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To The Reader

This inaugural issue of *Action, Theory and Criticism for Music Education* is devoted to papers presented at the interdisciplinary colloquium held June 11-15, 2000 in Helsinki Finland by the “MayDay Group” of musicians (MDG) and the “Artist, Work of Art, and Experience” group of artists (AWE). These proceedings were originally published in the *Finnish Journal of Music Education (Musikkikasvatus)*, Vol. 5, No. 1-2 (2000). With the permission of that journal, they are now made accessible to the international community of music education scholars. Two lectures by Professor Richard Shusterman, a leading pragmatist philosopher who has concerned himself centrally with the arts, were arranged by AWE to coincide with the colloquium and produced two interviews by Lauri Väkevä of the University of Oulu, Finland, the second of which is published here for the first time. Thanks are offered to Professor Shusterman for his contribution to the colloquium and for granting permission to publish the interviews.

By way of background, the MayDay Group (www.maydaygroup.org) is a group of international scholars from a variety of disciplines in music and music education. J. Terry Gates, SUNY Buffalo and Thomas A. Regelski, SUNY Fredonia (both now emeritus) created the group in 1993 to consider mounting challenges facing music educators and the status of music in society. Its analytical agenda is to interrogate traditional and status quo conceptions of music and music education from the perspectives of critical theory, critical thinking and research from all relevant disciplines. Its positive agenda is to inspire and promote action for change, both concerning how music and musical value are understood in the contemporary world of music and in the institutions responsible for music in society, particularly music education. The AWE Group (<http://triad.kiasma.fng.fi/awe/WRITINGS/index.html>) includes artists from several disciplines associated with several art schools and universities in Finland who share mutual interest in applying Pragmatism to important issues in art and art theory. Finnish philosopher Pentti Määttänen, a specialist in John Dewey and Charles S. Pierce, has been informal leader of this group.

MayDay colloquia are held once or twice a year, and each explores one of the seven “action ideals” posted on the Group’s website. The Helsinki meeting focused on Ideal Five: “In order to be effective, music educators must establish and maintain contact with ideas and people from other disciplines.” A joint meeting with artists was, therefore, very apt and produced much of mutual value. As a prelude to the colloquium, Professor Claire Detels, a musicologist at the University of Arkansas and a MDG member, agreed to produce a “study paper.” This was drawn directly from her book *Soft Boundaries: Re-Visioning the Arts and Aesthetics in American Education* (Bergin and Garvey Publishers, 1999), a critique of how single-disciplinary specialization and scholarly and pedagogical insularity within and between art and music departments of universities and schools have produced negative consequences for the effectiveness of arts and music education. The study paper was not read at the colloquium; but because it was addressed directly by several papers and other participants, it is also included with the proceedings.

Given the commitment of the AWE group to pragmatism and a strong interest on the part of several MDG members in music and music education as *praxis*, a Pragmatist theme evolved that addressed distinctly post-modern, post-analytic and post-structuralist perspectives on art, music and music education. In contrast to the hegemony of modernist aestheticist accounts of art, music and music education, the pragmatist-praxial tone of these proceedings exemplified for the arts a trend in other disciplines that has recently been called “the practice turn.”* In contrast to the “linguistic turn” of analytic, common language and formal language philosophy that occurred early in the 20th century, this newly burgeoning *practice theory* is concerned with human actions that are organized around praxis and pragmatic values, and that involve shared and embodied understanding, skills and know-how—where, in short, meaning arises in situated conditions of use.

