

Exploring the Ethical Possibilities of Praxial Music Education From the Perspective of Embodied Cognition

Choi, Jin Kyong*

The purpose of this study is to explore the ethical possibilities of praxial music education from the perspective of embodied cognition. Praxial music educators rely on embodied cognition, which views cognition as meaning generated through the dynamic interplay between a living system and its environment, to present empathy and care as ethical values in music education. However, they do not specifically discuss how embodied cognition can be applied at the intersection where music transitions into ethics. Therefore, this study explores the ethical possibilities of praxial music education by discussing the conditions under which music can advance toward empathy and care for others. Since embodied cognition views cognition as participatory and relational, if musical imagination can foster empathy by understanding others' emotions through participatory music-making and listening, and if this empathy can develop into dialectical empathy generated from intersubjectivity, then praxial music education can move towards ethics. Consequently, praxial music education emphasizes the importance of participatory music-making and listening grounded in concern and care, which presents the following insights: First, participatory music-making should begin with attentive listening. Second, the emphasis should fall on the process of teaching and learning rather than outcomes. Third, the focus should be on musical knowledge that enriches life rather than solely acquiring knowledge for the sake of music. Fourth, teachers must possess both ethical attitudes and professional expertise.

Keywords: embodied cognition, praxial music education, musical imagination, dialectic empathy, participatory music making and listening

*First and corresponding author: Visiting Researcher, Education Research Institute, Seoul National University (cerves@naver.com)

I . Introduction

Attempts to connect music to ethics have continued since ancient times in Greece and Asia, including Korea and China. According to the Greek ethos, ‘Music rhythm, mode, and instrument contain various human character such as anger, composure, patience, and temperance. As a result, music education can have a good influence and change on personhood (Plato, 1992).’ Moreover, Chinese and Korean Ye-Ak philosophy states that ‘Rites (Ye) and music (Ak), signifying the principle of order and harmony, communicate with the laws of the universe. Since sound originates from the human mind and music is in connection with ethics, an ideal society can be achieved through rites and music (Han, 2000).’ These philosophies indicate that the connection between music and ethics has been deeply entrenched in human society for a long time.

Schiller (2004) stated that ‘As various elements are harmoniously blended in a work of art, through aesthetic education in which reason and emotion are harmoniously integrated, an aesthetic state as a utopia can be achieved’. Meanwhile, Kant (1987) said, ‘Although judgments about beauty and art are subjective, fine art civilizes society by appealing to a common sense that enables universal communication.’ Both authors believed that beauty in music contributes to human life. They believed that music could be connected with ethics because the form, harmony, character, and beauty contained in music could positively influence the human mind, harmony in society, and communication. However, doubts persist regarding the connection between music and ethics; and the root of which lies in the following question: “Can the ethical demands of making and listening to music be transferred to other endeavors in life (Reimer, 2003)?”

Since the 1990s, praxial music education has created a new trend in music education by focusing on various communities and cultures to which musical acts, emotions, and specific musical practices belong. It indicated that it is not music as a work or aesthetics but human action that can connect the music with ethics (Elliott & Silverman, 2015). Prior studies (Bowman, 2005; Elliott, 1995; Westerlund, 2002) emphasized key elements in the process of music making, such as various contexts of human actions involved in creating music, reflection in action, and situational judgment. Praxial music education argued that music education should lead to goodness, the development of human mind and personality, and mindfulness through musicing (music making), but did not fully explain how the act of making music can be connected to life and lead to ethics.

Against this background, the emergence of embodied cognition is meaningful since it suggests the possibility of a connection between praxial music education and ethics. Embodied cognition

connects cognition and an organism's life by explaining that cognition arises from the meaning generated through the process of that organism's embodied-enactive interactions with the environment to sustain life (Varela, Thompson, & Rosch, 1992). Since embodied cognition considers cognition to be generated through ecological exchange, cognition contains the organism's environment, not the pure intellect, such as the abstract form that occurs inside the organism (Thompson, 2007). Scholars of embodied cognition argue that the meaning an organism generates based on their concern towards the environment and others can have relational, social, and ethical aspects (Colombetti & Torrance, 2009; Métais & Villalobos, 2021). Thus, according to embodied cognition, cognition of an organism is not disconnected from life but occurs within the context of its lived experience. As a result, the meanings generated through music-making, encompassing both music-making and listening, can be extended to the life of an organism. It lays the foundation for ethics by connecting music to the life of an organism.

Attempts to connect music with ethics in terms of embodied cognition are not yet fully active, but have begun with praxial music educators. Scholars (Elliott & Silverman, 2015; Silverman, 2020; van der Schyff, Schiavio, & Elliott, 2022) explain that music can progress towards empathy, understanding, and care (ethics) for others. They suggest that creative, embodied music making and listening form the self and generate meaning through emotions within meaningful relationships with the outside world. Prior literature examines music and ethics from an optimistic yet ambiguous perspective, suggesting that the environment and organism will help in the growth and flourishing of the community. However, the prior literature does not discuss in detail how embodied cognition can be applied at the intersection of music and ethics, nor does it address the processes required for music to progress toward ethics.

