cultures".

<sup>&</sup>lt;sup>15</sup> Though Goble refers only to Regelski and Elliott in this quote, Bowman can be included in this discussion.

<sup>&</sup>lt;sup>16</sup> Goble asserts that "[i]n using the term 'praxial', Alperson was drawing upon the ancient Greek distinction (discussed by Aristotle) between three areas of knowledge: *theoria, techne*, and *praxis.* [T]heoria denoted for the Greeks speculative knowledge of pure, eternal truth; *techne* designated the kind of knowledge required for making, producing, or creating something; and *praxis* signified knowledge that takes into account the sorts of reasoning and critical thinking necessary for getting 'right results' for the benefit of people in a given domain or situation." (Goble 2003, 24, see also Regelski 1998c.)

Praxial theory is opposed to the 'aesthetic<sup>17</sup> ideology' in music education. Regelski maintains that "music for its own sake" of traditional aesthetics is a manifestation of the Cartesian mind-body separation, as though music exists to just be "contemplated". Aesthetic theory sees "aesthetic responding" as exclusively cerebral, i.e., contemplative, abstract, intellectual, and so on, while praxial theory rejects the mind-body dualism and stresses the "minding of the body"; i.e., that the whole body, not just the brain, is involved in all experience. According to Regelski, praxial theory is rooted in contemporary neuroscience where the bodily bases of knowing (and feeling) are taken for granted, in comparison to traditional aesthetic theory where knowledge (separated from the body) with high abstract meaning is the more valued and trusted. (Regelski 2004, 1998c, 1996.)

With aesthetics-based music education philosophy, praxialism also initiates from defining music and a consideration of what music 'is' and 'means' (Elliott 1995, 12–13). For traditional aesthetic theory "music" of any kind shares some kind of "essence" with all other music; it is thus a singular 'thing'. To the degree that its essence is aesthetic, the music is to that degree "good". Music as praxis is of and for life and use. Music is not considered a collection of "works" that are performed and contemplated, but a matter of action (including listening) that engages the individual's total being (including past experience, which is significantly imbued with bodily qualia). Music, therefore, does not seek or contemplate fixed aesthetic meanings but, rather, constitutes them on and for each occasion of praxis. Thus, there can only be "musics" (plural) and, further, music is synonymous with musicing (thus active, not static or stable). (Elliott 1995, Regelski 1998c, 2004, see also Westerlund 2003.)

In a praxial view, all music is in some respect functional and musical knowing is both attained and manifested in musical action. Musicianship is considered procedural in essence and is demonstrated as a form of practical knowledge, a matter what Elliott (1995)—based on writings of Donald Schön (1983, 1987)—calls thinking-in-action and knowing-in-action (see also Regelski 1996)<sup>18</sup>. Especially for Elliott (1995), 'knowing how' is the basis on which he builds his understanding of musical knowing. The cognitive aspect of action is associated with the "reflection-in-action" (Schön 1983). Contrary to the orthodox aesthetic perspective, praxialism emphasizes the situatedness of all musical action. "The Being-in-the-world of music is praxial in terms of the many and varied existential, social, cultural and intellectual intentions served" (Regelski 1996, 32). The same praxial view concerns teaching music.

<sup>&</sup>lt;sup>17</sup> McCarthy and Goble (2002, 21) define aesthetics as the "branch of philosophy that deals with art..., its sources, form and effects. Aesthetic philosophies of music education focus on preparing students to perceive and respond appropriately to musical works as forms of art... in order to 'educate their feelings' and to evoke in them 'aesthetic experience' (i.e., a unique, highly pleasurable state of mind)."

<sup>&</sup>lt;sup>18</sup> The term "thinking-in-action" is used to refer to the thinking of a musician, dancer, athlete, etc. as the "performance" is going on (Regelski 2004). For Elliott (see 1995, 50), this thinking is conscious and actions are thoughtful; that is, they mindful of results and their criteria. Still, the reflection of actions can be 'silent' in the sense that it is often not articulated in words. Practical (or pedagogical content) knowledge of teachers is an example of this kind of knowing (see I). However, Regelski (2004) holds that thinking-in-action also describes a lot of actions that we do habitually (as described by pragmatism) but that we can reflect on—consciously focus on—as needed. This definition comes closer to what was discussed in the previous chapter as meaningful behaviour that is lived through, rather than thematized and reflected upon.

Regelski (1998c) finds three different aspects of praxis: (1) As a verb-form, praxis refers to "acting". Thus, it is a process of doing or trying to accomplish certain values or "goods", in which action itself is its own reward. Music as praxis, then, refers to 'doing' music, to what Elliott calls musicing. (2) As a noun, praxis refers to a pragmatic goal, to a product of the process of action. In music this implies curriculum goals or results of musical action, and more generally, the 'good time' created. (3) Praxis also refers to a broad category of knowledge that is developed through action. In music it means the practical and often tacit<sup>19</sup> 'know-how' what is called, for example, functional musicianship, musicality, or creativity. Praxial knowledge is based on personal efforts intentions and experiences, which in turn develop contextually through other practitioners and it evolves according to ever-new needs and contexts. Thus, it is never fixed or final, but functional according to each new application. (Ibid., Regelski 1996, 1998b.)

Each praxis exists to serve a particular (situated) need that it is "good for". It is centrally concerned with bringing about 'right results' for people. Praxis combines the real situations of life and decisions made in relation to them. There is no absolute right in action; rather, actions are 'good' and 'right' in or for a given situation. Thus, in music, musicianship varies according to the musical ends in question, which vary considerably between musicers and "good music" is music that serves the need in question particularly well. (Regelski 1998ac, see also Bowman 2002, 69.)

Furthermore, for Regelski, music is not just for musicians and its "goods" don't depend on a lot of specialised training; just being alive in a musical culture imparts at least an effective beginning. Thus, music "affords" different kinds of meaning, or relevance, according to how a person is prepared to "use" it. Regelski stresses that the task of music education is to provide the students with abilities that are of use in everyday musical actions and that promote musically the 'good life'. (Regelski 1996, 1998bc, 2004.)

When applying this understanding of praxis to teaching we could say that a teacher should not only technically perform his professionalism but seek to reach 'good results' that depend on a diagnosis of the pedagogical situation and the 'goods' of the students in it. Students can be considered 'clients' whose development is of primary importance when evaluating the results of 'good teaching'.

Elliott (1995) refers to musical action as 'musicing', a neologism that includes performing, arranging, composing, conducting and improvising and an equally active process of listening. Musicing consists of the complex interaction between present human action and the different musicianship that constitutes each musical tradition. He stresses "expertise" as relevant, but allows that one need not be a professional to "appreciate" music. Elliott maintains that all musicing involves conscious intention, and performing is thus considered conscious and thoughtful action that is mindful of results and their criteria (Elliott 1995, 50, also Westerlund 2002, 167). According to Elliott, musicing engages "musicers" in what psychologist Mihalyi Csikszentmihalyi called a "flow" experience. Furthermore, musicing contributes to personal self-growth, greater self-

<sup>&</sup>lt;sup>19</sup> For Merleau-Ponty (1962) and Polanyi (1966), 'tacit' knowing happens in the pre-reflective level, whereas for Regelski, the notion of tacit seems also to include the level of reflection where knowing is not articulated through words and is in that sense silent.

knowledge and improved self-esteem as well as brings order to consciousness. (Elliott 1995, 109–119, also McCarthy & Goble 2002.)

For Elliott (1995), a musical praxis is defined and governed by its own musicianship demands and criteria. He maintains that in order to properly "understand" music, you need to have performed it and thus have gained an insider's knowledge of its musicianship qualities. Thus, music education should aim to develop performance-orientated musicianship of individual learners. Regelski (2000), instead, does not see any particular musical action as a necessary or sufficient condition for the other. For him, for example, "listening is itself a particular praxis and, therefore, has its unique knowledge conditions that are 'practiced' only through the action itself" (ibid., 66–67). He emphasizes 'general musicianship' that has relevance for use across a variety of cultural traditions and styles of music. According to Goble (2003), Regelski's thinking thus seems closer to Alperson's original praxial account.

Elliott's ideas in *Music matters* (1995) have been largely discussed in the recent seminars and journals of music education. His ideas have received comments both for and against. Määttänen criticizes Elliott for combining two contradictory definitions of mind: that the mind equals the brain and, conversely, that the mind is not part of the brain nor of the body (Määttänen 2000). Although Elliott (1995, 53, 55–58) argues that musical thinking and knowing are in musical actions and that musical actions can be seen as the 'em-body-ment' of musical thinking and knowing, his first definition of mind implies what Määttänen (2000) calls a theory for 'embrained' instead of embodied knowledge. In the second case, Elliott (1995, 58) defines mind as a matter of interaction between the body and the social and cultural world. Only this definition, according to Määttänen (2000), can be joined with the idea that musical action embodies musical understanding. (See also III, Westerlund & Juntunen 2004.) Bowman (2000) criticizes Elliott for attaching a cognitive stamp to musical knowing without considering enough the bodily roots of cognition when arguing that 'music matters'. Because of this, Elliott's notion of musical knowing does not communicate well enough the specific nature of that knowing.

Bowman (2000) stresses that any account of musical engagements has to account for the ways in which the body informs and enables musical doings. He urges us to recognize that the body is a constitutive element in music cognition and creativity. Since the musical meanings are first and foremost connected with bodily perceptions, according to him, musical understanding cannot be separated from musical bodily knowing and Being. He also maintains that music itself is a kind of embodied mode of being and knowing. He writes that music is a unique way of being in the world because it is a unique way of being in the body: "[I]t draws together *knowing, being,* and *doing* as nothing else does" (ibid., 49, italics original). Music allows one to reach a level of consciousness where the mind and body are inseparably fused. (Ibid.) According to him, as the musical experience consists of distinctive ways of being in the body, the implications of Merleau-Ponty's philosophy for music education philosophy are obvious (Bowman 1998, 263, 299).

The third substudy refers to the views of Deweyan pragmatism when examining some ideas of Jaques-Dalcroze and Elliott. There is a close connection between pragmatism and praxialism in music education in the framework of action (see Westerlund 2002). John Dewey's pragmatism stresses the meaning of action and the praxial kind of thinking- and knowing-in-action, suggested by Elliott (Westerlund 2002, 2003, see also Määttänen 1996, Väkevä 2004). The educational principle 'learning-by-doing' underlays

Dewey's epistemic view in general. Experience is understood as an interaction between a human being and his physical and social environment. (Westerlund 2002, 16, 72–73, 165.) Dewey holds that music is experienced bodily and that a proper music education is a question of transformation of experience in the form of new skills and habits. For him, knowledge is both a result of experience and a tool for better experience (Dewey 1934, 290).<sup>20</sup>

#### 3.3 Hermeneutic understanding and interpretation

Hermeneutics<sup>21</sup> is an extensive research tradition including a variety of possible focuses. In fact, all qualitative research is—in some respect—hermeneutic in nature. My study's general interpretative stance belongs to the hermeneutic tradition. The methodology used in my study follows the interpretive hermeneutic tradition by developing a new, more contemporary interpretation of certain aspects of Dalcroze Eurhythmics. Although the main theoretical frame of reference of the study comes from the phenomenological tradition, there is no inconsistency with the hermeneutic tradition, not at least when following Heidegger's existential-ontological hermeneutics (see Bleicher 1990). In both, experience, meaning, and communality are central notions in ontological questions. Epistemologically, understanding and interpretation are both fundamental.

In this study, the meaning of interpretation and understanding follows the ideas of philosophical hermeneutics that mainly draws on Gadamer and Heidegger. For them, understanding is not the product of (objective) interpretation; understanding *is* interpretation. Interpretation is not a case of acquiring new knowledge but a means of interpreting 'the world' that has already been understood; it is the working-out of possibilities projected in understanding. Understanding and interpretation are never merely grasping of something pre-given but covers the co-existence in the world of subject and object through being-in-the-world. (Gadamer 1979, 98–103.) Thus, reaching an understanding does not mean excluding one's own standpoint, prejudgements, or prejudices; rather, it requires an engagement of one's biases and accepts the fact that we belong to some existing tradition which functions as a starting point yet allows new understanding. We can neither free nor distance ourselves from such a background, nor should we try. (Bleicher 1990, 98–103, Gadamer 1979, 234, 236, also Schwandt 2000, 194–196.)

In addition, hermeneutic understanding is participative, conversational, and dialogic; it is achieved through a logical process of questioning and answering. It is something that is *produced* in a dialogue, not something *reproduced* by an interpreter through an analysis

<sup>&</sup>lt;sup>20</sup> Thus, the connection between Merleau-Ponty's phenomenology and praxialism could be seen to form itself via Deweyan pragmatism. This connection is not however elaborated in this study.

<sup>&</sup>lt;sup>21</sup> Hermeneutics is an established methodology for interpreting text; it was originally applied to interpreting theological documents. The concept of interpretation includes three connotations of the Greek verb *hermeneuini*: to express, to explain, and to make understandable (Vestergaard 1985, 108). The first connotation emphasizes the expressive quality of interpretation. The second stresses that interpretation not only communicates meaning, but explains and communicates meanings interactively. The third refers to the translating character of the process of interpretation, the fitting together of two or more worlds unfamiliar to each other. (Ibid., 110–111, also Siljander 1988, 101.)

of what is to be understood (Schwandt 2000). Philosophical hermeneutics shares with phenomenology a nonobjectivist view of meaning. "The text [or human action] is not an 'object out there' independent of its interpretations and capable of serving as an arbiter of their correctness" (Connolly & Keutner 1998, 17, quoted in Schwandt 2000, 195). Hence, meaning is not discovered; rather, it is negotiated reciprocally in the process of interpretation. Understanding is a kind of practical experience in and of the world; it is 'lived' or existential. Consequently, there can never be a final and exact interpretation. (Schwandt 2000, 195–196.)

In my study, the use of hermeneutic interpretation means constructing a new understanding of Dalcroze Eurhythmics. My study aims to say something new and meaningful, to open new doors and perspectives of interpretation. Thus, the hermeneutic understanding and interpretation in my study does not mean, for example, comprehending and finding the 'right meaning'. Rather, the goal of my study is to derive a fresh understanding of the principles and practical applications of Dalcroze Eurhythmics based on Merleau-Ponty's philosophy of embodiment.

The "hermeneutic circle" that arises in hermeneutics refers to the relationship between understanding and the interpreter's prior knowledge of the object of interpretation. It proceeds from a communality that binds us to the traditional understanding of any object of interpretation. It implies that understanding means interpretation that never starts from nothingness—a *tabula rasa*, or a so-called "God's eye view"; rather, it is always based on previous understanding as an inescapable 'given' of the interpretive situation. Thus, understanding involves a circular relationship where present interpretation depends on some prior understanding of the whole under consideration. It is, therefore, not a 'vicious', 'relativistic' or meaningless circle, but an unavoidable and reciprocal *interaction* between existing and new meanings, between wholes and parts or details. (See Bleicher 1990, 102–103, 267.) The hermeneutic circle also implies that the process of understanding never reaches its final destination—the circle never closes. The definition of the research subject and interpretation are always somewhat provisional, not final. The hermeneutic process hence requires re-understanding the object of study over time. (Gadamer 1979, 236, Kincheloe & McLaren 2000, 286.)

The roots of the hermeneutic circle of this study lie in my first experiences of Dalcroze Eurhythmics over twenty years ago. My many years of studying and teaching Dalcroze Eurhythmics, and especially my licentiate thesis, are very important 'given' in that circle. In this study, the hermeneutic spiral of understanding is manifested in the order and, consequently, in the content of substudies starting from interpreting the Dalcroze teachers' 'talk'—their expressed beliefs, principles, and understanding of Dalcroze Eurhythmics—as well as their practical applications of the approach (I & II), and then advancing towards a theoretical examination and interpretation of the mind-body relation, the meaning of body movement, and the process of learning through the body (III & IV).

#### 3.4 Materials and methods

It is typical for qualitative research to gather information that makes different interpretations possible and to combine various methods. It is also considered an advantage for the study to include research materials gathered through more than one method (Alasuutari 1999, 84). Therefore, every inquirer has to design a personal combination of methods that fit the need of the study best. Qualitative research methods also vary according the research questions at stake and these questions, in turn, are determined by what the inquirer wants to study. (See e.g. Denzin & Lincoln 1994, 2.) The research materials and methods of this study are multifaceted, then (see appendix 1). The study combines empirical and theoretical approaches. The first and second substudies are empirical in nature, whereas the third and fourth substudies are theoretical. The first substudy uses a narrative method and the second one utilizes qualitative content analysis. The choice and application of these methods have been framed with the objective of understanding the research object as profoundly or richly as possible, with the understanding that "objective reality" is unreachable (see Alasuutari 1999, 82).

What is then the difference between theoretical and empirical approaches if, in any case, the research data has to be collected and the results have to be presented in a reliable way? According to Tuomi & Sarajärvi (2002, 20), the methods of data collection and analysis play a crucial role in empirical analysis, while a theoretical analysis cannot, in the same way, follow any given method. In the case of empirical study, the description of the research process helps the reader assess the thesis and thus increases its trustworthiness. The research processes are described in the following.

### 3.4.1 Narrative as method of data collection and writing

As the description of the research process of the first substudy is relatively short in the paper, more details are provided of it. The research material of the first substudy consists of transcribed interviews (110 pages) of seven Dalcroze master teachers in the United States. These teachers were qualified as 'master teachers' since they hold the Dalcroze Diploma—the highest international degree of Dalcroze studies—and have taught Dalcroze Eurhythmics and trained teachers for many years. This group of teachers can be considered a representative sample of Dalcroze master teachers (see Greene 2000, 990). The teachers were interviewed between August 1999 and January 2000. The interviews generally lasted for two hours.