Heidegger, Wittgenstein and a wide array of notable post-analytic, post-modern and post-structuralist philosophers, as well as second-generation critical theorists such as Habermas, have influenced the growth and direction of practice theory. It incorporates recent social philosophy and cultural theory and, in distinction to the rationalist bias of analytic theory, draws on empirical findings from the social sciences and cognitive studies, including neuroscience and consciousness research. The relevance for the arts and for music and music education in particular of this new emphasis on embodied praxis should be obvious; at the very least it offers the promise of new directions for thinking and research regarding the challenges facing music education. Thus, this collection of papers presents a variety of fresh and sometimes competing perspectives that otherwise have been overlooked, minimized, or even denied in many status quo discussions of music and music education. This new and sometimes provocative research is offered in keeping with the MayDay Group’s agenda to facilitate and disseminate new ideas, to continue to promote analysis of and open-minded dialogue about both old and new ideas, and to help effect change for the betterment of music education and music in society.

* Theodore R. Schatzki, Karin Knorr Cetina and Eike Von Savigny, eds. *The Practice Turn in Contemporary Theory*. Routledge: 2001.

Thomas A. Regelski, Editor.

Theory reduction considered harmful?

Juha Ojala

Music is the sound of universal laws promulgated.

–Henry David Thoreau

*I conclude that musical notes and rhythms were first acquired
by the male or female progenitors of mankind
for the sake of charming the opposite sex.*

–Charles Darwin

As you might suspect from the title and the quotations above, the goal of this paper is to raise discussion. The paper is based on an opening for discussion at the ninth MayDay Group colloquium, Helsinki, June 2000. The main premise is the fifth MayDay ideal, which states: "*In order to be effective, music educators must establish and maintain contact with ideas and people from other disciplines.*" (The MayDay Group 1997)

1. Interdisciplinary symbiosis requires harmonization of theories

Deriving from the ideal, it follows, that in order to be or become more effective as



music educators and music education researchers, the *theories*¹ underlying our activities must be

- a) aware of
- b) in close collaboration with and

c) in harmony with

current standings of all connecting fields of professional–musical and scientific– life.

With 'connecting fields' I mean all the fields that are likely to contribute to research and development we pursue, and, vice versa, all the fields that could in one way or another benefit from our insight. The requirement also, and in particular, applies to the various and sometimes contrasting theories within different subfields of music and music education research.

 It appears, that these connections do not take place, at least not to the point they could.

 As a result we are faced with the dangers of incoherent discussion with each other² and

 with members of other disciplines,³ confused terminology,⁴ empty concepts,⁵ illogical theoretical structures⁶ and ambiguous or dubious research results.⁷ And naturally, this is all a waste of resources and a great source for bad PR and frustration.

The theoretical disharmony, the imminent lack of systematicity and the difficulty of putting different research issues (problems, methods and results) into an encompassing perspective in the field of musicology, educational sciences and music education research is mostly due to

a) our not *adequately* knowing and expressing what we mean by 'music', and 'education', to take the grand examples; and because of that,

b) our pursuing research amongst a plethora of epistemological, theoretical and methodical conceptions of the subject matter, all considered equally applicable, which leads to results that reflect the evident problems of plurality; and because of both of these,

c) our not being able to draw advantage of the accomplishments of the other, connecting disciplines.

That is, there is conceptual ambiguity due to several, mutually inconsistent conceptions of music education, which hinders us from pursuing intra-disciplinary synergy and interdisciplinary symbiosis.

Therefore, *first, we must find an enduring ontological and epistemological basis for our subject matter.* The success of what we do in selecting and shaping research problems critically depends on how we conceive music and education: What are music and education? Why are they? How do they operate or take place? What can be known *in, of, and about* them? Second, *only then we can choose or develop the methods of operation most suitable for basic and applied research in music education,* the distinction of which ought to become apparent from the ontology and epistemology of the subject matters. Third, and *reciprocally tied to the first two, we need an attitude and effort of harmonizing our theories with those of other disciplines, which allows us to incorporate ideas of other disciplines for what they are, and for what they could be for us.*

Lauri Väkevä (in this volume) addresses the ontological and epistemological issues while exploring the demand of naturalizing music education philosophy. While the concern here is more the theoretical harmonization, let me affirm that Väkevä's quest is not only welcome but also necessary, in my opinion, since that would make it possible to apply the principle of interdisciplinary approach. With a naturalized foothold (and hard work), we can expect fruitful collaboration with other corroborating fields of research. And without a solid conception of these issues, one can only ask, where we are going.