Therefore, this study seeks to explore the ethical possibilities of praxial music education by examining the conditions necessary for embodied cognition-based praxial music education to achieve empathy and care. In praxial music education based on embodied cognition, music-making and listening generate meaning that captures the dynamic relationship between individuals and their environment. This study aims to specify the ethical possibilities of praxial music education by exploring how music-making and listening contribute to the sense-making process that fosters understanding and care for others. It also aims to discuss the conditions necessary for participatory sense-making to evolve from social bonding into ethics. Empathy and care are more closely connected to emotions than to mere feelings, and in the process of embodied cognition, emotions play a crucial role in generating meaning.

Therefore, this study focuses on the role of emotions in embodied cognition, particularly on

how musical emotions facilitate understanding others and lead to ethical outcomes. The research questions are as follows: What is the role of emotions in the cognitive process of embodied cognition? How do musical emotions aid in understanding others? And how can musical empathy lead to ethical outcomes? Although there have been previous attempts to link music and ethics in the past, the connection remains controversial (Higgins, 2018). Therefore, rather than aiming to establish a complete foundation for the connection between music and ethics, this study seeks to enrich the points of intersection between the two through the lens of embodied cognition.

II. Theoretical Foundation

1. Embodied Cognition

The concept of the embodied mind first appeared in *The Body in the Mind* (Johnson, 1987) and attracted attention as an issue in cognitive science since publication of *The Embodied Mind* (Varela et al., 1992). Although embodied cognition has various definitions and approaches (Matyja & Schiavio, 2013; Rowlands, 2010), its core lies in the life process of an organism. Just as humans require food, a safe place, and communication with peers in their environment to survive, organisms interact with their surroundings to sustain life. An organism thus produces what it needs by interacting with the environment or other organisms in it. This process of interaction is called ‘structural coupling’. The process of self-producing elements necessary for oneself is called ‘autopoiesis (Varela et al., 1992)’, which involves defining unity and norms in the system of an organism. An encounter with the external world occurs through the system's evaluation of its contribution to the preservation of autopoiesis.

Thus, an organism has an ‘operationally closed’ system that is structurally open to the environment (Thompson, 2007; Varela et al., 1992). The organism makes sense through repeated embodied-enaction with the environment based on its autonomy when individualizing itself from the outside and this becomes its cognition (Thompson, 2007). In short, since the experience (cognition) of an organism comprises the connection between the surroundings and other living systems, embodied cognition is not a fixed or unidirectional process, but means ‘sense-making’ that changes and develops in a fluid manner (De Jaegher & Di Paolo, 2007; Matyja & Schiavio, 2013; Thompson, 2007).

De Jaeger and Di Paolo (2007) called the meaning created by two autonomous systems through

structural coupling as ‘participatory sense-making’; when an organism is placed in a sharable environment, it can generate meaning at the level of social life by structurally coupling with the environment (Fuchs & De Jaegher, 2009; Torrance & Froese, 2011). Therefore, embodied cognition is not isolated, but has cooperative, fluid, and relational traits (Urban, 2015). These characteristics appear in studies that explore ‘social understanding’, ‘social interaction’, and ‘ethics’ based on embodied cognition (Colombetti & Torrance, 2009; Di Paolo & De Jaegher, 2021; Métais & Villalobos, 2021; Urban, 2015). Embodied cognition interprets the conditional openness of an organism in a precarious environment as ‘participation and concern (Thompson & Varela, 2001)’, and it is expected that the sense-making process of two or more autonomous systems could create social and ethical values.

The key lies in the emotions that emerge during the process of being embodied and enactive (Colombetti & Torrance 2009). When the human body is considered as a place of cognitive generation, cognition includes emotional aspects that arise when bodies meet (Thompson, 2007; Urban, 2015). Damasio (1999) described the life-regulation process of an organism as ‘basic life regulation-emotion-feeling-higher reason’, and emotions are more closely related to the life of an organism. For example, when humans feel fear in a life-threatening situation, their emotions are more closely related to human life than feelings or abstract thinking. Therefore, emotions that occur in the sense-making process of embodied cognition can provide clues to connect ethics and music.

2. Embodied-Enactive Musical Emotion

Musical terms, such as ascending and descending melody, tempo signature, staccato like jumping, smooth legato, agitato, and animato inherently indicate movement. While music itself does not physically move, it possesses movement (Langer, 1957). For example, a person might shake their head in rhythm with the music, or children might dance to the music they hear. Thus, music has the quality of inducing movement through musical affordances (Krueger, 2014). Movement, in turn, generates emotion. Since the term ‘emotion’ originates from the Latin ‘*emovere*’, meaning ‘to move out’ or ‘to be moved’, it is inherently related to action (LeDoux, 1998). Consequently, emotions manifest in various aspects of musical experience that involve and generate movement (Chong, Kim, & Kim, 2024; Lee, 2024; Sloboda & Juslin, 2001).

