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“Harmony and Dissonance”: The Musical Perspective on Posthumanity

After silence that which comes nearest to expressing the inexpressible is music.
– Aldous Huxley, “The Rest is Silence,” 1931

Abstract:

This paper explores the role of music as a communicative tool between the human and the posthuman. It utilizes the theories of embodiment and performativity of Karen Barad and Deniz Peters, as well as the perspectives of Continental Realism and contemporary phenomenology (Serres, Merleau-Ponty, Harman, and Morton). The examples are drawn from a range of pieces of speculative fiction: dystopia, biopunk and science-fiction. It is shown that the authors bring to attention the enharmonic quality of the relationship between the ALife and its creators and advocate eupsychian coexistence between these, portraying posthumanity as *musica ficta*: the sounds without notation that, although not recognized by *musica recta* (“true music”), make the invisible part of reality outside of currently described systems.

Keywords:

music, dystopia, posthuman, phenomenology, body

Introduction

The contemporary debate about the possibility of finding common ground between human demiurges and their A.I. and ALife creations, like companion robots and organoids, ranges from anthropomorphizing hopes to uncanny valley nightmares. The fear of artificial progeny that might surpass contemporary people and fail to express any intergenerational solidarity pushes researchers to ask questions about programming emotions and/or moral sense into the "mind children," and to seek ways of effective communication between many forms of beings: from enhanced animals¹ to bots. Not the least of these concerns is about the prospects of the rise of designer babies, fanned by He's experiment² and threatening us with scenarios straight out of Kress's *Sleepless* trilogy (1991–96): the dominant class taking over the despised "ordinary" humans. The cognitive processes of ALife and A.I., as well as the languages they would use or that they already use, are largely an enigma. The quest for a posthuman *lingua franca* is more than the question of choosing between English, Chinese or zero-one code: it touches upon the universalist attempt to find a shared subjective sensitivity that might become the basis for truly global communication.

In the following, I propose to consider music as a universal language, accessible to anything affected by sound waves, thus to any type of posthuman or transhuman being that may arise. I will concentrate on ALife, with the view to the bioethical discussion over He's experiment and numerous attempts of synthetic biologists to create artificial life. Given the lack of sufficient physical evidence, the examples will be drawn from a range of eugenic and posthuman dystopias as well as biopunk: subgenres of speculative fiction featuring the attempts to create a perfect race and often involving the reflection on the outcome of emerging biotechnologies.

The Dystopian Harmony

Aldous Huxley, hailed as the progenitor of eugenic dystopia, in his essay collection *Music at Night* (1931)³ spoke about silence as the nearest approximation to inexpressible Otherness. It would seem, then, that to approach a posthuman being, ALife arising from the constant evolution of man, environment and machine, it is the lack of sound that paradoxically enables communication. The "sonorous emptiness of the world,"⁴ though, is molded into a desired harmony⁵ only by the simultaneous existence of music, which opposes the destructive

1) George Dvorsky, "All Together Now: Developmental and Ethical Considerations for Biologically Uplifting Nonhuman Animals," *Journal of Evolution and Technology* 18, no. 1 (2008): 129–142.; "Zoolingua – Let's Talk," *Zoolingua*, Accessed August 28, 2019, <http://zoolingua.com/>.

2) In 2018 it was revealed that He Jiankui, a Chinese scientist, genetically modified human embryos and two children, Lulu and Nana, were born, supposedly immune to HIV. It has provoked international debate and harsh criticism of He's actions. David Cyranoski and Heidi Ledford, "Genome-Edited Baby Claim Provokes International Outcry," *Nature* 563, no. 7733 (November 2018): 607–608, <https://doi.org/10.1038/d41586-018-07545-0>.

3) Aldous Huxley, *Music at Night* (London: Chatto and Windus, 1931).

4) Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies*, trans. Margaret Sankey and Peter Cowley (New York: Continuum, 2008), 136.

5) Harmony can be primarily understood as an ancient concept relating to the fundamental idea of beauty, but it has also many narrower definitions, depending on the context and the epoch. In broad strokes, it can be defined as consonance of various elements, whether musical or not musical, in the aesthetic, political, social and other frameworks. Due to the broad context and interdisciplinary nature of utopian studies, harmony in this article is understood in accordance with the above general definition. One must, of course, acknowledge several differences and possible interpretations in the use of the term in various analyses, as well as difficulties in the application of notions from musicology to more general utopian studies or posthumanities. Thus, in relation to music harmony will be taken to mean a broadly conceived accord of sounds, whereas for example enharmony would be understood as a specialist

din of amorphous clatter. As Michel Serres poetically philosophizes: “Music produces silence, which in turn reduces music to its elemental self, almost perfect. Music produces silence like a beautiful musical singularity, a rare example of harmony.... Music surrounds or envelopes or includes silence, carrying no single meaning in order to elevate all meanings.”⁶ Thus, to look for a device allowing us to find harmony with the posthuman, we need to turn to music – as a practice, a theoretical framework, and as a device, appearing in the literature dealing with the rise of the novel tonalities of humanity.

