

This is an Accepted Manuscript of an article published by Taylor & Francis. Juntunen, M.-L., & Westerlund, H. (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. <https://doi.org/10.1080/14613800120089250>

**Digging Dalcroze, or, Dissolving the Mind-Body Dualism:
Philosophical and Practical Remarks on the Musical Body in Action**

Marja-Leena Juntunen, University of Oulu & Heidi Westerlund, Sibelius Academy

Abstract

David J. Elliott (1995. *Music Matters. A New Philosophy of Music Education*. Oxford University Press) has recently posed the view that musical understanding is to equated with musicianship. This epistemological turn to musical ‘know-how’ in the philosophy of music education has faced opposition as well as acceptance. Our paper examines this question of the body in relation to music and movement, which has been raised by Elliott and which was also Émile Jaques-Dalcroze’s major pedagogical concern. The general aim of the paper is to show the relevance of the philosophical question of the body in practical music education. This paper discusses attempts to avoid a kind of dualism in which music is either a mental-spiritual experience, which transcends the bodily pleasure, or a 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. We argue that the body can be taken as a conscious object of transformation within a framework of ‘holistic duality’ rather than dualism, and that this idea should be more consciously considered and applied to research and practice in music education.

Introduction

As educators, we are apt to read students' body language in order to know how they feel and respond. It is a silent and often unconscious way to inform us and to draw conclusions about the experience of our students. Educational behaviourists once claimed that since it is impossible to really know what happens in a student's mind, or that the mind equals their behaviour, we should only be aware and concerned with what the students do and how they behave; only with their responses to conditioning educational acts.

There is a grain of truth in behaviourism in the sense that observable human action needs to be taken seriously. Action is not only an end product of thinking. In *Music Matters*, David J. Elliott (1995) has suggested that musical performing is not an outcome of something we call thinking, but rather, that we think through performing music. His concept of ‘thinking-in-action’ equates musical understanding with musicianship in its various forms. This means an overall epistemological turn to musical 'know-how' where knowing means musical acting.

Following Elliott, our hypothesis is that the development of musicianship happens in action, through action, and within action. However, we also argue that the human body plays a crucial but unfortunately taken for granted and transparent role in the development of agency. This is not a radical new idea. For example, in the first half of the twentieth century, Emile Jaques-Dalcroze (1865-1950) paid attention to the musical body in education. We examine the musical mind and body within a naturalist framework of 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. (Benson 2001, 5; Velmans 2000; Williams & Bendelow 1998; also, Dewey 1958, 285; Westerlund 2001.) The feeling, sensing and experiencing body is engaged with musical sounds in many ways, whether we are aware of it or not. Along with Jaques-Dalcroze as well as many pragmatist theorists, such as John Dewey and Richard Shusterman, we argue that the body is not only an instrument through which musical thinking takes place, but that the body can be taken as a conscious and explicit object of transformation. Jaques-Dalcroze's idea of bodily transformation and therefore of better musicianship seems to have been in many ways ahead of his time. The transformative and experiential view is easily lost even in contemporary cognitive approaches that, for example, Elliott has applied in his *Music Matters*.

The absent, transparent, and instrumental body

For Jaques-Dalcroze, the question of the body in relation to musical understanding was a practical one. He was concerned that although his students in the Conservatory of Geneva performed or composed correctly, they revealed none of their musicality. The musical, physical and emotional problems of his students led him to dispute the philosophies and teaching methods of his time. (Jaques-Dalcroze 1935.) Music educators still ask many of the same questions: Why is music theory taught as a set of abstractions? Why does the study of music history not reflect the movement of peoples, societies or individuals? Why do the students seem to perform without understanding, read without comprehension and write that which they cannot hear? (Choksy, Abramson, Gillespie & Woods 1986, 30; Dutoit-Carlier 1965, 312-313; see also, Jaques-Dalcroze 1920/1965, 5-11.) Jaques-Dalcroze found faults in music education, in the limited accomplishment of future professional musicians and in the motor abilities of his students (Bachmann 1991, 78).

These kinds of questions can be related to the general disembodiment of experience in relation to knowledge in western culture. Charles Taylor (1989) traces the disembodied human being back to Plato for whom reason, in contrast to passion, was the capacity to see, grasp and understand. Plato created dichotomies such as the soul versus the body and the eternal versus the changing (ibid., 116). These dualities were reinforced in the

modern meaning by Descartes. In his famous statement, *Cogito ergo sum*, 'I think, therefore I am', knowledge gained through sight means correct representation of things, which he separated from the non-intellectual senses: touch, smell, taste and hearing. The Cartesian 'mechanical eye', as David Levin (1988) calls it, observes the world outside (ibid., 106). Confidence and rationality are achieved by the mind, by disengaging our selves from the material world (ibid., 141). Within the Cartesian frame, music appears as permanent ideational structures to be known (cognised) rather than something to be done, felt or experienced. We do not experience in and through music but rather cognise it out there.

