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Praxial Music Education and the Ontological Perspective: An Enactivist Response to *Music Matters 2*

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Praxial Music Education and the Ontological Perspective: An Enactivist Response to *Music Matters 2*

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Abstract

Elliott and Silverman's core ethical arguments for praxial music education are developed through the lens of critical ontology. I begin by adopting a Heideggerian perspective, examining the 'technological' understanding of being that dominates modern life, as well as the problematic conceptions of cognition, music, and education it commits us to. I then discuss how an ontological approach to praxis reintroduces conceptions of being and knowing that have become obscured in the modern world; and how such insights afford richer understandings of what human being-in-the-world entails. Following this, I consider how the ontological perspective may help us better align the idea of praxis with the 'enactive' approach to cognition discussed by Elliott and Silverman. To conclude the broad implications of this ontological-enactive perspective are explored for musical development and education.

Keywords: music education, critical ontology, *gestell*, praxis, enactivism, *eudaimonia*

When the first edition of *Music Matters* (MM1) was published in 1995 it represented a major shift in thinking with regard to what music education could mean for humanity. Indeed, while that first edition had its critics, it nevertheless expressed the growing dissatisfaction many music educators felt (and still do) towards the standard Western academic approach. As Elliott (1995) pointed out, taken-for-granted conceptions of what music and music education entails have relied on a number of tacit assumptions about aesthetics, cognition, and culture received from Enlightenment thinking. This has resulted in a

pedagogical perspective almost wholly informed by a late 19th century ‘work-based’ understanding of music as a *thing* to be reproduced—where music education involves training students to ‘correctly’ analyze and accurately reproduce such works (generally those produced by the European male ‘genius’) according to prescriptive codes of practice.

Of course, Elliott has not been alone in highlighting problematic Western assumptions about music and education. Importantly, the so-called *praxial* approach that drives *MM1* continues to be developed by a range of thinkers who explore music and education as the creative, interactive, social and ethical activities they are (Alperson 1991, 2010; Bowman 1998; Elliott 2005; Regelski 1997, 1998, 2006, 2012). Generally speaking, the *praxial* approach draws on philosophical insights found in the writings of Aristotle and others (e.g. Dewey 2005, 2009; Freire 2000) in order to consider music education not merely as a practice—as something people do in order to achieve a given practical end—but rather as a “socially rooted, complex, coherent and cooperative activity that grows over time into its own ethical world” (Higgins 2012, 224; also quoted in Elliott and Silverman 2015, 150). However, while this basic principle is generally accepted by *praxially*-minded thinkers, there is nevertheless an ongoing discussion over the details (for an overview see Maiello 2013). And indeed, while the importance of *MM1* was almost universally recognized among music education scholars, some critics felt that Elliott’s discussion of the *praxial* approach did not go far enough in articulating concrete alternatives that might truly move music education out of the shadow of the Western academic tradition.¹

Over the past two decades Elliott (2005) has encouraged such criticism. In doing so he and his cowriters (e.g. Silverman et al. 2013) have carefully advanced and broadened their perspective. They have incorporated the relevant views of their colleagues, and have explored the relevance of a range of new philosophical, socio-cultural and scientific research, much of which is only just beginning to be seriously addressed in the cultural and psychological study of music, let alone music education (e.g. ‘enactive’ approaches to music cognition; Matyja and Schiavio 2013). *Music Matters II (MM2)*, written in collaboration with Marissa Silverman, represents the culmination of this work.

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While the degree to which this new volume addresses the concerns raised by Elliott's critics will surely be the subject of a lively debate, it is not my intention to engage in that discussion here. Rather, I would like to explore a 'meta-theme' that while not always explicitly discussed in the text, nevertheless permeates much of the book.² Put simply, this involves a deep concern with ontological issues that center on disclosing what it means to be and become musical (and music educator), as well as the ethical implications of such understandings for human flourishing—e.g. for identity and personhood; physical, emotional and social development; clinical and everyday therapeutic activities and so on. While such concerns are present in *MM1*, they take on richer dimensions in *MM2*, most notably through the introduction of the embodied or so-called 'enactive' approaches to cognition I discuss below.

To more clearly highlight the significance of this ontological perspective for a *praxial* philosophy of music education, I begin by adopting a Heideggerian approach³—arguing that what and how we 'know' is dependent on our (often-tacit) understanding of being; or how our 'framing' of existence leads us to reveal the world in certain ways rather than others (Dreyfus 2002; Heidegger 1993a, 2008; Lines 2005b; Thompson 2001). In the first section I consider the 'technological' worldview that dominates modern life, as well as the conceptions of cognition, music, and education it commits us to. The concerns I discuss here are central to Elliott and Silverman's (2015) critique and my intention is not to argue against them. Rather, by placing things in a more explicitly ontological context I hope to reinforce the core ethical arguments of *MM2* by showing how the modern perspective promotes a reductive, mechanical, instrumental and ultimately dehumanizing conception of *being itself*—one that must be overcome if we are to awaken to the full meaning of education and musicality for human flourishing. With this in mind, I then revisit the so-called Neo-Aristotelian perspective that informs the *praxial* approach to music education. Here again, my intention is not to part with Elliott and Silverman, but rather to further develop the idea of *praxis* as an ontological concept, as a way of being-in-the-world. I discuss key principles such as *techné*, *poiesis*, *theoria* and *phronesis*—not first in terms of 'knowledge', but rather as *dispositions* and *life-movements*; as fundamental human potentials by which the world is revealed. Following this, I attempt to draw out continuities between the Neo-Aristotelian

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perspective, and the ‘enactive’ approach to cognition discussed in *MM2*; and I explore how the enactive orientation offers a radical break from the dualist and mechanical models that have dominated the Western understanding of mind in the modern era (Varela et al. 1993; Thompson 2007). As I will discuss, the enactive approach understands ‘mind’ as deeply continuous with basic biological processes, and thus highlights the active, situated, and embodied nature of actual *living* cognition—showing the continuity between biology and culture and thus the deep bio-cultural relevance of musicality for human well-being.