Eugenic dystopias – and, to a degree, the accounts given in science-fiction – provide literary environment and speculative evidence for the discussion of new possible harmonies. However, music in dystopian worlds is rarely used for communication between people, and even more so – with other kinds of humanity and aliens. Rather, it is presented as a means of social control: the legacy of the Nazi camp orchestras still resounding in the imaginations of writers, assailed from the other flank with the clamor of popular music. It frequently gives rise to the fleeting and disparaging vignettes of Beethoven, Wagner, or Nacio Herb Brown,⁷ aesthetically clashing with the horrible abuse of people by people. This use of music as an oppressive tool was succinctly grasped by Orwell, according to whom music’s “function is to prevent thought and conversation, and to shut out any natural sound, such as the song of birds or the whistling of the wind, that might otherwise intrude.”⁸ This statement is a mirror reflection of the time that produced it: in musical aesthetics modernist intellectualism reigned, already, though, precipitating on the brink of Merleau-Ponty’s holism – it sides sound with noise and the mind, rather than with freedom and the body.

Huxley’s *Brave New World*, on the other hand, connects the body, music and noise, all three united in “Orgy-Porgy,”⁹ reproducing the belief in sound as the source of misunderstandings. This synthetic music, performed on “hyper-violin, super-cello, and oboe-surrogate,”¹⁰ reposes on hypnotizing rhythm that sends the society into a sort of a trance – sometimes more powerful, provoking a mass hysteria, and sometimes simply creating for them an elusive world in which:

the music of the radio was a labyrinth of sonorous colours, a sliding, palpitating labyrinth that led (by what beautifully inevitable windings) to a bright centre of absolute conviction; where the dancing images of the television box were the performers in some indescribably delicious all-singing feely; where the dripping patchouli was more than scent – was the sun, was a million saxophones, was Pope making love, only much more so, incomparably more, and without end.¹¹

concept, strictly associated with different notation for the same sound. It is important for this analysis as it allows for the perception of inherent sameness even if the elements of harmony are transcribed – or biotechnologically designed – in varying manner.

6) Serres, *The Five Senses*, 136.

7) An American composer, famous for the song “Singing in the Rain” (1929), dystopianized by Kubrick in his adaptation of *A Clockwork Orange* (1971).

8) George Orwell, “Pleasure Spots,” in *Smothered Under Journalism: 1946*, Collected Writings, vol. 18, (London: Secker and Warburg, 2001), 31. As quoted in Gregory Claeys, *Dystopia: A Natural History* (Oxford: Oxford University Press, 2017), 442, <https://doi.org/10.1093/acprof:oso/9780198785682.001.0001>.

9) The name relates to one of the techniques of social control described by Huxley in *Brave New World*. Basically, it rests on the release of internal tension via group singing, taking drugs and having sex, and is treated as a form of entertainment but also a form of a communal activity, similar to a religious rite.

10) Aldous Huxley, *Brave New World* (New York: Random House, 2008), 145.

11) *Ibid.*, 135.

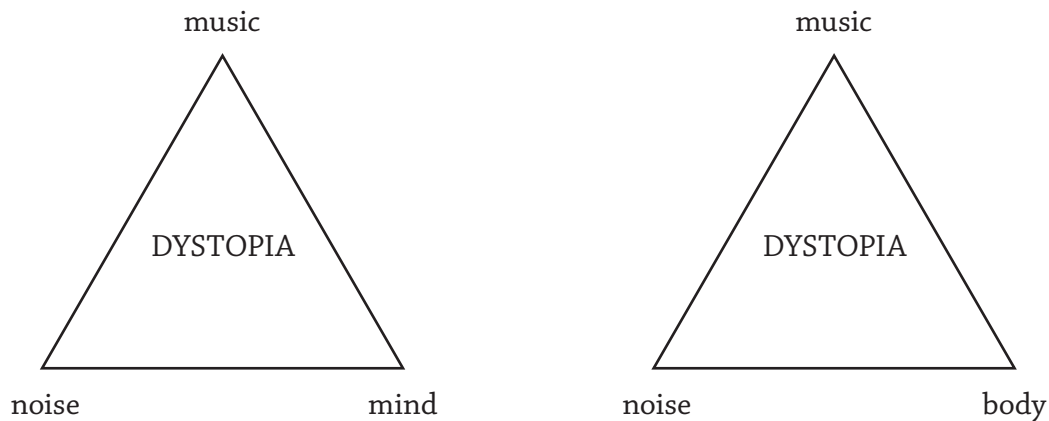


Figure 1. The left triangle shows the connection Orwell makes while the right one presents Huxley's template for the role of music in the eugenic dystopian world.