As a consequence of both ontological and epistemological reevaluation of music education and the cultivation of the interdisciplinary principle, it can be assumed, that many key concepts and even a larger amount of minor concepts need to be either completely abolished or largely reformed. Hence, the terminology used would also have to change.

Furthermore, it can be assumed that the ways research in music education is performed would face changes. This would apply to

- a) research issues or problems
- b) methodology
- c) politics of science in music education research
- d) practical arrangements of reporting, publishing, and conferencing
- e) tutoring / guiding / supervising undergraduate, graduate and especially doctoral students, and
- f) even academic position and their orientation



This might raise some objections or concerns. Do we want to pursue this? Or would we be happier with the *status quo*? We are still in the process of figuring out how we understand music and education and how they function, and in this task, really we ought to take into account what is happening or what has happened in other fields. Otherwise, we are lost at sea. The whole idea of culture is based on the originally beneficial idea of specialization and sharing tasks. Now, we have been through the discussion of the perils



involved,⁸ but there are also the obvious benefits as long as we do not go to extremities. We do not need to reinvent the wheel. We just need to know how the wheel works so that we can build our wagon, or the wheel spokes.



2. Does theory harmonization result in reductionism?

One of the strongest paradigms in or conceptions of music education has for some time now been the praxial (or pragmatic) paradigm,⁹ which sees music as praxis and



essentially tied to sociocultural practices. This has been a contrary view to the so-called traditional, aesthetic account of music, although it has also been argued that, to a certain degree, there might be a common ground between these approaches.¹⁰ This paradigm shift

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has been an empowering impact on music education philosophy and research. At the same time, we still have several other accounts of music, some of which might be useful for music education research, too. Let us consider the following case.

 From the perspective of *psychophysiology*,¹¹ music could be viewed as neuronal activity of the auditory cortex, of cortical and subcortical areas activated by the auditory cortex and onwards to the activation of the motor cortex and subcortical motor areas. Music education, in this perspective, could be seen as an undertaking which takes advantage of the plasticity of the neuronal network, and pursues to guide the neuronal activity and to alter the synaptic weights towards desired directions by doing ethically what it takes. Do we need this explanation? Can music and music education be *reduced* to neuronal activity in this manner? Is this necessary? Or harmful?

I think it is necessary to take this approach of *neuromusical research*¹² into consideration, since it may be used to provide us, in one way, with the so-called *hard facts* as to the essence and operation—ontology and epistemology—of music and education. "There is an abundance of both musical and educational issues that in the future may well be approached by measuring the psychophysiological preperceptual abilities, as well as the tendencies to neural plasticity, in order to determine the possible and suitable solutions for educational and musical activities." (Näätänen, Ojala & Ruismäki 1997, 15)

One might object by saying that both music and education are so complex and cognitively abstract, that psychophysiology in its scope of the microworld cannot be applied. But this is accepted within neurosciences: in studying higher functions in psychophysiology, problems are difficult and many methods are in their infancy. Even so, a large body of results has been excavated, giving insight to the operation of the mind and proof of the strong foothold of the neurosciences. Can we accept that, for instance, both

fields in question—*in statu nascendi*—can benefit from mutual understanding of each other's research paradigms?

This does not mean that we should *only* regard music and education from the perspective of neuroscience and forget about the praxial ideas, rather the opposite. First of all, these two approaches are not mutually exclusive. The main point is, however, that there is a whole variety of accounts we should consider. And all these should, to a certain degree of applicability be present in the considerations at the same time, if we are to successfully cultivate music education research, instead of strolling down the beaten path.