To conclude I consider how this *life-based* orientation reveals aspects of being and knowing that have been obscured in the modern era, and how such insights may help us situate music education as a crucial component of a total ‘ontological education’. That is, where music becomes a central way students and teachers may reengage with existence as the embodied, emotional, rational, creative, social and world-making beings they are; and thus develop deeper understandings of what it means to be and become a ‘person’. While the enactive-ontological framework I draw out here is largely discursive and theoretical, it is hoped that it may inspire future work in more empirical contexts; and that it may be juxtaposed with other philosophical and cultural perspectives to offer ever richer possibilities for what music education may become (Kincheloe 2003; van der Schyff 2015).

Music Education and the Technological ‘enframing’ of Being

It is increasingly recognized that the ways we think about and do music education are guided by a group of mutually influencing assumptions and practices that have become so culturally sedimented that they are often taken for granted (Small 1998). As Elliott and Silverman (2015) explain, notions of the autonomous ‘work’ and the ‘cult of the elite artist’ are historical developments associated with late 19th century and 20th century capitalist society—where the mechanical reproduction of printed and recorded music; the development of the Classical canon and the concert hall as a cultural and entrepreneurial strategy; and the emergence of a bureaucratic ‘culturally administered’ bourgeois society all played important roles in the growing *commodification* of music (De Nora 1986, 2000; Lines 2005a, 2005b; Small 1998). In the academic sphere, such developments have contributed to an understanding of

musical experience as a largely ‘passive’ affair—where the ‘aesthetic experience’ of music is generally assumed to depend on one’s ability to ‘correctly’ represent and understand the structural elements of the musical performance; and where the subjective experiences and unique life-worlds of listeners and performers are largely irrelevant to the meaningful apprehension and production of music (Elliott 1991, 1995; Elliott and Silverman, 2015).

Importantly, this orientation also influences how research and theorizing are framed in music philosophy and psychology (Clarke 2005). Indeed, the Western academic approach to music has developed hand-in-hand with a so-called ‘cognitivist’ or ‘information processing’ model of the mind, resulting in a standard framework where musical experience is generally assumed to proceed according to a dualist schema—a linear input-output process where structural elements intrinsic to the ‘music itself’ are retrieved from the ‘external’ environment as raw sense data and then processed (computed) hierarchically by relevant ‘internal’ cognitive mechanisms at sub-personal levels in the brain (Deutsch 1999; Pinker 2009; Scherer and Coutinho 2013; Sloboda 1985). This is understood to lead to the production of ‘internal’ representations, which result in behavioral outputs that allow us to engage with a ‘world out there’ (Varela et al. 1993). Here it is important to note that, like our current assumptions about music, our modern understanding of ‘mind’ may also be traced to historical moments in Enlightenment thinking beginning with Descartes—where the notion of a disembodied *cogito* supposedly unencumbered by contextual particulars forms the basis for the kinds of detached, rationalizing or ‘objectivist’ approaches to knowledge and aesthetics that came to dominate intellectual life in the modern era (Johnson 2007; Sill and Costall 1991; Varela et al. 1993). From this perspective, the cognitive relevance of emotions and feelings, embodied perceptions, as well as the socially situated and affectively motivated activities we share are largely ignored.⁴

In brief, the overriding assumption generated by these mutually reinforcing perspectives is that music *causes* responses in listeners according to some kind of mechanical stimulus-response framework. Thus a ‘good’ performer is one who is trained to represent and accurately reproduce the pre-given relationships or ‘meanings’ encoded into the score so that listeners will respond as intended by the

composer. Music education, therefore, focuses on *training* students to achieve this end by developing the skills and theoretical understandings required to ‘correctly’ perceive and reproduce the formal elements of music, and to behave appropriately in the context of codified performance environments (a kind of ‘production-line model’ if you like). Music that does not adhere to this technicist (Regelski 2002) framework is often understood to be ‘primitive’ or lacking in some way or another (see Bradley 2012; Small 1998).

This dominant ‘cognitivist’ orientation increasingly draws criticism from a range of scholars who argue that it divorces music from the contingent, embodied and ecological contexts that imbue it with meaning (physical, developmental, emotional, and socio-cultural; see De Nora 2000; Krueger 2013; Small 1998); that it downplays the active role people play in enacting musical experience (Clarke 2005; Bowman 2004; Elliott and Silverman 2015)⁵; that it largely disregards other cultural perspectives; and that it thus continues to reinforce a depersonalized ‘technicist’ focus in music education (Regelski 2002; see also Lines 2005a, 2005b; van der Schyff 2015). As Bowman writes, when music education continues to proceed according to standard technicist assumptions it obscures music’s “participatory, enactive, embodied character” as well as its great pedagogical capacity to “highlight the co-origination of body, mind, and culture” (2004, 46).

It is also important to note that while the objectivist philosophical tradition that has informed our understandings of mind, meaning and aesthetics did indeed produce some remarkable scientific achievements (e.g. computing technology), the *ethical* implications of this orientation were already being critiqued by a number of early 20th century thinkers. Edmund Husserl warned that the social sciences had become “blinded by the prosperity” produced by the positive sciences and that this led to a world view that was increasingly determined by technological progress—an “indifferent turning away from the questions which are decisive for a genuine humanity” (1970, 6-10). More recently, critical theorists such as Marcuse have argued that modernity’s uncritical embrace of detached ‘reason’ has taken an ominous turn where, “rationality is being transformed from a critical force into one of adjustment and compliance. Autonomy of reason loses its meaning in the same measure as the thoughts, feelings and actions of men are shaped by technical

requirements. . . . Reason has found its resting place in the system of standardized control, production, and consumption” (2004, 49).