Existing studies on music and emotions are divided into two approaches: ‘Where is emotion generated?’ and ‘How does emotion occur?’ (Schiavio, van der Schyff, Cespedes-Guevara, &

Reybrouck, 2017). This corresponds to an external approach that explores where the emotions of music exist among music, performers, and composers (Cook, 2001), and an internal approach to examine how musical stimuli act on the listener's body and brain mechanisms to induce emotions (Juslin, Liljestrom, Västfjäll, & Lundqvist, 2010; Kivy, 1989).

Despite their differing perspectives, both approaches share two common assumptions. First, they view music and listeners as separate, with music serving as an external stimulus influencing the internal condition of the listener. Second, both approaches place greater emphasis on the cognitive aspects than on the bodily experiences (Schiavio et al., 2017). However, the embodied-enactive perspective views musical emotions as emerging from the interaction between the living system and its environment (Colombetti & Torrance, 2009; Varela et al., 1992). This viewpoint reveals musical emotions that are essential for human growth and socialization, which have been disregarded by the external and internal approaches (Schiavio et al., 2017). For example, the musical emotions that arise from a mother's lullaby (Elliott & Silverman, 2015), cheering songs, military bands or religious rituals connect to the lived world, encompassing the organism's primitive emotions to complex socio-cultural self-organization (Dissanayake, 2012; Trevarthen, 2002).

Therefore, embodied-enactive musical emotions are essential for living systems to form relationships with others and the community in order to adapt to their environment, and through this, they can contribute to generating the moral meaning and value of human life that internal and external approaches might miss.

Then, how does the embodied-enactive emotion arising from structural coupling help an organism understand and adapt to its environment? Since ethics can begin with a genuine understanding of others' emotions (Levinas, 1998; Scheler, 2008), we should examine how embodied-enactive musical emotions can help us understand the emotions of others. Perhaps this process can create crucial interfaces where music and ethics intersect.

III. From Music to Ethics

Based on the previous discussion, it has been confirmed that embodied cognition is social and relational in nature, with emotions playing a key role in these processes. Therefore, this chapter will explore how emotions in music can foster concern and care for others.

1. Musical Imagination

According to the traditional ethical thought, metaphysical and universal moral principles can be applied to the moral situations human beings encounter individually, and the purpose of ethics education is to learn and acquire these principles. However, Johnson (2007) asserted that ‘patterns of human sensorimotor experience constitute human thought, expression, and communication’. Johnson (1993) posed the issue that the pursuit of universal moral laws has largely overlooked human incarnation. Further, Johnson (1993) describes morality as the synthesis of human actions, attitudes, and thoughts, and at the centre of these lies the body that human beings can share most universally. It takes moral imagination to put oneself into another’s situation to empathize with, understand, and act correctly with their emotions (Johnson, 1993). Moral imagination that makes one empathize with the other enables one to indirectly experience the other person’s, so that one could proceed to have concern, understanding, and care for them.

Moral imagination is very similar to the imagination that occurs when making or listening to music as it operates metaphorically in contexts and situations, bodies, actions, emotions, and relationships. To express or understand elements such as images, meanings, expressions, emotions, and colours inherent in the context and situation of music, we use our bodies and movements to imagine, and through this we experience multiple layers of emotions. For example, when expressing Chopin’s *Funeral March*, one can ask the following questions: Would it be more effective to express the dotted rhythm like heavy steps following a funeral procession? Who is dead? Is it Chopin’s acquaintance? Isn’t the tone similar to that of a dark sky? What kind of atmosphere would a funeral in the 19th century have? One’s musical imagination while making or listening to music helps experience emotions suitable for virtual contexts.

Johnson (1993) explains that ‘the narrative inherent in literature is an important factor that enables moral reasoning by developing moral sensitivity.’ However, compared to narrative arts such as novels, plays, and films, music appears to have a narrower path for exploring narratives that can evoke moral reasoning. So, how can musical imagination develop into moral imagination? Narrative arts feature characters and the ways in which various human groups in society relate and conflict unfold in virtual situations and stories (Gallagher & Hutto, 2008; Krueger, 2014), allowing for indirect experiences of diverse moral conflicts. In contrast, music, although operas and songs contain narratives with various characters, primarily consists of a flow of sound and lacks elements to judge moral right or wrong. Therefore, to demonstrate that musical imagination can become moral imagination, its explanation must be based on pure

instrumental music.

