Music and What It Is Like: What Theories of Mind Tell Us About the Experience of Music

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What is an experience of music?

An experience of music can be something as complex as playing an instrument and composing, or it can be something as simple as just listening to Beethoven's *Ninth Symphony*. However, at the point when Beethoven was composing his *Ninth Symphony*, he had already spent several years of his life unable to hear certain sounds and tones. It is estimated that at this point in his life Beethoven had already suffered from hearing loss for more than twenty years (Davies 42-43).[1] The cause of Beethoven's gradual hearing loss and eventual deafness are still debated and not completely understood.[2] Just two years before the first performance of Beethoven's *Ninth Symphony*, during a rehearsal of his work *Fidelio* in late November of 1822, friend and musician Anton Schindler accounted to a friend that "from the beginning of the duet in the first act, it was clear that [Beethoven] heard nothing of what was going on, on the stage" (MacCarthy 51). During this same rehearsal, the seventeen-year-old soprano Wilhelmine Schröder recounted of Beethoven:

> At that time the Master's physical ear already was deaf to all tone. With confusion on his face, with a more than earthly enthusiasm in his eye, swinging his baton to and fro with violent motions, he stood in the midst of the playing musicians and did not hear a single note! (Davies 56)

Both Schindler and Schröder describe in their accounts of the rehearsal that the usual conductor of the orchestra was also aware of Beethoven's inability to conduct the rehearsal.[3] Schindler describes that "fatal November day" as one in which Beethoven "had been smitten to the heart, and to the day of his death he lived under the impression of that failure" (MacCarthy 52). Succumbing to his hearing loss, Beethoven secluded himself after the incident during which time he wrote one of his most influential and brilliant compositions, his *Ninth Symphony*. How is it possible for a deaf Beethoven, in spite of lacking an essential ability to fully experience music, still able to compose a piece of music that he cannot himself properly experience? Beethoven's experiences of music help show how complicated experiences of music are. Even though Beethoven lacks the ability to experience music aurally, his mind is not affected by this disability because he is still able to continue to compose and write music. Beethoven's experiences of music help show that the relationship between music and the mind is both deeply personal and experientially complicated.

If experience does bear a relationship to the mind, then theories of mind ought to provide the information necessary for better understanding what is involved in an experience of music. The aim of this essay is to show that reductive and non-reductive theories of mind fail to fully capture subjective experience. This is a problem for understanding what an experience of music is because such theories do not clarify the relationship between mind and music—that is, the relationship between mind and the subjective experience of music. I believe that these theories of mind are unable to provide an explanation of the relationship between the mind and experience because both theories do not account for the first-person phenomenal dimension of conscious experience. Since these theories of mind fail to capture this subjective dimension of experience, I believe that reductive and non-reductive theories of mind cannot fully explain what an experience of music is like. By accounting for the first-person phenomenal dimension of experience that escapes these theories of mind, we can begin to understand what makes our human relationship with music so unique.

THE MIND AND THE EXPERIENCE OF MUSIC: REDUCTIVE PHYSICALISM & NON-REDUCTIVE DUALISM

In this section, I will examine the neurological findings of the differences in the brains of musicians and nonmusicians and how these findings in conjunction with reductive and non-reductive theories of mind are understood to relate to the experiences of subjects.

Both reductive and non-reductive theories of mind understand the mind in relation to available information about mental phenomena but differ in their understandings of mental phenomena. Reductive theories of mind are views where complex thoughts or mental states can be reduced to physical information about

the mind. In the case of neuroscience, the mind is reducible to physical information about the brain and neural activity. On this view, the mind and the sorts of activities associated with mental processes come together in the body and the two do not exist separately. Reductionism is aimed at explaining mental phenomena described in one theory in terms of mental phenomena described in another theory.[4] reductionism, then, would contend that mental phenomenon can be simplified in terms of physical information about the neurological findings of the brain. If this sort of reductive physicalism is able to explain mental phenomena in terms of physical information about the brain, then physical information about the brain should also be able to tell us something about subjective experience. Since reductive theories of mind associate the mind with neural activity and the processes that come together in the brain, neuroscience, then, provides a way of understanding the subjective experience of music using physical information about the neurological findings of the brain. This means that it is possible that our subjective experiences of music can be fully explained by cognitive activity and physical states of the brain while experiencing music. If this is the case, then physical information about the brain should be adequate for understanding the subjective experience of music.