And indeed, as the modern industrial world-view rapidly adopted the dualistic ontological schema of ‘man over nature’ or ‘subjects over and against objects’, the world soon became a resource for a global project dedicated to economic growth through the optimization and exploitation of resources (Evernden 1993; Heidegger 1993a; in a musical context, see Lines 2015). This resonates with the concerns of many current post-colonial thinkers and critical pedagogues—including Elliott and Silverman (2015)—as they continually struggle to reveal the fallacies and ‘false consciousness’ (Eagleton 1991) behind the Neo-Liberal agenda that increasingly threatens to dominate every aspect of our lives in the 21st century (Giroux 2003, 2011; Lines 2015). As I suggested above, this can be seen in the rather mechanical and product-driven way music is (re)produced for otherwise anonymous ‘consumers’. But it also extends to education where students and teachers are increasingly seen not as autonomous beings with unique perspectives on the world, but rather as part of what Heidegger (1993a) refers to as the ‘standing reserve’ (*Bestand*)—future consumers and producers, or indeed, ‘human resources’.⁶ As Elliott and Silverman write, “The overriding concern of neoliberal ‘education’ emphasizes producing workers ‘fit’ for the short-term needs of global business” (2015, 119).

Thus, more and more, students and educators risk being made to comply with externally imposed rules and conventions where ‘information’ is transferred from teacher to student in a more or less passive way (e.g. the ‘banking’ model; Freire 2000)—where students are trained systematically to think and perform according to standardized practices; and where teachers are expected to follow pre-given procedures in order to produce predetermined outcomes that serve the bureaucratic-corporate techno-culture (Abbs 1994; Bai 2001, 2003; Elliott and Silverman 2015). The ‘bottom line’ relevance of music education for this worldview is, of course, tenuous at best. And as a result, music education advocates are often reduced to making arguments that confine the meaning and value of music to ends that satisfy the trends of the free-market economy (Elliott and Silverman 2015).

One way to understand this instrumental and mechanizing worldview we live through in the modern (or ‘post-modern’) era is in terms of what Heidegger (1993a; 2008) refers to as an impoverished technological ‘enframing’ (*Gestell*) of being. This concept does not refer only to the objects of technology that surround us, but also to the ways we are in the world and how we reveal existence to ourselves—e.g. the ‘mechanical’ way we think about cognition; the decontextualized, disembodied and passive ways we discuss knowledge and aesthetics (Elliott 1991; Alpers 1991, 2010); and the bureaucratic, prescriptive and instrumental ways we do music and education in formalized contexts (Thomson 2001). What I would like to argue here, and what I take to be the main ethical message of *MM2* and the *praxial* approach in general, is that the great pedagogical relevance of music lies in its ability to disclose new ways of meaning-making that go beyond the technical, instrumental, categorical, and rationalizing forms that we in the modern world often assume to be exhaustive of the word ‘knowledge’; that it offers new ways of opening up to the world that may help us look beyond the technological perspective and thus rediscover our humanity (Bai 2003; Nakagwa 2000; van der Schyff 2015). Indeed, I would like to suggest that music education may play a central role in the development of a much needed ‘ontological pedagogy’ (Heidegger 1998a; Thomson 2001) that involves reawakening to the primordial nature of human being-in-the-world (Matthews 2008).

In order to reveal this possibility, however, philosophy of music education must develop new perspectives on the nature and meaning of music and what it means to be and become a musical being—a goal Elliott and Silverman (2015) take on wholeheartedly. As I mentioned above, this will require a decentering of the technological perspective in order to develop more refined and ethical approaches to human being and knowing—i.e. perspectives that look beyond our current instrumentalizing and dehumanizing world view. With this in mind, I turn now to a Heideggerian reading of Aristotle’s conception of *praxis*. Here I revisit a number of distinctions and concepts that have had an important influence on philosophy of music education and attempt to cast them in a more explicitly ontological light—one that may help us frame the possibilities of human being and ‘personhood’ in a more primordial ‘life-based’ context (van der Schyff 2015).

The Ontological Perspective: Revisiting ‘Neo-Aristotelianism’ for Music Education

It is important to recognize that our current orientation towards being-in-the-world need not be understood as the sole possibility for humanity. Rather, the bureaucratic and ‘technologically enframed’ (Heidegger 1993a) conception of being we live through today may be seen as a historical development, which may well have a historical demise (although of course the question remains whether or not humanity will disappear with it). As Heidegger (1993a, 2008) and others have suggested, ‘being’ may be understood in terms of overlapping epochs of human activity, each with its own concerns, beliefs and relevant activities through which the meaning of existence is disclosed in a given period (Dreyfus 1997, 2002; Dreyfus and Kelly 2011; Thomson 2001). For example, in the West such epochs may be traced through the Roman Empire (with its focus on being as finished works), the rise of Christianity (where being is understood as a creation of a divine God), the Age of Reason and Enlightenment (with its ‘modern’ focus on the ‘objects’ of human reason and progress) and the contemporary post-industrial world and its preoccupation with economic growth through technological optimization (Dreyfus 1997, 2002; Heidegger 1993a; Thomson 2001).