Even in the case of non-narrative instrumental music, we tend to create a narrative for it through its title, the external elements that the music suggests, and its expressive gestures (Kramer, 1991; Maus, 1997). In other words, to understand music, we often imagine it by creating a story. A narrative approach to music helps us understand music contextually by composing actions, emotions, feelings, and meanings in music as a single meaningful whole. Therefore, even pure instrumental music can be understood as the flow of emotion, conflict, and resolution when we assign it a certain narrative.

The narrative quality of music is important in fostering open forms of participation compared to literary genres. While literary narratives guide readers through fixed stories and characters with consistent personalities, musical narratives allow listeners to construct their own stories and meanings, free from the constraints of a predefined plot. For instance, when engaging with Beethoven's *Symphony No. 6 Pastoral* or Stravinsky's *The Rite of Spring*, we might imagine scenes such as the tranquility of nature or the primal essence of ancient pagan rituals. Still, these interpretations are not bound to a singular story, meaning, or emotion. In other words, the narrative of music is closely tied to moral imagination, as it enables us to subtly explore various emotions and conflicts that arise in ethical dilemmas by generating infinite layers of imagination and emotion. In short, the open-ended narrative quality of music can serve as a more flexible and expansive form of moral imagination, allowing us to experience ethical dimensions that cannot be fully conveyed through words or text.

Furthermore, it is crucial to acknowledge that most difficulties in moral judgment arise not in clear narrative situations where good and evil are clearly revealed, but in ambiguous emotional situations. Musical emotion embodies these dynamics with its levels of tension, conflict, resolution, and the harmony of subtle and ambiguous emotions (Langer, 1957). These musical emotions are akin to real-life feelings, such as chills, tremors, happiness, sadness, anger, and serenity (Juslin et al., 2010). Imagining various contexts and emotions of music during music-making and listening helps individuals understand, control, and accept emotions arising from conflicts and problems encountered in life. Thus, musical imagination aids in developing appropriate emotional responses and actions for various situations by fostering empathy for others' emotions and circumstances.

However, empathy itself is not ethics. For empathy to evolve into ethics, an empathetic encounter is necessary- an interaction where living systems, while maintaining their autonomy and independence, engage with each other in a way that fosters ethical understanding. Embodied

cognition explains that an organism's operationally closed system develops self-individuation and autonomy, establishing relationships with the environment based on this autonomy (Thompson, 2007; Varela et al., 1992). As a result, it is essential to concentrate on the autonomy of the organism. The following section will explore how, in music-making and listening, an organism can develop empathy and care for others by maintaining its autonomy.

2. Dialectic Empathy

Empathy is not necessarily ethical. Empathy in the absence of autonomy can lead to uncritical and passive immersion. For example, through Hitler's use of music as propaganda, gangster music, and white supremacist music, musical empathy could be used to suppress others or other communities (Higgins, 2018). For empathy to lead to ethics, 'intersubjectivity', which involves communication while maintaining a balance with others based on autonomy, is a prerequisite (Levinas, 1998; Scheler, 2008).

Can the process of musicing form intersubjectivity that enables empathy for others while preserving autonomous subjectivity? The process of developing empathy while preserving subjectivity is well explained by entrainment theory (Rabinowitch, Cross, & Burnard, 2012). In Physics, 'entrainment' describes a situation in which two or more oscillators synchronize their periods (Bittman, 2021). Entrainment theory explains how empathy can emerge through interactions with the environment while maintaining autonomy, but it does not describe a loss of identity. Thus, entrainment allows empathy for others to develop without abandoning oneself or becoming fully immersed in another. Fuchs and De Jaegher (2009) explained this as follows:

It is the continuous fluctuation between synchronised, desynchronised and in-between states that drives the process forward. The to-and-fro between attunement and alienation is even necessary in order to understand each other without melting into each other. Perfect synchronisation would lead to an undifferentiated, homogeneous feeling state. Therefore, misunderstandings and irritations are necessary as the dialectical counterparts of understanding (Fuchs & De Jaegher, 2009).

Thus, empathy is not a perfect match between the self and others, but a process of reconciling differences and harmonizing them, and such empathy can be observed in conversations involving social interaction or musicing (music-making) with others (Fuchs & De Jaegher, 2009). Rabinowich et al. (2012) explained that participants in musical ensemble activities share

intentions, emotions, actions, and cognitive processes in fragmented individual subjectivity and experience broad and continuous interpenetrating intersubjectivity. Members of ensemble music performing together move independently while making their own music, but they maintain intersubjectivity to create harmony and balance in the overall music. If one's subjectivity is weakened by immersing oneself in the music of the other, one's musical expression, breathing, balance, dynamics, and dynamism will disappear. However, if one focuses on own music without listening to other people's music and only strengthens own subjectivity, one will miss the breathing and timing of giving and receiving with others. Then, the balance and harmony will be broken, and the music will collapse. Therefore, in ensemble music, it is essential to make music while maintaining the subjectivity of each participant. Thus, music that is made together can help create empathy through intersubjectivity while maintaining one's own identity.