Is the call for naturalization of music education philosophy in contrast to the idea that music is a social construct? No, it is not. Viewing the social and cultural aspects of music is one perspective. Neuroscience provides another perspective, psychology of behavior another one and so on. All these perspectives contribute to the understanding of what music and education are about. Furthermore, the contributing disciplines do evolve and develop over time, and even new sub-disciplines may emerge that could be beneficial. In any case, there is a constant need for updating our connections and relations to these connecting disciplines.

Levels of explanation	Accounts for consideration in theoretical harmonization of music and education	Levels of human experience
"Higher"	Cultural theories / Politics / Economy...	Cultural
Level of man? →	Social theories / Anthropology / Geography...	Social
	Psychology of behavior / Biology...	Inter- & inner personal
	Neuropsychology / General physiology...	Biological
	Neurophysiology / Cellular physiology...	Natural
	Chemistry...	
"Lower"	Physics...	

FIGURE 1. A variety of accounts to be considered in music education research.

These perspectives contribute to the understanding of what music and education are and how they can be studied. Where would idealism fit in this?

The following remarks concern the variety of accounts to be considered in the quest for theoretical harmonization of music education research (FIGURE 1). First of all, the various theoretical levels correspond to various levels of human (or animal) experience, as portrayed by Darryl Coan (2000). Second, this all may easily imply *theoretical reduction*. According to Patricia Smith Churchland (1986/1992, 278), the word 'reduction' "has been synonym for 'insult and abuse', 'behaviorism', 'materialism', 'bourgeois capitalism', 'experimentalism', 'vivisectionism', 'communism', 'militarism', 'sociobiology' and 'atheism'." It has also gained bad ring partly because it has been strongly associated with a utopia of a scientifically unified, coherent body of knowledge, and *logical empiricism* and its idea of *hypothetico-deductive justification*. It has also been accused for giving physics and natural sciences a sovereign position over other sciences, resulting in exaggerated *physicalism*. One of the most common objections, regarding the human, has been that mental phenomena cannot be reduced to brain. But "[i]n the sense of 'reduction' that is relevant here, reduction is first and foremost a relation between theories. Most simply, one theory, the *reduced* theory T_R , stands in a certain relation --- to another more basic theory T_B . Statements that a phenomenon P_R reduces to another phenomenon P_B are derivative upon the more basic claim that the *theory* that characterizes the first reduces to the *theory* that characterizes the second." (Churchland 1986/1992, 278)

Now, unless we resort to transcendentalism or idealism, it is evident that we can assume that music and education exclusively operate 1) with our physical, social and cultural environments, 2) with us (as living organisms), and 3) with our minds in particular

(as operating natural neural networks). If this is so, by what grounds could we ignore any of the accounts in figure 1? And not ignoring them, means incorporating, or at least mutually harmonizing the theories in terms of both ontology and epistemology.¹³ Regardless of the level of explanation, we should be able to relate theories of (at least) neighboring levels to each other, since phenomena on one level tend to be connected to the phenomena on the neighboring levels one way or another. Just as an example, it does not work to claim that music is a social construct *as opposed to* cognitive construct of an individual, since the origin of any social construct is the interaction of individuals, and one becomes an individual only in social context. We need both sides of the coin, and the terminology ought to be there for our assistance, not for resistance. The same kind of reciprocal dependence applies for theories of behavioral psychology versus neuropsychology: one is useless, or at least inadequate without the other. In short, the theories at different levels of explanation form a *web of beliefs*.

Which theory then should be used for explaining which phenomenon? The important task is to find always the most suitable level of description (or node of the web of beliefs) in order to get the most elegant and efficient theoretical conception of the phenomenon. It would seem silly to pursue the reduction to the point that we should explain theories of jazz solos in terms of theories of molecular exchanges between neural cells. Simply, it is worthwhile having various levels of description, that is, theories of different levels of explanation, based on what is the purpose of explanation. In other words, theoretical reduction does not mean that theories of higher levels of explanation would be useless, just the opposite. Physics is no first science. Nor are cultural studies. The point is, that the different levels of explanation need to be in harmony with each other, but there is clearly no need to radical reductionism.