When the modern, Cartesian self was further advanced through Locke and other thinkers of the Enlightenment, the self became what Taylor calls the 'punctual' self (Taylor 1989, 161). The punctual self is self-centred and leads to distancing objects such as musical objects and objects of knowledge. Charles Varela (1992) argues that in 'possessive individualism' matters of truth, reality and meaning were transposed to the individual mind. Hence, everything of value, such as individuality, authorship or agency, has nothing to do with the phenomenal world of visible physical objects. Then also the body and its movement became given and unproblematic. They belong to the phenomenal realm of mechanism and determinism. In consequence, even intersubjectivity is not a matter of the existence of other things and bodies. (Ibid., 12.) According to Taylor, the Protestant versions of this modern conception of the human being valued the detachment from purely personal enjoyments. 'The lived experience of the passions teaches us nothing; it can only mislead. Our passions should in the end function only as cold disengaged understanding shows us they ought to' (Taylor 1989, 283). Under such institutional conditions, sense and flesh got a bad name. As John Dewey argued, flesh became corruptible, the spirit incorruptible (Dewey 1958, 249; also, 1934, 21).

The disembodied conception of the human being has been repeated in aesthetics. Lydia Goehr (1994) argues that the western view instructs that 'art' music as well as philosophy has searched for the transcendental, the *a priori* precondition of any experience. Music is not only *against* the world; it is also *not of* the world. In aesthetics, the transcendental relationship with music is cleaned from what Goehr calls 'dirty hands' and the 'real world': from craft, participation, behaviour, feelings, usefulness, functionality, practicality and interestedness. In contrast, art and aesthetics involve the transcendental, which means truth, knowledge, civilized thought,

contemplation, control, distance, abstraction, self-expression, individuality, non-practicality, music for music's sake, and so on. (Goehr 1994, 103.)

Jaques-Dalcroze seems to have been among those who tried to brake the modern paradigm in music education. He wrote that when the unity between matter and spirit was broken the mystical element of music was cultivated, and rhythm could find refuge only in the architecture of cathedrals. Music forgot its origin, which is in the dance, and men lost the instinct for expressive and harmonious movements, not only in the art but also in everyday life. (Jaques-Dalcroze 1930/1985, 188.) It is not correct, however, to claim that the stance towards all western music is disembodied. There has always been room for practices that have been organised around the needs, emotions and passions of the participants which resonate with the artistic material. Henry Giroux (1992) argues that this phenomenon that he calls 'a productive moment of corporeality' is found, for instance, in rock music (ibid., 191-192). Richard Shusterman (2000b) has lately disputed that rock, unlike music of the intellectuals, involves "overcoming resistances like 'embarrassment, fear, awkwardness, self-consciousness, [and] lack of vitality'" (ibid., 184). The aesthetics of rock and Afro-American music in general – the active, excited plunging – reveals, from the viewpoint of body, how passive is the aesthetic attitude of disinterested and detached contemplation (Shusterman 1997, 111; also, 2000b, 184).

As Levin (1988) argues, the disembodied experience and individualistic conception of the human being is not only a philosophical construction but is lived through in western culture (ibid., 96). Music has been widely and very near-sightedly accepted as a matter of 'cognitive' understanding or special intelligence, instead of a 'flesh and blood' experience where there is a continuum between various aspects of experience. For instance, popular music's challenge to the controlled and transparent body is rather a primitive excitement than a proper attitude toward music, which means in practice that, for instance, rock often loses its passionate expressiveness in education. Traces of this line of thinking can also be found in David Elliott's notion of musical agency. In spite of Elliott's general attempt to overcome dichotomies such as mind versus body and subject versus musical object, he builds up a dichotomy between pleasure and enjoyment. He writes:

When biological and social needs intrude into consciousness, the result is disorder. Order is restored in consciousness by satisfying these needs. When consciousness tells us that our biological needs or social expectations are satisfied, we experience pleasure. Pleasure can occur with little or no conscious effort; enjoyment cannot. Pleasure can be stimulated electrically and chemically in the brain; enjoyment cannot. Enjoyment results not from satisfying basic biological and social needs but from moving forward in psychological growth and complexity. Enjoyment arises only from unusual investment of our conscious powers. (Elliott 1995, 115.)

For Elliott, conscious powers appear as the ‘ghost in the machine’—a social and biological machine. Although pleasure does not need to be our primary aim in education, it *is* involved with object of interest that promote growth, such as learning music. Musical practices involve social expectations, and we do teach and learn them in various ways.

As the historical reconstructions show, there is no ontological ground other than historical and cultural contingency for us to think that ‘music’ can be reduced to inward, mental, dispassionate matters or even a special intelligence. The bodily and non-bodily involvement in music is a normative question rather than an ontological one. John Dewey tried to debunk such biased dualism by launching the term *body-mind* (Dewey 1958).