I have focused on the Dalcroze work in the U.S. because the approach there has stayed relatively close to its original form<sup>23</sup>, partly due to the Diploma still being awarded by the Institute Jaques-Dalcroze in Geneva. Furthermore, in the U.S., there are several applications of Dalcroze Eurhythmics in the professional training of musicians—the level

<sup>&</sup>lt;sup>22</sup> Two more teachers might have been included in this group, but they were not available for my study. One master teacher was not teaching Dalcroze at that time and declined to participate. The other master teacher works mostly in Europe and thus was unavailable for my interview.

<sup>&</sup>lt;sup>23</sup> 'Original form' here implies that teaching includes all the areas of the approach (see 2.2)

of education at which the approach got started. Language also played an important role, since I wanted to be able to interview the teachers in their own language.

In this substudy, I have applied certain characteristics of narrative method (see Gudmundsdottir 1996). The interview used to collect data would be defined most accurately as episodic interview (Flick 2002), which assumes that the subjects' "experiences of a certain domain are stored and remembered in forms of narrative-episodic and semantic knowledge" (ibid., 104). It seeks to make use of the advantages of both a narrative and a thematic interview. The advantage of a narrative interview is that it allows the researcher to approach interviewee's experiential world in a more comprehensive way. (Ibid., 96, 103.) Gudmundsdottir (1995, 26) asserts that experienced teachers intuitively use narrative to bring order to what they know about teaching. Articulating the pedagogical content knowledge thus takes on a narrative nature (see ibid., 29) and seemed an appropriate method for this substudy. The narrative-episodic knowledge is manifested, for example, in teachers' life stories and in their descriptions of why they decided to study Dalcroze Eurhythmics.

On the other hand, a thematic interview allows the interviewer to ask specific questions according to the research interest. The particular questions in these interviews, then, involved the subjective understanding of Dalcroze principles, and the interviewees were also asked to comment on some of Jaques-Dalcroze's statements (see appendix 2). All questions aimed at reaching semantic knowledge based on assumptions and relations that are abstracted and generalized from experiences and concrete situations (see Flick 2002, 104).

In the first phase of analysis, the transcribed interviews were categorized according to the questions asked during the interview (see appendix 2). During the categorization, I noticed that the teachers' talk and Jaques-Dalcroze's writings seemed to resonate and interact—Jacques-Dalcroze's statements and principles studied in my licentiate thesis (Juntunen 1999) had obviously guided the interview. After reading through the categorized material several times in relation to Jaques-Dalcroze's original ideas, I formed the themes used as the subheadings of the paper. Although each teacher seemed to have a very personalized approach, their experiences and the understanding of the principles and practice of the Dalcroze approach were very similar.

The research report has been written in the form of a fictive story, employing the idea of 'writing as a method of inquiry' by Richardson (2000). For her, writing is a way of clarifying one's own thoughts, a process of discovery. Writing is hence considered a method of inquiry and interpretation; it entails wording or rewording the world without ever reaching a final goal. This alternative way of presenting the research results makes it possible to shape the material with a specific audience in mind. The research can thus reach wide and diverse audiences. (Ibid., 924, 936.) The text was written the audience of the conference of the International Society of Music Education (ISME) in mind.

The paper is a fictive conversation between Jaques-Dalcroze and two Dalcroze teachers, Sarah and Jamie. Since Jaques-Dalcroze's statements had guided my questions and comments during the interviews, it seemed appropriate to set the Dalcroze teachers' talk in dialogue with Jaques-Dalcroze's words. However, since the length of the paper

was restricted, only themes that explained the essence of the approach were included.<sup>24</sup> Therefore, only short passages of the teachers' life-stories are included in the research report.<sup>25</sup>

The words spoken by Jaques-Dalcroze in this fictive conversation are based on his writings. Since, for the most part the teachers' articulated reflections seemed to complement and enrich each other, the words of Sarah and Jamie have been compiled from all seven interviews. I needed at least two persons for a natural conversation, but neither fictive person represents a particular group of the interviewed teachers. Direct quotes from the interview data have been used, for the most part, in order to allow the teachers' own voices to be heard. (See appendix 3.) Nonetheless, it can be argued whether the voices of Sarah and Jamie are those of the teachers' or that of the researcher. In a way, the constructed text presents this interpretive inquirer's own inscription of such meaning (Lather 1991). By choosing certain themes and quotes from the data the researcher also reveals a personal story (Gubrium & Holstein 1995, 22). Although the conversation is fictive, the text itself, in so far as it is systematic, clear, critical, and committed to the scientific tradition, can be regarded as scientific (Richardson 2000).

This method of presenting the research results was extremely fascinating and rewarding; writing was a real 'flow' experience. Writing in a form of a narrative also allowed the use of teacher's own words, thus, giving primacy to their concrete lived experiences (see Denzin 2000). Furthermore, I could familiarize myself with a new way of reporting the research and hence extend my experiences and possibilities as a researcher

#### 3.4.2 Qualitative content analysis of commentary books and articles

The research material of the second substudy was drawn from the commentary books and articles about Dalcroze Eurhythmics published in the U.S after 1970. As I had already interviewed Dalcroze master teachers of the U.S., it seemed reasonable to continue the study within the U.S. I have also used doctoral dissertations published in the U.S. as sources when they included descriptions of the procedures of a Dalcroze lesson in action that cannot be found elsewhere. Additionally, I have used the research material of the first substudy in order to complete the picture of the multiplicity of practical applications. There is not a lot of published commentary writings on Dalcroze Eurhythmics, and the number of research studies is also fairly small. Thus, it was quite easy to locate this research material through the library databases and the homepages of Dalcroze societies.

<sup>&</sup>lt;sup>24</sup> The following themes were not addressed: Dalcroze solfège; a process of becoming a Dalcroze teacher; connections between Dalcroze Eurhythmics and other approaches or methods; and constructing a Dalcroze lesson.

<sup>&</sup>lt;sup>25</sup> The life stories of the teachers in relation to Dalcroze Eurhythmics were quite similar: All the interviewees had at first studied music professionally. They all had significant experience with the Dalcroze approach that encouraged them to study Dalcroze and this, in turn, led them to use the approach in their teaching. The narrative passages have been applied in introducing the fictive Dalcroze teachers in the paper.

Commentators do not seem to question Jaques-Dalcroze's arguments. However, such commentary does reveal a strong personal character of the writers, as based on their individual experiences using the approach. Some of the books and articles discuss simply the development and principles of the approach (e.g. Caldwell 1998, Landis & Carter 1972); some give practical ideas for teaching (e.g. Abramson 1997, Findlay 1971, Henke 1984); and some include both aspects (e.g. Aronoff 1979, Caldwell 1995, Choksy *et al.* 1986, Farber 1991, Henke 1993, Mead 1994). The dissertations of Alperson (1994) and Stone (1985) study specific Dalcroze Eurhythmics classes and teachers and provide detailed descriptions of the teaching procedures used in those situations.

In interpreting the commentary on Dalcroze Eurhythmics, I have used qualitative content analysis. In particular, I rely on Flick (2002) as well as on Tuomi and Sarajärvi (2002). Their writings have offered supportive arguments for the choices I have made and have helped me in forming the categories in the analysis. One concern of my research was to determine the particular subjects in music education in which the Dalcroze approach was used, and how it was used. These concerns guided the surveying of the commentary and the selection of certain parts of it (see Flick 2002, 190). First, the research material was 'reduced' based on this research interest. This material included about eighty pages and was organized into eight categories (see appendix 4). According to Tuomi and Sarajärvi (2002), one basic issue of analysis is to decide whether to search for similar or divergent aspects of the data. In looking for uses of the approach within music education, I looked for different applications; in analyzing the classroom procedures, I tried to find similar elements and any shared logic of teaching. After gaining familiarity with the gathered material, the following categories seemed meaningful: (1) subjects of studies divided into professional training and children's education; (2) teaching procedures within one lesson; (3) the role of body movement; and (4) the goals of practical applications of the Dalcroze approach. This categorization was used, as well, as subheadings of the substudy. Then the text was written as an attempt to synthesize the analysis. (See Tuomi & Sarajärvi 2002, 103, 110–113.)

#### 3.4.3 Theoretical substudies

The third and the fourth substudies are theoretical. Theoretical study in general builds on texts and operates with concepts. Although there is no strict method for a theoretical study, certain phases of action often occur in the process. These phases Tuomi & Sarajärvi (2002, 20) present based on Niiniluoto as: 1) finding and defining of the problem; 2) explicating, such as sorting, clarifying, and developing the complex viewpoints; and 3) argumentation, namely reasoning that proceeds methodically from a statement to a conclusion. In effect, such theoretical analysis is a kind of problem solving essay (ibid., 20–21, Rosenberg 1984). However, the research report does not necessarily indicate all the steps through which the researcher proceeded.

In both theoretical substudies (III & IV), I was fortunate to work with another researcher. In both cases, the joint effort started from a shared interest. In the third substudy, we shared an interest in examining the mind-body relationship and the philosophical question of the body in practical music education. The expertise of the

other writer was especially in Dewey's and Elliott's philosophies. In the fourth substudy, the researchers shared an interest in embodiment of Merleau-Ponty's philosophy. Elucidating the main viewpoints preceded the writing in both processes; defining the meaning of the basic concepts and the main arguments, shaping the goals and the structure, and so on. In the third substudy, the writing alternated individual writing, exchanging ideas, commenting on each other's text, and writing together. Given this working method, it is impossible to make a distinction in the text between writers. In the writing process of the fourth substudy, the other writer mostly commented on and made further suggestions to the text written.

Since the Dalcroze approach has roots in Jaques-Dalcroze's work, his writings have been referred to throughout this study. They have also been the starting point for the third and fourth substudy, and they have been applied in reporting the results of the first substudy. I have mainly used texts that include the essential arguments for Dalcroze teaching, but I have familiarized myself with all of Jaques-Dalcroze's published writings. His basic writings consist of articles, mainly published in the journal *Le Rythme*. In these, Jaques-Dalcroze presented his ideas and observations for the public. By doing so, he wanted to stimulate the discussion of Dalcroze Eurhythmics and of the arts and education in general (see J-D 1909a, 1930). The articles also include the only description of the history of the approach written by Jaques-Dalcroze himself (see J-D 1935).

His two primary books consist of these articles. *Le rythme, la musique et l'éducation* (1920/1965)<sup>26</sup> is a collection of Jaques-Dalcroze's essays written between 1898 and 1919. In the book, he presents and argues his basic thesis concerning musical learning and music education. *Art, Music and Education* (1930/1985) is a collection of essays published between 1922 and 1925. This book discusses mainly rhythm and the educational aspects of Dalcroze Eurhythmics in relation to the arts in general. The articles were originally published in French, but the book was published only in English. Occasionally, my study also refers to other works of Jaques-Dalcroze. His later books *La Musique et nous* (1945/1981) and *Souvenirs, Notes et Critiques* (1942) for the most parts overlap in content with the primary books mentioned above. Moreover, the theoretical content of *Méthode Jaques-Dalcroze* (see J-D 1906abcde, 1916, 1917, 1918ab, 1920, 1921b) is found in those primary books.

In a theoretical study, the sources used should be central and relevant in view of the research topic (Tuomi & Sarajärvi 2002, 21). In both theoretical substudies, only essential and reliable sources were used and cited. In the third substudy, Jaques-Dalcroze's ideas are examined primarily in relation to the writings of D. Elliott (1995) and in dialogue with recent philosophical discussion on the question of the 'body-mind' with particular reference to the writings of J. Dewey (e.g. 1958). Dewey and Elliott are both well-recognized scholars, who have studied the meaning of (holistic) action in knowing. In the fourth substudy, the role of body movement is examined mainly in dialogue with Merleau-Ponty's (1962, 1968) notions but with the recent literature of embodiment in the arts education (e.g. Parviainen 1998, 2000, Stubley 1998, Sheets-Johnstone 1981, 1999), psychology (Polanyi 1966, 1969), and cognitive science (Lakoff & Johnson 1980, 1999), as well.

<sup>&</sup>lt;sup>26</sup> In my substudies, I have applied the English translation *Rhythm, music and education* (J-D 1921/1980) since it is more available to readers than the original one.

Considering all the research material used for this study, Jaques-Dalcroze's writings clearly and decisively form the basis for understanding Dalcroze Eurhythmics. The commentary writings mainly update Jaques-Dalcroze's texts by placing them in contemporary perspective and by introducing various practical applications of the approach (II). The interviews of the master teachers allow the teachers' own voices to be heard and, thus, shed some light on the unwritten principles of the approach and of the ever-new praxial knowledge that results for the teacher from the use of the approach (I). The theoretical examination, in turn, has enabled the study and interpretation of certain aspects of Dalcroze Eurhythmics from scholarly perspectives outside of Jacque-Dalcroze's writings and the Dalcroze approach as employed by master teachers, and thus deepens the understanding of the theoretical accounts of the teaching practice.

#### 4 Presentation of substudies

# 4.1 From the bodily experience towards internalized musical understanding: how the master teachers articulate their pedagogical content knowledge of the Dalcroze approach

This paper examines the principles of Dalcroze teaching that appear in the Dalcroze master teachers' talk about their "pedagogical content knowledge". Pedagogical content knowledge (Shulman 1987) refers to master teachers' special ability to understand and know their field of teaching. It integrates a teacher's know-how of the content and the pedagogy. It identifies the professional understanding of how specific topics and issues are "organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction" (ibid., 8). It also includes the idea of teaching as reflective action, in which teachers make decisions in relation to their own values and the meanings included in the content of teaching. (Ibid., also Gudmunsdottir 1995.) This praxial knowledge cannot be found in textbooks and is rarely articulated in the context of teaching.

The paper presents the Dalcroze master teachers' pedagogical content knowledge in fictive dialogue between Jaques-Dalcroze and two equally fictive Dalcroze teachers, Sarah and Jamie. In the conversation, Jaques-Dalcroze expresses some of his thesis, which the teachers discuss and comment on. The topics chosen for inclusion in this dialogue epitomize the basic principles of Dalcroze teaching.

In what follows, the content of the paper has been re-analyzed from the perspective of embodiment. The Dalcroze master teachers seem to have an extremely positive, almost idealistic, attitude towards the approach's educational possibilities. They are convinced that, since the exercises engage the student's whole self (the mind, body, and emotions), they necessarily promote personal growth. The teachers assert that, by constantly requiring personal responses and awareness of oneself, Dalcroze teaching develops student's self-knowledge and sense of self, and also helps the student to communicate with other "selves" better. They seem to believe that bodily involvement with music develops imagination and creativity and that it makes listening, learning, and musical experience in general more embodied and thus more personal. This implies that the teachers have a wide perspective of the educational ends of Dalcroze Eurhythmics.

The real master teachers (on whom Jamie and Sarah are based) seem to agree for the most part with the original principles of Dalcroze Eurhythmics. They maintain that Dalcroze exercises develop general bodily skills, and that such physical experiences of music enrich musical consciousness and understanding. However, they recognize that stillness is also important in Dalcroze teaching; it deliberately practices internalizing and re-experiencing movement through kinaesthetic images, without moving. For some of the teachers, this aspect is one of the greatest benefits of Dalcroze training.

The master teachers seem to agree with Jaques-Dalcroze (1918a, VIII, 1920/1965, 59–60) that, generally, students should not be taught rules before they have an experience of them. In a Dalcroze lesson, leaning experiences originate in exploring some musical phenomenon. According to the interviewees, a Dalcroze teacher's responsibility is to enable and guide this exploration through physical activities and exercises. Thus, teaching is indirect rather than didactively conveying information, and learning integrates many experiences.

In the Dalcroze approach, bodily experience is considered to be not only a means to embodied knowing, it is also important in itself. The master teachers interviewed are convinced that experiences of moving with music enrich people's lives in general. Meaningful, enriching personal experiences of Dalcroze teaching have also motivated the teachers to study and to apply it in their own teaching. According to them, personal experiences of the approach are crucial for understanding its principles. This seems to be one important aspect of Jaques-Dalcroze's contention that Dalcroze Eurhythmics is above all "a personal experience" (J-D 1945/1981, 233, also 1909, 1920, iii, 1935, 3).

The master teachers maintain that the learning of the principles of Dalcroze teaching happens mainly through observing and imitating a Dalcroze teacher's own embodied actions. However, one teacher cannot teach exactly like another teacher. Thus, through analyzing one's own actions and those of other teachers, and developing certain unique habits of behaviour, the principles of the approach can be learned and applied in a personal way. Thus, becoming a Dalcroze teacher involves a process of reflection on one's own embodied experiences. In this perspective, the Dalcroze approach stands for the current principles of reflective learning (e.g. Mezirow *et al.* 1990, Boud, Keogh & Walker 1989).

The master teachers' understanding of the mind-body relation seems to follow Jaques-Dalcroze's lines of thinking. They believe that bodily experience feeds the mind, and *vice versa*; and that Dalcroze practice thus reinforces the natural connection between the mind and body (that was artificially created by Cartesian philosophy). Furthermore, they hold that the mind-body connection first arises when cognition reflects on natural movements. This can mean becoming aware of one's movements and their qualities, or using simple words to analyze and (or) remember bodily actions and its experiences. Asking the students to do things in different ways also is a means of reinforcing the connection.

These master teachers seem to emphasize the importance of reflective analysis after experience. They maintain that, through analysis, the connection of a bodily experience to musicianship and music making is established. In addition, when the students are asked become aware of and talk about their actions and experiences, they learn to reflect on and to organize their thoughts about their own (musical) experience. Only one of the teachers emphasized the body's ability to learn and to remember *without* the role of conscious reflection.

The interviewed teachers seem to be aware of certain possible problems of learning through movement: Some students are not willing to move; other students enjoy moving, but do not naturally connect their listening, thinking, feeling, and moving, or there is not enough time for that connection to take place. Sometimes, the problem is that the teaching stops at the activity level, whereas learning through movement necessitates the movement to be qualitatively sensed (see O'Donovan-Anderson 1997, Parviainen 2000). Moreover, according to the teachers interviewed, the connection to music making is not established by itself; it has to be encouraged by the teacher.