For the purposes of this paper, however, I would like to look further back to consider the primordial conceptions of being and knowing articulated in Ancient Greek thought. Indeed, this return to Greek philosophy continues to play an important role in philosophy of music education, especially with the introduction of the so-called ‘Neo-Aristotelian’ perspective discussed in *MM2* (see also Regelski 1998, 2002, 2012). Here we find, clearly articulated, what are generally understood as fundamental modes of *knowing*, which are developed to provide more nuanced epistemological frameworks. Such modes are referred to as: (i) *techné* (the technical or procedural knowledge associated with production), (ii) *theoria* (theoretical knowledge), and (iii) *phronesis* (situated-embodied or practical-ethical knowledge). To these we may add (iv) *poiesis*, which refers to the activity of production itself and that is therefore intimately involved with *techné* (Elliott and Silverman 2015). These elements constitute the key components of Aristotle’s conception of *praxis*, which is understood in terms of inherently social and ethical forms of activity that seek to

initiate positive transformations in the world. Following Aristotle (2001), Regelski (2002, 2012), Freire (2000) and others, Elliott and Silverman (2015) discuss how when a focus on *techné* obscures the other three elements, all connection to *praxis* is lost—in this case *techné* is stripped of its ethical responsibility, as “technical skills are not, by themselves, individuating, self-actualizing, creative, or personal growth experiences” (2015, 46).

While I certainly agree with such insights, I am going to suggest that we may develop an even more nuanced perspective by exploring these concepts in an ontological context. In order to understand what this entails we may begin by considering how the four elements that constitute the Aristotelian conception of *praxis* may also be understood to have historical origins. Indeed, for the early Greeks the original concern was not with *techné* and *poiesis*, but rather with *phusis*. This term is often translated as ‘nature’, but this concept has more to do with the animate way in which the world was (is) primordially revealed to creatures who ‘discovered’ themselves enmeshed in it (Dreyfus and Kelly 2011). Indeed, what *being-as-phusis* discloses is the way the world (plants, animals, emotions, the weather) continually surges up and transforms. People and things move in and out of existence and other things emerge to take their place; matter and form are enmeshed in an endless process of interactive transformation (one that had best be attended to if survival is to be in any way assured). With this in mind, *phusis* may be understood not so much as an object (something we are over-and-against), nor first and foremost as a kind of ‘knowledge of’, but rather as a mode of ‘disclosure’ in which we are inextricably implicated—the primordial way being is revealed by a being who *cares* about being (i.e. *Dasein*; Heidegger 2008).

It was only later in, the 6th and 5th centuries B.C., that the great artisanal culture emerged in Greece and with it the notions of *techné* and *poiesis*. But here again, these concepts cannot be properly understood in modern postindustrial terms (i.e. instrumentally; or simply as forms of ‘knowledge’). Rather, according to Heidegger (1993a), *poiesis* involves a kind of ‘bringing forth’ that is intimately connected with, and develops from, the idea of *phusis-as-emergence* I began to discuss above (the continual surging action of transformation through which the world reveals itself). Indeed, following Heidegger, *poiesis* may be understood, for

example, in terms of *ekstasis*, or how something moves away from its standing as one thing to become another; the unfolding of a thing out of itself⁷ (a plant emerging from a seed) or the emergence of ‘thingness’ from ‘no-thingness’, being from void.⁸ However, it may also be understood as a kind of nurturing where “things are dealt with as needing to be helped to come forth” (Dreyfus 1997) as in art-making, friendship, child rearing and education.

By this light, *poieisis* and *phusis* are inextricably linked. And when understood as the active forces/processes behind human forms of making, the idea of *techné* takes on a more nuanced, ethical, and even ‘sacred’ (Dreyfus 1997) dimension. Indeed, from this perspective *techné* may be seen as a basic human potential,⁹ a fundamental way we reveal our being-in-the-world as rational creatures (Heidegger 1993a)—who, through our ‘art-making’ activities, reflect the transformational processes that sustain the world. In this context, *techné-as-poeisis* may be differentiated from ‘technology’ in the modern sense as it (ideally) involves a disclosing of that good, excellence or truth that is immanently present in the process of production-as-transformation.¹⁰ From this perspective, *techné-as-poeisis* may be understood as a reappropriation of the sacred nature of *phusis*, where existential truth may come ‘shining’ forth through the proper cultivation of craft. Thus, as Dreyfus and Kelly (2011) argue, the *meta-poietic* mode of being associated with the artist, musician or craftsman is something all human beings must strive for if they are to achieve true authenticity and a flourishing existence (*eudaimonia*; see also Heidegger 1993b; Dissanayake 1998, 1992).

What is important to recognize here is that the life movements and dispositions associated with the forms of ontological disclosure I have discussed above are all underpinned by a primordial *caring* attitude towards the world—a fundamentally affective or valenced way of being that characterizes human life (Heidegger 2008). This caring attitude is the essence of *phronesis*, which refers to how the possibilities of our contingent existence are revealed through meaningful action (i.e. *praxis*). Indeed, for Heidegger and Aristotle, *phronesis* concerns our direct involvement with life (most fundamentally our concern with death and flourishing that forms that background to our existence) and may thus be understood as the primordial *disposition* of *Dasein*—the fundamental way the world is revealed through the

transformative and embodied (inter)activity associated with the life-movement referred to as *praxis* (Sheets-Johnstone 2012). Put simply, *phronesis-as-praxis* describes how we engage in the deliberative ethical action that is relevant to the contingencies of the moment; how we ‘reach out’ to the world and thus project certain possibilities “ahead of ourselves” (Heidegger 2008).¹¹ In this way *phronesis-as-praxis* may be understood to ground and permeate all other modes by which being is revealed in the physical, embodied and social-cultural contexts of our lives as we strive towards a flourishing existence.

While the core insights outlined above are certainly not lost on Elliott and Silverman (2015), I suggest that considering *praxis* in this more explicitly ontological light may help us better understand how ‘knowledge’ emerges from the fundamental forms of organism-environment interactivity that allow a meaningful world to be ‘brought forth’. That is, the ontological perspective turns us from our tacit obsession with the ‘cognitive’—where human beings are seen as detached rational beings—and towards a recognition of the more primordial nature of human being-in-the-world as relational, emergent, transforming, contingent, situated, temporary and emotional-embodied. This, I argue, may deepen our understanding of what ‘knowledge’ entails by situating it more clearly within the embodied processes through which we open up to the possibilities of being-in-the-world; and which also seem to characterize the fundamental *experience* of music as something we *live through* with our whole being, and not first and foremost as an ‘object’ of knowledge (Thompson 2007). As I will discuss in the next section, this ontological view of *praxis* resonates in many ways with *MM2*’s welcome introduction of embodied or so-called ‘enactive’ approaches to cognition for music education (see also Bowman 2004; Bowman and Powell 2012). This perspective offers important new insights into how and why music is meaningful when it understands human cognition not first in terms of detached rational processes and dualistic mechanistic metaphors (i.e. the mind as computer), but rather as deeply continuous with the most basic operations of life¹² itself (Thompson 2007).