Towards a holistic view of the human being

Like Jaques-Dalcroze, Elliott is interested in developing musicianship defined as embodied action. In his definition of embodied action, Elliott leans on Ryle's behaviourism. Ryle (1949) attributed mental states to any system that has appropriate behavioural dispositions. Musical thinking is evidenced in musical action. There is, therefore, no need to talk about mental states that refer to the musical object as such. It is the ability to think while acting that counts. (Ibid., 59.) This argument seems to serve Elliott's purposes. By further applying Dennett's materialism, Elliott (1995) then deduces a view in which “the body is in the mind” and the mind is nothing but the physical brain (ibid., 51) that “scans acoustic waves for musical information” (ibid., 83). The apprentice's brain is working with the “norms, rules, and ideas”, cultural memes, that are passed on through generations (ibid., 111). As a result, instead of embodied knowledge, Elliott seems to have a “theory for embrained knowledge”, like Pentti Määttänen (2000) writes. The human brain-mind is viewed from an information perspective instead of an experiential one.

The whole question of mind and body can, however, be set in another way. Max Velmans (2000) writes that “the *proximal* causes of consciousness are to be found in the human brain, but it is a mistake to think of the brain as an isolated system”. Moreover, we do not experience this world as being inside our brains (ibid., 230). Thirdly, all experiences should not be likened to thoughts, as Descartes proposed (ibid., 247). There is, therefore, no need to reduce the body and mind to the material brain in order to avoid the Cartesian dualism and transcendental idealism. What we need to do is to examine music and learning as *experience* in which the body is engaged in various ways.

According to Dewey, the whole organism is not simply a sum of its parts. The organism as a whole thinks with the brain whilst interacting in a context and situation, and in this process the brain is just an organ for thinking. (Dewey 1972, Vol. 1, 108.) Similarly, it is the human being that runs with the legs and not the legs that run (Määttänen 2000; Määttänen & Westerlund 1999). Along with Dewey, Maurice Merleau-Ponty (1962) also argued that it is the lived body itself, not an intellectual mind that finds its way around the room. This embodiment is always lived through from the first-person perspective. My embodiment and physicality is fundamentally conditioning my experience and sense of self. In the experience of the human organism all senses are inseparable and interacting. Jaques-Dalcroze believed that it is “the sixth sense” (*le sens musculaire*) that controls the multiple qualities of movements (Jaques-Dalcroze 1920/1965, 140-141). This kinaesthetic sense—as it is called today—combines moving and sensing, and works on a subconscious level.

Yet, the lived bodily experience is not subjective and inward in the sense that it is developed in the social and material environment, in relation to various practices and conditions. In experience we are engaged in human habits that direct positively life, as Dewey and other pragmatists generally have maintained. In anthropology as well as in music education, Blacking was one of the first who pointed out the cultural and social aspects of bodily experience. He held that feelings, and particularly fellow-feelings expressed as movements of bodies in space and time, often without verbal connotations, are the basis of mental life (Blacking 1977, 21). Blacking's point is that the human body is not only executing tasks that the autonomous individual mind gives to it but is also an instrument for being a *social* human being as well as an expression of it. The body both generates and expresses imposed sociality.

Jaques-Dalcroze also acknowledged the social aspect of the body. Before Blacking, he emphasized that music, and the rhythms of the human body embedded in it, have been the basis of human emotion down all ages (Jaques-Dalcroze 1930/1985, 7). According to him, “[e]ach nation has its own particular motor rhythms, expressed in everyday life by certain ways of carrying out the various tasks required by climate, environment, and social conditions” (ibid., 223). Jaques-Dalcroze believed that every artistic action is a product of its time and culture (ibid., 239). Music from a certain period of time reveals the entire mental state of the period and response of the bodily movements imposed by social conventions and necessities (ibid., 7). On the other hand, he claimed that the rhythmic character of the music of a country will conform to the physical aptitudes of its inhabitants (Jaques-Dalcroze 1920/1965, 44-45).