Ojala, J. (2000). Theory reduction considered harmful? *Action, Criticism, and Theory for Music Education*. Vol.1, # 1, (April 2002). http://act.maydaygroup.org/articles/Ojala1_1.pdf

The second point is an anthropocentric one. One might be tempted to label the levels of explanation in figure 1 as levels of abstraction so that the "higher" cultural and social explanations are usually considered most abstract, while it is often assumed that reduction to "lower" physical explanation would make things least abstract and most concrete and tangible. But, abstraction means something that is (situated) far away (conceptually). As soon as we reach chemical levels we are faced with another direction of abstractness: not one of us has seen a molecule, or an atom, or a quark. If we study things that have to do with human life, such as music and education, it is very *natural* to start with the obvious level of explanation, hence the focus on psychology of behavior, or biological level in past empirical research. From a pragmatic point of view, this "level of man" is the level, on which we should be most effective. It is the level of pragmatic signification, and crucial scope of operation both in terms of life in general and science in particular. Science is supposed to serve this level. We have expanded the levels of explanation towards social and cultural theories, but how are we doing in the other direction? Both top-down and bottom-up approaches need to be in balance, not in single studies, but in a larger scale. This is in concord with the need for naturalization, and especially that of traditional or temperate kind.¹⁴

The third point is anything but anthropocentric: if we take an encompassing approach to music, we should seriously start examining musical processes also as biological processes, to take one neglected example. This would entail the integration of biomusicology.¹⁵ Of course, animals have nothing they would call art or music in those terms, but who cares about the terms animals or any musicker would or would not use? Depending on our conception of music, we can examine it in situations regardless of whether the music-maker holds it as being musical situation or not. Our starting point in

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Western culture is a one that includes the concept of music, whatever we may understand with it. But we cannot get rid of that understanding; no purely *emic*¹⁶ approach to foreign cultures—or in this case other species—is possible. But that is not a problem, necessarily. It just creates another auxiliary addition to the theoretical framework, especially important perhaps, as it operates on the "level of man". Comparing human music with the (possible) animal music would surely give new insight as to the processes involved, which would also be significant for music education.

3. Towards a bigger picture

While the comprehensive harmonization of our theories of music education with those of other disciplines is a goal never to be reached, all practical purposes considered, the endeavor would nevertheless improve our chances in becoming more effective as music educators and researchers. It would certainly endow us more secure foundations of music education research from ontological, epistemological as well as methodological perspectives. At the same time it would provide us with inner synergy within music education and perspectives to relate various research issues within the domain of music education.

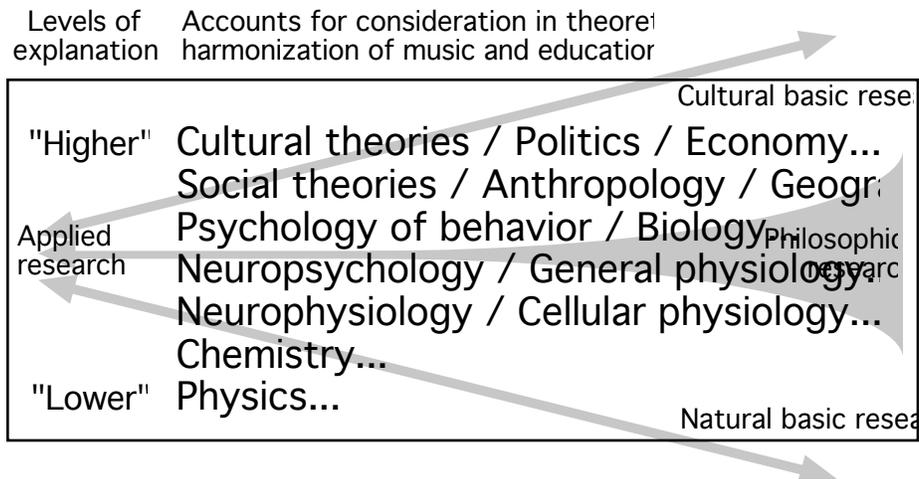


FIGURE 2. A variety of accounts to be considered in music education research.

