

Denise Petzold

Exploring Human-Instrument Relationships in Classical Music

From Idealist Aesthetics to Post-Humanist Perspectives on a Significant, Sounding Other

Hunting Sound, or: Standing in Front of a Conservatoire

On my solitary walks around Maastricht, the Netherlands, I usually pass by the local classical music conservatoire. I like to linger there, let the tapestry of sounds and notes buzz around my head like pollen on a sunny spring day. What I hear, then, are young, aspiring musicians who play snippets of works by *the* great composers – Bach, Beethoven, Dvořák, and the like. Out of the building's windows travel sounds of pianos, horns, violins, flutes – sounds that overlap, sometimes violently, each unfazed by the other. The conservatoire, I think to myself, is a circus of sounds, a house of tonal acrobatics.

I am however also reminded that there are things I only hear implicitly, beneath the obvious, intersecting sounds. For example, the years of effort that students sink into learning to play their instrument. The countless hours they spend rehearsing passages of works for a concert or audition. The tense shoulders, the sore fingertips or lips, the frustration, the moments of serendipity and exhilaration. Yet if I listen – really *listen* – I begin to understand that the flute repeats the same phrase over and over. The violin is focused on a solo, entrenched and lost in its own world. The piano frequently interrupts itself and starts again. The horn's sound becomes softer and dissipates – maybe its owner jots down a thought in the score. These students are on the hunt for the sounds of this musical tradition, to not merely learn but to make them their own, to capture them. To incorporate them with or even in their bodies, so that they can become part of this musical tradition. I can hear them and their instruments, at this specific moment in time and space, trying to make sense of the music together.

In this essay, I aim to challenge the idea of sound as either immaterial or easily documentable or collectable. The purpose of this piece is to sharpen under-

standings of how and where sound resides, and thus how sound is made to persist over time. I do this in the context of classical music¹. I argue that the sounds of classical music are situated in the in-between, specifically in the often muted, overlooked affective and physical dimensions of the embodied relationships between musicians and their instruments. As philosopher Lydia Goehr has shown, the aesthetic paradigms of classical music go hand in hand with an image of the musician and their instrument as faithful servants to perform the music, meaning primarily according to the score². However, in practice their relationship is much more multi-layered. Classical music consists of a tradition of specific sounds, and it presumes specific ways in which these sounds are produced and crafted, learned and taught. This is why the students at the conservatoire put so much work into “getting the music right”. Often, these Romantic idealist aesthetics are accompanied by an understanding of sound becoming engrained into the body as muscle memory. As a consequence, the musicians and their instruments tend to become tacit – black-boxed – narrators of the sound and the music as intended by the composer. All of this I can hear when standing outside of the conservatoire, if I only listen carefully to the missed and misplaced notes, the repetitions, interruptions, and corrections.

The aesthetic ideals under which much of classical music practice – especially its educational practice – still operates, however, tend to neglect the situatedness that lies within the embodied relationship between musicians and their instruments. That includes the instrument's agency in shaping this relationship. Sounds are witnesses, not end products, of such relationships; they signify a process of humans engaging with the world. They can be collected and conserved *because* they are crafted in relations. Therefore, I intend to look closer at the conjunction³ of

humans and instruments that brings classical music into existence and helps its sounds to endure through time⁴.

On a specific level, I do this to disrupt the common understandings of sound as they are practised in classical music settings. By looking closer at the relationship between musician and instrument, I believe it is possible to open up long-standing ideas of the faithful transmission of this music and the supposed transcendence of its artworks. For this, I draw on insights from post-humanist and new materialist understandings of human-artefact relations. I propose to view instruments as *significant, sounding others*, whose relation to which shapes and shifts how sound and subsequently this music exists. This offers a new perspective on the importance of the situatedness of and relationality between musicians and instruments in classical music practice, but also on the bigger role of change in this tradition⁵. On a broader level and from the perspective of this special issue, this proposition may herald new understandings on the importance of the agency of sound artefacts in other musical or sounding practices, as well as the relationships through which sounds are made, manifested, collected, conserved, and shared.

In what follows, I will first take a closer look at the idealist aesthetics in which classical music is anchored, and trace how they have perpetuated the sounds of classical music (including subsequent underlying assumptions on the role of musicians and instruments in transmitting this musical tradition). Based on this, I will question the idea of instruments as either tools or bodily extensions by presenting understandings and readings from post-humanist and new materialist literature that problematise the interactions and relationships between humans and non-humans. Based on this, I will present the notion of the *significant, sounding other* as a concept through which to rethink how classical music sounds are made and conserved, followed by some concluding thoughts on what this means for higher education in classical music.