Yet, culturally maintained habits do not always lead to best experience. Dewey, a contemporary of Jaques-Dalcroze, defended F. Matthias Alexander's view that many of the physical and mental ills that people suffer in the modern world result from disharmony between our more advanced intellectual behaviour and our more basic bodily functions (Shusterman 1994, 137). Jaques-Dalcroze used the expression *a-rhythm* referring to the same problem.¹ Alexander was after better somatic awareness and a new attention to bodily experiences offering a concrete method for such reflective education (e.g. Alexander 1987). Shusterman (1994) writes, “[t]his insistence on thinking through the body, to achieve more conscious control and more acute perception of its condition, clearly distinguishes Alexander's approach from standard physical culture and body building” (ibid., 137). Neither Dewey, Alexander, Jaques-Dalcroze nor many of their contemporaries thought that bodies are like ‘tabula rasa’ upon which society just stamps its symbolic imprint. They recognized that body-functioning influences the mind and vice versa, in a heterogeneous way. This implies, for example, that by becoming consciously aware of one's otherwise subconscious movements, it is possible to prevent oneself from doing unnecessary habitual movements and, thus, to improve the body functioning. Similarly, by consciously learning new social habits, for instance, musical expression and dance, we can improve our psychophysical existence. The body needs cultivation and habituation. Moreover, joint action in music education can develop morality, which comes from the sensibility of the body rather than what is channelled exclusively through the social being. Levin (1988) calls this ‘organismic bonding’, or after Merleau-Ponty, as ‘initial sympathy’ (ibid., 332). The view moves then from phenomenologically embodied notions, such as the body-subject and body-image (e.g. Merleau-Ponty) to social habits and disciplined body (e.g., Blacking). More importantly, it moves to ‘body awareness techniques’, ‘constructive conscious control’ (e.g. Alexander, Eutonie and Feldenkreis methods), therapy, and finally to transformation of the whole body-mind (e.g. Jaques-Dalcroze, Dewey, Shusterman).

By searching for a closer connection between body and mind, Jaques-Dalcroze thus seemed to have similar goals as Dewey, Alexander and later Shusterman in his ‘somaesthetics’ (see Jaques-Dalcroze 1930/1985, 58; Shusterman 2000a, 138-144). Jaques-Dalcroze's goal was to establish a system of music education in which the body is the intermediary between sounds and thought, where there is communication between feeling and understanding, and between sensations which inform the mind and those which recreate sensorial means of expression (Jaques-Dalcroze 1920/1965, 11-12). He emphasized the principle that the “body is an inseparable ally of the mind; body and mind

¹ Jaques-Dalcroze wrote that “[a]-rhythm is a malady usually caused by the inability of a man to control himself, from a predominance of intellect over nervous functionen” (Jaques-Dalcroze 1921/1980, 52).

should harmoniously perform their divers functions, not only separately but simultaneously” (Jaques-Dalcroze 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” (Jaques-Dalcroze 1930/1985, 6). A change in mental state (e.g. bad news) affects body functioning (e.g. causing the diaphragm to contract), thus disrupting the balance. This balance of the body-mind can be reconstructed by certain exercises (e.g. in relaxation). (Jaques-Dalcroze 1930/1985, 5; 1921; 1845/1981, 157.) The Dalcroze exercises, for instance, help in solving the problem of unexpected information without losing the flow of movement. Hence, they prepare the musician to interact smoothly without interruption in changing musical situations.

The theoretical and practical implications of Jaques-Dalcroze's attempts are that there is no experience, emotional or physical that is separate from various ways of acting, or from attitudes of appropriate experiences, or social ‘bodies’. The body is an experiencing, relational and actively transforming body. Body is intended as well as unintended in ‘empowered’ agency. Consequently, the experience of the relational body-mind cannot be examined only as something that happens inside the skin and behind the eyes. The challenge for a music educator is not only to continue the tradition, to develop the learner’s skills and know-how in relation to a pre-existing practice and cultural information. What educators should be interested in is the lived experience of their students in relation to musical practices.

Transformation through music

Music has several values and tasks in education. Jaques-Dalcroze underlined that music education is “*par la musique*” and “*pour la musique*”, through and into music (Jaques-Dalcroze 1926; also, 1920/1965, 12, 42; Bachmann 1991). Jaques-Dalcroze seems to have understood the importance of combining both the third and first-person perspectives in music education. He maintained that music is the most powerful means of education and can strengthen the communication between the senses, muscles (body) and the mind (Jaques-Dalcroze 1930/1985, 58-59). Through rhythm, according to him, it is possible to bring the mind, body, feeling, music and all the forms of arts together in a conscious human experience (Jaques-Dalcroze 1920/1965, 101; 1930/1985, 106-117). For Jaques-Dalcroze, the teaching of rhythmic movement, although based on music, is not solely a preparation for musical studies, but rather is a more profound education of general culture (Jaques-Dalcroze 1930/1985, 102).

Consequently, the relationship between the body and music that Jaques-Dalcroze sought is different from a stimulus-response relationship between the object and experiencing subject. Such causal effects of musical sounds on the felt body has been described, for instance, by Bennett Reimer (1995) as “faster or slower heartbeat or breathing, shivers, chills, tingling, sweating, a feeling of being ‘high’ or of ‘floating’” (ibid., 3). Another kind of relationship between the body and music has been described by Keith Swanwick (1992) who acknowledges the connections between feeling, gestural movements, imagination and musical sounds. In his research children described music in terms of postural metaphors and emotional labels (ibid., 90-91). Swanwick’s results have a connection to Jaques-Dalcroze’s notion that music depends on movement, and finds its nearest prototype in our muscular system. Jaques-Dalcroze himself writes: “All the nuances of time—all the nuances of energy—can be ‘realized’ by our bodies, and the acuteness of our musical feeling will depend on the acuteness of our bodily sensations” (Jaques-Dalcroze 1921/1980, 60; see also, Swanwick 1992, 90). In practise this could mean that concrete bodily performance, for example of musical phrases, clarifies and strengthens musical experience. An educative bodily involvement with music changes thinking-in-action and leads towards better experience.