#### 4.2 Practical applications of Dalcroze Eurhythmics

The second paper studies the particular subjects in music education which the Dalcroze approach is used to teach, and how it is used. First it looks at the teaching procedures, the characteristics, and the structure of a typical Dalcroze lesson, and then examines the various subjects of studies, as applied to the two categories of professional training and children's education. The study is mostly based on books of commentary, articles, and studies about Dalcroze Eurhythmics published in the U.S. after 1970 (see 3.4.2).

Within music education, the Dalcroze approach is applied in general music education, in music schools, in professional training of musicians as well as with children. The subjects include studies in theory, solfège, rhythm and performance; choral and band rehearsals and conducting; as well as for studies for solo instrument and voice. The variations of applications, and the teachings styles are plentiful.

The final research question was formulated as follows:

How does the perspective of embodiment appear in the practical applications of Dalcroze Eurhythmics?

The practical applications of Dalcroze Eurhythmics seem to be shaped according to each teacher's individual preference. Nevertheless, there are many commonly shared aspects: All the applications more or less aim at the same instructional goals; in particular, deepening musical understanding, improving bodily knowing, developing concentration, hearing and listening skills, enlivening musical expression, bringing students in contact with their inner selves, and enriching their musical experiences. In teaching, it is also typical for students to be constantly challenged to be alert, to pay attention, and to use their imagination.

Dalcroze applications include exercises that combine, for example, listening, moving, singing, thinking, improvising, and imagining—a variety of mind-body involvements (within given musical culture) in order to explore a particular musical subject, or phenomenon. The exercises integrate music and body movement using the body as a musical instrument. There are no fixed movements in connection with a specific musical phenomenon. Rather, students listen to music in and through movements and gestures, which often means mirroring the musical sounds heard or imagined<sup>27</sup>. In this mirroring, the quality of movement plays a crucial role. In Dalcroze lessons, working individually,

<sup>&</sup>lt;sup>27</sup> Sometimes students' movements express the music that their hear with their 'inner ears'.

with a partner, and in small groups are all included. Teachers who use the approach stress that Dalcroze Eurhythmics allows learning from experience and in an individual way; but it also allows learning from observing and interacting with the others present. Thus, in this respect, Dalcroze Eurhythmics incorporates both subjective (individual) and the sociocultural (shared) aspects of learning.

In the practical applications, musicianship is viewed from a broad perspective. Therefore, the attempt is to educate the whole person, not just to develop discrete skills. The substudy suggests that, by emphasizing the development of musicianship, Dalcroze teaching shares some similarities with the praxial approaches to music education (see 3.2).

In practice, learning through embodied experiences is reinforced in various ways by Dalcroze Eurhythmics. Usually, a Dalcroze lesson starts with a 'warm up' that aims at leading students towards a state of concentration, and at making them kinaesthetically focused and aware. During a given lesson, exercises are paced to result in a balance between the mental and physical energy required for each activity. Varying the level of difficulty of the exercise also helps keep the students motivated. The teaching proceeds in accordance with the students' reactions and learning. This means that students are not taught more, or faster, than they can deal with effectively. Moreover, within a lesson, as well as in the long term, making students kinaesthetically and thus qualitatively aware of their movements, and establishing a connection between, listening, thinking, and moving are all important goals. According to the teachers, this connection is required for the experiences of Dalcroze Eurhythmics to be personally meaningful. The issue of imaginative bodily involvement—imagining a movement before doing it (i.e., a considered response), or re-experiencing a movement through images in mind, without moving—is presented in this substudy once again. It is an aspect that has been recognized in some recent studies of learning (see e.g. Matthews 1994, 130).

In Dalcroze teaching, the importance of joy in learning is stressed. In order to create an atmosphere of play and joy, many Dalcroze exercises are shaped as games. Such 'games' include so-called activities such as follow, quick-reaction, interrupted canon (echo), canon, and replacement. All these activities are designed to necessitate rapid and direct communication between (analytical) thinking, feelings, listening, and action, and they are designed to encourage spontaneous interaction between a student and the music.

In Dalcroze teaching, the connection between music and movement is established first by accompanying students' natural movements with appropriately improvised music, and then by making students follow the music with their movements. Students are also encouraged to accompany movement with their voices or body percussion. Once students internalize the music through 'sensing' their movements, they are gotten to support and perform the movements in silence.

Dalcroze Eurhythmics seems to be applied mostly in the context of Western music. However, the paper finishes by considering the possibility of applying the approach within other musical traditions as well. It contemplates whether basing musical learning on bodily experiences might even offer a universal means of music education.

# 4.3 Digging Dalcroze, or, dissolving the mind-body dualism: philosophical and practical remarks on the musical body in action

The third paper is a theoretical study, and was written jointly with Dr. Heidi Westerlund. The research question was:

What kind of perspectives does Émile Jaques-Dalcroze bring into the discussion of the mind-body relationship in the context of the philosophy of music education?

The paper examines the question of the body in relation to music and movement, which has been raised by music education philosopher David J. Elliott and which was also Jaques-Dalcroze's major pedagogical concern. The general aim of the paper is to demonstrate the relevance of the philosophical question of the body to the practice of music education. In the paper, we discuss the need to avoid the kind of dualism in which music is either a mental-spiritual experience that transcends the body, or a mere somatic experience of 'flesh and blood'. The ideas of Jaques-Dalcroze and Elliott are examined in relation to recent philosophical discussion on the question of the 'body-mind' with particular reference to the views presented by pragmatists emanating from John Dewey's philosophy.

For Jaques-Dalcroze, the question of the body in relation to musical understanding was a practical one. The questions he raised can be related to the general disembodiment of experience in relation to knowledge in Western culture and the disembodied conception of the human being in Western philosophy. Within this disembodied framework, musical experience is regarded as involving ideational structures to be cognized rather than a question of doing, experiencing, and feeling. In the paper, some lines of this thinking in philosophy, in protestant religion, and in aesthetics, are presented based on writings of Charles Taylor (1989), Charles Varela (1992), Lydia Goehr (1994), and John Dewey (1958).

The paper suggests that, since Jaques-Dalcroze tried to break the dualist mind/body paradigm and searched for a closer connection between the mind and body, he can be regarded as having had similar goals as John Dewey, Matthias Alexander and much later, contemporary pragmatist Richard Shusterman. Like Alexander (1987) and Shusterman (1994), Jaques-Dalcroze recognized the importance of habits for psychophysical well being; that is, the importance of how certain body-functioning habits influence the mind and *vice versa*, in a heterogeneous way. Through body awareness, and thus by learning new, good habits and changing earlier, bad ones, it is possible to improve body-functioning in a way that facilitates a successful balance between the mind and body.

Like Dewey, Jaques-Dalcroze stresses the importance of *experience* in learning. For both, knowledge should not be separated from doing, similarly as theory should not be separated from practice (see J-D 1918, VIII, 1920/1965, 59–60, Dewey 1984, 148–149). The paper notes that they also share the idea that the mind-body exploration and experiences of music generate not only new bodily habits, but also better experiences and new musical understanding.

The paper argues that the kind of educative mind-body involvement with music suggested by Jaques-Dalcroze transforms thinking-in-action and thus results in enhanced experiences. Thus, the relation between music and movement is not a question of a

stimulus-response relationship between the object and the experiencing subject; rather, the collective effect of all earlier experiences as well as the new, present situation itself determine the bodily responses to and actions with music. Thus, movement not only makes musical listening, understanding, thoughts, and feelings concrete, but it also transforms them.

In many aspects, Jaques-Dalcroze seems to have been ahead of his time! He recognized the social aspects of both the body and music. This perspective was later acknowledged by the work of ethnomusicologist John Blacking. Furthermore, before there were any scientific findings on the matter, Jaques-Dalcroze was aware that we learn in different ways and through a combination of various senses (J-D 1930/1985, 98–99, also 1945/1981, 105). He understood that, in addition to improving physical development and skills, embodied experiences can lead to a certain intellectual quickening (J-D 1930/1985, 99).

The paper argues that Dalcroze Eurhythmics needs to be approached from a thoroughly holistic view of the human being. Therefore, dividing the goals of Dalcroze Eurhythmics into categories, such as mental and emotional, physical, and musical as some have done (e.g. Choksy et al. 1986, 35) is not congruent with Jaques-Dalcroze's expressed ideas. The categorization of the goals of Dalcroze Eurhythmics introduced by Choksy et al. in Teaching Music in The Twentieth Century (1986), presents awareness, social integration, and expression as 'mental', and separate from the body; it thus seems to distort Jaques-Dalcroze's original idea of a two-sided transformation from the body to the mind, and vice versa. In Dalcroze Eurhythmics, the mental, emotional, and physical, or bodily, aspects are inseparable and are approached through music within a particular culture (see figure 3). Each of these interacting aspects penetrates the goals of eurhythmics that Choksy and others present. Transformation towards these goals develops our contextually developed musicianship within our mental-emotional-bodily being, and thus leads to ease, accuracy, and personal expressiveness in and through musical actions, such as, hearing, performance, analysis, reading, writing, and improvising.

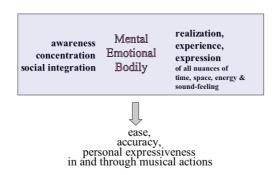


Fig. 3. Goals of Dalcroze Eurhythmics through music within a culture (III, p. 211).

In the substudy we assert that Jaques-Dalcroze's ideas imply that emotional and physical experiences are inseparable from various ways of acting, or from out 'social bodies'. The body, then, is an experiencing, relational, and actively transforming body. The whole human being is transformed through the musical practices in the culture. Consequently, we cannot examine the experience of the body-mind as something that happens only inside the head. Accordingly, educators should be interested in the lived experience of their students in relation to musical practices, and not just in developing the learner's skills and know-how in relation to pre-existing practices and cultural information.

### 4.4 Embodiment in musical knowing: how body movement facilitates musical learning within Dalcroze Eurhythmics

This paper, which is also a theoretical study, was written with Dr. Leena Hyvönen. In the beginning of the substudy, notice is taken of the present situation in (music) education in which teaching often takes place on the abstract level and is thus non-experiential. Such teaching seems to value conceptual thinking over the modes of knowing that bodily experiences can enhance. It also indicates the belief that intellectual processes exist apart from our bodies. Such thinking reflects the mind-body separation of Cartesian dualism.

The paper attempts to challenge the idea of disembodied thinking and to shed some light on the role of embodied forms of musical knowing. The substudy examines how, within the frames of Dalcroze Eurhythmics, body movement can facilitate musical knowing and how such bodily experiences can provide a means of developing skills, competencies and understanding necessary to the expressive mode of musical knowing. The substudy applies Merleau-Ponty's (1962, 1968) philosophy of 'knowing the world through the body', as well as his ideas of gesture, habit, and reversibility.

The suggestion is made that, within the Dalcroze approach, body movement is primarily related to enhanced bodily knowing, musical understanding, listening, and sense of self. It also argues that Merlau-Ponty's notion of reversibility offers a perspective for interpreting this relation, and that kinaesthetic awareness and sensitivity are crucial to the development of such enhanced states. We argue, along with Merleau-Ponty, that the body is a primary mode of knowing, and that what can be known through bodily experience, while often incapable of being expressed in words, is known at a deeper and often more functional level. We suggest that movement-based learning is, as Merleau-Ponty argues, pre-reflective knowing and can be understood as a process of musical understanding that moves from the concrete doings of musicing towards the abstract and (or) conceptual.

In the paper, bodily knowing is studied in relation to Merleau-Ponty's concept of *habit* (M-P1962) and *reversibility* (M-P 1968), Polanyi's (1966) concept of *tacit*<sup>28</sup> and focal

<sup>&</sup>lt;sup>28</sup> Polanyi's (1966) concept of *tacit knowing* shares similarities with Merleau-Ponty's pre-reflective knowing by implying that we know more than we can tell. In tacit knowing we incorporate an object, an operation, or an understanding in our body (ibid., 16). Furthermore, one can come to know another person's bodily skilfulness by a tacit act of comprehending it (ibid., 33). Polanyi compares our tacit knowing of world with the way our bodies are commonly known to us. We do not normally need to focally concentrate on our body parts when acting in the world. We typically focally attend only when we have a problem with them.

knowledge, and Parviainen's (2000) notion of bodily knowledge. In sum, these notions suggest that in learning new bodily skills, the reciprocal alternation between tacit and focal knowledge involves a dialogue between pre-reflective movement and (bodily) reflection on that movement. Such reflection requires an open, sensitive attitude towards one's movement. Through bodily reflection and practice, which is an endless process, new movements become tacit knowing. In learning new skills, reflective thinking (consciously focusing on) and sensing should be in balance. By observing our movements, and by attuning ourselves to kinaesthetic sensations, we can also obtain bodily knowledge that involves understanding of our movements. Our own bodily knowledge also helps us understand other people's movements, which in turn is a source for the inner activation of new skills. Bodily knowing underlines all our knowing and sense of self and incorporates the awareness by which we know ourselves holistically (see Stubley 1999).

As previously stated, learning from movement and bodily experience requires becoming sensitive to and aware of kinaesthetic sensations. In Dalcroze Eurhythmics, in order to awaken this awareness, variations of movements are encouraged. The exercise of *excitation and inhibition*<sup>29</sup> can also serve the same purpose. A third way to heighten kinaesthetic awareness is to study the gestural points of departure and arrival: anacrusis, crusis and metacrusis.

Merleau-Ponty's (1962) notion of habit can be applied to shed light on how musical actions and musical understanding are related. Practitioners of the Dalcroze approach commonly suggest that musical concepts are based on bodily experience, not learned abstractly. However, the phenomenon of habit, as described by Merleau-Ponty, connotes further that bodily actions *embody* the meaning of the phenomenon. Thus, the understanding of a musical phenomenon as a habit of action, interpreted from this perspective, means that the body understands what, for example, a musical phrase means in practice, and is able to perform such phrase in action. Such bodily realization of a musical phenomenon, then, is not only a means of showing the understanding of it; *it is* the bodily understanding of the musical phenomenon, and *it is* the phenomenon as a habit of action. In this light, Caldwell (1995, 136) seems to have a grain of truth when arguing that the Dalcroze approach teaches musical behaviour, rather than abstract knowing of musical concepts—although, instead of using the word behaviour, which refers to skilful actions, I would apply the notion of 'being in the sound through the body' (see Stubley 1998).

The paper suggests that one way to explain how body movement relates to musical understanding is to regard it as such a physical metaphor. For George Lakoff and Mark Johnson (1980), metaphor links the concrete, bodily domain and the abstract, conceptual domain.<sup>30</sup> It allows us to understand and experience one kind of thing in terms of another (ibid., 5). In Dalcroze Eurhythmics, body habits, preferably drawn from daily experience,

<sup>&</sup>lt;sup>29</sup> For instance, the students walk with the pulse of music. Every time they hear a triplet, they stop or start walking again. However, they are not supposed to react to any other kind of change in music, for example, to stop walking if the music stops, in other words, they have to resist the 'natural' reaction. They have to be simultaneously ready to react and to resist reaction.

<sup>&</sup>lt;sup>30</sup> For Lakoff and Johnson (1980), metaphor is a thought process rooted in physical experience. Thus, e.g. "in trouble" derives metaphorically from the physical experience of having been "in" rooms or other restricted spaces and "trouble" metaphorically is treated as a restricted space which one wants to leave.

that embody a musical phenomenon can function as a physical metaphor for abstract understanding of music. This process embodies the various levels of knowing that share similarities with Bruner's three-tiered system of representational modes, *enactive*, *iconic*, and *symbolic* (1974)<sup>31</sup>, which he designed to advance the pedagogical understanding of how thinking is developed. The *iconic* mode of knowing, as applied by Bruner to education, can be understood as a metaphorical transference between action and conceptual thinking. Although Bruner writes only about images and pictures as icons, the same phenomenon can also happen in tactile and kinetic areas. Then, the physical metaphor can be seen as a kinetic or tactile icon. Moreover, the notion of gesture as metaphor (Wis 1993, 123) seems related to Merleau-Ponty's notion of communication and comprehension of gesture insofar as the gesture carries a meaning; that is, it brings thoughts or feelings into being.

In the paper, we argue that a musical phenomenon also can be explored as a metaphor and that the phenomenon of reversibility (see 3.1.2) can be applied to interpreting such exploration. Through bodily exploration of a musical phenomenon, it is possible to experiment with how the movement compares to that phenomenon; for example, how a sequence of movement is congruent or incongruent with the style and form of a particular musical passage. Reversibility occurs when, at the same time movement gives tangible form to the present understanding of a musical phenomenon, ongoing reflection by the mover further transforms the understanding in real time (see M-P 1968, 154). In this process, the knowing and the knower become inseparable. Such exploration may initiate a richer and different understanding than was previously the case for the student, or than the teacher's own understanding of the phenomenon.

Students' words describing their experience can be considered verbal metaphors. As an outcome of reflection, the words focus attention toward the experience of 'having been moved'. Following Merleau-Ponty's thinking, words are a linguistic expression of corporeal reflexivity. This is the level where the *tacit cogito*, 'I can', becomes *cogito*, 'I think'. (M-P 1962, 404, Dillon 1997, 110–111.)

Along with Merleau-Ponty (1962, 242), we argue that abstract concepts are derived reflectively from bodily experience not transferred directly from the teacher's mind to the student's mind. Thus, teachers should provide students with embodied experiences as the basis for conceptual knowledge, and need to be aware of the level of knowing which is meaningful to attain in a particular situation. Moreover, the task of reflection is never ending. Thus, even accomplished musicians can attain a richer or transformed musical understanding from experiences that combine music and body movement (see also Matthews 1994, 122).