Additionally, the work of making music together involves various emotions, actions, discussions, revisions, practice, and reflection. Participants with excellent musical ability discuss problem-solving methods together so that participants who lack musical ability can actively participate. Moreover, practicing together is a process of finding harmony in one's music by adjusting each other's bodies, moving, and giving and receiving familiarity. In the end, the process of making music together is that the self and others, who have intersubjectivity, form empathy through coordination, correction, change, reflection, and consideration.

However, since listening to music has a more passive and static nature, it is presumed that it has less autonomy compared to making music, although the mirror neuron theory states that listening to music also involves moving (Gallese, Fadiga, Fogassi, & Rizzolatti, 1996). According to recent research, participatory music listening (Elliott & Silverman, 2015) can form empathy while maintaining intersubjectivity. Participatory music listening does not result in intimate and personal meaning created by the listener and the music alone, but rather forms meaning through exchanges with other music participants about how they hear, think, and feel about the music based on the listener's subjectivity. In this process, one can broaden knowledge about the self and others by meeting other people who interpret music differently or similarly. In this way, since participatory music listening involves jointly forming the meaning of music with other participants based on one's own subjectivity, empathy can be formed based on balanced intersubjectivity.

Since the process of musicing together with participants with autonomy and subjectivity involves reconciling differences and achieving harmony, it becomes possible to form synchronisation as a dialectical process, as described by Fuchs and De Jaegher (2009). In this

sense, this study considers the empathy created by participatory music-making and listening as 'dialectic empathy'. Dialectical empathy is not being completely immersed in the emotions of other participants, but it is a process of understanding, controlling, reflecting, and harmonizing the other and self with various emotions and meanings inherent in music while maintaining autonomy. Because dialectical empathy from participatory music-making and listening is not uni-directional, it moves and develops through imagination, expression, emotion, debate, revision, discussion, consensus, adjustment, change, and reflection. Therefore, it can expand the contact point with ethical values such as concern, care, understanding, and consideration.

In the process of forming dialectical empathy, the world to which one belongs is changed. For example, a person understanding and caring for a friend's situation by forming empathy in their relationship can change the meaning of their shared world by changing not only oneself but also the friend's mind and behaviour. The process of jointly generating the meaning of music changes the world by creating harmony with participants from various backgrounds. This is consistent with embodied cognition, which states that the meaning generated by an organism's embodied-enactive interaction with their environment affects both the organism and the environment. Therefore, connecting music and ethics through embodied cognition involves various participants of music producing values that are helpful in their lives together.

IV. Discussion and Implications

According to the previous discussion, praxial music education can achieve its ethical potential by centering on participatory music-making and listening. In other words, to fully realize its ethical possibilities, praxial music education must place participatory practices at the heart of teaching and learning. Participatory music-making and listening mean that everyone is vividly connected with others involved in music through a shared interest and love for music, rather than merely demonstrating advanced musical skills or providing high-level critiques of music. In other words, participatory music-making and listening should involve opening one's senses to the world, carefully observing others' expressions, movements, and breathing, and responding to and respecting their expressions and emotions. The process in which musical imagination and dialectical empathy constantly intersect can be described as participatory music-making grounded in concern and care.

The key is that participatory music-making, which emphasizes concern and care, begins with

Careful listening. What is attentive listening? Careful listening goes beyond merely observing the musical techniques, expressions, and emotions of others to capture the details necessary for making music. For example, you might explore why your friend is having technical difficulties at a certain point, why his breathing is rapid, why the tempo is fast, and other related factors. Attentive listening requires musical imagination. To deeply understand the difficulties your friend is experiencing, you need to imagine his emotional state (e.g., embarrassment, regret, and frustration). Attentive listening also leads to creative solutions that transcend technical challenges. For example, if your colleague is having trouble maintaining tempo, you can go beyond helping him acquire technical proficiency and instead reach a creative interpretation of the music by varying the tempo.

Meanwhile, dialectical empathy supports the process of harmonious collaboration by mediating the diverse opinions, demands, and emotions that may arise in cooperative music-making. In this way, musical imagination and dialectical empathy expand the ethical possibilities of participatory musicing by helping to resolve the various conflicts or challenges that may emerge during the process.

Secondly, collaborative music-making based on concern and care must emphasize the process over the outcome. This is crucial because focusing solely on the outcome can gradually alienate learners with lower musical abilities. To mitigate this, when students engage in collaborative creation or performance, teachers can assess the competencies necessary for the collaborative process rather than the final work or performance. This assessment can include factors such as how attentively they listen to others' opinions, whether they disregard or exclude the musical abilities of their peers, and whether they demonstrate an open attitude toward various musical attempts. By emphasizing the process in collaborative music-making, an inclusive musical environment is created where all learners can participate, fostering a sense that everyone is valued.