The body, in this model, is appropriated by the artificial, augmented sounds that serve the purpose of uniformization and totalitarian control. In terms of posthuman music it is worth looking at the dystopian landscapes painted in Vonnegut's *Player Piano* (1952) or Frigyes Karinthy's *Voyage to Faramido* (1921). In the case of Vonnegut's novel, music-making appears as a typically human occupation that has been taken away by the mechanized pianola, or rather – an economic system that lays off human workers for more efficient machines. Karinthy's earlier vision goes in the opposite direction: Faramido is an ALife utopia, where artificial beings assume the most "natural" language: music (apparently, in the simple C-major scale), not necessarily and not specifically human. Still, rather than sound, it utilizes notation, thus entering the controlled realm of systematization.

The exclusion of humanity from perfect harmony shows at the same time the richness of human nature that cannot be coded in a few simple letters. The coinciding eugenic debates and discoveries in molecular biology (most notably, DNA, e.g., the discovery of the double helix in 1951) created the background for the reflection on different types of codes that exists in the world and their "ownership" by the sphere of human-made culture. In both stories, though, music comes from the non-organic rather than organic beings, thus questioning its biological naturalness and portraying it as a product rather than a free flow, more typical for contemporary texts. Nevertheless, these attempts to show non-human sources of musical communication are early steps to the reflection on posthuman and non-human subjectivity, now seriously considered by the theorists of the "universe of things": for Steven Shaviro, who identifies himself with speculative realism, "song" becomes substitute for the unknown inner reality of the "hidden objects."¹²

Although it may seem that music in dystopias is disembodied, this is not to say that musicality and embodiment are non-existent in the bionarratives as devices facilitating talking about the nature of modified bodies. In Bear's *Blood Music* (1984) the characters listen to the "friction" of their altered hematopoiesis, made up of "sounds. Not sounds.... Activity.... seasons of symphonies."¹³ The protagonist Vergil Ulam's blood is infused with noocytes with which he develops a relationship. While the nanobots and Virgil are distinct beings, at the same time they form one organism, and develop harmonious coexistence metaphorized as music and

12) Stephen Shaviro, *The Universe of Things: On Speculative Realism* (Minneapolis and London: University of Minnesota Press, 2014), 145, <https://doi.org/10.5749/minnesota/9780816689248.001.0001>.

13) Greg Bear, *Blood Music* (New York: Open Road Media, 2014), n.p.

experienced as music by the characters. In this case, it seems a natural choice in communication; however, it needs to be pointed out that further on in the narrative incomprehensible sounds form words to emphasize the particular messages of the non-human Others. Bear's narrative points to the internal posthumanity in which the Cartesian ego must orient itself in relation to the altered body. Still, it is only the beginning of "feeling in"¹⁴ the internal harmonies: the posthuman and human Other left outside of the solipsistic hymn to self.

Certainly, the ungrounded belief in *musicophilia* being a special quality of only true humanity, perhaps a part of the mystery of human nature, as implied in Vonnegut's novel, does not help in the acknowledgement of music as shared common ground between human and posthuman. A similar example is provided by Oliver Sacks¹⁵ in his 2007 book: the Overlords, the aliens from A.C. Clarke's *Childhood's End* (1953), are unable to partake in the musicality of the human race. This neuro-cerebral approach stands in stark contrast with everyday experience of the successful communication with the non-human world, both animate and inanimate. The reactions that can be elicited and the stimuli we may receive from animals, plants or even rocks testify to the essential viscerality of music. This basic observation has been expounded upon by, for example, Michel Serres, Karen Barad and Deniz Peters,¹⁶ leading to the statement that music, in its performativity and universality, extends to all species and bodies, and spans its harmony over a range of synesthetic experiences. Rather than simply "hearing in" music, "feeling in" seems a more proper – and feasible – strategy, since the sound waves are received not solely through our ears. As Serres writes:

Sight distances us, music touches us, noise besieges us. Absent, ubiquitous, omnipresent sound envelops bodies. The enemy can intercept radio transmissions but does not have access to our semaphore; sight remains unintrusive, sound-waves will not be contained. Looking leaves us free, listening imprisons us... Practically all matter, particularly flesh, vibrates and conducts sound... Local vision, global listening: more than just ichnography, geometral for both the subject and object, hearing practises ubiquity, the almost divine power of universal reach. Singular optics, total acoustics. Hermes, the god of passage, becomes a musician, for sound knows no obstacle: the beginning of the total ascendancy of the word.¹⁷

This observation is of crucial importance for the examination of the possible harmonious existence of humanity along with posthumanity. Following Merleau-Ponty, the bridge of communication, and thus harmony, is "a grip we have on the world,"¹⁸ depending on the inter-corporeal relation between different types of beings and experienced in flesh. Merleau-Ponty recognizes language as central to culture and precedent to music,¹⁹ and his approach seems to agree with the naturalist standpoint of such thinkers as Steven Pinker,²⁰ seeking to reduce music to a derivative of the structures that already exist in the brain which evolved to fulfill other functions. However, in common experience, matter reverberates with resonances, and sound proves to be an effective

14) Deniz Peters, "Touch: Real, Apparent, and Absent," in *Bodily Expression in Electronic Music: Perspectives on Reclaiming Performativity*, eds. Deniz Peters, Gerhard Eckel, and Andreas Dorschel (New York: Routledge, 2012), 21, <https://doi.org/10.4324/9780203145098>.