The paper discusses several reasons for integrating body movement with listening to music. One line of reasoning is that musical sounds naturally vibrate in the whole body, reinforce cross activation of senses (synaesthetic experience) and trigger bodily reactions (see J-D 1920, 1920/1965, 6, 48, M-P 1962, 211, 234, 227, also Bowman 2000, Ferguson

<sup>&</sup>lt;sup>31</sup> Enactive representation means knowing through doing. It is a pre-conceptual level and comes before reflection. The symbolic level is achieved later through reflection over a long period. The iconic mode places itself within that period: it means knowing through images and pictures. It stands for a highly stylized analogue of the enactively experienced event (Bruner, 1974, 316-17). Bruner developed the three modes of knowing mainly when studying mathematical thinking and linguistic learning.

1973, 13, Levin 1989, 45, Stubley 1999). Moreover, just as it contributes to performing, the bodily realization of music can clarify and reinforce listening, and thus enrich the musical experience. Likewise, when students respond to music with body movement, all the students participate in bodily action and the teacher is able to see the responses of all the students, all at once.

The paper proposes that when students listen to music using movement responses, they listen with their whole-self. This refers not to the physical reactions of the body, but also to the listening that is informed by a 'felt' bodily understanding of what music means. Levin (1989) uses the notion of 'preconceptual' listening: a listening that is attuned through the entire body of felt experience. Stubley (1998) employs the notion of 'being in the sound' to describe how the sound opens up the channel that enables one to encounter the music as a living being and to fuse with it as one.

When musical listening is understood as 'felt' through the whole body, we find in listening the reversibility, a sense of a 'double belongingness' (see M-P 1968, 142, Levin 1989, 158-159) that implies that music is simultaneously both heard and felt (Stubley 1999). As a Dalcroze teacher asks students to listen to the reactions in their bodies, they are enabled to connect, not only to music but also to themselves, to their own response to the music. This is reminiscent of Levin's (1989, 38) description of skilful listening as a 'practice of the Self'.

Applying Merleau-Ponty's (1968, 154–155) notion of gesture (and speech) to situations where musical sounds are expressed through body movement, we conclude that listening to music *is* thinking and the body movement that results *is* a completed emotion or thought. Thus, listening and moving inform each other simultaneously; there is no 'one after the other'. This reciprocity is particularly evident in improvisation, whether done by playing a musical instrument, singing, moving, or dancing.

# 5 The various aspects of embodiment within Dalcroze Eurhythmics

#### 5.1 Being-in-the-musical-world through the body

Merleau-Ponty has described how the body is our anchor to the world; likewise, Jaques-Dalcroze has shown how the body can function as an intermediary between the musical world and knowing. Dalcroze Eurhythmics recommends that, since the body and its movements incorporate rhythm, the best way to study musical rhythm is through the body. Other elements of music can also be studied through embodied experiences of music and movement. This happens through bodily exploration (body movement, singing, playing, improvising, conducting, etc.) of any music. In this exploration, sensing, listening, acting, feeling, and thinking all fuse into one experience. In the context of Dalcroze teaching, the teacher's job is to guide and to provide possibilities for this exploration. (II & IV.)

Dalcroze Eurhythmics shares with Merleau-Ponty the idea that the body and bodily involvement with the world are primary tools of knowing the world and oneself. Dalcroze approach applies body movement to musical learning based on the belief that knowing through the body and embodied actions happens at the deeper level than knowing only through abstract thinking and, thus, that bodily interaction with music enriches musical experience. With such embodied experience, all senses interact and are thus inseparable. Moreover, bodily interaction with music, by combining sensing, feeling, and thinking, reinforces the mind-body connection. Such embodiment is always lived through the first-person perspective: My embodiment and physicality is fundamentally conditioning my experience and sense of self.

### 5.2 Holistic view of the human being

Within Dalcroze Eurhythmics the view of the human being is holistic. Since musicianship is also viewed from a wide perspective, there is an attempt to educate the whole of the human being (I & II). Musical knowing and skills important for any musician are developed, and a love for music and the desire to express musical feelings

are awakened before or in accordance with performance studies. The Dalcroze approach offers a practical example of teaching that engages the numerous capacities and qualities of a student and also includes the idea that the moving body contributes to the sense of 'wholeness'.

The Dalcroze master teachers' conception of the mind-body relation seems to follow Jaques-Dalcroze's position that the mind and body are inseparable and that Dalcroze practice activates and reinforces their unity (I). Based on this view, Dalcroze Eurhythmics recognizes the foundational role of bodily experiences in cognition (III & IV). In Dalcroze exercises the relations between the mind, body, emotions and music are intertwined in a multidimensional way. Dalcroze Eurhythmics applies kinaesthetic learning and stresses that we first and foremost learn through our lived bodily experiences (IV). The Dalcroze approach seeks to re-establish the unity between music and body movement that was originally manifest in dance. This unity got broken by the Cartesian separation of mind and body, spirit and matter. The resulting dualism led, according to Jaques-Dalcroze (1930/1985, 188), to the loss of natural sensitivity for harmonious and expressive movements in the arts as well as in everyday life (III).

Dalcroze teachers do not seem to question Jaques-Dalcroze's explanation of the mind-body relation, or, have simply taken it for granted (I & II). Since he wanted to find theoretical support for his practical findings, Jaques-Dalcroze tried to relate them to the psychological and neurological expertise of his time. He leaned on the ideas of psychologist Edouard Claparède, among others (Berchtold 1965, 81, also Appia 1911). This led him to a rather dualistic explanation of the stimulus-response relation between mind and body (see e.g. J-D 1920/1965, 137, 1917, 8). At any rate, these explanations are dated and should be modernized according to contemporary research (see e.g. Damasio 2000). However, by understanding the positive impact on musical action and on neuronal activation of training through rhythmic movement, Jaques-Dalcroze seems to have been on the right track. As Bowman (2002, 71) states, "[o]ur bodily actions build on habits and on the firing of neural pathways whose routine depends on the contingencies of personal experience".

However, dualistic explanation does not seem to support the practice of teaching and, instead, focuses away from the lived experience; it is even in conflict with the practical pedagogical ideas of Jaques-Dalcroze. His writings present his practical findings from an 'out here away from the body' perspective and can even suggest a very technical practical application. In Dalcroze practice, the relation between music and movement is not a question of a stimulus-response relationship between a musical 'object' and an experiencing subject, but rather, all earlier experiences as well as the situation itself determine the body's actions with music (III). If Jaques-Dalcroze had been acquainted with Merleau-Ponty's ideas (or Eastern philosophies), his writings on this matter most likely would be considerably different.

Dalcroze Eurhythmics also acknowledges the social aspect of the body, i.e., that we learn certain habits of acting, feeling and thinking culturally, including especially rhythmic expression, which directly influences the music of the culture. Accordingly, the interpretation of the goals and principles of Dalcroze Eurhythmics has to take this aspect into account as well. Thus, the physical, mental, and emotional aspects of the approach are inseparable and are approached through the social implication of music within a particular culture (see figure 3 in 4.3). Each aspect penetrates the goals of the approach.

Mindful, and—(emotional)—bodily involvement with music develops the contextually shaped musicianship that contributes to easiness, accuracy, and personal expressiveness of the musical action. The whole person is being educated according to the cultural context. Music education, then, is capable of serving both personal and communal objectives. (III.)

Within Dalcroze Eurhythmics, the body is considered as an experiencing, relational, and actively transformative body. Consequently, the experience of the relational bodymind should be considered from the first-person perspective as a meaning-constructing and expressive process. Still, the Dalcroze approach also includes the third-person perspective, which is realized when the student reflects on his own experiences and seeks to transfer these experiences (preserved as images<sup>32</sup>), for example, to playing an instrument. (III, see also 6.8.)

#### 5.3 Sensing and knowing through the body and movement

The movements of Dalcroze Eurhythmics aim to reflect listening to music so that the qualities of movement (speed, energy, intensity, direction, etc.) correspond as closely as possible to the qualities of the music heard. There is no right way to move; instead, movements are individual but reflecting some cultural influences as well. In order to become aware of the quality of the body movement, one has to become sensitive to and be aware of one's movements and of their attributes. This happens through 'listening' to kinaesthetic sensations, through what Jaques-Dalcroze (1920/1965, 140–141) and Merleau-Ponty (1962, 206) call the sixth sense. Learning from movement requires heightened kinaesthetic awareness that can be awakened through various exercises<sup>33</sup>.

It seems that Jaques-Dalcroze intuitively understood what researchers (e.g. Mickunas 1974, Sheets-Johnstone 1999) have since verified, namely, that the kinaesthetic sixth sense is our basic perceptual organ and source of qualities of time, space, and energy, and that kinaesthetic consciousness is the basic process of knowing that synthesizes all bodily actions and experiences (Sheets-Johnstone 1999, 131, 238). Kinaesthetic consciousness enables us to learn from body movement and experience. Yet, in order to recognize the quintessential significance of kinaesthesia, it is necessary to turn to the actual experience of qualitatively sensed movement and to give a phenomenological account of that experience (see Sheets-Johnstone 1999).

Within the Dalcroze approach, bodily knowing is developed primarily in order to create a finer and subtler instrument for musical expression. Merleau-Ponty refers to the body's skilfulness by the notion of *habit*. In framework of music it means that in learning psychomotor skills it is the body that comprehends new motor significances through kinaesthetically attuned bodily involvement. Thus, bodily habits make the expression of music possible without having to concentrate on bodily actions moment by moment.

<sup>&</sup>lt;sup>32</sup> Following Damasio (2000, 9), by *image* I mean "a mental pattern in any of the sensory modalities, e.g. a sound image, a tactile image, the image of a state of well-being".

<sup>&</sup>lt;sup>33</sup> The following exercises can be applied: Excitation and inhibition exercise; making familiar movements unfamiliar; studying gestural points of departure and arrival; finding different ways for bodily expression of music; and recalling, analyzing and expressing in words one's bodily experiences (I & IV).

Dalcroze Eurhythmics aims to develop general bodily knowing or 'bodily knowledge', by which Parviainen (2000) means improved knowing in and through the body. It originates in the body's interaction with the world and has a direct connection to senses and bodily awareness as well as to psychomotor abilities, skills, and actions. It includes the realization and understanding of the movement, as well as being able to accomplish it, which necessitates bodily practice and skills. This knowledge is acquired through observing our own movements and through 'listening to' our kinaesthetic sensations (O'Donovan-Anderson 1997). (IV.) According to Shusterman (2000, 138–141), it is directly related to embodied pleasure (III). Bodily knowing encompasses the sense through which we know ourselves as whole; it is the foundation of all our knowing and sense of self (see Stubley 1999).

Jaques-Dalcroze (J-D 1930/1985, 59–60) argued that to compose or interpret music in a personal way, it is absolutely necessary to have personal experience of body movements and of their relation to the emotions, feelings, and 'colours' of life. Moving with music is likely to initiate emotions and feelings<sup>34</sup>, whether one is aware of them or not. Thus, we do not only *move with* music but we also are *moved by* music; music 'affects' us. To have been moved by the music is to have discovered something new in the interaction of body and sound, something that changes how we know ourselves in relationship to the evolving sound. Especially, the spontaneous reaction to the music—being-in-the-sound—enables feeling (and understanding) music by the listening body as a whole (see IV, Levin 1989, Stubley 1998). Listening, that is paying attention and being attuned through the body's felt sense, can also develop our capacity to think; the capacity to think in a way that is not just more 'reasoning' and 'reflecting' but thinking which listens just as it can develop listening that is thoughtful. (Levin 1989, 17, 245.)

#### 5.4 Transformation through bodily exploration and music

Dalcroze Eurhythmics is often defined as 'education through and for music' (l'éducation par la musique y pour la musique), (e.g. Jaques-Dalcroze 1926a, Bachmann 1984), and is described in terms of 'personal experience' (e.g. J-D 1935, 3, 1945/1981, 233). These traits seem to imply a transformation of musical knowing through music and to emphasize the importance of personal action and experience in musical knowing. The transformation depends on personal variables and, in particular, awareness of and reflection on one's actions and experiences. It is also always inseparable from one's own interpretation and understanding of such personal variables. (III & IV.)

All personal transformation, however, does not happen in connection with music. Dalcroze Eurhythmics also aims to enhance 'non-musical' general capacities such as paying attention, concentration, creativity, remembering, reproducing or changing an action, and to improve co-ordination and communication. Jaques-Dalcroze was

<sup>&</sup>lt;sup>34</sup> According to Damasio (2000, 42), feeling means a mental experience of an emotion. He suggests that we are not conscious of *all* our feelings, but that the full and lasting impact of feelings requires consciousness (ibid., 36).

convinced that his approach promoted exceptional physical development and intellectual quickening as well as "transforming the mind along the lines of greater self-possession, stronger power of imagination, more constant mental concentration" (J-D 1930/1985, 104, also 99). (II & III.)

It seems that the actual role of body movement, or, more exactly, the role of bodily exploration<sup>35</sup> is seldom discussed in music education in general and has been relatively poorly studied even within Dalcroze Eurhythmics. Based on this study (see IV), I argue that educative bodily exploration with music within Dalcroze Eurhythmics can transform bodily knowing, musical understanding, expression, and listening, as well as the sense of self (IV). Merleau-Ponty's (1968) notion of reversibility can shed light on the process of learning habits, bodily exploration of music, listening and expression, as well as on interpreting the relation between people in shared musical action (IV, see also 6.7).

#### 5.5 Facilitating musical understanding through movement

In interpreting how body movement relates to and can facilitate musical understanding, musical understanding can be seen as a habit of musical action. By applying Merleau-Ponty's notion of *habit* (see 4.1.4), understanding of a musical phenomenon as a habit of action implies bodily knowing of its meaning in use. Thus, a musical action, including body movement, can be seen as a bodily understanding of musical meaning. In this light, the Dalcroze approach primarily seems to develop pre-reflective mode of knowing, 'a bodily way of being in sound' (Stubley 1998), (including sensing, feeling, and thinking) that form the basis for subsequent reflective thought (IV). Through causing a change in musical actions, embodied involvement also transforms (conscious) thinking and, consequently, shapes both thinking-in-action and thinking-as-action (III).

If the connection between conscious thinking and moving has been established through awareness, it enables an inseparable bond between them; in Merleau-Ponty's (1962, 184–185) terms, gesture becomes completed thought, that is, gesture brings thought into being. Therefore, any fear that Dalcroze teaching would be mere 'fun' unless the experiences were consciously reflected on and analyzed (I) is needless, provided that listening, thinking, feeling, and moving are all integrated. The body remembers, even without consciously focused, reflective thinking. Mindful action, thus, can be considered not only as a step towards reflective thought, but also as embodied understanding.

One way to interpret how body movements relate to musical understanding is to analyze their use as a physical metaphor. Bodily exploration of a musical phenomenon can imply various things: The teacher can either guide students through certain physical metaphors (movements that seem to embody a certain musical meaning) that allow students to comprehend one (or some) aspect of a musical phenomenon or concept in question (e.g. syncopation), or can offer a musical phenomenon (e.g. phrasing of a piece of music) as a metaphor for bodily exploration which aims at individual understanding of the music.

<sup>&</sup>lt;sup>35</sup> The notion of bodily exploration points up that the whole mind-body is involved in action.

In the first case, the process is primarily designed to teach students to be able to understand, name, recognize, read, or notate a certain musical phenomenon—or all such possibilities. Such a process, especially with children, often starts by connecting daily movement experiences, images, and sounds with a certain musical phenomenon. Then, the students are encouraged to become attend to the qualities of their movement in relation to those of music. Finally, the notated form and (or, alternatively) the name of the musical phenomenon are introduced. In this example, a physical metaphor that has been abstracted from the concrete body movement is a bridge connecting the concrete and the abstract. In particular, such concepts as high/low or fast/slow in music can be explored by analogous body movement embodying these abstract musical qualities and can thus be understood based on bodily experience (see Wis 1993, 16, IV). Since in this case metaphor provides a link between concrete, bodily domain and abstract, conceptual domain, the notion of metaphor follows Lakoff's and Johnson's (1980) definition of it. This level of knowing seems to place itself somewhere between the pre-reflective and conceptual domains, and could be called mindful. It also serves as the basis for abstract knowledge.

In the second case, the teacher offers a musical phenomenon as metaphor for bodily exploration in order to generate diverse performance options and to foster improved understanding of the music. This process could involve a musical phrase, for example. Thus, the students can be asked to explore different ways of exemplifying the phrase through movement; that is, different movements that can expressively mirror their listening and understanding of the phrase. While showing in movement what they hear, the students sense their own movements, and the resulting reversibly guides and informs their listening and understanding of music. Sensing, moving, listening, and understanding all echo one another; they are separated and synergic at the same time. As Merleau-Ponty maintains, the 'flesh is a mirror phenomenon', the medium of the dialectic of subject-object mirroring (M-P 1968, 259, Levin 1989, 158, also Parviainen 1998, 65). The movement response to music is at first spontaneous and pre-reflective but gradually, as the process proceeds, becomes more 'thought through'.

However, because a metaphor is at stake, the question also can be asked in reverse: How is the music like or different than the movement? This approach can generate entirely different and new ideas. Such exploration encourages the development of personal understanding since the students' movement responses and experiences are unique. However, a student's understanding can also be expanded through observing or mirroring the movements of other students. With Dalcroze teaching, students are primarily asked to find their *own* way to express in movement what they hear in music, but they are also encouraged to learn from each other. Then, because the same musical idea is represented in various ways, each student can become aware of other possibilities for motion and action. (IV, see also 6.7.) When a musical phenomenon is explored as a metaphor, the interpretation of the metaphor seems closer to the way of 'being-in-the-sound' (Stubley 1998) through the body—i.e., creating a phenomenological understanding of the metaphor at stake. The metaphoric connection occurs at the pre-reflective level of knowing and is not necessarily translatable into words.