Thirdly, musical knowledge about life or for life becomes more important than knowledge about music itself, such as theory, technique, expression, and aesthetics. While some may criticize this approach as reducing music to a tool for life, it overlooks how deeply music is connected to the quality of human life. Students should recognize that making music, listening to music, understanding the meanings that music creates, and the process of creating music together can contribute to their emotional, social, and ethical growth. In this way, they can experience that music grows, transforms, and develops alongside life. In short, recognizing music as an important part of life highlights how musical activities enrich human existence.

Accordingly, we should consider music education that supports learners' emotional and social development. For example, imagine a 'Musical Emotion Expression Workshop' as a part of a school music program. In this workshop, students learn various musical techniques for expressing emotions, use music to convey their own feelings, share emotional experiences with peers, and give and receive feedback on each other's musical expressions. Students experiment with different musical tools, instruments, and techniques to express their emotions, empathize with their peers' musical expressions, and learn how to understand and respect emotions. This process helps students understand and express their own emotions while providing opportunities to strengthen social bonds through interactions with peers.

Fourth, teachers must exhibit ethical attitudes and professionalism. This is essential because teachers should be able to design collaborative processes in a detailed and systematic way with a deep understanding of students' musical abilities. Teachers should be able to provide customized education that accommodates diverse learning styles and capacities of the learners. For example, teachers can design teaching-learning activities according to sensory preferences. For learners who prefer visual learning, teachers can help enhance the student's understanding of musical concepts by providing visual scores that depict musical structures, timbres, dynamics, or rhythmic patterns. Conversely, for students who prefer auditory learning, teachers can help students understand music by directly demonstrating sound changes (or using sound sources or videos) rather than relying on symbols (scores) or theories. In addition, tasks should be designed to suit the learners' abilities for collaborative music so that all students can participate. For instance, students who struggle with instruments might engage in alternative activities like body percussion or vocalization, promoting an inclusive musical experience where everyone can actively engage.

In summary, for praxial music-making to expand its ethical possibilities, it requires careful listening, process-centered music education, musical knowledge for life, and the ethical attitudes and professionalism of teachers. These components converge at the intersection of musical imagination and dialectical empathy, fostering an empathetic music environment that nurtures the growth of individuals and class communities.

V. Conclusion

This study is valuable because it concretely supports the discussions of praxial music educators (Elliott & Silverman, 2015; Silverman, 2020; Van der Schyff, Schiavio, & Elliott, 2022), who explored the ethical values inherent in the praxial nature of music based on embodied cognition. Embodied cognition indicates that ‘the act of an organism is cognition.’ As such, it not only enables praxial music education to integrate theory and practice, but also provides a scientific basis for extending the rules, harmony, various emotions, narratives, contexts, meanings, and expressions inherent in music to human life. Additionally, embodied cognition supports the idea that the external values of music, which praxial music educators have pursued for a long time, are inseparable from music.

The Greek ethos and Ye-Ak philosophy pursued top-down ethics by educating about the laws of the universe, harmony, human character, form, and beauty contained in music. In contrast, embodied cognition is the pursuit of bottom-up ethics (Daly, 2016) that expects humans to create meaning beneficial to the world’s development through music. If the former pursued metaphysical ethics with metaphysical music, the latter aims for participatory, humanistic, and down-to-earth ethics by expecting the meaning created through people’s interaction with music in various parts of the world will be beneficial to the human world. Eventually, linking music and ethics through embodied promotes equality in music by allowing various kinds of music to exist in the world (Elliott & Silverman, 2015).

Connecting music and ethics through embodied cognition presupposes a context of collaborative music-making and listening that can lead to participatory sense-making. To achieve this, careful listening, process-centered music education, musical knowledge for life, and teachers’ ethical attitudes and professional competencies are necessary.

However, this study does not fully address all dimensions of how music connects to ethics. Specifically, it does not explore the process by which individuals acquire norms to adapt to their environment. This gap, limits a complete understanding of the ethical dimensions of praxial music from the perspective of embodied cognition. Therefore, this limitation suggests that follow-up research should be conducted from the perspective of virtue ethics rather than empathy or care ethics.

Ultimately, to guarantee that music and ethics can consistently foster openness, engagement and care in all musical contexts, diverse music education programs, educational environments that allow for the participation of diverse learners, and teacher education must be developed and studied. Through these initiatives, music education can nurture an empathetic musical community.