15) Oliver Sacks, *Musicophilia: Tales of Music and the Brain* (New York and Toronto: Alfred A. Knopf, 2007).

16) Serres, *The Five Senses*; Peters, "Touch"; Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter"; and *Signs: Journal of Women in Culture and Society* 28, no. 3 (2003), <https://doi.org/10.1086/345321>.

17) Serres, *The Five Senses*, 47.

18) Maurice Merleau-Ponty, *Le primat de la perception* (Lagrasse: Verdier, 1996 [1934]), 41–53.

19) Maurice Merleau-Ponty, *The Structure of Behavior*, trans. Alden L. Fisher (Boston: Beacon Press, 1963), 120–121.

20) Sacks, *Musicophilia*.

tool for the communication between races, ages or species. It breaches the divide between human and animal, human and plants, and even with inanimate matter. Famously, Forster's caves of Marabar resound with an echo of ultimate Otherness, incomprehensible for reason and yet felt and experienced. This would be impossible if music were reliant on individual development. The rhythms, silences and melodies of corporeity suggest the non-evolutionary view of music, as a universal independent from the "fickle tinkerer,"²¹ and superior to all arts and means of expression: a supreme harmonizing mode, not relying on previous neural structures and communication networks. It seems to call on the mythical mode of timeless substances. After all, as Serres writes, Orpheus's harp had nine strings – one per each muse – and this universal and transcendent quality allowed him to en flesh the shadows from Hades.²² The lack of subjective and physical continuity²³ between the human and the posthuman, a necessary prerequisite of harmony, can therefore be made up for by music, since the latter reaches to the deeper layers of being than simply codes of language or of DNA.

The problem of music as a product, and thus already artificial and disposable, or fully dependent on the "humanity" of the user, stems from the fact that it is perceived solely as *musica recta*, in other words, the approved and codified system of sounds, failing to acknowledge the existence of sharps and flats and other microtonalities. Posthumanity exists in the realm of *musica ficta*, unregulated and unrestrained. These terms, coming from the medieval practice of music, show a line drawn between the written and the performed, between the symbolic and the lived. According to Barad, "language has been granted too much power"²⁴: ironically, what is physical and factitious is labeled as *ficta* – and thus discarded as not relevant. The post-human theory of music tried to redress this apparent incongruity, reaching out to the actual rich and individual experience of corporeal "feeling in," rather than intellectual "listening in" to music. It might be that this escape into the waves and vibrations of physicality and the celebration of diversity is but a reverse effect and a reaction to the metanarratives proscribing ever novel *rectas*. However, it seems the only strategy for humanity faced with altered bodies and new types of matter. In this view, the attempt to codify the practice of human life and arrive at some sort of a norm would go against common experience, put in relief by the ever increasing technological possibilities of human modification and "rewriting life." Incidentally, this is related to the role music is granted in the most recent dystopias deriving from eugenic narratives. Just like humanity explored the realm beyond notation, the "owned" music, appropriated by an external source of control, like a state, becomes one's "own" individualized music, more often than not displaying enharmonic rather than simply harmonic qualities. Whereas harmony underscores idealized coexistence of different elements, which might result in a dystopian, totalitarian attempt to subsume all under one system, enharmony acknowledges the subtle differences between sounds that for an untrained ear may seem the same: it validates the barely perceptible discord as an element of a functional system.²⁵

21) Allen Buchanan, *Better Than Human: The Promise and Perils of Enhancing Ourselves* (Oxford: Oxford University Press, 2011), 29. Music here would not be dependent on evolutionary processes but would constitute an unchangeable quality, with the connective potential between forms of humanity and non-humanity.

22) Serres, *The Five Senses*, 122.

23) Francis Fukuyama, *Our Posthuman Future* (New York: Farrar, Straus and Giroux, 2002); Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 1989).

24) Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs: Journal of Women in Culture and Society* 28, no. 3 (2003): 801, <https://doi.org/10.1086/345321>.

25) Enharmony is contemporarily understood, as "pitches that are one and the same even though named or 'spelled' differently, e.g., G# and Ab or E and Fb. Pitches related in this way are said to be enharmonic equivalents of one another. In systems of tuning other than equal temperament (in which all semitones are of the same size), two pitches forming such a pair may not be absolutely the same.... In conventional keyboard instruments, where a single string or pipe must produce both members of a pair, the two will

The Embodied Enharmony

The scenarios for musical exchange between N(atural)-life and ALife are explored by contemporary writers, Nancy Farmer (the Matteo Alacrán cycle, 2002 and 2013) and Neal Shusterman (*The Unwind Dystology*, 2007–2014).²⁶ Building upon the heritage of Huxley, they bypass the worries of Orwell, who strictly separated music from naturalness and feared that mind can be overtaken by the invasiveness of noise. In Huxley's *Brave New World* a similar anxiety was expressed, this time concerning the interception of body by controlling rhythms, acting on the subconscious and overwhelming the senses of the citizens of the World State. As Claeys²⁷ writes, though, after the Second World War the dystopian impulse has been weakened and the eugenic themes were absorbed by science fiction (referenced above), and temporarily by young adult literature. Both Farmer and Shusterman represent this crossover tendency of combining the heritage of adult and young adult literature, drawing on the feminist appreciation of the body and validation of the place of the posthuman and postnatural in the world.