An ‘Enactive’ Approach to Musical Sense-making

Enactivism is an interdisciplinary research program that explores cognition across a wide range of areas including neuroscience, social-cognition, developmental studies, philosophy of mind, phenomenology, and theoretical biology (Stewart et al. 2010; Thompson 2007; Varela et al. 1993).¹³ As such, it offers support for the ontological perspective from a range of contemporary areas of study. Most centrally the enactive approach asserts the deep continuity between mind and life, where ‘cognition’ is understood most fundamentally as *perceptually guided action* (Noë 2006; Varela et al. 1993). By this light, a meaningful world is brought forth, or ‘enacted’, through the continuous interactivity between organism and environment—where ‘mind’ is understood as a main property of this dynamically evolving organism-environment system. From this perspective mind, body and world are inseparable; and thus cognition is necessarily embodied and situated (Thompson 2007; Varela et al. 1993).

In order to better understand the relationship between enactivism and the ontological perspective discussed in the last section, it may be useful to introduce yet another of Aristotle’s ideas—albeit one that receives very little attention in the philosophical literature. I refer here to his notion of *orexis* (see *De Anima* 2001), which describes the essentially striving or conative nature of all living beings; the way all living organisms ‘reach out’ to the world in order to develop their potential as fully as possible. As Martha Nussbaum explains, “we all [natural beings] reach out, being incomplete, for things in the world. That is the way our movements are caused” (2001; see also Nussbaum 1986).¹⁴ It is important to note here that *orexis* explicitly casts even the most basic forms of living world-making first in terms of *active engagements* with the world as opposed to responses; where life itself is characterized as *movement towards* flourishing (*eudaimonia*), as primarily ‘goal directed’. Indeed, following Aristotle, Heidegger writes that plants and animals “are beings only insofar as they have their essential abode and ontological footing in movement. However, their being-moved is such that the *archê*, the origin and ordering of their movedness, rules from within those beings themselves” (1998b, 190).

This last point reveals an important distinction between the ‘natural’ and the ‘artificial’ that is often lost in the modern world. It allows us to see that whereas the

products of technology have their ontological footing outside of themselves (Heidegger 1993a, 1998b), nature (*phusis*) is essentially “self-revealing,” or *autopoietic* (self-producing or self-organizing).¹⁵ The modern computer provides an excellent example of how this is so. While a computer can be said to perform ‘cognitive’ functions, it has no access to what those functions could mean. Put simply, a computer’s functions as an information-processor necessarily remain ‘operationally open’ to the outside entities (i.e. humans) who input data and who impose meaning on outputs; its existence is therefore non-autonomous and thus non-caring (non-*phronetic*). This is to say that the computer’s coming-into-being and the meaning of its existence is determined externally; and thus, at best, a computer can only give an illusion of the relational activity we find between autonomously interacting *living* systems (Dreyfus 1992; Thompson 2007; Varela et al. 1993).

Living creatures, by contrast, are intrinsically meaningful. They *actively* and *autonomously* participate in the construction of their own life-world. In doing so, they open up (disclose) unique ecologies of salience, which are ‘informed’ by their interactions with every form of ‘otherness’ they may meet. Therefore, it is increasingly argued that the computer offers only a highly reductive model of what actual living cognition entails, albeit one that has dominated cognitive science for most of its existence (Dreyfus 1992; Varela et al. 1993). Indeed, in order to achieve and maintain a viable existence, *living* cognitive systems must exhibit ‘operational closure’—this refers to their autonomous identity; the bounded metabolic, self-regulative processes necessary for an organism to be differentiated as such (Di Paolo 2005, 2009; Thompson 2007; Varela 1979). However, a living organism must also simultaneously maintain the dynamic organism-environment *interactivity* that allows it to ‘make-sense’ of its world in relation to its intrinsic needs (Barbaras 2010; Jonas 1966).¹⁶ This necessary co-arising asymmetry between the self-generating (closed) metabolic processes and the (open) sensorimotor dynamics of ‘sense-making’ may be observed in even the most basic single celled organisms—which, while not possessing the complex neural structures to support explicitly representational forms of cognition, are nevertheless capable of engaging in the kinds of active, conative and valenced behaviours necessary to enact their adaptive

‘point of view’ (a primordial ‘self’) (Maturana and Varela 1980, 1992; Thompson 2007). In brief, such insights have led a growing number of researchers to argue that we should no longer base our conceptions of mind and cognition in technological metaphors (i.e. the mind as computer), but rather in the fundamental processes of life itself (Thompson 2007).