The various possibilities discussed here are not really mutually exclusive; rather, they are different approaches to music teaching process that applies body movement and aims at transforming or enriching students' musical understanding. However, these different

approached reveal that Dalcroze Eurhythmics is not only a method of developing conceptual knowing through embodied experiences; more generally, it develops bodily knowing of the musical world.

#### 5.6 Teachers' embodied actions and teaching procedures

The basic principles of teaching Dalcroze seems to be learned mainly through imitating and reflecting on the Dalcroze teachers' actions and one's own experiences (I & II). Jaques-Dalcroze himself stressed that it was impossible to comprehend the principles of the approach without drawing from personal experiences. The 'method' is embedded, then, in teacher's mindful actions and thinking-in-action which are very rarely articulated through words. Thus, a Dalcroze teacher can be very skilful in teaching without being able to explain the theoretical arguments of the practice and, similarly, differences between teachers arise from the differences in their own participation and development as students of Dalcroze Eurhythmics.

The attempts to facilitate embodied experiences and to reinforce the mind-body connection are manifest in various aspects of each teacher's actions and teaching procedures: The same musical subject is studied through various activities and areas of study (rhythmic movement, solfège and improvisation), all of which are integrated within the Dalcroze pedagogy. The exercises simultaneously activate the mind and body, including multiple senses. The mind-body connection is reinforced at least in three ways: by combining (a) sensing with action (e.g. expressing in movement what is heard); (b) thinking with action (e.g. becoming aware of one's movements or remembering, analyzing and expressing bodily experiences in word); and (c) feeling through action (e.g. expressing the emotions aroused by music through movement). Thus, sensing, action, feeling, and thinking continuously interact in the exercises. (I & II.)

Within a lesson, there is a cyclical and spontaneous flow from action to reflection and *vice versa*. The pedagogy gradually builds on earlier understanding and knowing, and proceeds based on students' ongoing responses and progress. Students are thus taught at a pace that is suited to their individual development. The exercises are paced to create a balance between the mental and physical energy required for each activity as well as between activities. Varying the level of difficulty motivates students by alternating the success of easier exercises with the challenge of more difficult exercises. Students work individually, with a partner, or in small groups—usually all are incorporated in a lesson. They are encouraged to learn from experience in their own individual way. (II.) In the leaning processes the quality of action and, consequently, of experience plays a crucial role (III & IV). The main goals, among others, are to encourage musical expression and creativity, to lead students to trust their own ideas and creations, and to help them to discover the body as an expressive musical instrument (II).

While the Dalcroze teachers I interviewed have strong confidence in the benefits of the approach, they also acknowledge problems: Learning through movement is difficult for students who are self-conscious about moving to music. This lack of ease, even embarrassment, prevents them from enjoying the exercises and thus from having positive experiences. Moreover, awakening sensitivity towards movement and establishing a

connection between sensing, thinking, feeling and moving usually takes a lot of time, and the necessary time is not always available. Dalcroze teachers also acknowledge that Dalcroze training is not necessary for the musical success of all students. (I.)

# 6 Integration of the theory and practice – a description of a potential Dalcroze lesson

As I reflect upon the findings of my substudies, I realize that my study has significantly advanced my own understanding of the actual teaching practice and procedures of Dalcroze Eurhythmics in relation to the aspect of embodiment. This chapter aims at clarifying the character of the exercises and logic of Dalcroze teaching. Though the practice does not translate easily into words, in the following, I will describe the teaching procedures used in one potential Dalcroze lesson accompanied by the theoretical accounts of the procedures used and thus, I try to relate some theoretical findings of this study<sup>36</sup> to the teaching practice of Dalcroze Eurhythmics. The following text manifests my reflection of the particular findings of this study and embodies my present understanding of Dalcroze Eurhythmics—keeping in mind that such understanding evolves with further practice and analysis. It represents one way to explain the meaning of some teaching procedures from the perspective of embodiment. Moreover, it gives an idea of how the various perspectives examined in this study can come together within one lesson. In addition, by concluding with practical issues, my study adds a segment to the hermeneutic circle that began by pondering the practical knowledge possessed by Dalcroze master teachers and the practical applications of the approach, followed by examining such practical issues from a theoretical perspective.

The lesson described represents a potential Dalcroze lesson in a music education program. There are sixteen students between the age 19 and 25 in this class. The focus for this lesson is musical phrasing. The lesson also aims at reinforcing the connection between body movement, breathing and voice. It should be noted that this kind of description of a potential lesson fails to include the interaction between the teacher and the students, which guides and informs teacher's actions in remarkable ways. In a real situation, the Dalcroze teacher does not merely direct activities; decisions concerning how to proceed—as well as the improvised music being provided as impetus for movement—are made at the same time as the students are responding.

<sup>&</sup>lt;sup>36</sup> Some of the theoretical arguments in relation to the teaching procedures have not been presented in the substudies and are derived from the concluding reflection on the parallels between Merleau-Ponty's writings and the teaching practice of Dalcroze Eurhythmics.

# 6.1 Becoming aware

Almost always, I start the lesson in a form of circle. A circle makes a boundary in space and includes everybody in it equally. It gives a feeling of community and safety yet, leaving space for individuality. In a circle, the teacher can see students and has a possibility to communicate either with one student only or with all of them at once. Students can also readily see each other, and thereby profit from observational learning.

I start by talking with my students. I want them to know that I am interested in them as individuals and to make them aware of their own thoughts and feelings in that particular situation. I listen to them with empathy, and then I ask them to try to put their worries aside and just to concentrate on their own self and body. Since Dalcroze Eurhythmics above all proceeds from the first-person perspective, it is important to awaken an awareness of the student's self at the very beginning of the lesson. Through awareness the thought can emerge in the action (see IV, Clifton 1983, 37).

# 6.2 Body awareness and habits

We start the actual lesson by an exploration of body posture that aims to establish a balanced body position. I ask the students, for example, to release the muscles of the neck and to free the movement of the head. The body has this capacity to sense its parts and their relations. According to Merleau-Ponty, it is the body schema that provides one with the pre-reflective knowledge of the location of one's body parts with the reference of the spatiality of situation (M-P 1962, 98, 100). Then we walk and I encourage the students to maintain this balance in the body and to seek ease in their movements.

After returning to our starting places, we concentrate on sensing the experience of 'having been moved'. When examining the aspects of 'moving' and 'having been moved', the notions of tacit and focal knowledge (Polanyi 1966) become relevant. In terms of phenomenology, tacit knowledge refers to understanding the moving aspect of the body; and focal knowledge refers to understanding the body that has moved (Parviainen 2000). In the exercise here, the feedback gotten from the body as a result of changing the posture or of walking involves focal knowledge. (IV.)

By becoming aware of and sensitive to the quality of body's position and movements, students can gradually obtain a more acute perception of the body's condition and a constructive conscious control over its habits. This implies an ability to change culturally learnt and maintained habits that, in turn, lead to improved body functioning. In Dalcroze, the importance of good bodily habits in daily life experiences is recognized according to the belief that they are closely connected—not only to our actions, but also to our thinking and feeling in general. In good habits there is a harmony between basic bodily functions and intellectual behaviour. This focus on obtaining good habits is a goal shared with 'body awareness techniques' such as Alexander, Feldenkreis or Eutonie. (III.)

# 6.3 Awakening kinaesthetic sensitivity

Because focus is on the issues of phrasing, breathing, and vocal use, the lesson continues with a breathing exercise. First, we learn a series of movements and then, to reinforce their integration, concentrate on engaging and synchronizing breathing with those movements. This exercise is also designed to prepare students to use their voices and to get them to experience the length of one controlled breath. Teaching proceeds by graduated steps so that the progress is cumulative, moving from easy to more difficult (II).

Then, I ask students to walk freely around the room in a comfortable tempo and to concentrate on their own movements. We experiment walking as quickly as possible without bumping into anyone and as slowly as possible without losing a sense of continuous flow. By varying familiar ways of walking, students can familiarize themselves anew with familiar habits (Sheets-Johnstone 1999, 143). I also ask them to pay attention to themselves as they move in order to discover the 'felt experience' of it. (See IV.)

After the students have returned to their original tempos, I ask everyone to become aware of the other students around them and of their walking tempos. Then, I ask the students to establish a common tempo without stopping or making metric sounds, or speaking. This takes a while, since they not only need to *watch* the pace of other students' feet but also to '*listen*' with kinaesthetic sensitivity to the movements of the others (III). In order to be able to this, in terms of phenomenology, the students need to 'tune to each other'.

This 'tuning-up' through movement highlights the meaning of 'joint action' in a Dalcroze lesson. Both learning and transformation can be approached through the group instead of from an individual perspective. By applying the phenomenon what Levin (1988) calls 'organismic bonding' and Merleau-Ponty calls 'initial sympathy' (ibid., 332), it is even possible to argue that a shared bodily (inter)action can change and shape interrelations between group members much more efficiently that simple reflective awareness and thinking (see III).

When the students have found a common tempo, I start to accompany their walking with improvised music on the piano and purposely vary the tempo and dynamics. Most of them follow the changes of tempo, but only few of them express in their movements changes of dynamics. Such changes stimulate the listening-moving connection and motivate alertness, concentration and attention (II). As I encourage the students to really *feel* the music, I start wondering what I really mean by that expression. It seems that the expression "feel the music" refers to allowing the music to affect the students, allowing them to discover things they never knew before. It can also invite the students to become more conscious of the music and of their feelings, to feel the feelings that the music, movement, and the situation itself awaken (see Damasio 2000, 36-37). Furthermore, 'to feel the music' seems to relate to being sensitive to a point in the range of function of the body parts at a certain moment (see Damasio 1996, xvi–xvii), in this case, to sense and become aware of the state of the body in movement in relation to music's qualities.

I continue playing music suitable for walking and ask the students to walk in three lines. They are supposed to stop in place when they hear a triplet. No other change in

music should inhibit their movements. This is the so-called 'excitation and inhibition exercise'; it focuses constant attention and conscious control over kinaesthetic processes and thus reinforces the mind-body connection. Of course, my students make mistakes, which only amuses them. An atmosphere of play and joy emerges in the lesson.

In Dalcroze teaching the importance of one's emotional state in learning is recognized. Along with Jaques-Dalcroze (1920/1965, 91–93, 1930/1985, 100), teachers today believe that joy is the most powerful mental stimulus to learning (I). In order to inspire a free and joyful atmosphere and feeling, many of the exercises, are shaped as musical games (II). Mihalyi Csikszentmihalyi's (1990) understanding of play helps clarify the idea: Play sustains interest and enjoyment because it orders consciousness through the knowledge created of one's own power to control life. Play challenges, since it demands the reordering of one's own know-how in order to overcome and rise beyond obstacles and the unexpected. (See also Stubley 1992, 11.) Joy arises when students experience balance between present capacities and the task in question. Csikszentmihalyi (1990) refers to this experience of balance by the notion of flow (see also III). Furthermore, positive experiences foster positive motivation toward study. As Sheets-Johnstone (1999, 267) reminds us, merely acquiring information does not generate motivation, because motivation is not embodied in cognition. Motivation, rather, comes from and is experienced by the 'felt' body.

# 6.4 The words begin in the body

After the exercise, students are allowed to talk in pairs for a minute about their experiences. To think, remember, and express one's experiences strengthens the mind-body connection and initiates a transformation of images, ideas or the meaning of earlier experiences—often all three. It can also initiate awareness of 'I' as the subject of experience. When the students reflect verbally on their experiences right after being actively involved, they have a fresh sensation of 'having been moved'. If the words begin as names that direct one's attention to one's experience, they embody the personal experience and hence have an immediate meaning for the person using them; we know the words, then, because they are verbal metaphors for movement.

In this sense, most words begin in bodily experience. This is one dimension of Stubley's (2002) 'moving words' metaphor; it echoes Horst Ruthrof's (2000) pragmatic conception of language as an open-ended process<sup>37</sup> and Merleau-Ponty's (1962) idea of naming as a reflexive act. 'Moving words' refer to the sensation of 'having been moved' (Stubley 2002). Through bodily exploration and experience, words and symbols come to have a meaning; without the body's perceptual experience, words are empty (M-P 1962, 193, 235–237, also 3.1.3). Moreover, naming does not only go outward to the object (as the semantic approach would look at it), but it also expands to include the speaking 'I'. As we open ourselves to the 'temporal' moment of this expansion, there is a play of impressions. This play in turn transforms the sense of sense and the whole body-mind.

<sup>&</sup>lt;sup>37</sup> Ruthrof (2000, 1) maintains that "nonverbal signs are the deep structure of language and meaning is the event of an association of nonverbal and linguistic signs. When a meaning event occurs, the body enters language in the form of quasi-perceptual readings of the world".

Students also learn from each other through sharing experiences. Although one will never experience and understand the things as the other does (M-P 1964/1982, 169), 'the moving words' of the other may initiate new understanding of one's own experience.

# 6.5 Creating images

Next, I play a composed piece on the piano and ask students to walk and to change the direction every time they hear a new phrase. Phrases in this piece are of different lengths. Then, I ask students to show the phrasing with their arms. After doing this for a while, I stop playing and see whether or to what degree the students have internalized the phrasing of the piece and are able to continue the movements in silence (see II). Once they start losing the common feel of time, I re-enter with the music.

In the next exercise, the students are directed to create three phrases of different lengths that altogether equal ten beats. I set the tempo and first ask them just to imagine the movements in silence. Through imagining movement, the nervous system gets activated as if the body were really moving and thus prepares the body for the upcoming movement (Damasio 2000, 80, see II). This exercise develops the ability to create exact images of action. Such images—i.e., 'mental training'—are useful when rehearsing music on an instrument or vocally.

Then, I ask my students to find a partner. This time person A shows the created phrasing to person B, who then observes and tries to determine the form of the phrases. When I ask for comments, one student notes that it is important to be very clear and exact in showing beginnings of phrases. This remark initiates a short discussion of the importance of *anacrusis*—the upbeat or pickup—that actually conditions the phrase that follows it. We repeat the exercise and try to make the phrasing clearer by preparing the body for phrase changes. This focus also makes the students more aware of their movements and of the connection between what they reflectively think and how it is effectively manifested in their bodily actions (IV).

# 6.6 Being in the sound

We continue by walking freely around the room. While walking, I explain the next exercise, which warms up the students' voices and asks them to think of the length of one exhale as one complete phrase. To do this, students walk in space from one place to another while making a controlled 'sshh' sound within one exhalation, and then stop to breath in. I also ask them to become aware of the physical space they used (in terms of geography of room walked).

Next, as they exhale I ask the students to make one long sustained sound with one vowel. I encourage them to listen to the cluster of sounds created and to feel the vibration of the sounds in their bodies. When a person makes sounds and listens to sounds, the body seems to tune itself to and vibrate along with the musical sounds. Thus, it is possible to experience the 'double belonginess', the reversibility of perception, in that particular moment; the sounds are simultaneously both heard and felt (Stubley 1999, IV).

In fact, the same phenomenon occurs in expressive movement expression, too; the dancer simultaneously creates and experiences the dance, thus both creating and receiving the movement and the artistic expression (J-D 1920/1965, 132–133).

The exercise is continued, but when exhaling this time students are asked to use their voices freely, applying various sounds and rhythms and following their own voices with whole body movements. Since the exercise may seem a little scary or silly at first, I demonstrate it myself first. I try to encourage the students to 'throw' themselves into this exercise freely and spontaneously. This exercise aims at creating a space for 'being in the moment' (M-P 1962) and 'being in the sound' (Stubley 1998); it aims at making them live through a moment in the pre-reflective world of sensations where the mind and body are still tightly united—where the body is engaged in the manner of being entirely in this 'musical moment' (see M-P 1965, 188–189, Stubley 1999).

# 6.7 Exploring music, self, and others

I continue by working with *plastique animée*. I have chosen a piece that includes phrasing that can be interpreted in various ways. First, I ask my students just to listen to the piece and then, to let their arms spontaneously follow the phrases of the melody. I encourage them to use long, sustained movements in order to reflect the continuity of the melody. Although I suggest some ideas for movement, there is a lot of freedom for creative choices. Then, I ask them to do something different, to use different body parts for expressing phrases. By having them do the same thing in another way, they are encouraged to become more aware of what they did earlier. With this connection between awareness and action, their movements become ever-more more mindful. (II & IV.) When finding another way of showing the phrasing, they also seem to become more connected to the personal self; this sense of self emerges into the moment and is experienced as one's identity (Stubley 1998, 98, I & IV). In these exercises of *plastique animée*, we are at the very centre of Merleau-Ponty's (1962) notion of embodiment: experiencing and knowing the world subjectively through the living body-subject—the process in which the sense experiences and sensations blend with one's 'inner world'.

Due to the variation in movements, students also take ideas from others. This is actually one advantage of working in a group; it allows perceiving and learning from others, a taking up of the acts of others that, for Merleau-Ponty, means communication with another way of being—a communication he considers to be the agency of all knowledge (M-P 1964/1991, 93). Comprehending the actions of other people happens in dialogue with one's own being (M-P 1964/1982, 168–169, 1973/1991, 139, also Anttila 2003a). Through 'sensing' the other, and reciprocally becoming 'sensed' by others, the different landscapes between self and others interweave; their actions fit together and reversibility thus occurs (M-P 1968, 102).

Although reciprocating movements are 'tuned' into each other, they are not identical. Students perform similar movement, but there is also a gap, a difference, a uniqueness in the actions of each. This reminds me of Merleau-Ponty's (1968) notion of reversibility between people. I ask those students whose movements seem most interesting and unique to demonstrate for others; then I encourage the other students to try out those movements,

which expands their repertoire and, and understanding of possibilities. The contrast with their own movements can help students to discover *their* own since the standpoint of other and that self are reciprocally interchangeable (Dillon 1997, 168-169, also Rouhiainen 2003, 127). The same phenomenon seems to happen, for example, in a jazz ensemble. There is a shared common ground in playing, but individual uniqueness of improvisation is welcomed and makes the music more interesting. This gap is a space for exploration, a place through which to become involved with the 'becoming'. It leads playing in new directions, or brings different flavour with it and thus enriches the musical vocabulary of the players.