Both series are set mostly in the American South. The Matteo Alacrán cycle was created as a reaction to the atrocities of Farmer's home environment, the American-Mexican border, connected with illegal immigration and drug trade. She envisions a future in which both problems are solved by the creation of Opium, a fictional state ruled by a drug dealer who enslaves immigrants and who ensures his immortality by transplanting parts from clones he breeds in a high-tech Paradise. Shusterman's *Dystology* is also a transplantation dystopia: he builds upon the abortion and donation scandals from the contemporary US, painting a world in which abortion is illegal but giving up a child for organs is accepted, as long as all parts "live" in somebody else. This leads to the creation of posthuman creatures, made up entirely of other people's tissues. Both authors have experience with playing music and use it as a device to talk about the attempts to establish communication between the varieties of humanity.

In Farmer's Mexican narcotopia Matt, a donor-clone of the cartel boss, El Patrón, is treated like an animal, and the only way for him to express his feelings is to secretly play piano. "Even so, the ability to create music filled him with a joy too large to contain. He forgot where he was. He forgot he was a clone. The music made up for everything—the silent contempt of the servants, Steven's and Emilia's snubs, Tom's hatred."²⁸ Still, Mozart and Beethoven help Matt only to look into his own subjectivity, not to harmonize with his surroundings. "Once, he'd been satisfied by the music alone. Now he had learned about friendship, and it was no longer enough to play without an audience."²⁹ The Classical notes of the Austro-German heritage, resounding in the heart of Latin America, prove insufficient to reach beyond one's self. This reaches back

always be equivalent, even if the instrument is so tuned that certain intervals are out of tune. This has led on the one hand to systems of temperament and on the other to experiments with enharmonic keyboards with separate keys for at least for some pairs that would otherwise be equivalent. The term enharmonic keyboard is also used, however, for instruments intended to produce microtones for their own sake." Willi Apel, *The Harvard Dictionary of Music* (Cambridge, MA and London: The Belknap Press of Harvard University Press, 2003), 294–295. As can be seen, this extended definition of enharmony shows it as a concept accommodating for a specific kind of harmony that escapes totalitarian uniformity: a frequent threat in utopian narratives.

26) Nancy Farmer, *The Lord of Opium* (New York: Simon and Shuster, 2013); Nancy Farmer, *The House of the Scorpion* (New York: Simon and Shuster, 2002); Neal Shusterman, *Unwind* (New York: Simon and Shuster BFYR, 2009); Neal Shusterman, *Unwholly* (New York: Simon and Shuster BFYR, 2013); Neal Shusterman, *Unsouled* (New York: Simon and Shuster BFYR, 2014); Neal Shusterman, *Undivided* (New York: Simon and Shuster BFYR, 2015).

27) Gregory Claeys, *Dystopia: A Natural History* (Oxford: Oxford University Press, 2017), 271, <https://doi.org/10.1093/acprof:oso/9780198785682.001.0001>.

28) Farmer, *The House of the Scorpion*, 90.

29) Farmer, *The Lord of Opium*, 90.

to the colonial history of Mexico and is part of the oppressive European past cluttering the old mansion of El Partrón. Equal temperament and homophony, typical for Viennese classics, are not enough to break out of solipsistic isolation of different types of beings: more natural, flexible music is needed to transform the dystopian landscape.

A more telling example by way of human-posthuman harmonies is the one of slaves caught in a programmed obedience and whose memory of their families and former selves is ruthlessly erased. Farmer concentrates on the figure of a "waitress": a nameless Latino girl serving in the boss's white house, and Eusebio, a genius guitarist, who – reunited with his son – cannot even recognize him. When Matt wants to break into their brains to restore their former selves, he exposes them to music: "Mr. Ortega had reached Eusebio with music. The man had been a composer, and music existed on such a deep level with him that nothing could erase it. Matt knew he was the same."³⁰ Just like in the real-life cases of disabled people with neural damage, described in Sacks' *Musicophilia*, music for the characters becomes a channel of communication beyond – and despite – words and technology.

Contrary to Huxley's intuition from *Music at Night*, Merleau-Ponty's "Eye and Mind" essay shows science and art as polar opposites, granting music the status of the closest proximity to pure Being. In Serres' parlance, Pan sides with Hermes, and trumps Panoptes, or – to retain continuity with the posthumanist discourses – Prometheus or even Hephaestus.³¹ This is to say that wild, natural music can be used as a means of communication and resistance to the all-seeing eyes of Bentham's panopticon, thus becoming a line of defense against totalitarian dystopias. This metaphor could be extended to include the mythological patrons of technological progress: Prometheus and Hephaestus, quite often associated with transhumanization of bodies e.g. via biohacking. The functioning of the machine can be distorted by sound waves, thwarting the attempts to reduce the body to automatic processes.