Thus, Jaques-Dalcroze brings the perspective towards embodied and transformational *agency* instead of plain bodily reaction as causal response. In his search for agency, Elliott (1995) states that “if the body is in the mind, then it makes perfect sense (as Dalcroze, Orff, and Kodaly specialists maintain) that the kinds of moving involved in music making - - are essential to improving musical understanding - -” (ibid., 103). However, as explained earlier, the importance of the body in musical experience becomes transparent in eliminative approaches. Movement involved in music making increases also so-called bodily knowledge. Bodily knowledge refers to improved knowing in and through the body, which, in turn, has a direct connection to senses and bodily awareness as well as to abilities, skills and action. It has also its direct connection to embodied pleasure. (Shusterman 2000a, 138-141). In embodied musical agency the body and the mind function as complex interacting allies of the experiencing and acting organism as a whole.

Jaques-Dalcroze's challenge was to develop the psychophysical being within and through music and action. In Dalcroze exercises the senses, body, mind, emotions, and music fuse into one experience. Jaques-Dalcroze’s most innovatory idea for music education was to incorporate a meaningful movement experience to the learning process in order to facilitate and reinforce musical understanding and to bring awareness to the physical demands of an artistic performance. The bodily involvement with music opens the doors of hearing, feeling, understanding, reproducing, remembering, and inventing. (See

Juntunen 1998.) The constant interaction of rhythmic movement with aural perception and improvisation is central. In the physical exploration of musical rhythm, melody, harmony, form, etc., the movement is spontaneous or joined to cognitive conceptual responses involving locomotion and gesture. The exercises bring to awareness the student's bodily response to music, enlarging and refining it so that the body and the ear form a dynamic partnership. In this partnership listening inspires movement, while moving guides and informs listening (see Juntunen 1999).

One characteristic of Jaques-Dalcroze's pedagogical approach, that of eurhythmics, is its evoking sensations that create mental images (Jaques-Dalcroze 1930/1985, 108; also, 1920/1965, 137). Jaques-Dalcroze believed that music students should continually be cultivating a memory bank of aural, visual, and kinaesthetic images which could be recalled at any time for reading, writing, performing or creating music (Mead 1994, 5). Before any great scientific study was really available on the process of learning Jaques-Dalcroze seems to have been aware that we learn in different ways and by the combination of various senses (Jaques-Dalcroze 1930/1985, 98-99; also, 1945/1981, 105). Even though we may have different intelligences, as Gardner (1983) states, "they can be fashioned and combined in a multiplicity of adaptive ways by individuals and cultures" (*ibid.*, 9) and can be developed with help from each another. The lived bodily involvement then becomes important, being thus not only one compartment of the many intelligences. Jonathan Matthews even argues that "if the active body is not actually or imaginatively involved in the learning process, learning doesn't simply occur" (Matthews 1994, 130).

Jaques-Dalcroze (1930/1985, 99) believed that the result of his approach, in addition to an excellent physical development, is a certain intellectual quickening. He was convinced that the power of his approach is in "transforming the mind along the lines of greater self-possession, stronger power of imagination, more constant mental concentration" (*ibid.*, 104). As a student feels delivered from all physical embarrassment and mental obsession of a lower order, she will conceive a profound joy, which Jaques-Dalcroze looked upon as the most powerful of all mental stimuli (Jaques-Dalcroze 1920/1965, 91). In this respect it can be argued that Dalcroze exercises also influence various capacities needed for learning and schoolwork, such as paying attention, becoming aware, memory, concentration, ability to act rapidly or slowly, ability to pick up a habit quickly, or to make a rapid response to a question (Bachmann 1991, 87; Caldwell 1995, 63-66).

It is crucial to note, as we argue, that Dalcroze eurhythmics needs to be approached from a thoroughly holistic view of the human being. An approach that isolates the body from musical experience and transformation reflects an inaccurate interpretation of the

approach. For instance, *Teaching Music in The Twentieth Century* (Choksy & et al. 1986, 35) categorizes goals of Dalcroze eurhythmics into (i) mental and emotional, (ii) physical, and (iii) musical domains. Mental and emotional goals cover awareness, concentration, social integration (awareness of similarities and differences and appropriate responses between oneself and others), as well as realisation and expression of all nuances. In the physical domain education aims at ease and accuracy of performance as well as personal expressiveness through performance. Musical goals are defined as quick, accurate, comfortable, expressive and personal response to listening, leading to performance, analysis, reading, writing and improvisation.