In the exercise described above, I also encourage the students to think of the images and earlier experiences that the word 'phrase' evokes, and invite them to engage these ideas in their creative explorations. In bodily exploration of an aspect of music—such as phrasing, shape or length of line, etc.—the play of images is expressed in movement that, in turn, evokes and informs other images. There is a constant synaesthetic (M-P 1962, 229) play of the various senses and an interaction of the ways in which the bodies intersect the world. (See IV.) Ruthrof (2000, 4, 72–84) describes this bodily capacity to know and construct meanings through a kind of communication of associations as 'heterosemiotic richness'. Such bodily exploration of a musical phenomenon is likely to transform or reinforce our earlier understanding of the matter.

Finally, I ask my students to form small groups and make up a movement composition based on this experimentation. Performing the movement composition calls for balance between the qualities of space, time, and energy of movement with those of the music (II & IV). When each group is ready, its choreography is performed for the others. Every performance is recognized by applause and there is also some constructive feedback from the 'audience'.

# 6.8 Reflecting on the experience

After the performances, we talk together about the lesson. It is crucial that the students have the chance to think about and to reflect on their experiences, and to constitute new meanings of them through describing them. The topics are numerous; they include discussions about the phrasing, breathing, using voice, interacting with other people, performing, spontaneity, concentration, listening, and so forth. This reminds me of the definition of Dalcroze Eurhythmics as *personal experience* involving the various capacities of a person (see 5.4).

Reflecting and analyzing one's own experience through the memory of the living of the experience introduces 'the third person perspective' (III). Through reflection on 'lived experience' I can become aware of and understand my experiences (M-P 1968, 35, 1962, x). Moreover, as an 'outside' spectator of my own 'inner' experience I can also reflect better on the actions and experiences of other people in relation to mine. Thus, subjectivity and intersubjectivity achieve their unity. (M-P 1962, xii, xx.)

In reflection on one's movements, the experience is questioned, and its qualities are imaginatively changed and extended. Through this act, the essence of the experience and of the phenomenon in question is revealed, and a person becomes responsible for one's

own conceptions and actions (M-P 1962, xx, 1964b/1989, 70). Through reflection, recent experiences are connected to earlier ones and to earlier understanding, and they thus result in ever-clearer images (see Damasio 2000). These images can later be consciously recalled, for example, when playing an instrument, singing, reading, writing, listening to, or teaching music. In good actions we make use of images that we can recall with the help of the memory. <sup>38</sup> This process actually creates a bridge between Dalcroze study and music making in other situations. However, because of the 'mindfulness' of bodily action, even without conscious reflection the body would remember; echoes of previous bodily experiences influence actions in other situations. Through reflection and words, however, this connection gets strengthened. Yet, the 'felt' qualities of experience are never fully translatable into words; sometimes, not at all translatable. It is also crucial to note that a clear line cannot be drawn between the pre-reflective and the reflective levels of knowing; rather, the issue is a matter of interaction between two moments of what is a holistic process.

Before ending the lesson, I give out the score of the music used in the lesson. To make a connection between the earlier exercises and the written form of this piece, we listen to the piece again while drawing the phrasing over the staves. As the students begin to leave, it seems as if they might still be reflecting on their experiences. Most likely, these experiences will become meaningful for some students only after a couple of weeks, months, or even years—Dalcroze studies imply a never ending developmental process.

<sup>&</sup>lt;sup>38</sup> Damasio writes, ".. without the guidance of images, the actions would not take us far. Good actions need the company of good images. Images allow us to choose among repertoires of previously available patterns of action and to optimize the delivery of the chosen action – we can, more or less deliberately, more or less automatically, review mentally the images which represent different options of action, different scenarios, different outcomes of action. We pick and choose the appropriate and reject the bad ones. Images also allow us to invent new actions to be applied to novel situations and to construct plans for future actions – the ability to transform and combine images of actions and scenarios is the wellspring of creativity." (Damasio 2000, 24.)

# 7 Concluding discussion

# 7.1 Theoretical and practical implications of the study

In this study Dalcroze Eurhythmics has been examined from the perspective of the concept of embodiment advanced in the phenomenology of Maurice Merleau-Ponty. In particular, this study elucidates the meaning of body movement in music education—a research topic suggested by Alperson (1994). Merleau-Ponty's concept of embodiment highlights the importance of pre-reflective, lived experience from the student's first person perspective, which gets easily left aside when looking at the human being from outside, from the third person perspective. The perspective of embodiment directs attention to the body's ability to learn through movement and other bodily actions—to what can be called a 'mindful' level of knowing. From this viewpoint, rather than a conceptual, or abstract knowledge of music, Dalcroze Eurhythmics primarily teaches habits of musical action or, more generally, 'a bodily way of being in sound'. On the other hand, this study also sheds light on the meaning and importance of consciously reflecting on 'lived experience' in order to make it meaningful and transferable to new situations. Moreover, the study illuminates how Dalcroze lessons engage embodiment in ways that aim to reinforce the mind-body connection and facilitate personified, holistic involvement and, thus, embodied learning.

The central theoretical implication of my study for Dalcroze Eurhythmics is that it offers a fresh viewpoint and vocabulary for explaining the practice of Dalcroze teaching. Indeed, this study has considerably changed the way I talk about the approach to my students. Although Dalcroze teachers primarily need numerous practical skills and, thus, praxial knowledge, research findings concerning underlying processes can help improve current practice (see Heller & O'Connor 2002, 1090). According to my personal knowledge, there are numerous excellent Dalcroze teachers whose teaching typify the principles of the approach but who find it difficult, however, to adequately articulate all the theory that supports the practice—Jaques-Dalcroze's own theory, as well as recent developments, such as the suggestion argued here of the relevance of the theory of embodiment. This study, then, provides further 'tools' by which Dalcroze teachers can (a) provide theoretical accounts for Dalcroze teaching procedures; (b) advance principles of the approach interpreted from the perspective of embodiment; and (c) discuss other

recent research and philosophy relevant to the role and potential of the Dalcroze approach for music education everywhere. Consequently, Dalcroze Eurhythmics can be supported not only by devoted practitioners who believe that the approach works (see Stone 1985, 10) but also through explicit theoretical arguments for the benefit of potential users. As Regelski (1998a) reminds us, teachers need to be able to communicate their ideas accurately to others if they are to create and contribute to a sharable fund of praxial knowledge in the professional music education community. This ability is increasingly crucial for music teachers, including Dalcroze teachers, as they need to be able to explain the importance of studies in music to other teachers and educational authorities convincingly. Such theoretical understanding can also serve teachers as a basis or path for planning and preparing more meaningful exercise processes and of organizing their pedagogical thoughts about Dalcroze Eurhythmics.

Bodily knowing, or knowing through the body, is a model of cognition that may be difficult for some people to acknowledge since it is non-linguistic and, just as significantly, has no solid, stable object on which it is affixed (see Sheets-Johnstone 1999). However, these taken-for-granted assumptions do not refute it or its pragmatic importance. By acknowledging the importance of bodily experiences in musical knowing, Dalcroze Eurhythmics offers a fertile ground for examining music's felt qualities and their relation to musical knowledge; and by acknowledging the role and importance of such experience, it turns our attention and interest towards students' lived experiences in relation to musical practices. It also enables students to know themselves as subjects of knowing, as well to remove the veil that prevents them from experiencing the inner state of the body.

It is surprising that relatively little attention is paid in the training of musicians to the development of holistic bodily skills, since making music is, above all, a bodily action. Moreover, it seems that often in music education, especially in instrumental teaching, accuracy of intellectual, analytical, and technical abilities and skills is valued above the abilities of sensing, feeling, and expressing emotions. Consequently, the former set of values dominate the choices of teaching procedures and skills being educated. Thus, for example, studies of music theory often apply only student's intellectual capacities even though the same content could be taught more effectively and with greater interest and relevance through students' active involvement and lived experiences. Teachers at all levels seem to forget about the research showing that the brain is not only wired to know but also to feel deeply (Damasio 2000). As bodily engagement is mostly associated with emotions, children, and play, it is often considered a meaningless waste of time in the context of 'serious' (musical) learning. My study challenges music educators to consider that musical learning can profitably be based on, or make use of bodily exploration and pre-reflective experiences, and that bodily involvement can facilitate developing a wide range of kinds of musical knowing.

Music education in public schools is faced with several particular problems and challenges. For example, music is often taught to large numbers of students in small classrooms within limited time. Using body movement in teaching music usually requires special arrangements, much planning and preparation, and is susceptible to disciple problems. Furthermore, learning through movement and experience takes time and may not be fully successful for everyone. Nevertheless, I maintain that it is well worth the effort since including lived, embodied experiences in music lessons can amount to the

rare times in school where students can sense, experience, and express themselves holistically, become aware of sounds and learn through the body, and be more in contact with emotions, self, and other students.

As is the case with Regelski's praxial philosophy of music education, in Dalcroze Eurhythmics musicianship is developed in broad and general terms. This breadth and generality can contribute to a wide range of musical practices. Furthermore, Dalcroze Eurhythmics stimulates and incorporates the capacities of the whole body-mind. It challenges us to consider the meaning of music education from a more extensive educational viewpoint; it urges us to consider music education as a process that educates the student not only musically, but also holistically. Along with the praxial approach (see Elliott 1995, 113-119), it emphasizes that music and music making contributes to personal self-growth, greater self-knowledge and improved self-esteem. Through bodily involvement, students can also learn and apply capacities and skills such as concentration, bodily knowing, communication skills, creativity, and so on, that are essential in all areas of life. Music teachers often dispute whether the rationale for teaching music should be based exclusively on musical values or whether the advantages of musical study for development of general capacities useful in learning and life should be acknowledged as well. I agree with Bowman (2002, 65) that music's educational ends and aims are too often wrongly regarded as 'extramusical' and unnecessarily separated from music's intrinsic nature and value. Though music may not be considered essential to life—to staying alive—and while many of the outcomes of musical study may not presently be valued highly in society at large, studying music clearly can affect who we are and how we relate to others. It develops certain mode of reflective attitude toward experience, openness toward possible meaning, and educates a person who is capable of acting and reflecting open-mindedly, cooperatively, and independently. (Ibid., 63, 66.)

This study offers a starting point for further discussion of the role and importance of embodiment for teaching and learning, and encourages educators as well as educational authorities be alarmed that the bodily experiences of today's students are only twodimensional for the most part, that most often only the visual sense is activated, and that overall bodily knowledge is poorly developed, especially the skills of balance and coordination. Computers are increasingly used even in teaching the arts, thus disengaging the body; furthermore, students use telephones and computers for much of their communication, thus losing the meanings otherwise contributed by gesture and other bodily expressiveness. I agree with Damasio (2000, 28-29) that most likely it was easier to get more balanced perspective at earlier times when the environments were relatively simple; people were thus probably better able to sense the inner state of their bodies and the possible origin and nature of what we call self-more about themselves in general—than many of us are able to these days, bombarded as we are with constant and complex sensory stimulation. As if these circumstances weren't already problematic enough, the studies of the arts, those subjects that naturally develop bodily skills and enhance learning through bodily involvement, are also increasingly regarded as irrelevant; at any rate, their value is questioned. Consequently, the studies of the arts are typically allotted less time and fewer resources in schools, while studies that only engage intellectual thinking are stressed above all else. It is difficult to disagree with Hyvönen (2002) that the outcome of this policy in education is a student who resembles a young child's drawing of a human body—a big head with tiny arms and legs.

### 7.2 Evaluative comments

Research methodologists are increasingly questioning the value of applying quantitative criteria for qualitative work (Flinders & Richardson 2002, 1159). The suggestion is also made that quantitative concepts should be reconfigured for use in qualitative research (see Gergen & Gergen 2000). Instead, such terms as 'trustworthiness' and 'authenticity' have been offered (see Lincoln & Guba 2000, 180, Olesen 2000, 230, Greene 2000, 991) as alternatives to quantitative concepts of 'reliability' and 'external validity'. Trustworthiness is associated with 'method' and 'interpretation' of data (Lincoln & Guba 2000, 178). As my intention has been to approach the research questions from various perspectives (including teachers' experiences, teaching practice, and theoretical examination), I have applied a variety of materials and methods. In section 3.4, I have presented arguments for my choices.

For this study, I have examined all the basic writings of Jaques-Dalcroze. I have mostly used the original versions, with the exception of applying the English translation of *Le rythme, la musique et l'éducation* (J-D 1920/1965) in my substudies since that edition is more available to readers. I have used the original French version alongside it in order to ensure the authenticity of the text. I have also consulted the original French versions of Merleau-Ponty's writings along with standard English translations. Only those ideas and notions of Merleau-Ponty that are relevant and meaningful for this study have been used. Further consideration of his comprehensive philosophy is not germane to the focus and thus the scope of this study.

Considerable debate has arisen concerning the criteria of good 'interpretation' (see Lincoln & Guba 2000). Any understanding is always achieved in relation to the chosen horizon and the questions being asked (Schwandt 2000, 195–196). I have chosen the perspective of embodiment based on ideas of Merleau-Ponty due to its apparent theoretical congruence with and support for Jaques-Dalcroze's practical ideas. The research questions as stake have been formulated to enable a substantial understanding of the meaning and relevance of embodiment for both the practice and theory of Dalcroze Eurhythmics.

Several choices were made during this research process that have strongly guided this study in certain direction as opposed to others. Indeed, other theoretical frames of reference or different research sources would have unravelled altogether different aspects of Dalcroze Eurhythmics. The perspective of embodiment has especially focused on the meaning of body movement and bodily experiences within the approach, whereas the perspective of creativity for example, would have shed light on the meaning of improvisation and on creative processes. Interviewing teachers and studying practical application in various other countries would certainly have brought up slightly different details. However, the rationale for my methodological decisions is offered in section 3.4.

In this study, the substudies form segments of the big hermeneutic circle of understanding. All understanding, and thus the whole inquiry in this case, nonetheless reflects to some degree the standpoint of the inquirer. Therefore, the writer has had to reflect on her stance as a researcher concerning what 'education' and 'experience' mean in this study (see Kvale 1997, 274). My experiences studying and teaching Dalcroze Eurhythmics form a solid basis for understanding Jaques-Dalcroze's writings, the

commentary books, and Dalcroze teachers' discussions of their teaching. On the hand, an 'insider' perspective can also be a challenge for a critical study. Nonetheless, being aware of this fact, I have tried to explain my stance as an inquirer explicitly and honestly by stating the rationale for my various choices, decisions, and interpretations.

Linking the theoretical findings of the study with the teaching practice (see chapter six) involved a process of critical reflection and transformation and formed one segment of the hermeneutical circle of this study (see Schwandt 2000, 191). Heller and O'Conner (2002, 1090) worry that much of the reported research of music education is a mere reworking of doctoral dissertations and thus does not add credibility to the music education enterprise. The present study, however, contributes to music teaching and learning and, ultimately, to teaching practice by increasing the understanding of the practice of Dalcroze Eurhythmics and thus of the use of bodily involvement within music education.

Lather's notion of 'catalytic validity' (Lather 1991, 68) suggests that effective research has consequences both in readers' minds and for practice. My substudies have been present to international meetings of Dalcroze Eurhythmics teachers and have initiated productive conversations and questions. The application of the concept of embodiment appears to be a novel perspective for a number of teachers and provoked fruitful discussion. I am confident that this study will motivate more Dalcroze teachers to offer their own perspectives and study and understand the Dalcroze approach in greater depth.

Writing as a method of inquiry (Richardson 2000, see 3.4) implies that writing itself is a method of knowing—a method of discovering or clarifying one's own ideas. As Gadamer (1982) notes, successful hermeneutic understanding leads to enhanced inner awareness. It contributes to our personal 'horizons' and, thus, to our experience and self-knowledge. (Ibid., 109-110.) This study has considerably broadened and deepened my educational thinking, knowing, and practice. Also, a passion for further research has also been stimulated. In this light, the study has been successful.

#### 7.3 Ideas for future studies

Fostering the applications of Dalcroze Eurhythmics, and of music teaching in general, requires research, particularly in terms of assessing the impact of teaching and encouraging critical reflection. If the collective understanding of the teaching development is to be improved, individual teachers must learn to reflect more on their particular approaches and circumstances and to report their results for scrutiny and use by others. In this study, one substudy (I) examines Dalcroze teacher narratives. One possibility for future studies would be to examine Dalcroze teachers' narratives more in detail, including interviews that encourage the teachers to analyze their teaching critically, to present arguments and rationales for their pedagogical choices, and to be more precise about what is involved in their teaching. Such research would make Dalcroze Eurhythmics teaching and theory more publicly shared; this, in turn, would contribute to the music teaching in general. (See Wilcox & Upitis 2002.)

Another attractive idea for further research would be to examine music students' experiences of Dalcroze studies over the long term, since at least developing certain parts of musical knowing through movement seems to take a lot of time (see Lewis 1986<sup>39</sup>). Stone (1985) has already studied the teaching procedures of Dalcroze teaching as part of training professional musicians. Further inquiry could study how skills and understanding develop over the course of their studies and to examine the actual contribution of Dalcroze teaching to their overall musical and personal development.

Finally, further studies could profitably study various practical applications of Dalcroze Eurhythmics in detail: How do they relate to other musical studies, what are their specific ends and goals, teaching procedures, timetable, and so on? Inquiry could also be designed to study in various countries any differences in the types of body movement used and the comparative importance given to bodily knowing within music education. Such study would most likely provide even more support for the advantages of embodied ways of learning and knowledge. Such research can help us in particular to build bridges between the different music pedagogies and teaching philosophies; and provide new tools for improving music education.