References

- Bittman, E. L. (2021). Entrainment is not synchronization: An important distinction and its implications. *Journal of Biological Rhythms*, 36(2), 196-199.
- Bowman, W. D. (2005). The limits and grounds of musical praxialism. In D. J. Elliott (Ed.), *Praxial music education: Reflections and dialogues* (pp. 52-78). New York, NY: Oxford University Press.
- Chong, H. J., Kim, B., & Kim, H. J. (2024). Analysis of music rationale and fidelity in music emotion regulation studies. *Journal of Music and Human Behavior*, 21(1), 89-113.
- Colombetti, G., & Torrance, S. (2009). Emotion and ethics: An inter-(en)active approach. *Phenomenology and the Cognitive Sciences*, 8(4), 505-526.
- Cook, N. (2001). Theorizing musical meaning. *Music Theory Spectrum*, 23(2), 170-195.
- Daly, A. (2016). *Merleau-Ponty and the ethics of intersubjectivity*. London: Palgrave Macmillan.
- Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. New York, NY: Harcourt Brace & Company.
- De Jaegher, H., & Di Paolo, E. (2007). Participatory sense-making: An enactive approach to social cognition. *Phenomenology and the Cognitive Sciences*, 6(4), 485-507.
- Di Paolo, E. A., & De Jaegher, H. (2021). Enactive ethics: Difference becoming participation. *Topoi*, 41(2), 241-256.
- Dissanayake, E. (2012). The earliest narratives were musical. *Research Studies in Music Education*, 34(1), 3-14.
- Elliott, D. J. (1995). *Music matters: A new philosophy of music education*. New York, NY: Oxford University Press.
- Elliott, D. J., & Silverman, M. (2015). *Music matters: A philosophy of music education* (2nd ed.). New York, NY: Oxford University Press.
- Fuchs, T., & De Jaegher, H. (2009). Enactive intersubjectivity: Participatory sense-making and mutual incorporation. *Phenomenology and the Cognitive Sciences*, 8(4), 465-486.
- Gallagher, S., & Hutto, D. D. (2008). Understanding others through primary interaction and narrative practice. In J. Zlatev, T. P. Racine, C. Sinha, & E. Itkonen (Eds.), *The shared mind: Perspectives on intersubjectivity* (pp. 17-38). Philadelphia: John Benjamins Publishing Company.
- Gallese, V., Fadiga, L., Fogassi, L., & Rizzolatti, G. (1996). Action recognition in the premotor cortex. *Brain*, 119(2), 593-609.
- Han, H. S. (2000). *Thought on Korean traditional music*. Seoul: Minsokwon.
- Higgins, K. M. (2018). Connecting music to ethics. *College Music Symposium*, 58(3), 1-20.

- Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination, and reason*. Chicago, IL and London: University of Chicago Press.
- Johnson, M. (1993). *Moral imagination: Implications of cognitive science for ethics*. Chicago, IL and London: University of Chicago Press.
- Johnson, M. (2007). *The meaning of the body: Aesthetics of human understanding*. Chicago, IL and London: University of Chicago Press.
- Juslin, P. N., Liljestrom, S., Västfjäll, D., & Lundqvist, L. O. (2010). How does music evoke emotions? Exploring the underlying mechanism. In P. N. Juslin & J. A. Sloboda (Eds.), *Handbook of music and emotion* (pp. 605-642). Oxford: Oxford University Press.
- Kant, I. (1987). *Critique of aesthetic judgement* (W. S. Pluhar, Trans.). Indianapolis, Indiana: Hackett Publishing Company.
- Kivy, P. (1989). *Sound sentiment: An essay on the musical emotions, including the complete text of the corded shell*. Philadelphia, PA: Temple University Press.
- Kramer, L. (1991). Musical narratology: A theoretical outline. *Indiana Theory Review*, 12, 141-162.
- Krueger, J. (2014). Affordances and the musically extended mind. *Frontier in Psychology*, 4, 1-13.
- Langer, S. K. (1957). *Problems of art: Ten philosophical lectures*. New York, NY: Charles Scribner's Sons.
- LeDoux, J. (1998). *The emotional brain: The mysterious underpinnings of emotional life*. New York, NY: Simon & Schuster.
- Lee, Y. J. (2024). Depending on mode and tempo cues for musical emotion identification in children with cochlear implants. *Journal of Music and Human Behavior*, 21(1), 29-47.
- Levinas, E. (1998). *Otherwise than being: Or beyond essence*. Pittsburgh, PA: Duquesne University Press.
- Matyja, J. R., & Schiavio, A. (2013). Enactive music cognition: Background and research themes. *Constructivist Foundations*, 8(3), 351-357.
- Maus, F. E. (1997). Narrative, drama, and emotion in instrumental music. *The Journal of Aesthetics and Art Criticism*, 55(3), 293-303.
- Métais, F., & Villalobos, M. (2021). Embodied ethics: Levinas' gift for enactivism. *Phenomenology and the Cognitive Sciences*, 20(1), 169-190.
- Plato (1992). *Republic* (G. M. A. Grube, Trans.). Indianapolis, Indiana: Hackett Publishing Company.
- Rabinowitch, T., Cross, I., & Burnard, P. (2012). Long-term musical group interaction has a positive influence on empathy in children. *Psychology of Music*, 41(4), 484-498.
- Reimer, B. (2003). *A philosophy of music education: Advancing the vision* (3rd ed.). Albany, NY: State University of New York Press.