Classical Music's Idealist Aesthetics

In her seminal book *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music*, Ly-

dia Goehr discusses how the notion of the work-concept has come to shape and regulate Western art music, its practices and operational systems. The work-concept – whose musical origin she dates to roughly 1800, thus relating also to the concomitant rise of art museums – helped music to become understood as an autonomous art form whose main ‘currency’ consisted of artworks⁶. Alongside the growing relevance of the autonomous musical work developed the notion of *Werktreue* (work fidelity), which meant that musical works could be performed to varying degrees of authenticity or faithfulness. As scholars like Bruce Haynes, James Johnson, and Richard Taruskin argue, this aesthetic tradition hinges significantly on the superiority of the score or musical text, the importance of musical literacy and technical excellence of performance, the image of the composer as genius and the subsequent pursuit of his intentions, as well as attentive and silent listening in the concert hall⁷.

Today still, classical music and its many conventions and practices very much revolve around the work-concept and attached idea(l)s of *Werktreue*. Especially in classical music education, the understanding that musicians play their instrument excellently and faithfully to the score – thereby seeking out actively the composer's intention – is as alive as ever. Due to these aesthetics, classical music education differs from the education of other musical genres. As Christophe de Bézenac and Rachel Swindells demonstrate, Western classical music depends on a very formalised educational practice, which serves to uphold this specialised musical tradition by, for example, providing compartmentalised, instrumental repertoire. Also études – musical pieces that are mostly composed specifically for the purpose of practising, examining and auditioning technical excellency and musicality – are part of this musical system in which professionalisation and competition play increasingly important roles⁸.

This is an important reason for why one-to-one tuition is considered the bedrock of classical music education. A common understanding among classical musicians is that this music can be taught best or most successfully in an intimate setting between a teacher and their student, which is provided by the master-apprentice model. The master-apprentice model is not unique to classical music but can be

found in other crafts that seemingly rely on tacit learning processes⁹. Here, ‘tricks of the trade’ are handed down from one person to the other. In a classical music setting, this means that instrumental (or vocal) teachers – who often are, it should be noted, prestigious performers rather than trained educators – supervise a student for a longer time. Across different branches of music studies, one-to-one tuition at classical music conservatoires has been well researched over time as a pedagogical system; however, Helena Gaunt emphasises the varying or even contrasting findings in such studies, given the individual and situated nature that is inherent to this pedagogical model¹⁰.

Yet, in short, the aim of classical music education is to produce excellent performers of musical works who are situated firmly in this musical tradition and its aesthetics. As Anna Bull shows in her book *Class, Control, and Classical Music*, this means that playing and learning are closely tied to an ethics of self-correction¹¹. She criticises assumptions that foreground craftsmanship in classical music as consisting primarily of the willingness to experiment or playfully investigate¹². On the contrary, she asserts that curiosity is pushed aside by the players’ obligation to fix and ‘clean up’ mistakes constantly, that it is “quashed beneath teachers asking students to do things in specific ways”¹³. This also relates to how musicians are taught to produce and ‘store’ specific sounds with help of their bodies and instruments: while constantly urged to develop their own musical voice, the moral ramifications of such a pedagogy can result in the homogenisation of sound, as well as the preservation of sounds that are considered especially ‘valid’ or ‘authentic’ in relation to this music. As Bull further notes, the desired invisibility of the performer’s body – realised, for example, by performers wearing black or the policing of movements and facial expressions – is contradictory to the physical effort required to make the music: the high level of technical expertise necessary to play the works may be daunting both physically and mentally, yet the performance is supposed to look effortless. In this conglomerate of invisibility, the instrument is often understood as either an extension of the musician’s body to control, or a tool to gain mastery of in order to perform the music and its spe-

cific sounds successfully, meaning: faithfully to the score.