However, this categorisation does not seem to bring out what Jaques-Dalcroze was after. It presents awareness, social integration and expression as something mental, separated from the body. It seems to distort the idea of two-sided transformation from the body to the mind and vice versa. In Dalcroze eurhythmics mental, emotional and physical, or bodily, aspects are inseparable, and are approached through music within a culture (Figure 1). Each of these aspects penetrates the goals of eurhythmics that Choksy and others present: better awareness, concentration, social integration, realisation, experience and expression of nuances of time, space, energy and sound-feeling. Transformation towards the goals of eurhythmics develops our contextually developed musicianship within our mental-emotional-bodily being, thus leading to ease, accuracy and personal expressiveness in and through musical actions, such as hearing, performance, analysis, reading, writing, and improvising.

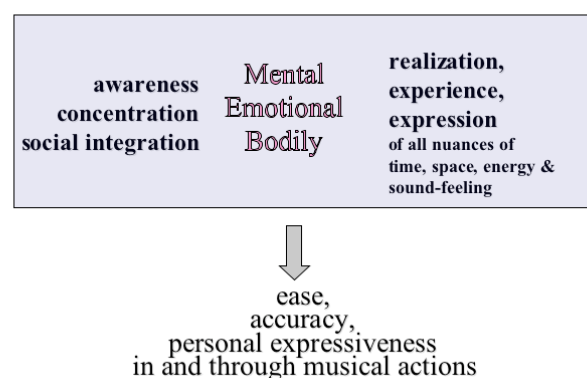


Figure 1. Goals of Dalcroze eurhythmics through music within a culture.

In eurhythmics, the whole human being is transformed through music within the musical practices in the culture. Music education thus serves various musical goals of the individual as well as for the larger society.

Practical implications for music education

Because it does not give rules to follow, Dalcroze eurhythmics is not a method. Rather it is an approach, an experience, a process, or even a philosophy. When Jaques-Dalcroze was asked to describe his approach, he wrote that it was easy for him to explain how he conceived the idea, to quote the results, and to demonstrate some of the exercises; but to obtain a better understanding of it, a personal experience was invaluable (Jaques-Dalcroze 1909; 1935; 1945/1981, 233). His pedagogical ideas can be applied differently according to social and cultural contexts. Hence, Jaques-Dalcroze did not give straight instructions to follow, only suggestions. For example, "[o]ne might commence by regulating the mechanism of walking, and from thence proceed to ally vocal movements with gesture of the whole body" (Jaques-Dalcroze 1921/1980, 5). Moreover, "[i]f we wish [a student] to become a musician, first we must make him listen to music and then imbue the whole of his body and being with the gradations of all musical sounds and intervals, so that his Aural Sense is profoundly developed" (Jaques-Dalcroze 1935).

Dalcroze teaching is always a process, which starts with the students' present abilities, then proceeds progressively according to their subsequent responses. The exercises activate at the same time the senses, bodies and minds of the students. (See Juntunen 1999, 112-114.) A good Dalcroze teacher is a professional practitioner who acts for the best of the students. Teaching is always situated and praxial (Regelski 1996). Jaques-Dalcroze (1920/1965, 59-60), like Dewey, emphasized that students should not be taught concepts and rules before they have an *experience* of the facts behind them, and that the students should be taught to know themselves and to use all of their faculties. For both Dewey and Jaques-Dalcroze, knowledge should not be separated from doing similarly as theory should not be separated from practice (also, Dewey 1984, 148-149). The Dalcroze exercises reinforce imagination and individual responses, as well as working together in pairs and groups. The aim is to enable students to say, not 'I know' but 'I have experienced' (e.g. Jaques-Dalcroze 1921/1980, 63). Jaques-Dalcroze believed that if the element of joy is present, the students will learn better. Therefore he called his exercises 'games' (Jaques-Dalcroze 1918, VIII; 1921), such as follow, quick reaction, replacement, echo and canon (Aronoff 1979, 167-168; Moore 1992, 18-19). Such 'games' can be invented endlessly and are always part of a musical process.

The Dalcroze approach has been applied in professional training of musicians, in music education in schools (e.g. Aronoff 1983; Choksy *et al.* 1986; Turbin 1986; Mead 1994, 86), in early childhood music education (e.g. Aronoff 1979; Joseph 1982), in instrumental studies (e.g. Farber 1991; Caldwell 1995), in choir and orchestra conducting

(e.g. Henke 1984; 1993; McCoy 1994), in performance, music theory and solfège studies (e.g. Findlay 1971; Choksy *et al.* 1986; Steinits 1988; Caldwell 1993) amongst professionals and amateurs. It has also been applied in theatre and dance education as well as in music therapy² (e.g. Dutoit 1965).