A study conducted by Gottfried Schlaug was aimed at addressing the differences between the brains of musicians and nonmusicians.[5] What this study found is that there are structural differences in the brains of musicians that correlate to the complex physical and mental operations that musicians perform. According to this study, a musician was defined as someone who has had exposure to musical education and is proficient in reading music as well as performing it. A non-musician was defined as someone who has never played a musical instrument and has little to no education in music. This would suggest that the experiences musicians and non-musicians have of music somehow attribute to the physical structure of the brain. According to this study, A musician is defined by her experiences because physical information about the brain reflects her experiences. In this sense, physical information about the brain is able to tell us something about experience because the brain *is* the relationship between mind and experience. For example, the corpus callosum is a part of the brain that is associated with inter-hemispheric communication that underlies motor sequences. This area of the brain was significantly larger in musicians, particularly in those who began musical training before the age of seven years old.[6] Those musicians who had early experiences of music also exhibited symmetry between the left and right hemispheres of the brain which was found to have strong correlations to the age of commencement of musical training.[7] The symmetry exhibited by the hemispheres of the brain is understood as having to do with the motor cortex and handedness.[8] What this physical information suggests is that the kinds of complex motor skills involved in playing a musical instrument engages both hemispheres of the brain and there is an increased communication between the two hemispheres that

attributes to their physical symmetry. This physical information about the brain of musicians suggests that mental phenomena underlie experience. What can be concluded from this sort of physical information about the brain is that mental phenomena and experience exhibit a relationship that is reflected in the physical structure of the brain. However, if we can gain an understanding of both mind and experience from physical information about the brain, then what exactly does physical information about the brain tell us about the experience of music?

On the other hand, non-reductive theories of mind maintain that the mind and the body exist separately but interact, causally or otherwise. Whereas reductive theories of mind reduce consciousness and intentional states to cognitive processes, non-reductive theories preserve the separation of mind and body. Frank Jackson offers an argument opposing reductive theories of mind through his famous example of achromatic Mary.[9] This thought experiment in conjunction with what has become known as the knowledge argument,[10] provides support against a purely physical understanding of the mind. If it is possible to gain a sense of mental phenomena as related to the experiences of both the musician and non-musician from physical information about the brain, then physical information should be able to tell us something about the experience of music and the mental phenomena associated with it. Yet, even if physical information is able to tell us something about the experiences of musicians and non-musicians, what about the experience of music can it tell us? Jackson's example of achromatic Mary[11] shows that if physical information is able to tell us something about experience, then Mary should know something about the experience of color if she is given all the physical information about color vision. What Jackson shows is that although Mary may be an expert on all physical information about color vision, Mary does not know everything about the experience of color because she has never experienced seeing color for herself.[12] It stands to reason that upon being let out of her colorless world and into a colored world, Mary would undoubtedly learn *what it is like*[13] to visually experience color.[14] In this regard, physical information about experience does not provide Mary with everything she needs to know *what it is like* to experience seeing color for herself. Mary does not know *what it is like* because physical information does not provide her with the conscious mental phenomena that underlie the experience of color. So, if Mary cannot know *what it is like* to experience color from physical information about color and color vision, then contrary to reductive physicalism, "consciousness" as a mental phenomenon is not reducible to physical information about the neurological findings of the brain. In other words, mental phenomena are not reducible to physical phenomena. What Mary shows is that there are non-physical aspects of experience that are left out of a physical account because she acquires new knowledge about *what it is like* to experience color that she is not given in physical information about color vision.

Jackson's Physical Knowledge Argument

1. Reductive theories of mind provide all the **physical information** about experience. (premise)
2. There is some information about experience that **reductive** theories of mind do not provide, namely the **'what it is like'**-experience. (premise)
3. Thus, some facts about experience are left out of a **reductive** account. (1,2)
4. Therefore, some aspects of experience are **not physical**. (3)

Through Jackson's argument, what Mary shows us is that she cannot know *what it is like* without subjective experience. This is because physical information cannot provide knowledge of the subjective states of experience. Since subjective experience is not reducible to physical knowledge, then this aspect of experience must be non-physical. The subjective aspects of experience that tell us *what it is like* are non-physical aspects that reductive physicalism cannot fully account for. If we consider that the mental phenomena associated with subjective experience is in one way reducible to physical information about the brain and yet also non-physical, then perhaps it is possible to provide Mary with the knowledge she is missing about the experience of color through a non-reductive dualist account. A non-reductive dualist account of mental phenomena and conscious experience would provide all the non-physical information about the experience of color that physical information does not provide. Consider Jackson's Physical Knowledge Argument and the same scenario with Mary, except that this time she has all the non-physical information about color vision instead. So, in this case, Mary is provided with all the non-physical information about subjective experience and 'what it is like' to experience color. Now, if this information is truly non-physical, then the mental phenomena that underlie subjective experience cannot be reduced to anything physical. This means a newly informed Mary should now have all the information she needs to know what the experience of color is like. As it turns out, non-physical information cannot fully account for the physical aspects of experience.

Churchland's Non-Physical Knowledge Argument

1. Non-reductive theories of mind provide all the **non-physical information** about experience. (premise)
2. There is some information about experience that **non-reductive** theories of mind do not provide, namely the **physical aspect** of experience. (premise)
3. Thus, some facts about experience are left out of a **non-reductive** theory. (1,2)
4. Therefore, some aspects of experience are **physical**. (3)

Since all the physical information about color vision does not provide Jackson's Mary with knowledge of *what it is like* to experience seeing color for herself, then perhaps Churchland's Mary is in a better position to know *what it is like* if she has all the non-physical information about color vision. As it turns out, non-physical information about color vision also falls short of providing knowledge about subjective experience. What Churchland's argument and Jackson's thought experiment about Mary help show is that she cannot acquire knowledge about *what it is like* without subjectively experiencing it for herself. A reductive approach to the mind presents a theory that is unable to account for subjective experience because mental phenomena are not reducible to physical phenomena. However, a non-reductive approach to the mind presents a theory that also cannot fully account for subjective experience because mental phenomena are not reducible to non-physical phenomena. Subjective experience includes a first-person aspect of experience that these theories of mind cannot fully account for. Without firsthand experience, Mary cannot gain the requisite knowledge needed to know *what it is like* to experience seeing color for herself.