This ‘life-based’ turn lies at the heart of the so-called ‘enactive’ approach—which, as I mentioned above, argues that living cognition involves an ongoing process of *action as perception*; a circular process of contingent organism-environment interactivity whereby a meaningful world is continually ‘brought forth’ (Nöe 2006; O’Regan and Nöe 2001; Varela et al. 1993). Among other things, this perspective allows us to reconsider notions of ‘knowledge’ and ‘information’, not as things to be acquired, but rather in terms of dynamic ‘ontogenic’ (Oyama 2000) processes:

... information, dynamically conceived, is the making of a difference that makes a difference for some-body somewhere. ... An autonomous system becomes informed by virtue of the meaning formation in which it participates, and this meaning formation depends on the way its endogenous dynamics specifies things that make a difference to it. (Thompson 2007, 57; also quoted in van der Schyff 2015, 3)

By this light information is not objectively ‘out there’ in a pre-given world waiting to be processed by an anonymous subject; meaning and knowledge are not ‘generated’, ‘computed’ nor simply abstractly represented ‘in the head’. Rather, an ‘enactive ontology’ reveals that meanings are ‘emergent’ phenomena that depend on the self-organization (*autopoiesis*) of the whole creature as it continually enacts a meaningful world through a history of structural coupling with the environment; meaning is thus impossible to reduce to objective inner or outer structures (Bateson 1972, 1979/80; Varela et al. 1993). Moreover, because such basic forms of sense-making are inherently embodied, conative and valenced (i.e. ‘caring’), cognition and emotion are no longer understood as separate domains, but rather as deeply continuous with one another (Colombetti 2014; Pessoa 2013).

Of course, for complex organisms sense-making may involve much more than the basic metabolic processes described above. Indeed, human *autopoiesis* entails a lived developmental history of social embodiment through which meaningful interpersonal and cultural ecologies may emerge (Johnson 1987, 2007; Varela et al. 1993)—and this necessarily involves the development of various skills and ways of

thinking. Thus the enactive perspective resonates rather closely with the fundamental mode of human being-in-the-world associated with *phronesis-as-praxis* and the active and caring relationship with being it describes. And likewise, it also returns us to the notions of *poietic techné* and *theoria* to consider how such distinctly human modes of existential disclosure may be seen as continuous with the primordial concepts of *orexis* and *autopoiesis* common to all life forms—i.e. as distinctly human forms of actively reaching out to, and enacting the worlds we inhabit. Indeed, from this perspective the ‘categories’ associated with the notion of *praxis* may be understood not simply as discrete domains of knowledge, but rather as heuristic concepts that allow us to begin to describe the manifold and interpenetrative ways we *enact* a meaningful existence.

Human Being as Musical Being

While Elliott and Silverman’s (2015) discussion of the enactive perspective may not delve as deeply as I have into basic biological concerns, its inclusion in *MM2* nevertheless shows a profound concern with the ethical meaning of music for the formation of personhood, beginning with its primordial nature as a form of self and world-making (DeNora 2000; van der Schyff 2015). I have attempted to take this a step further by showing how exploring the notion of *praxis* from an ontological perspective may help us better see the resonances between Ancient Greek (*praxis*) and contemporary (enactive) approaches to being and meaning; and how this ontological-enactive orientation may help us better understand the ethical meaning of human being and becoming, starting with the most basic requirements for organic flourishing.

With this in mind, it is interesting to note how the ‘ontologically continuous’¹⁷ perspective on human meaning and world-making afforded by the ontological-enactive orientation coincides with recent shifts in understanding what ‘music’ entails. As Elliott and Silverman (2015) discuss, the modern ‘nihilistic’ understanding of music¹⁸ is coming under growing scrutiny (Lines 2005a). Increasingly, this involves a critical decentering of Western academic assumptions to embrace non-Western points of view; the exploration of developmental and therapeutic perspectives; as well as a growing concern with how people actually

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engage with music in everyday life and in different contexts (Blacking 1995; DeNora 2000; Green 2008, 2012; Nettl 2005; Small 1998). For example, thinkers like Mark Johnson (2007) have argued that the embodied-affective forms of meaning-making associated with music are indicative of a basic non-linguistic cross-modal aesthetic capacity that grounds all forms of cognition—ways of knowing that emerge from our histories as embodied-affective beings who strive towards a flourishing existence in our interactions with the world. This insight turns us away from the detached, rationalizing, and disembodied Enlightenment notion of aesthetics and knowledge and toward something closer to the original Greek idea of *aesthesis*, which is rooted in the senses—a primordial awareness of the rising and falling of experience and the relational and transformational (*ekstasis*) nature of perception itself.

Along these lines, musicality is increasingly understood to play a crucial role in the development of the emotional and social scaffolding that affords interpersonal cohesion (Krueger 2013, 2014)—the very grounding of *phronesis* and personhood. This involves the development of pre-linguistic aesthetic modes of communication and understanding that enable the forms of ‘primary intersubjectivity’ between infants and primary caregivers so necessary for developing social bonds (Trevarthern 2002).¹⁹ And indeed, from the enactive perspective, such affective-aesthetic processes are understood to ground and motivate the kinds of “participatory sense-making” (De Jaegher and Di Paolo 2007) that we continue to engage in throughout our lives.²⁰ Musicality may thus be seen as a central way in which we realize the ‘relational autonomy’ that lies at the heart of the enactive approach to social cognition. Indeed, this view highlights the social or ‘extended’ nature of the musical mind that evolves “dynamically in the relationship between organisms and their surroundings (including other agents)” (McGann et al. 2013).²¹ By this light musical learning may be understood as an *adaptive* and *participatory* phenomenon involving shared patterns of action and perception that continuously shape and renew the cognitive ecology (Reybrouck 2001, 2005, 2012; Schiavio and Cummins 2015).

From the enactive perspective, then, human musicality involves far more than “auditory cheesecake” (Pinker 2009); or the reproduction and consumption of musical ‘works’ and products. Rather, it is understood as central to human well-

being as one of the principal ways we orient ourselves relationally in the world as dynamic self-makers who span physical, biological, emotional, socio-cultural, rational-technical, and theoretical modes of being (van der Schyff 2015). Here music as *praxis* is also revealed, most primordially, as a form of *orexis*—a basic way humans (and perhaps other animals) actively reach out to the world, form environments for each other, and thereby reveal or enact shared worlds of meaning. Thus, by this light, our musical-aesthetic²² nature is central to what it means to be and become a person when it affords the disclosure, and harmonious integration of the multiple modes of being-in-the-world available to us as the autonomous, *autopoietic*, and fundamentally caring social beings we are.