Even though not everybody may need eurhythmics to be a musician, nor is all music suitable to move to, we argue that everybody can benefit from exercises that combine different senses, mind, body and music by becoming more bodily aware and having the bodily experiences enrich the mind. It is important to note that applying Dalcroze principles does not necessarily require a special class. Already acknowledging and being aware of the body in action, or involving a simple body movement or gesture in active listening engages the whole body-mind through music. Such practical applications will remain a constant challenge in music education. The work of Jaques-Dalcroze may be interpreted as a musician's and educator's practical effort to dissolve the mind-body dualism, which has been a theoretical challenge for many philosophers.

References

- Alexander, M. 1987. *The Use of the Body*. Orig. 1932. London: Victor Gollancz.
- Aronoff, F. W. 1979. *Music and Young Children*. Expanded Edition. New York: Turning Wheel Press.
- Aronoff, F. W. 1983. Dalcroze Strategies for Music Learning in the Classroom. *International Journal of Music Education*, 2, 23-25.
- Bachmann, M.-L. 1991. *Dalcroze Today. An Education through and into Music*. Trans. D. Parlett. New York: Oxford University Press.
- Benson, C. 2001. *The Cultural Psychology of self. Place, Morality and Art in Human Worlds*. London & New York: Routledge.
- Blacking, J. 1977. Towards an Anthropology of the Body. In J. Blacking (ed.) *The Anthro-pology of the Body*. London: Academic Press, 1-28.
- Choksy, L., Abramson, R. M., Gillespie, A. E. & Woods, D. 1986. *Teaching Music in the Twentieth Century*. Englewood Cliffs: Prentice-Hall.
- Caldwell, J. T. 1993. A Dalcroze Perspective on Skills for Learning. *Music Educators Journal*, 79(7), 27-28, 66.

² Jaques-Dalcroze wrote: "Psychologists have long since recognised how great an influence rhythmic movements are capable of exercising upon the brains of abnormal children. Naturally the influence is as great upon healthy children, possessed of a more complete power of relaxation. Muscular sensations enrich the brain, and man is at once both the possessor and the distributor of vital powers' (Jaques-Dalcroze 1930/1985, 116).

Caldwell, J. T. 1995. *Expressive Singing. Dalcroze Eurhythmics for Voice*. Englewood Cliffs: Prentice-Hall.

Dewey, J. 1934. *Art as Experience*. New York: Perigee Books.

Dewey, J. 1958. *Experience and Nature*. Orig. 1925. New York: Dover Publication.

Dewey, J. 1972. *The Early Works: 1882-1898*. Carbondale: Southern Illinois University Press.

Dewey, J. 1984. *The Quest for Certainty*. Orig. 1929. In J. A. Boydston (ed.) *John Dewey: The Later Works, Vol. 4*. Carbondale: Southern University Press.

Dutoit, C.-L. 1965. *Music Movement Therapy*. Surrey: The Dalcroze Society.

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*. Neuchatel: Editions de la Baonniere, 305-412.

Elliott, D. 1995. *Music Matters. A New Philosophy of Music Education*. Oxford & London: Oxford University Press.

Farber, A. 1991. *Speaking the Musical Language*. *Music Educators Journal*, Dec'91, 30-34.

Findlay, E. 1971. *Rhythm and Movement: Applications of Dalcroze Eurhythmics*. Evaston: Summy Birchard Company.

Gardner, H. 1983. *Frames of Mind. The Theory of Multiple Intelligences*. New York: Basic Books, Inc., Publishers.

Giroux, H. A. 1992. *Border Crossing. Cultural Workers and the Politics of Education*. New York & London: Routledge.

Goehr, L. 1994. *Political Music and the Politics of Music*. *The Journal of Aesthetics and Art Criticism* 52(1)99-112.

Henke, H. 1984. *The Application of Emile Jaques--Dalcroze's Solfege-Rythmique to the Chroral Rehearsal*. *The Choral Journal*, Dec'84, 11-14.

Henke, H. 1993. *Reherasing with Dalcroze Techniques*. *The Instrumentalist*, May'93, 45-46.

Jaques-Dalcroze, E. 1909. *Le cours normal d'été sera le dernier*. *Le Rythme*, 2, 14-18.

Jaques-Dalcroze, E. 1918. *Méthode Jaques-Dalcroze: La Rythmique. Vol. 2*. Lausanne: Jobim & Cie.

Jaques-Dalcroze, E. 1920/1965. *Le rythme, la musique et l'éducation*. Orig. 1920. Lausanne: Fœtisch.

Jaques-Dalcroze, E. 1921. *Définition de la Rythmique*. *Le Rythme*, 7/8, 1-8.

Jaques-Dalcroze, E. 1921/1980. *Rhythm, Music and Education*. Trans. H. Rubinstein. Orig 1921. London: The Dalcroze Society Inc.

Jaques-Dalcroze, E. 1926. *La Grammaire de la rythmique (préparation corporelle aux exercices de la méthode)*. *Le Rythme*, 17, 2-9.