Farmer, though, does not naïvely present music in general as a remedy to the fears connected with cyborgization. Not every type of music, no matter how evocative or personal, can be used for effective communication. For example, the waitress reacts to recordings of popular songs, and dances to tunes like a figure from a music-box, but in the end her senses are overloaded. The exposure to the popular dance music seems to induce a certain trance, which brings about anamnesis, but in the end proves invasive and destructive. In a sense, it replays the scenarios suggested by Orwell and Huxley: the sounds overwhelm the body and mind, reaching back to the girl's past; however, they do not function as communication but as noise. At the same time, the improvised flamenco music played by a deaf music teacher is not enough to shock Eusebio out of the technologically-imposed obedience; and yet, it reaches him in a more subtle way, not destroying the artificial "blood music" but somehow bypassing it, to reach to the man's subjectivity. It seems, then, a more promising communicative strategy.

Importantly, the musical encounter that facilitates the coexistence of the biohacked slaves and the cloned boy, is the one resting on microtonality³² and enharmony. This is to say, rather than assuming the presence of semi-tones easily discernible for an average listener, it is implied that there are intervals "smaller" than

30) Ibid., 255.

31) See Serres, *The Five Senses*; Maurice Merleau-Ponty, *L'œil et l'esprit* (Paris: Les Éditions Gallimard, 1964); Maurice Merleau-Ponty, *Phenomenology of Perception*. Trans. Donald A. Langes. (London: Routledge, 2012), <https://doi.org/10.4324/9780203720714>.

32) It is important to state clearly that the two concepts are not equivalent, nor they are usually brought together. However, it is not impossible to speak about enharmony and microtonality in search for common ground. We can compare ancient Greek enharmonic scales and modern microtonal ones. As Apel claims, whereas the ancient enharmonic scales are only periodically microtonal, they do contain microtones. In contradistinction, modern music experimented with microtones more extensively. Apel, *The Harvard Dictionary of Music*, 509–510.

semi-tones, whose communicative value depends on the musical sensitivity of the performer and the recipient of the musical message. It also acknowledges the harmony of sounds that belong to different tonalities, are transcribed differently, but may sound essentially the same. In contrast to let us say Mozart's works, flamenco music lies in the realm of unequal temperament, which allows for microtonal differences between seemingly identical sounds. Rather than the achievement of forced accord, a certain discord is accommodated for, without disrupting the whole system. The varieties of humanity – the clone, the human, the biohacked – can be brought together in the viscerality of musical experience: not the one that seeks an artificial unison or “legitimate” thirds and fifths, but the one in which tonality is enhanced by micro differences. Human and posthuman, in such a system, can safely be both the same and different, in “harmonious” melodiousness.

The same regularity is observed by Neal Shusterman. His posthuman protagonist is Camus Comprix, brought to life from scraps and pieces of various talented people. Among others, he receives the hands of a genius Native American guitarist, Wil Tashi'ne. When he confronts Wil's former girlfriend and plays for her a piece on a flamenco guitar, his sounds are said to be, “atonal – but they are not.”³³ The effectiveness of the opened channel of communication is such that:

In some inexplicable way, Una feels violated. How dare he push so deeply into her with his music? His music, because Cam has layered his own soul upon Wil's. Something new, built upon the foundation laid down by the monsters who created him.

“Did you like it?” he asks.

How can she answer that question? That piece of music wasn't just for her; it was her. Somehow he distilled every ounce of her being into harmony and dissonance. He might as well ask if she likes herself – a question that has become just as complicated as the tonal qualities of the song.³⁴

This quotation illustrates the phenomenon of musical tactility, described by Deniz Peters. As he claims, “it is given to all listeners as part of their bodily experience, and, if sufficiently so, it can enable mutual empathy.”³⁵ This statement is critical for the theorization of musical communication between varieties of humanity: it shows the fundamental connection that can be found through the sound experienced haptically and holistically, rather than solely intellectually. Human cultural exclusivity is challenged by the omnipresence and omni-availability of musical production, depending only on the ability to discern and respond to a particular sound.

Flamenco emerges as a perfect musical environment for the N-Life and the A-Life, and discloses an important truth. When we look at the enharmonic notation, we encounter different notes, e.g. D# and Eb, which – when performed – would yield consonance as close to the sonoric unification as possible. It reflects the position of human to posthuman: they share the tone (substance), and differ in the notation (the design, their place in society). The implication of the use of enharmony is that the codification and nomenclature in the relations between types of humanity might sometimes be deceptive, as the names and notes suggest a greater disparity than there really is. On the other hand, the lack of transcription might lead to a mistaken belief in the uniform sameness and the unjustified expectations from all to be identical rather than – like in Derridean quasi-transcendentalism – both the same and different. The answer to Una's question: “How can his music be so in tune with her soul and the rest of him so disconnected? So out of joint?”³⁶ depends on the develop-

33) Shusterman, *Unsouled*, 220.