Conclusion: Toward an Ontological Approach to Music Education

The enactive-ontological perspective I have begun to sketch out here is intended to support Elliott and Silverman's (2015) critical concerns over a music pedagogy tacitly informed by a commodifying, dehumanizing and technically driven world view. And indeed, as I have attempted to show, the ontological perspective is also necessarily a critical one when it allows us to better see how the impoverished modern technological perspective imposes instrumental and standardizing approaches to mind, music and education that obscure important aspects of what human being and becoming entails (see Kincheloe 2003); how it is primordially unethical when it wrenches away the active, transformative and self-revealing nature of human-being-as-musical-being, turning the natural into the artificial; and how it thus dehumanizes the student and teacher relationship when it forces them to passively comply with externally driven standards—a situation that, in the worst instances, is perhaps best described as 'pavlovian'.

This is why the *praxial* approach developed in *MM2* is so important. It asks a new generation of musicians and educators to critically reengage with fundamental questions: What is music? What is education? What is a musical mind? A self? A person? A flourishing life? And of course, these questions may be traced back to the core ontological themes I have been discussing all along. Gaining a deeper understanding of this primordial grounding of human being and knowing is the essence of 'ontological education' (Heidegger 1998a; Kincheloe 2003; Thomson,

2001)—an approach that begins with recognition and clearing away of the assumptions that obscure the essence of being, so that other possibilities may come forth. With this in mind Elliott and Silverman (2015) have made important steps forward by opening up more critically nuanced perspectives on what education is (musical or otherwise), as well as possibilities for what it may become. Along these lines, a reengagement with the *life-based* ontology we find in Greek thought and the enactive approach to mind may allow us to explore the pedagogical environment in new ways—i.e. in terms of interacting, self-producing, autonomous, *living* entities.

An important implication of this perspective is that it demands a new conception of what being and becoming ‘educator’ entails. Indeed, by this light an educator can no longer be seen simply as a repository of facts and information, but rather must be understood as a master of learning itself. That is, as one who embodies being-as-educating; who discloses the *praxis* of education as an opening up to the world—as a transformative *life-movement*—and who thus strives to enable students to reach their *autopoietic* potential as master learners themselves. By this view the educator becomes an artist in the nurturing *poietic* sense, where pedagogical ‘craft’ (*techné*) is directed towards revealing the ‘truth’ of being-as-learning as a circular process of adaptive student-teacher interactivity²³ (see Heidegger 1998a; Thomson 2001).

In brief, *Music Matters 2* is a call for this new kind of music educator—one who is willing to draw on and develop a range of philosophical, scientific, socio-cultural, technical and therapeutic understandings in a caring, ethical, *praxis*-based context; and who is excited to explore the possibilities of musical being and becoming from diverse points of view. Above all, this ‘ontological educator’ strives to reveal musicing as the transformational and participatory world making activity it is: as a universal human potential that spans the range of our embodied being and knowing, and that may thus open up ways of revealing the deep continuity between aspects of being that often seem highly dichotomous in the modern world—self and other; mind and body; emotion and reason; nature and culture; technology and human authenticity (Bowman 2004; Lines 2014). Indeed, once the modern technological *Gestell* is critically pushed aside, musical being and pedagogical being may begin to show themselves as the embodied focal praxes they are—shared activities through which the possibilities of being may ‘shine forth’ and whereby the world may be cast

in a new light (Borgmann 1984; Dreyfus 1997; Dreyfus and Kelly 2011; Heidegger 1993b; Lines 2005b). In this way a *praxial* music education guided by an evolving, *critically* ontological perspective may play a central role in enacting new relationships with the social and ‘natural’ environments that sustain us, thus affording humanity more ethical and authentic ways of being-in-the-world.

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Notes

¹ Of course, the goal of the *praxial* approach is not to exclude Classical music from education, nor to downplay the rigorous kinds of training it requires. Rather, the idea is that by re-situating this form of musicing within a richer critical, creative and ethical context—and by decentering its dominant position—we may in fact revitalize it, leading to new interpretations and approaches. From a pedagogical perspective this may afford students who train in Classical music a broader perspective on what ‘music’ entails; as well as an enhanced perspective on their own musical potentials, which may go beyond professional and technical concerns to reveal the importance of creative musical activity (e.g. improvising) for their day-to-day lives.

² As Elliott and Silverman write, “our intra-personal and interpersonal experiences of music making, listening, feeling, knowing, teaching, learning . . . trace back to the fundamental issue of what it means to be the kind of living entity that possesses, undergoes, enacts and “performs” his or her personhood” (2015, 154).

³ For a range of Heideggerian approaches to music education, see Pio and Varkoy (2015).

⁴ Johnson describes the situation well when he writes, “On one side of the dualistic gap we have concepts, thought, reason and knowledge. On the other side we have sensations, feelings, emotions, and imagination. What has been so fateful about this dualism for contemporary philosophy is the way it aligns meaning with the cognitive and thus dismisses quality, feeling, and emotion from any account of meaning” (2007, 216). Among other things, this has resulted in an approach to aesthetic education where, as Elliott (1995) points out, the term ‘aesthetics’ is understood in the detached, abstract, decontextualized and highly rationalizing sense that follows from the thought of Kant and other “18th Century axioms.”

⁵ As music psychologist Eric Clarke writes, this ‘cognitivist’ orientation reduces musical cognition to an “abstract reasoning or problem solving process” where “perception is treated as a kind of disinterested contemplation with no connection to action—which bears little relationship to the *essentially exploratory function of perception in the life of an organism*” (2005, 15; emphasis added).