<sup>&</sup>lt;sup>39</sup> Lewis (1986) discovered that unless movement-based music instruction was experienced over a long term, it had little effect on the aural perception skills among first and third grade\_students.

#### References

- Aronoff FW (1979) Music and young children. Turning Wheel Press, New York.
- Alanen L (2002) Johdanto [Introduction]. In: Descartes R Teokset II [The works II]. Gaudeamus, Helsinki, 7–18.
- Alasuutari P (1999) Laadullinen tutkimus. Vastapaino, Tampere.
- Alexander M (1987) The Use of the Body. Orig. 1932. Victor Gollancz, London.
- Alperson PA (1991) What Should One Expect From a Philosophy of Music Education? Journal of Aesthetic Education 25(3): 215–242.
- Alperson R (1994) A Qualitative study of Dalcroze Eurhythmics classes for adults. Ph. D. dissertation. New York University.
- Anttila E (2003a) A Dream Journey to the unknown. Searching for dialogue in dance education. Acta Scenica 13. Theatre Academy, Helsinki.
- Anttila E (2003b) Lectio 8.9.03 [online]. [Cited October 10 2003]. Available: http://www.teak.fi/viikkis/vko36–37 03Liite1.htm.
- Appia A (1911) L'origine et les débuts de la Gymnastique Rythmique. In: Appia A Complete work vol. III. L'Age d'Homme, Lausanne, 140–145.
- Aronoff FW (1979) Music and young children. Turning Wheel Press, New York.
- Bachmann M-L (1984) La Rythmique Jaques-Dalcroze. Une éducation par la musique et pour la musique. La Baconnière, Neuchâtel.
- Bachmann M-L (1991) Dalcroze today. An education through and into music. Oxford University Press, New York.
- Becknell A (1970) A History of the Development of Dalcroze Eurhythmics in United States and its influence on the public school music program. Ed.D. dissertation. University of Michigan, MI.
- Berchtold A (1965) Émile Jaques-Dalcroze et son temps. In Martin F (ed) Émile Jaques-Dalcroze: l'Homme, le Compositeur, le Createur de la Rythmique. Editions de la Bonniere, Neuchatel, 27–158.
- Bertolotto I (1984) Jaques-Dalcroze -metoden. Orig 1973. Institute of musicology. University of Stockholm, Stockholm.
- Blacking J (1977a) How Musical is Man? Orig 1973. University of Washington Press, Seattle, WA.
- Blacking, J (1977b) Towards an anthropology of the body. In: Blacking J (ed) The Anthropology of the Body. Academic Press, London, 1–28.
- Bleicher J (1990) Contemporary hermeneutics: hermeneutics as method, philosophy and critique. Routledge, London & New York.
- Bloom FE & Lazerson A (1988) Brain, mind, and behavior. W. H. Freeman and Company, New York.
- Boud D, Keogh R & Walker D (eds) (1989) Reflection turning experience into learning. Kogan Page, London.
- Bowman WD (1998) Philosophical perspectives on music. Oxford University Presss, New York.

Bowman WD (2000) A somatic, "here and now" semantic: music, body, and self. Bulletin of the Council for research in Music Education 144: 45–60.

Bowman WD (2002) Educating musically. In: Colwell R & Richardson C (eds) The handbook of research on music teaching and learning, Schirmer Books, New York, 63–84.

Brooks P (1993) Body work. Objects of desire in modern narrative. Harvard University press, Cambridge, MA.

Bruner J (1974) Beyond the information given. Studies in the psychology of knowing. George Allen & Unwin Ldt, London.

Brunet-Lecomte H (1950) Jaques-Dalcroze. Sa vie – Son oeuvre. Edition Jeheber, Geneve.

Caldwell JT (1995) Expressive Singing. Dalcroze Eurhythmics for Voice. Prentice-Hall, Englewood Cliffs, NJ.

Choksy L, Abramson RM, Gillespie AE & Woods D (1986) Teaching music in the twentieth century. Prentice-Hall, Englewood Cliffs, NJ.

Clifton T (1983) Music as heard. A study in applied phenomenology. Yale University Press, New Haven & London.

Crossley N (1994) The politics of subjectivity: between Foucault and Merleau-Ponty. Ashgate, Aldershott, Brookfield.

Crumpler SE (1982) The effect of Dalcroze Eurhythmics on the melodic musical growth of first grade students. Ph.D. dissertation. Lousiana State University, LA.

Csikszentmihalyi M (1990) Flow. The psychology of optimal experience. Harper and Row, New York.

Damasio AR (1996) Descartes' error. Emotion, reason and the human brain. Orig 1994. Papermac, London.

Damasio AR (2000) The feeling of what happens. Body, emotion and the making of consciousness. Vintage, London.

Dénes T (1965) Chronologie. In: Martin F (ed) Émile Jaques-Dalcroze: l'Homme, le Compositeur, le Createur de la Rythmique. Editions de la Baonniere, Neuchatel, 11–26.

Denzin NK (2000) The practices and politics of interpretation. In: Denzin NK & Lincoln YS (eds) Handbook of qualitative research. Sage, London, 897–922.

Denzin NK & Lincoln YS (1994) Introduction: entering the field of qualitative research. In: Denzin NK & Lincoln YS (eds) Handbook of qualitative research. Sage, London, 1–17.

Descartes R (1975) The philosophical works of Descartes. Vol I. Orig 1931. The Cambridge University Press, London.

Dewey J (1934) Art as experience. Perigee Books, New York.

Dewey J (1958) Experience and nature. Orig. 1925. Dover Publication, New York.

Dewey J (1984) The Quest for Certainty. Orig. 1929. In: Boydston JA (ed) John Dewey: The later works, Vol. 4. Southern University Press, Carbondale.

Dillon MC (1997) Merleau-Ponty's ontology. Orig 1988. Northwestern University Press, Evanston, II.

Dutoit-Carlier C-L (1965) Le Createur de la Rythmique. In: Martin F (ed) Émile Jaques-Dalcroze: l'Homme, le Compositeur, le Createur de la Rythmique. Editions de la Baonniere, Neuchatel, 305–412.

Elliott D J (1995) Music matters. A new philosophy of music education. Oxford University Press, Oxford

Farber A (1991) Speaking the Musical Language. Music Educators Journal, Dec'91: 30–34.

Farber A & Parker L (1987) Discovering Music through Dalcroze Eurhythmics. Music Educators Journal Nov'87: 43–45.

Ferguson DN (1973) Music as metaphor. The elements of expression. Orig 1960. Greenwood Press, Westport, CT.

Findlay E (1971) Rhythm and movement: applications of Dalcroze Eurhythmics. Summy Birchard Company, Secaucus, NJ.

Flick U (2002) An introduction to qualitative research. Orig 1998. Sage, London.

Flinders DJ & Richardson CP (2002) Contemporary issues in qualitative research and music education. In: Colwell R & Richardson C (eds) The new handbook of research on music teaching and learning. A project of the music educators national conference. Oxford University Press, Oxford, 1159–1127.

Gadamer H-G (1979) Truth and method. Orig 1975. Sheed and Ward, London.

Gadamer H-G (1981) Reason in the age of science. MIT Press, Cambridge, MA.

Gergen MM & Gergen KJ (2000) Qualitative inquiry: tensions and transformations. In: Denzin NK & Lincoln YS (eds) Handbook of qualitative research. Sage, London, 1025–1046.

Globe JS (2003) Perspectives on practice. A pragmatic comparision of the praxial philosophies of David Elliott and Thomas Regelski. Philosophy of Music Education Review 11(1): 23–44.

Goehr L (1994) Political music and the politics of music. The Journal of Aesthetics and Art Criticism 52(1): 99–112.

Greene JC (2000) Understanding social programs through evaluation. In: Denzin NK & Lincoln YS (eds) Handbook of qualitative research. Sage, London, 1001–1017.

Gripenberg M (1952) Trollbunden av rytmen [Enchanted by rhythm]. Otava, Helsinki.

Gubrium JF & Holstein JA (1995) From the individual interview to interview society. In: Gubrium JF & Holstein JA (eds) Handbook of interview research. Context & method. Sage, London, 3–32.

Gudmundsdottir S (1995) The narrative nature of pedagogical content knowledge. In: McEwan H & Egan K (eds) Narrative in teaching, learning, and research. Teachers College Press, New York, 24–38.

Gudmundsdottir S (1996) The teller, the tale and the one being told: the narrative quality of the research interview. Curriculum Inquiry, 293–306.

Hannaford C (1995) Smart moves. Why learning is not all in your head. Great Ocean Publishers, Atlanta, GA.

Heinämaa S (1999) Merleau-Ponty's modification of phenomenology: cognition, passion and philosophy. Synthese 118: 49–68.

Heller JJ & O'Connor EJP (2002) Maintaining quality in research and reproting. In: Colwell R & Richardson C (eds) The new handbook of research on music teaching and learning. Oxford University Press, Oxford, 1089–1127.

Henke H (1984) The application of Emile Jaques-Dalcroze's Solfège-Rythmique to the choral rehearsal. The Choral Journal Dec'84: 11–14.

Henke H (1993) Rehearsing with Dalcroze techniques. The Instrumentalist May'93: 45-46.

Hyvönen L (2000) Taidekasvatuksen teoriaa etsimässä. [Searching for the theory of arts education.] Paper presented in the seminar of education, November 11 2000.

Ingham PB (1920) The word "Eurhythmics". (Reprinted from the School of Music Review March 1914.) Dalcroze Journal May 1920: 8–9.

 $J-D = Jaques-Dalcroze, \acute{E}.$ 

Jaques-Dalcroze É (1906a) Méthode Jaques-Dalcroze. La respiration et l'innervation musculaire planches anatomiques. Sandoz, Jobim & Cie, Neuchatel.

Jaques-Dalcroze É (1906b) Méthode Jaques-Dalcroze. Gymnastique Rythmique. Sandoz, Jobim & Cie, Neuchatel.

Jaques-Dalcroze É (1906c) Méthode Jaques-Dalcroze. Etude de la portée musicale. Sandoz, Jobim & Cie, Neuchatel.

Jaques-Dalcroze É (1906d) Méthode Jaques-Dalcroze. Les gammes et les tonalités, le phrasé et les nuances. Vol 1/3. Sandoz, Jobim & Cie, Neuchate

Jaques-Dalcroze É (1906e) Méthode Jaques-Dalcroze. Les gammes et les tonalités, le phrasé et les nuances. Vol 2/3. Sandoz, Jobim & Cie, Neuchatel.

Jaques-Dalcroze É (1909a) A MM. les membres du comité de la S.G.R. Le Rythme 1: 3-4.

Jaques-Dalcroze É (1909b) L' éducation par le rythme. Le Rythme 7: 63–70.

Jaques-Dalcroze É (1910) L'éducation par le rythme et pour le rythme. Le Rythme 2/3: 18–31.

Jaques-Dalcroze É (1916) Méthode Jaques-Dalcroze. La Rythmique. Vol 1. Jobim & Cie, Lausanne.

Jaques-Dalcroze É (1917) Méthode Jaques-Dalcroze. Exercices de plastique animée. Vol 1. Jobim & Cie, Lausanne.

Jaques-Dalcroze É (1918a) Méthode Jaques-Dalcroze: La Rythmique. Vol 2. Jobim & Cie, Lausanne.

Jaques-Dalcroze É (1918b) Méthode Jaques-Dalcroze. La Rythmique appliquée a l'étude du piano. Lausanne: Jobim & Cie.

Jaques-Dalcroze É (1920) Method of Eurhythmics. Rhythmic movement. Vol 1. London: Novello & Co

Jaques-Dalcroze É (1920/1965) Le rythme, la musique et l'éducation. Fœtisch, Lausanne.

Jaques-Dalcroze É (1921a) Définition de la Rythmique. Le Rythme 7/8: 1–8.

Jaques-Dalcroze É (1921b) Method of Eurhythmics: Rhythmic movement. Vol 2. Jobim & Cie, Lausanne.

Jaques-Dalcroze É (1921/1980) Rhythm, music and education. The Dalcroze Society, London.

Jaques-Dalcroze É (1926a) La grammaire de la rythmique (préparation corporelle aux exercices de la méthode). Le Rythme 17: 2–9.

Jaques-Dalcroze É (1926b) Rytmes d'hier, d'aujour'hui et de demain et leur enseignement dans les écoles de musique. Congrès du rythme 1926: 92–102.

Jaques-Dalcroze É (1927) Lecture demonstration before the Music Teachers' Association, 2.7.1927. Dalcroze Society of Great Britain.

Jaques-Dalcroze É (1930/1985) Eurhythmics, art and education. Arno Press, New York.

Jaques-Dalcroze É (1930) L'esprit de l'enseignement musical. Le Rythme 28: 3–4.

Jaques-Dalcroze É (1935) Petite histoire de la Rythmique. Le Rythme 39: 3–18.

Jaques-Dalcroze É (1942) Souvenirs, notes et critiques. Editions Victor Attinger, Neuchatel.

Jaques-Dalcroze É (1945/1981) La musique et nous. Note sur notre double vie. Slatkine, Genève.

Johnson M (1987) The body in the mind: the bodily basis of meaning, imagination, and reason. University of Chicago Press, Chicago, IL.

Joseph A (1982) A Dalcroze Eurhythmics approach to music learning in kindergarten through rythmic movement, ear- training and improvisation. D.A. dissertation. Carnegie Mellon University, Pittsburgh, PA.

Juntunen M-L (1999) Dalcroze-rytmiikka – kehollisuutta korostava ja muusikkoutta kehittävä musiikkikasvatuksen lähestymistapa. [Dalcroze Eurhythmics - an approach to music education that emphasizes embodiment and develops musicianship]. Licentiate thesis, University of Oulu, Oulu.

Kincheloe JL & McLaren P (2000) Rethinking critical theory and qualitative research. In: Denzin N K & Lincoln Y S (eds) Handbook of qualitative research. Sage, London, 279–313.

Kvale S (1997) InterViews. An introduction to qualitative research interviewing. Sage, London.

Lakoff G & Johnson M (1980) Metaphors we live by. The University of Chigaco Press, Chigaco, IL.

Lakoff G & Johnson M (1999) Philosophy in the Flesh. The embodied mind and its challenge to Western thought. Basic Books, New York.

Landis B & Carter P (1972) The approach of Émile Jaques-Dalcroze: contribution of Dalcroze, Kodaly, and Orff. MENC, Reston, VA.

Langer M (1989) Merleau-Ponty's phenomenology of perception. A guide and commentary. Macmillan Press, London.

Lather P (1991) Getting smart: feminist research and pedagogy with/in the post-modern. Routledge, New York & London.

Leder D (1990) The absent body. The University of Chicago Press, Chicago, IL.

Levin DM (1988) The Opening of Vision. Nihilism and the postmodern situation. Routledge, New York & London.

Levin DM (1989) The listening self. Personal growth, social change and the closure of metaphysics. Routledge, New York & London.

Lewis BE (1986) The effect of movement-based instruction on the aural perception skills of first and third –graders. Ph.D. dissertation. Indiana University, Bloomington, IN.

Lincoln YS & Guba EG (2000) Paradigmatic controversies, contradictions, and emerging confluences. In: Denzin N K & Lincoln Y S (eds) Handbook of qualitative research. Sage, London, 163–188. Maldiney H (2000) Flesh and verb in the philosophy of Merleau-Ponty. In: Evan F & Lawlor L (eds) Chiasm. Merleau-Ponty's notion of flesh. State University of New York Press, Albany, N.Y., 51–76.

Mark ML (1986) Contemporary music education. Schirmer Books, New York.

McCarthy M & Goble JS (2002) Music education philosophy: changing times. Music Education Journal 89(1): 19–26.

McCoy CW (1986) The effects of movement as a rehearsal technique on performance, meter discrimination ability, and attitude of members of high school choral ensembles. Doctoral dissertation. University of Iowa, IA.

Matthews JC (1994) Mindful body, embodied mind: somatic knowing and education. Ph.D. dissertation. Standford University, CA.

Mead VH (1994) Dalcroze Eurhythmics in today's music classroom. Schott Music Corporation, New York.

M-P = Merleau-Ponty, M

Merleau-Ponty M (1945) Phénomenologie de la perception. Gallimard, Paris.

Merleau-Ponty M. (1962) Phenomenology of perception. Routledge, New York & London.

Merleau-Ponty M (1964/1982) Signs. Northwestern University Press, Evanston, IL.

Merleau-Ponty M (1964a/1989) Phenomenology and the sciences of man. In: Wild J (ed) The primacy of perception. Northwestern University Press, Evanston, IL, 43–95.

Merleau-Ponty M (1964b/1989) The primacy of perception and its philosophical consequences. In: Wild J (ed) The primacy of perception. Northwestern University Press, Evanston, IL, 12–42.

Merleau-Ponty M (1964/1991) Sense and non-sense. Northwestern University Press, Evanston, IL.

Merleau-Ponty M (1965) The Structure of Behaviour. Metheun, London.

Merleau-Ponty M (1968) The visible and the invisible. Northwestern University Press, Evanston, IL.

Merleau-Ponty M (1973/1991) The prose of the world. Northwestern University Press, Evanston, IL.

Metz ER (1986) Movement as a musical response among preschool children. Doctoral dissertation. Arizona State University, AZ.

Mezirow J and associates (1990) Fostering critical reflection in adulthood: a guide to transformative and emancipatory learning. Bass Publishers, San Francisco, CA.

Mickunas A (1974) The primacy of movement. Main Currents 31(1): 8–12.

Moore SF (1992) The writings of Emile Jaques-Dalcroze: toward a theory for the performance of musical rhythm. Ph.D. dissertation. Indiana University, IN. University Microfilms International, MI 48106.

Murphy JP (1990) Pragmatism. From Peirce to Davidson. With an introduction by R Rotry. Westview Press, Oxford.