Conclusion

As both Beethoven and Mary show, "experience" is not something that can be fully explained in reductive and non-reductive theories of mind because it is more than an event, process, or occurrence. There is a first-person aspect of experience that cannot be fully accounted for through physical and non-physical information about the mental phenomena that underlie experience. Beethoven's knowledge of *what it is like* to be a deaf musician is based on his subjective experiences of music and is not something he can gain knowledge of through information about the experience of music because he was becoming increasingly deaf and is no longer able to fully experience music for himself.

> But how humiliated I have felt if somebody standing beside me heard the sound of a flute in the distance and I heard nothing, or if somebody heard a shepherd sing and again I heard nothing- Such experiences almost made me despair, and I was on the point of putting an end to my life- The only thing that held me back was my art. For indeed, it seemed to me impossible to leave this world before I had produced all the works that I felt the urge to compose; and thus I have dragged on this miserable existence- a truly miserable existence, seeing that I have such a sensitive body that any fairly sudden change can plunge me from the best spirits into the worst of humors. (From The Heiligenstadt Testament, quoted in Davies 45)

Beethoven's accounts of what his experiences of music are like show that knowledge of his experiences can be both a source of inspiration and torment for him and that this information finds its full expression when it is understood as being situated according to the subject whose experience is also mediated by hearing loss. If it is possible to gain a sense for the subjectivity of experience through accounts of *what it is like*, then it is because these descriptions refer to knowledge about a first-person aspect of experience. To properly understand what an experience of music is like for someone like Beethoven, the first-person aspect of experience that is captured in knowledge about *what it is like* must also be taken into consideration because his experiences of music had gradually changed throughout his life as a result of his hearing loss. Since knowledge about subjective experience seems to be left out of physical and non-physical information about the mental phenomena that underlie experience, then perhaps Phenomenology can account for the first-person aspect of experience that is necessary for fully understanding *what it is like* for Beethoven to continue to be a part of the world of music despite losing a crucial ability for the full experience of music. A phenomenological approach would mean beginning with consciousness and conscious experience which should provide a more appropriate access point for knowledge about *what it is like* to experience music with a disability like Beethoven's. Phenomenology provides a way to clarify the role of hearing loss in Beethoven's experiences of music which makes it possible to understand how Beethoven's disability changes his experiences of music without impeding his ability to continue to create music that he cannot fully experience for himself. In other words, if Beethoven cannot acquire the requisite knowledge of *what it is like* to fully experience music because of his hearing loss, then Beethoven's connection to the music world must point to a perceptual relationship in subjective experience that does not compromise or damage the relationship between mind and music. A phenomenological account of perception leaves the connection between mind and body open to new and changing information about *what it is like* to experience music so that Beethoven can continue to compose new music even though he cannot fully experience the music he has written for himself.

NOTES

1. Beethoven mentions his "strange deafness" in a letter to friend, physician Franz Wegeler, but does not date the letter. The estimated date of the letter is Junje 29, 1801.
2. See Davies, P.J., 2001 & MacCarthy, M., 1936.
3. Davies, P.J., 2001, pp.56-57, & MacCarthy, M., 1936, pp.50-51. Shröder's account alleges that Conductor Umlauf "had to charge himself with the heart-rendering business of calling [Beethoven's] attention to the fact that the opera could not be given under his direction". Schindler, on the other hand, suggests that the conductor had "proposed a pause of rest, without giving the reason" after the chorus had become confused, after which "the same thing began again with the same confusion". It was after

this break that Schindler claims that he wrote in the notebook Beethoven used to communicate, 'I beg you not to go on. I will tell why, at home.' Whether or not Beethoven was spared the humiliation of being told he was unable to conduct is not important, but what does matter is that it is clear from both accounts that Beethoven was affected by his hearing loss and could no longer conduct.

4. This understanding of reductionism is modeled after what is presented in this article: Churchland, P.S. & Sejnowski, T.J. "Neural Representation and Neural Computation" in *Philosophy of Psychology: Contemporary Readings*, edited by Jose Luis Bermudez, pp.151-181.

5. I am referring to two particular articles by Dr. Gottfried Schlaug. Please see *References* for both articles.

6. Schlaug, G., 2003, pp.368-369.

7. Schlaug, G., 2003, p.369.

8. Schlaug, G. , 2003, p.369.

9. Jackson, F., 1982, pp.127-136.

10. See also Jackson, 1986

11. Jackson, F., 1982, p.130.

12. For whatever reason, Mary has been confined to a black and white room that is completely devoid of color for her entire life.

13. Nagel, T., 1974, pp.435-450.

14. Just to clarify, Mary has always had the ability to perceive colors but she has only had achromatic experiences; i.e. experiences devoid of colors.

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