Jaques-Dalcroze, E. 1930/1985. *Eurhythmics, Art and Education*. Trans. F. Rothwell. Orig. 1930. New York: Arno Press.

Jaques-Dalcroze, E. 1935. *Petite histoire de la Rythmique*. *Le Rythme*, 39, 3-18.

Jaques-Dalcroze, E. 1945/1981. *La Musique et Nous. Note sur notre double vie*. Réimpression de l'édition de Genève 1945. Genève: Slatkine

Joseph, A. 1982. *A Dalcroze Eurhythmics Approach to Music Learning in Kindergarten Through Rhythmic Movement, Ear-training and Improvisation*. D. A. Dissertation. Carnegie Mellon University, Pittsburgh.

Juntunen, M.-L. 1998. *Dalcroze-rytmiikka ja muusikkous*. [Dalcroze Eurhythmics and Musicianship]. *Finnish Journal of Music Education*, 2(1), 86-95.

Juntunen, M.-L. 1999. *Dalcroze-rytmiikka – kehollisuutta korostava ja muusikkoutta kehittävä musiikkikasvatuksen lähestymistapa*. [Dalcroze Eurhythmics - an approach of music education which emphasizes embodiment and develops musicianship]. Licentiate Thesis, University of Oulu, Finland.

Levin, D. M. 1988. *The Opening of Vision. Nihilism and the postmodern situation*. New York & London: Routledge.

Matthews, J. C. 1994. *Mindful Body, Embodied Mind: Somatic knowledge and education*. Doctoral dissertation. Stanford University.

McCoy, C. W. 1994. *Eurhythmics: Enhancing the Music-Body-Mind Connection in Conductor Training*. *Choral Journal*, Dec'94, 45-46.

Mead, V. H. 1994. *Dalcroze Eurhythmics in Today's Music Classroom*. New York: Schott Music Corporation.

Merleau-Ponty, M. 1962. *The Phenomenology of Perception*. Transl. by C. Smith. London: Routledge & Kegan Paul.

Moore, S. F. 1992. *The Writings of Emile Jaques-Dalcroze: Toward a theory for the performance of musical rhythm*. Ph. D. dissertation. Indiana University. University Microfilms International, MI 48106.

Määttänen, P. 2000. *Elliott on Mind Matters*. *Bulletin of the Council for Research in Music Education*, 144, 40-44.

Määttänen, P. & Westerlund, H. 1999. *Tradition, Practice, and Musical Meaning. A Pragmatist Approach to Music Education*. In F. V. Nielsen, S. Brändström, H. Jørgensen & B. Olsson (eds.) *Nordisk musikkpedagogisk forskning, Årbok 3*, 33-38.

- Regelski, T. 1996. Prolegomenon To a Praxial Philosophy of Music and Music Education. *Finnish Journal of Music Education*, 1(1), 23-40.
- Reimer, B. 1995. The Experience of Profundity in Music. *Journal of Aesthetic Education*, 29(4), 1-21.
- Roth, R. J. 1998. *Radical Pragmatism. An Alternative*. New York: Fordham University Press.
- Ryle, G. 1949. *The Concept of Mind*. London: Hutchinson's University Library.
- Shusterman, R. 1994. Dewey on experience: Foundation or reconstruction? *Philosophical forum*, XXVI(2), 127-148.
- Shusterman, R. 1997. *Practicing Philosophy. Pragmatism and the Philosophical Life*. New York & London: Routledge.
- Shusterman, R. 2000a. *Performing Live. Aesthetic Alternatives for the Ends of Art*. Ithaca & London: Cornell University Press.
- Shusterman, R. 2000b. *Pragmatist Aesthetics. Living Beauty, Rethinking Art*. 2nd edition. Lanham, Boulder, New York & Oxford: Rowman & Littlefield Publishers, Inc.
- Steinitz, T. 1988. *Teching Music: Theory and Practise of the Dalcroze Method*. Tel-Aviv: OR-TAV Music Publications .
- Swanwick, K. 1992. What makes music musical? In J. Paynter, T. Howell, R. Orton & P Seymour (eds.) *Companion to Contemporary Musical Thought*, Vol. 1. London & New York: Routledge, 82-104.
- Taylor, C. 1989. *Sources of the Self: The Making of the Modern Identity*. Cambridge: Cambridge University Press.
- Turbin, D. 1986. Kódaly, Orff, Dalcroze, Suzuki: Application in the secundary schools, *Music Educators Journal* 72(6), 56-61.
- 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.
- Velmans, M. 2000. *Understanding Consciousness*. London & Philadelphia: Routledge.
- Westerlund, H. 2001. *Multicultural Music Education and Pragmatism: A Deweyan Approach to Musical Pluralism and Democratic Education*. University of Art and Design, Papers, 62-69.
- Williams, S. J. & Bendelow, G. 1998. *The Lived Body: Sociological Themes, Embodied Issues*. London & New York: Routledge.