⁶ In fact Heidegger (1998) takes things further and suggests that the post-modern technological understanding of being effectively does away with modern understanding of meaningful subjects ‘over and against’ objects. Dreyfus explains that by this view, the world “has become ‘a system of information’ and a modern airliner is not an object at all, but just a flexible and efficient cog in the transportation system. Passengers are presumably not autonomous subjects either, but resources recruited by the tourist industry to fill the planes” (2002, page not available). As Lines (2015) points out, music itself is often framed in this commodifying light—as a resource to be exploited for economic ends.

⁷ This resonates with Abbs understanding of ‘education’ as “an opening out of the mind that transcends detail and skill and whose movement cannot be predicted . . . the expression of a primary impulse for truth, a deep epistemic instinct that we inherit as part of our biological nature” (1994, 15–16; also quoted in Elliott and Silverman 2014, 112).

⁸ This aligns with many core insights in Eastern thinking (see Nakagawa 2000; van der Schyff 2015).

⁹ This is echoed nicely by Erazim Kohák, “Technology . . . is not only a convenience but also an authentic human possibility . . . [Mankind] is an artificer not by accident but essentially. . . . If the products of human techné become philosophically and experientially problematic it is, I would submit, because we come to think of them as autonomous of the purpose which led to their production and give them meaning” (1984, 23–4).

¹⁰ And likewise the development of *theoria* may also be understood not simply as a kind of knowing, but also as a fundamental movement of human life-as-thought towards normative principles that guide action and understanding (yet another mode of ‘revealing’ or ‘disclosing’ the world). However it should be noted that, for Heidegger, the emergence of theory with Plato and the sophists also marks a major turning point away from *phusis* and the *poietic* world view (see Dreyfus 2002).

¹¹ For Heidegger (2008), this is deeply connected to *Dasien*’s ultimate condition as *being-toward-death*, which grounds the anticipatory structure of care associated with *phronesis*.

¹² John Cage remarked on a number of occasions that he sought to reflect nature “and her manner of operation” in his music (see Pritchett 1996).

¹³ Indeed, enactivism is no way ‘antiscientific’. Rather it asks us to rethink standard objectivist and reductionist trends in order to reshape scientific tools in light of a more phenomenologically informed practice (Thompson 2007; Varela et al. 1993). Thus this theoretical framework may inspire new scientific approaches to music cognition, negotiating between qualitative and quantitative analysis, as well as first, second and third person points of view.

¹⁴ *Orexis* is often simply referred to as ‘desire’. However, as Nussbaum (2001) points out, the term has much richer developmental, ethical, and spiritual implications than this word might imply. Indeed, she discusses *orexis* in the context of human life by describing how we reach out to the world (to nature, things, our parents and siblings, our friends and colleagues, our society, other societies) with our bodies, senses, minds and souls in order to understand (to feel, intuit, imagine and rationalize) our needs, desires, reasons and conditions and thereby engage in the process of enacting the worlds we inhabit (see also van der Schyff 2010).

¹⁵ Following Aristotle, Heidegger writes that plants and animals “are beings only insofar as they have their essential abode and ontological footing in movement. However, their being-moved is such that the *archê*, the origin and ordering of their movedness, rules from within those beings themselves” (1998b, 190).

¹⁶ Merleau-Ponty writes that an “organism, in the presence of a given milieu, has its optimal conditions of activity and its proper manner of realising equilibrium”; each “modifies its milieu according to the internal norms of its activity” (1963, 148, 154).

¹⁷ Such insights resonate with Dewey’s principle of continuity where, “rational operations grow out of organic activities, without being identical with that from which they emerge” (1991, 26).

¹⁸ . . . where music is assumed to be irrelevant to day-to-day and evolutionary concerns related to our survival and well-being (e.g. Pinker 2009; see Lines 2005a).

¹⁹ As Elliott and Silverman (2015) discuss, this also understood to be an important aspect of the biological meaning of music in an evolutionary context (see Cross 2010; van der Schyff 2013).

²⁰ This can be seen with infants, who do not simply respond passively to environmental stimuli but rather make “specific preparatory body adjustments that facilitate the mother’s movements . . . intentions and goals are not searched before or behind the communicative action as its ‘cause’, but [rather are] shaped and adjusted as the interaction unfolds.” (Fantasia et al. 2014, 6–8; see also Hubley and Trevarthen 1979; Krueger 2013). This is an excellent example of the open-closed, interactive-autonomous dynamics that characterizes the enactive approach to living cognition.

²¹ Enactive ‘relational autonomy’ is characterized by its ‘extended’ and ‘interactive’ nature, as opposed to detached Enlightenment notions where autonomous agents are assumed to be “primordially lone individuals extending their cognitive reach” (see Urban 2014, 4; see also De Jaeger 2013).

²² Here I use the term ‘aesthetic’ in the revised sense discussed above, which involves the primordial (emotional-embodied) capacity to make sense of the world through the integration of movement, feeling and cross-modal perceptions (Johnson 2007; Ramachandran 2011; Sheets-Johnstone 2012). This contrasts with the detached and rationalizing, or ‘formalist’, perspective associated with traditional ‘music education as aesthetic education’ (e.g. Reimer 2003; see Alpers 1991; Elliott 1991; Regelski 2010, 2011). Indeed, this formalist approach to aesthetics is also critiqued by Heidegger (1993b).

²³ Perhaps not surprisingly, the enactive-ontological perspective resonates closely with care ethics, but this is a subject for another paper. For an overview, see Urban 2014.

About the Author

Dylan van der Schyff is a musician, music educator and researcher in philosophy of music and music education. His academic work explores these areas through the lenses of 4E cognition, phenomenology, sound studies and critical ontology. As a performer, van der Schyff has appeared on over 100 recordings, spanning the fields of jazz, free improvisation, experimental, electronic and 'new music'. He has also participated in numerous cross-disciplinary works involving dance, theatre and film. His current PhD research at Simon Fraser University is supported by the Canadian Social Sciences and Humanities Research Council.