34) *Ibid.*, 320.

35) Peters, “Touch,” 20.

36) Shusterman, *Unsouled*, 321.

ment of musical sensitivity that would enable the understanding, the "feeling in" of the tonal differences and the acceptance of the unequal musical temperament, in which the perfect octave will be sacrificed to leave the (post)human intervals "untempered," not compromised but free from "dissonant" labels.

Conclusion

The reflection on the implications from the theory of music that can be drawn for posthumanities discloses a number of conclusions and practical indications that can be applied to facilitate the functioning of not only future, but today's societies.

1. Harmony, although in common speech it is used to mean simple accord, in itself is not a simple concept and does not necessarily yield a utopia. In fact, a music-box harmony is artificial and illusive, unobtainable for humanity in its inherent diversity. It is often presented as a desired pattern for coexistence; however, it is strongly connected with the values of sameness and lack of discord, or else with the dominance of one particular order to which other elements are subservient. Whereas homophony as an aesthetic value yields easily understood and pleasant music, as a communicative strategy or binding principle in society it is not reflective of human and non-human complexity. Thus, it may well render a dystopian neohedonistic world, characterized by the denial of suffering, pain and death as parts of human life, and the failure to acknowledge Otherness that would disrupt the predefined principle of beauty. The authors of contemporary posthumanist texts reach to enharmony and microtonality to put in relief that dissonance is something illusory, stemming from arbitrary judgments, and that in fact the perception of harmony depends on a well-trained ear and connective sensitivity which can be learned, and which belongs to the common post-human nature.

2. The terms *musica recta* and *musica ficta* are helpful in conceptualizing posthumanity and the possible forms of future communication. It seems that posthumanity exists largely within the "unnotated" sphere, not mapped out and familiarized to humans, and there are numerous attempts to push it into the ready molds and include it in contemporarily accessible understandings. *Musica ficta*, a medieval practice of reading music without the necessity to transcribe microtones, shows the attitude that would perhaps be desirable in relation to posthumans. As evident from the discussion of harmony, the main danger lies in the attempt to codify and legitimize the *musica ficta* of humanity. The lack of tolerance for the non-transcribable leads people to forcefully include Otherness into academic, legal and social notation, thus only reinforcing the existing system and deepening the divide. Rather, we should enter the unnotated realm, and for that we need musical literacy, in the sense of the ability to attune oneself and develop sensitivity to the sounds of the world – not so much in the sense of intellectual understanding. Graham Harman³⁷ in his original re-reading of Heidegger underlines that there will always be a part of each object that will be inaccessible to us, and it would be vain to try to forcefully draw it into the order of Lacanian Logos. Timothy Morton and Michel Serres, in fact, advocate music as a universal means of communication, coming closest to successful exchange between human and non-human.

This brings an important lesson for academic posthumanities. The numerous conferences and publications that aim to provide theoretical understanding of very practical problems connected with the rise of new humanities thanks to biotechnological modifications are to a large extent devoted to finding a new language, new framework or new perspective to include non-human into the human order. This results neither in the openness to the posthuman Other nor does it yield effective communication. It is precisely the lack of theory,

37) Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago, La Salle: Open Court Press, 2002); Graham Harman, "Intentional Objects for Non-Humans," 2008, <http://faculty.virginia.edu/theorygroup/docs/intentional-objects.pdf>.

notation and legitimization that makes *musica ficta* possible. Apparently, only the freedom to be and the connection on the aesthetic plane (Harman, Morton) can bring freedom from cognitive biases and stereotypes. The development of musical sensitivity seems, therefore, fundamental, to bypass the traps of intellectual *musica recta*.

3. There are two important ways in which the human-posthuman connection can be found through music, but they need to be acknowledged and introduced into common practice.

a. Musical literacy: music being a universal language, it should be an obligatory part of the curriculum in schools. At present, music is usually an elective or is not offered at all, thus making people easy prey for totalitarian attempts to take over their minds and bodies, as described by Orwell and Huxley. In everyday life, we are mostly exposed to noise and accustomed to simple harmonies, rather than to complex, refined sound systems. The understanding of underlying patterns and the ear trained to discern different tunes allows people to be independent and to resist the advertising jingles, trance-inducing rhythms and supermarket muzak, making them more aware and responsible citizens. What is more, the acquired sensitivity to different sounds enhances empathy and shared identity with the non-human world, facilitating eco-imagination and promoting openness to other forms of being. In a farther reaching perspective, the communication with ALife could be envisioned as productive thanks to the conscious use of music, operating on supra-linguistic levels. We should teach our children and ourselves to use music as a meaningful tool, not to abuse it, not to dumb it down, not to reduce it to music-box clockworks or make it a tool of ideologies. The development of musical literacy and musical sensitivity will open us up to the voice of the alien, the posthuman Other, the voices existent in the environment, from the song of the whales to the wind whistling in the rocks. As noticed by Attali:

Music is more than an object of study: it is a way of perceiving the world. A tool of understanding. Today, no theorizing accomplished through language or mathematics can suffice any longer; it is incapable of accounting for what is essential in time – the qualitative and the fluid, threats and violence. In the face of the growing ambiguity of the signs being used and exchanged, the most well established concepts are crumbling and every theory is wavering.³⁸

b. Musical tactility: considering the warning of Huxley and the theories of corporality and performativity of music, the simple truth that music pervades matter and that it is received not only by the sense of hearing but via the whole body must be acknowledged. What is especially underlined is the sense of touch, not as a metaphor of emotional response to music, but as part of proprioception³⁹. Although proprioception is described in relation to humans, musical tactility is valid in the discussion of the influence of music also on the inanimate world, as we can observe the very physical effects of soundwaves on, for example, rocks or metal. It provides grounds for thinking about music as the language of the future. It needs to be pointed out, though, that depending on the epoch, the authors speculating on the role of music for posthuman communication take different stances. The earlier texts suggest that music is part of human culture, and take an exclusivist stance. The contemporary ones tend to take the opposite view: posthuman beings perfect musical communication and improve on the patterns found in both nature and culture. Karen Barad argues for the acknowledgement of this connective value of embodiment, which seems to be essential for musical communication:

38) Jaques Attali. *Noise: The Political Economy of Music*, trans. by Brian Massumi (Minneapolis and Toronto. University of Minnesota Press, 1985), 4.

39) Peters, "Touch."

What is needed is a robust account of the materialization of all bodies – “human” and “nonhuman” – and the material-discursive practices by which their differential constitutions are marked. This will require an understanding of the nature of the relationship between discursive practices and material phenomena, an accounting of “nonhuman” as well as “human” forms of agency, and an understanding of the precise causal nature of productive practices that takes account of the fullness of matter’s implication in its ongoing historicity.⁴⁰

4. In his essay “The Rest is Silence” that provided the epigraph for the present article, Aldous Huxley states that all good music leaves silent spaces, and he prizes Mozart over Wagner because he finds the former less “noisy.” Silence, for him, is the supreme and paradoxical form of expression, ideally suited for what is inexpressible. It seems, though, that by borrowing the title for his essay from *Hamlet*, he implies that the “rest,” remaining beyond musical communication, is touching upon the intangible, the sacred and spiritual and, as such, is remaining outside of what is material. Here, it is worthwhile to quote a passage from the *Unwind Dystology* that would show silence as part of embodied musical communication. As we read in Shusterman’s novel:

Cam crescendos, holds on the penultimate chord, then allows the song its conclusion, those final tones resonating in every hollow of the basement, including the hollow that Una knows resides within her. The silence that follows feels as important as the music that came before it, as if it’s also a part of the piece. She finds she can’t break that silence.⁴¹

Beyond music, then, there hovers the third element of a novel triangle, emerging from contemporary posthumanist texts: the one conjoining music, body and silence in a harmonious interrelation. The comparison with the previously sketched devising of music as the ally of noise shows how the old model is replaced with the implied physicality of silence, the underlying value of which would be freedom, sought after by all inhabitants of dystopian landscapes. The next step, after the viscerality of music, then, is meaningful, communicative silence: the reflection that has begun with Huxley’s observation makes a full circle, but reaches outside the flow of melody to ultimate Otherness.

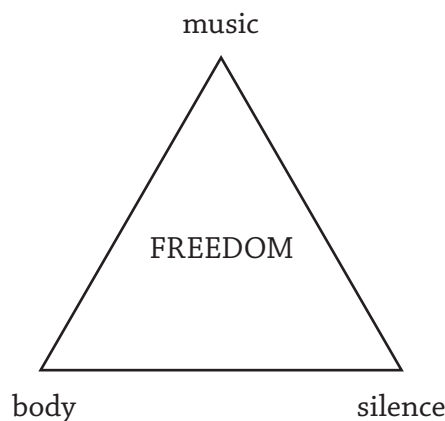


Figure 2. The space left for silence, rather than noise, ensures the success of embodied musical communication.

40) Barad, “Posthumanist Performativity,” 810.

41) Shusterman, *Unsouled*, 320.

To conclude, one can state that posthumans are contemporarily presented as those of special musical capability and sensitivity. Their successful means of communication with humans are derived from the means of communication adapted – as shown – by the disabled, by orphans, the deaf, immigrants, the unemployed. These groups have discovered that the discourses we use for the discussion of their situation, and the post-human conundrum, necessarily fall into the pitfalls of the existing discourses on race, nation, gender, etc. To avoid the incompatibility and inappropriateness of these discourses, we should reach out to music, and seek for communication beyond words. Whereas the sounds of music would provide a bridge for understanding on the level of the body and emotions, silence – a proposed third element – is entering the extra-corporeal, posing questions about possible posthuman spirituality. The invitation to embrace the “rest,” hidden in silence, is in fact an invitation to further reflection leading beyond posthuman physicality to posthuman metaphysics.

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