These perspectives contribute to the understanding of what music and education are and how they can be studied. Where would idealism fit in this?

Figure 2 portrays certain aspects of this. For instance, it appears to be somewhat unclear what 'applied' versus 'basic research' in music education might entail: The closer to real-life situation of musical learning we get (such as classroom teaching or individual musicking, on the "level of man"), the more applied it is. This means that, for instance, the "statistical research about the relative success of educational models and methods" (Detels in this volume) performed by music educators would fall into applied music education research. On the other hand, the basic research stretches out to three directions according to the levels of explanation and further abstraction from the applied research. Cultural basic research deals with top-down issues, even political, economical and judicial issues involved in music education. Natural basic research, in turn, is involved with bottom-up issues such as those in neurosciences and pharmacology, for instance. Last but not least, the philosophical branch of basic research provides the omnipresent meta-level.

Expressing a detailed account of interdisciplinary harmonization is far beyond this talk, but I hope this has raised some doubts for or against the idea of intertheoretic reduction in music education research. To briefly summarize, we need a strong epistemological and ontological basis for what we do. At the same time, we need to make an effort to view our work in the perspective of other disciplines, place ourselves in a big picture, and incorporate what we need. Without this, we cannot be sure, where we are going.

Notes

¹ The word 'theory' is to be taken here both in the broader sense of being implicit or explicit knowledge to be potentially manifested in various forms of action (cf., e.g., Ojala 1999), and in the narrower sense of explicitly utterable, general conceptions achieved in scientific inquiry. A deeper analysis of theory and practice is beyond the scope of this paper. But in brief, the latter is seen as application of the former in experience – theory, in turn, as "knowledge" of and about practical action, its consequences and being-in-the-world in general.

² e.g., such as in the issue of 'aesthetics' as making sense of aesthesis versus being burdened with the implications of aesthetic orthodoxy, idealism, transcendentalism, disembodiment and onetime traditions of music pedagogy

³ e.g., conceptions of issues such as 'musical mind', 'musical thinking', etc.

⁴ e.g., terms such as 'arts', 'culture', 'consciousness', 'intentionality', 'imagination', 'music', etc.

⁵ e.g., such as 'creativity' – a valid definition of the term remains to be found.

⁶ such as idealistic and transcendental conceptions of musical aesthetics

⁷ such as the so-called "Mozart effect"

⁸ See Detels in this volume.

⁹ Cf., e.g., Elliott, David J (1995, 1996), Regelski (1996, 1998), Väkevä (1999).

¹⁰ Cf., e.g., Spychiger (1997), Väkevä & Ojala (1999)

¹¹ The reason I brought up the psychophysiological account for music is that the neurosciences have had a tremendous impact on the philosophy of mind. "Many philosophers have moved away from the view that philosophy is an a priori discipline. --

Consequently, there has been a reevaluation of the significance of neuroscientific and psychological findings for philosophical research." (P.S. Churchland 1986/1992, 5-6)
When considering both music and education as cognitive processes, the impact should become evident on philosophy of music education and music education research, as well.

¹² Cf., e.g., Wilfried Gruhn (1999)

¹³ This does not imply a romantic quest for strict holism or unity of science nor any sort of Grand theory of everything. The need is simply that of utilitarian harmonization, the degree of which is dictated by the practical results.

¹⁴ Cf., e.g., Määttänen (1993), Popp (1998).

¹⁵ Cf., especially Wallin et al (eds., 2000).

¹⁶ Just as ethnomusicological approach tends to envelope the broad spectrum of musical cultures, including the Western one, biomusicology appears to envelope all human music as well as music by other animals. In this respect, the parallel to ethnomusicological vocabulary is not out of question.

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