- Rowlands, M. (2010). *The new science of the mind: From extended mind to embodied phenomenology*. Cambridge, MA: The MIT Press.
- Scheler, M. (2008). *The nature of sympathy* (P. Heath, Trans.). London: Routledge & Kegan Paul.
- Schiavio, A., van der Schyff, D., Cespedes-Guevara, J., & Reybrouck, M. (2017). Enacting musical emotions. Sense-making, dynamic systems, and the embodied mind. *Phenomenology and the Cognitive Sciences*, 16(5), 785-809.
- Schiller, F. (2004). *On the aesthetic education of man* (R. Snell, Trans.). Mineola, NY: Dover Publications.
- Silverman, M. (2020). Sense-making, meaningfulness, and instrumental music education. *Frontiers in Psychology*, 11, 837.
- Sloboda, J. A., & Juslin, P. N. (2001). Psychological perspectives on music and emotion. In P. N. Juslin & J. A. Sloboda (Eds.), *Music and emotion: Theory and research* (pp. 71-104). Oxford: Oxford University Press.
- Thompson, E. (2007). *Mind in life: Biology, phenomenology, and the sciences of mind*. Cambridge, MA: Harvard University Press.
- Thompson, E., & Varela, F. J. (2001). Radical embodiment: Neural dynamics and consciousness. *Trends in Cognitive Sciences*, 5(10), 418-425.
- Torrance, S., & Froese, T. (2011). An inter-enactive approach to agency: Participatory sense-making, dynamics, and sociality. *Humana. Mente*, 15, 21-53.
- Trevarthen, C. (2002). Origins of musical identity: Evidence from infancy for musical social awareness. In R. MacDonald, D. J. Hargreaves, & D. Miell (Eds.), *Musical identities* (pp. 21-38). Oxford: Oxford University Press.
- Urban, P. (2015). Enactivism and care ethics: Merging perspectives. *Filozofia*, 70(2), 119-129.
- Van der Schyff, D., Schiavio, A., & Elliott, D. J. (2022). *Musical bodies, musical minds: Enactive cognitive science and the meaning of human musicality*. Cambridge, MA: MIT Press.
- Varela, F. J., Thompson, E., & Rosch, E. (1992). *The embodied mind: Cognitive science and human experience*. Cambridge, MA: MIT press.
- Westerlund, H. (2002). *Bringing experience, action, and culture in music education* (Unpublished doctoral dissertation). Sibelius Academy, Helsinki.

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체화인지 관점에서 바라본 실천적 음악교육의 윤리적 가능성 탐구

최진경*

본 연구의 목적은 체화인지 관점에서 실천적 음악교육의 윤리적 가능성을 탐색하는 것이다. 실천적 음악교육학자들은 유기체가 환경과 상호작용하며 생성한 의미를 인지로 간주하는 체화인지에 기대어 공감과 돌봄을 음악교육의 윤리적 가치로 제시하고 있다. 하지만 이들은 음악이 윤리로 나아가는 지점들에 체화인지가 어떻게 적용될 수 있는지를 구체적으로 논의하고 있지 않다. 이에 연구자는 음악이 타인에 대한 공감과 돌봄으로 나아가기 위해 어떠한 조건들을 거쳐야 하는지를 논의함으로써 실천적 음악교육의 윤리적 가능성을 탐색하였다. 체화인지는 인지를 참여적이고 관계적인 것으로 간주하기에, 참여적 음악 만들기와 듣기에서 타인의 정서를 이해할 수 있는 음악적 상상력으로 공감을 형성하고, 이러한 공감이 상호주관성으로부터 생성된 변증법적 공감을 형성할 수 있다면 실천적 음악교육은 윤리로 나아갈 수 있다. 이에 따라 실천적 음악교육은 관심과 돌봄에 기반한 참여적 음악 만들기와 듣기를 강조하게 되는데, 이는 다음과 같은 시사점을 제시한다. 첫째, 주의 깊은 듣기에서 출발하는 참여적 음악하기가 필요하다. 둘째, 교수-학습의 결과보다는 과정에 집중해야 한다. 셋째, 음악을 위한 앎보다는 삶을 위한 음악적 앎을 강조한다. 넷째, 교사는 윤리적 태도와 전문성을 갖추어야 한다.

핵심어: 체화인지, 실천적 음악교육, 음악적 상상력, 변증법적 공감, 참여적 음악하기와 음악듣기

*주저자 및 교신저자: 서울대학교 교육연구소 객원 연구원 (cerves@naver.com)