Määttänen P (1996) Pragmatistista musiikin filosofiaa. David J. Elliott musiikista ja musiikkikasvatuksesta. [Pragmatistic philosophy of music. David J. Elliott on music and music education]. Finnish Journal of Music Education 1(1): 47–50.

Määttänen P (2000) Elliott on mind matters. Bulletin of the Council for Research in Music Education 144: 40-44.

O'Donovan-Anderson M (1997) Content and comportment. On embodiment and the epistemic availability of the world. Rowman & Littelefield, Lanham & London.

Olesen VL (2000) Femenism and qualitative research at and into the millennium. In Denzin NK & Lincoln YS (eds) Handbook of qualitative research. Sage, London, 215–277.

Oxford English Dictionary on line (2003) Eurhytmy [online]. [Cited December 7 2003]. Available: http://dictionary.oed.com/cgi/entry/00078833.

Parviainen J (1998) Bodies moving and moved. A phenomenological analysis of the dancing subject and the cognitive and ethical values of dance art. Tampere University Press, Tampere.

Parviainen J (2000) Kehollinen tieto ja taito. [Bodily knowing and skills.] In: Pihlström S (ed) Ajatus 57. The yearbook of the Finnish Philosophical Association, 147–166.

Polanyi M (1966) The tacit dimension. Doubleday & Company, New York.

Polanyi M (1969) Knowing and being. University of Chicago Press, Chicago, IL.

Priest S (1998) Merleau-Ponty. Routledge, New York & London.

Regelski TA (1992) The action value of musical experience. In: Paynter J *et al* (eds) Companion to contemporary musical thought. Vol 1. Routledge, New York & London, 105–127.

Regelski TA (1994) Action research and critical theory: empowering music teachers to professionalize praxis. Bulletin of the Council for the Research in Music Education 123: 63–89.

Regelski TA (1996) A prolegomenon to a praxial philosophy of music education. Finnish Journal of Music Education 1(1): 23–40.

Regelski TA (1998a) Critical theory and praxis: professionalizing music education [online]. [Cited April 2 2003]. Available:

http://www.nyu.edu/education/music/mayday/maydaygroup/papers/crittheoryrev.htm.

Regelski TA (1998b) Schooling for musical praxis. Finnish Journal of Music Education 3(1): 7–37.

Regelski TA (1998c) The Aristotelian bases of praxis for music and music education as praxis. Philosophy of Music Education Review 6(1): 22–59.

Regelski TA (2000) Accounting for all praxis: an essay critique of David Elliott's *Music Matters*. Bulletin of the Council for Research in Music Education 144: 61–88.

Regelski TA (2004) Personal correspondence, January 13 2004.

Reuter M (1999) Merleau-Ponty's notion of pre-reflective intentionality. Synthese 188: 69–88.

Richardson L (2000) Writing: a method of inquiry. In: Denzin NK and Lincoln YS (eds) Handbook of qualitative research. Sage, London, 923–948.

Rosenberg J (1984) The practice of philosophy. Prentice-Hall, NJ.

Rouhiainen L (2003) Living transformative lives. Finnish freelance dance artists brought into dialogue with Merleau-Ponty's phenomenology. Doctoral dissertation. Acta Scenica 13. Theatre Academy, Helsinki.

Ruthrof H (2000) The body in language. Cassel, New York.

Sawday J (1995) The body emblazoned. Dissection and the human body in Renaissance culture. Routledge, London and New York.

Schwandt T A (2000) Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics, and social constructionism. In: Denzin NK & Lincoln YS (eds) Handbook of qualitative research. Sage, London, 189–214.

Schön DA (1983) The reflective practitioner: how professionals think in action. Basic Books, New York.

Schön DA (1987) Educating the reflective practitioner: how professionals think in action. Basic Books, New York.

Sessions R (1962) The musical experience of composer, performer, listener. Orig 1950. Atheneum, New York.

Sheets-Johnstone M (1981) Thinking in movement. The Journal of Aesthetics and Art Criticism XXXIX(4): 399–408.

Sheets-Johnstone M (1999) The primacy of movement. John Benjamins, Amsterdam.

Shulman LS (1987) Knowledge and teaching: foundations of the new reform. Harvard Educational Review 57(1): 1–22.

Shusterman R (1994) Dewey on experience: foundation or reconstruction? Philosophical forum XXVI(2): 127–148.

Shusterman R (2000) Performing live. Aesthetic alternatives for the ends of art. Cornell University Press, Ithaca & London.

Siljander P (1988) Hermeneuttisen pedagogiikan pääsuuntaukset. [Major characteristics of hermeneutic pedagogy]. Teaching materials and reports published by the Faculty of Education, University of Oulu 55/1988, Oulu.

Smyth M M (1984) Perception and action. In: Smyth MM & Wing AM (eds) The psychology of human movement. Academic Press, London, 83–118.

Southern E (1971) The music of black Americans: a history. Norton & Company, New York.

Southern E & Wright J (2000) Images. Iconography of music in African-American culture, 1770s–1920s. Garland Publishing, New York.

Spector I (1990) Rhythm and life. The work of Émile Jaques-Dalcroze. Pendragon Press, Stuyvesant.

Stafford B M (1991) Body criticism. Imaging the unseen in Enlightenment art and medicine. MIT Press, Cambridge, MA.

- Stone S (1985) An analysis of instructional procedures in a college level Dalcroze Eurhythmics class. Ph. D. dissertation. University of Pittsburgh, PA.
- Storr A (1992) Music and the Mind. Harper Collins, London.
- Stubley E (1992) Philosophical foundations. In: Colwell R (ed) Handbook of research on music teaching and learning. Schirmer Books, New York, 3–20.
- Stubley E (1998) Being in the body; being in the sound: a tale of modulating identities. Journal of Aesthetic Education 32(4): 93–106.
- Stubley E (1999) Musical listening as bodily experience. Canadian Journal of Research in Music Education 40(4): 5–7.
- Stubley E (2002) Moving words. Paper presented October 9 2002 in Sibelius-Academy, Helsinki.
- Stubley E (2003) Personal communication. August 17 2003.
- Taylor C (1989) Sources of the self: the making of the modern identity. Cambridge University Press, Cambridge.
- Tiemersma D (1989) Body schema and body image: an interdisciplinary and philosophical study. Swets & Zeitlinger, Amsterdam.
- Tuomi J & Sarajärvi A (2002) Laadullinen tutkimus ja sisällönanalyysi. [Qualitative research and content analysis]. Tammi, Helsinki.
- Varela C (1992) Cartesianism revisited: the ghost in the moving machine or in the lived body. An ethogenic critique. Journal for the Anthropological Study of Human Movement 7(1): 5–64.
- Varela FJ, Thompson E & Rosch E (1993) The Embodied Mind. Cognitive Science and Human Experience. MIT Press, Cambridge, MA.
- Vestergaard E *et al* (1985) Johdatus kasvatuksen filosofiaan. [Introduction to philosophy of education]. Gaudeamus, Helsinki.
- Vuori M (2002) Katson, soitan, läpielän. Pianistisia kokemuksia prima vista –soittamisesta. [A study of pianistic experiences in prima vista playing]. Doctoral dissertation. Studia Musica 13. Sibelius-Academy, Helsinki.
- Väkevä L (2004) Kasvatuksen taide ja taidekasvatus. Estetiikan ja taidekasvatuksen merkitys John Deweyn naturalistisessa pragmatismissa. [The art of education and the arts education. The meaning of aesthetics and arts education in John Dewey's naturalist pragmatism]. Ph.D. dissertation. University of Oulu, Oulu.
- Westerlund H (2002) Bridging experience, action, and culture in music education. Doctoral dissertation. Studia Musica 16. Sibelius-Akatemia, Helsinki.
- Westerlund H (2003) Reconsidering aesthetic experience in praxial music education. Philosophy of Music Education Review 11(1): 45–62.
- Westerlund H & Juntunen M-L (2004) Music and knowledge in bodily experience: Dalcroze's challenge to David Elliott. In: Elliott D (ed) Praxial music education: Reflections and dialogues. Oxford University Press, Oxford, in press.
- Wikipedia (2003) Rudolf Steiner [online]. [Cited November 25 2003]. Available: http://en.wikipedia.org/Wiki/Rudolf Steiner.
- Wilcox S & Upitis R (2002) Strengthening the teaching of music educators in higher education. In: Colwell R & Richardson C (eds) The new handbook of research on music teaching and learning. A project of the music educators national conference. Oxford University Press, Oxford, 840–854.
- Wis R M (1993) Gesture and body movement as physical metaphor to facilitate learning and to enhance musical experience in the choral rehearsal. Ph. D. dissertation. Northwestern University, Evanston, IL.

Table 1. The basic procedure of each substudy:

Procedure	Substudy I: From the bodily experience towards internalized musical understanding: how the Dalcroze master teachers articulate their pedagogical content knowledge of the approach (Juntunen 2002a)	Substudy II: Practical applications of Dalcroze Eurhythmics (Juntunen 2002b)	Substudy III: Digging Dalcroze, or, dissolving the mind-body dualism: Philosophical and practical remarks on the musical body in action (Juntunen & Westerlund 2001)	Substudy IV: Embodiment in musical knowing: how body movement facilitates musical learning within Dalcroze Eurhythmics (Juntunen & Hyvönen 2004)
Starting year	1999	1999	2000	2002
Research material	Transcribed interviews of seven Dalcroze master teachers in the United States of America	Commentary books, articles and studies about Dalcroze Eurhythmics published after 1970 in the U.S.	Primarily, writings of E. Jaques-Dalcroze, D. J. Elliott, and J. Dewey concerning the philosophical question of the body-mind in music education	Writings of E. Jaques-Dalcroze and M. Merleau-Ponty with the recent literature on embodiment
Method	Episodic interview and narrative writing	Qualitative content analysis	Theoretical study	Theoretical study
Research questions	1. What principles, viewpoints, and beliefs about Dalcroze teaching appear in the Dalcroze master teachers' talk about their pedagogical content knowledge?  2. What perspectives of embodiment appear in this talk?	1. How and within which subjects of studies is Dalcroze Eurhythmics applied in music education? 2. How does the perspective of embodiment appear in the practical applications of Dalcroze Eurhythmics?	What kind of perspectives does ÉmileJaques-Dalcroze bring into the discussion of the mindbody relationship in the context of the philosophy of music education?	1. How does body movement relate to musical knowing within Dalcroze Eurhythmics? 2. How can bodily experiences provide a means of developing skills, competencies, and understanding necessary to work in the expressional mode of musical knowing?

List of the themes and questions of the interviews (I).

Questions concerning narrative-episodic knowledge:

- Could you tell your life-story?
- What was your first experience of Dalcroze Eurhythmics?
- How and why did you choose to study Dalcroze?
- Could you describe your current work?

Questions concerning semantic knowledge?

- How would you define Dalcroze Eurhythmics?
- According to your understanding, what are the basic principles of the approach?
- What is Dalcroze 'good for', what does it develop? What do you think the students learn?
- What is the meaning of the role of movement in the leaning process?
- How do you make a Dalcroze lesson? What does it consist of?
- How much do you explain to students what is happening in teaching?
- To what does the often used phrase 'feel the music!' refer?
- What is your understanding of the mind-body relation? How does Dalcroze Eurhythmics reinforce that relation?
- What do you think of the Dalcroze solfège; do you apply it?
- What do you think of the following statements of Jaques-Dalcroze?
  - Music and its rhythm are the most powerful means of education.
  - Learning should base on individual experiences and the theory should always follow the practice.
  - All the rhythms of music can be found in the rhythms of the body.
  - Musical consciousness is the result of physical experience
  - Joy is a most powerful stimulus for learning
- How do you build the bridge from Dalcroze studies to music making?
- What is the process of becoming a Dalcroze teacher?
- What would you criticize in the Dalcroze approach?
- Have you found any connections or similarities between the Dalcroze approach and other pedagogies of music, systems, philosophies, etc.?
- What do you think of the future of Dalcroze Eurhythmics?
- Should I ask you something else?

Extracts from the interviews of the Dalcroze master teachers concerning important principles of Dalcroze teaching:

#### Interviewee A:

I think a very important principle, I almost .. I do regard it as a rule is around the fact that we are working with natural movement, natural movement means movement people do when they are not thinking about it, I mean movement they use to get from here to there, to reach for something, that is natural movement, and the word natural is very important here. If we think what is important in eurhythmics -- that is to have people become aware of the natural movement they are doing. I mean if somebody is just walking, they may or may not be aware of it. And in eurhythmics class we have to get them to become aware, otherwise you can't use the walking. You wanna be able to use it. So we make them aware of what we do.. So we are using our cognition there to analyze a little bit and use words. I can ask: "What can you say about that tempo, is it a fast walk, a medium walk, a slow walk?" These are simple words, but they are words. So this is -- using our cognitive faculty along with this natural movement.

#### Interviewee B:

Well, a eurhythmics class is unlike anything else in life. You dress yourself suitably, take off your shoes, that you are bare feet on, and move according to the instructor's instructions -- with reference to some particular aspect of music. At some point in the class -- the physical responses are joint to cognitive conceptual responses and you are giving your body instructions for how to move, but there certainly is a point in the class where the movement is spontaneous and natural and open response to the music, that's what I hope happens. And then over the course of an education of eurhythmics, not only are the bodies natural responses tuned into, but new skills, not only skills which response to analytical issues, but new skills of response, new ways for the body to participate in what's happening musically. So that the body really becomes something like a musical instrument...

I also hope they are getting a way of thinking about their own musical experience. I certainly found that Dalcroze has words, has principals of organization, and any system organizes your thoughts, and organizes your thoughts about your own experience. And I find that in Dalcroze there is a good set of terms to speak to us about what we experience...

#### Interviewee C:

The danger in Dalcroze for me is that you have a lot of fun, but you don't learn anything ... It is important how you take that experience and use it ... so that the eurhythmics becomes connected to performance. Students need to experience before they abstract, but they do have to have to abstract. Experience is not enough.

#### Interviewee D:

.... the music, the sound goes in your ear, to your brain, and then it goes travels out your body, and then it feeds back, and then you analyze afterwards, that what we always say we experience it first, and then analyze what we have done and felt. ... I guess what we are doing is helping them to built up vocabulary. And from that vocabulary, vocabulary of experiences, and from that vocabulary of experience they can pull and ... I think they are very concrete. I think that is what he says: "If it doesn't make an impression on your brain, it isn't concrete and you are not going to be able to remember it..."

#### Interviewee E:

What we are teaching is not movement, .. what we try is to have the movement only as some kind of re-enforcing, you know, for the better understanding.... So I think that if we really want to utilize the eurhythmics, not the rhythmic only, but to utilize it for the musicianship, that what he wanted. Then we have to think, "what are we doing in eurhythmics?" We have to unify the movement with the thinking, and apply that to a performance, any kind of performance, or any kind of understanding music...

I thing that some of the students, they can make the connection, and sometimes they can't. And I have seen many times that they can do it in the lessons,... But when they get to their instrument, it is not the same. So, I don't think it is the perfect method.. it helps some people and some people don't get the connection.

We have people walk, but I think not until they become really conscious, of the walk, of the arrival here, and of the arrival there, until then they don't get it, it is not solid enough, it has to happen ... and if you are not conscious of the time, that you go from one place to the other, ... it doesn't give you the same sense of a rhythm. I don't know if it is clear?

#### Interviewee F:

... a way of teaching music through experience first. When I describe a method to none musicians, I always use an analogy of walking down the hall. If I would say to you: "How far is it from here to the drinking fountain?" If you sit here and look, you go: "Oh, it is probably 15 steps". Well, go ahead and try those steps. So you take the steps and—oh, it's 12 steps and you know, because you have taken the steps you know. And if I come back the next day and I say: "How many steps it is from here to tub?" And you say 12 because you have the experience of doing it and you know. So, that is what we teach in eurhythmics, we teach somebody to really know something because they have the experience. And once they really know it, we manipulate what they know. So what if you took babies steps to the drinking fountain, what about if you took giant steps, how would that change? ... It manifests itself differently, if you take what you know and you keep adding on and you manipulate it to have a deeper understanding and reason. That's how I think about it....

Listening is really, really, really important, because we have to teach kids, I think you have to teach students not just to hear but really to listen and to abstract, you know, to be able to abstract things from what they hear and analyze them and do all sort of that. So listening is really - - I think very important...

#### Interviewee G:

There are a lot of principles ... I think the principle of what the eurhythmics lesson is. ... It is not a Smörgåsbord sort of idea of a little bit of this, and a little bit of that. It is basically a kind of art form where you start with an idea and you develop it, and then you arrive at something, so that it has a logic and a line, and there is the deepening of the experience in itself. ... It is a process, yes, where all of the exercises in the lesson are really deepening the chosen focus of the lesson, that it has a single focus, rather than "we'll do a little exercise of syncopation now", or, "now let's do a little 3 against 2", as you were practicing skills, I don't see it in that way at all. I see it as a deepening of the focused thing. And you start maybe with a one very simple thing, but then it begins to apply to a larger frame of reference, so that the experience deepens ...

I have tried to put the student in touch with an inner experience, experience of their own body, of their own way of learning, of their own reactions, and to make the links between those, I guess that is how I would describe it. ... For me the musical learning is probably the central feature as opposed to movement for movement's sake... but we can't even really experience it without the body, that it is a physical thing. It is also an emotional thing... So what we are doing is really just by using the body, by awakening and saying, "listen to these reactions that in your body", we are enabling the student to connect, not only to music, but to themselves and to their own response to the music...

The first categorization of the research material concerning the practical applications of Dalcroze Eurhythmics (II):

- Contents and goals of teaching
- Activities and procedures of teaching
- Important principles of teaching
- Reasons for applying body movement
- Principles concerning education in general
- Challenges and problems
- Applicability for different ages of students
- Areas of the practical applications