It is important to provide these insights into classical music education and its mechanisms of invisibility because they show how little research has actually been concerned with the manifold ways in which classical musicians and their instruments engage with each other. While music sociologists, music historians, and musicologists have all shown interest in classical music practice and musician-instrument relationships, this relationship has often been examined as a wheel in the clockwork that is classical music, as both a cause and the result of its aesthetic tradition and its systems, routines, and conventions. However, there are exceptions that draw attention to the manifold agential powers that instruments occupy in classical music contexts, and how they may shape various relationships and this tradition more broadly – rather than simply being an attachment or a means to an end. Izabela Wagner, in her ethnography *Producing Excellence: The Making of Virtuosos*, shows for example how instruments are vital to a classical musician’s career. She traces how young musicians – violinists – test, lend, and obtain instruments, thereby presenting the motivations, doubts, and strategies attached to instrument choice and its consequences for different career paths¹⁴. Lisa McCormick, in her ethnographic research on classical music competitions, shows that instruments in classical music have always played a seminal role for gaining access and manifesting social order and power hierarchies in music education¹⁵. She also observes how musicians depend on the concrete material properties of their instruments to create a meaningful performance and gestural display: she provides the example of the decrease of the phenomenon of virtuoso organ players, due to the performer’s body increasingly hiding from the audience’s view, concluding that some instruments have greater symbolic powers to bestow upon their players than others¹⁶.

For the most part, however, research in classical music has not paid sufficient attention to the agency of instruments, and especially the ways in which the relationship between musicians and instruments is more multi-layered than classical music’s aesthetic tradition assumes (and what that might mean for its sounds and tradition). In order to shed light on this, I will turn

to understandings of post-humanist scholars and new materialists in a craft-related context, notably the work by Tim Ingold and Petra Gemeinboeck.

A Post-Humanist Perspective on Sound

While the previous section has shown how the idealist aesthetics of classical music result in the performer and instrument becoming ‘transmitters’ of a supposedly transcendent artform, there are scholars who pay attention to what happens in the situated relationship between a musician and their instrument and how they create sound and meaning together – or rather, *with* each other.

Author and cellist Richard Sennett, for example, muses on how the calluses of string players enable a greater sensitivity through being in touch with the material: they are vital for allowing musicians to fully commit to pressing their fingers on the strings¹⁷. Anthropologist and cellist Tim Ingold adds that calluses facilitate probing and treading¹⁸. Bodily marks and adaptations are clear indicators “that the instrument is not merely an extension of the body; rather, it is *with* the body, affecting it in all sorts of ways” [original emphasis]¹⁹. Such examples challenge easy conceptualisations of the relationship between musician and instrument, as it becomes a dynamic source of embodied learning and situated knowledge production processes. In connection to this, Ingold criticises the often-assumed binary between the tacit and the explicit commonly underlying simplified conceptualisations and ideas of learning in craft contexts, like classical music²⁰. He argues that the term ‘tacit’ black-boxes what happens in such engagements and proposes the notion of ‘hapticality’ to attend to the complexities and sensitivities inherent to how human and material respond to each other:

Where the tacit is silent, the haptic is noisy; where the tacit is embodied, the haptic is animate; where the tacit is sunk into the depths of being, the haptic is open and alive to others and to the world²¹.

Thinking, then, is not merely a tacit but a situated process that unfolds through musicians and instruments actively relating to the world with each other. In this process, Ingold coins the term ‘correspondence’ to portray the responsiveness in which player and instrument attune to each other and the world²². Corres-

pondence is anchored in attending rather than intending, as Ingold claims, thus drawing attention to the idea that the entanglement between musicians and instruments is not so much characterised by repetition or muscle memory but constant engagement and attunement. Indeed, while interacting is a dynamic in which things are “joined *up*”, “[...] correspondence is a joining *with*; it is not additive but contrapuntal, not ‘and...and...and’ but ‘with...with...with’” [original emphases]²³.

Ingold’s understanding of human-instrument relationships closely relates to the critical post-humanist work of Petra Gemeinboeck. In her work on robotics, Gemeinboeck proposes that thinking as a material engagement or process dramatically shifts subject positions:

the first places the human at the ‘top of the world’, from where it is constructed and controlled, while the latter places us inside the world, amidst its unfolding mess of relations, and in constant, even if only partial, connection to it²⁴.

Gemeinboeck – similarly to Ingold – distinctively argues against a Cartesian separation of mind and body; doing and thinking cannot be separated from each other. However, this does not mean that the mind, body, or things are the same. These entities may constitute each other but “mutualities are not necessarily symmetries”²⁵. And while this is an important recognition, the issue of agency implicit here is not the most memorable point. Rather, work like Ingold’s and Gemeinboeck’s complicate the human-instrument or -machine relationship, “rendering the boundary relational and dynamic, and by doing so, opening up a new playground for humans and machines”²⁶.

Moving back to the context of classical music and sound-making, ideas such as Ingold’s correspondences and Gemeinboeck’s shifting subject relations are of vital importance because they propose alternative understandings to how this music is played, learned, and taught: through active and mutual engagement with the world. While the idealist aesthetic regime of classical music does regulate and affect these human-instrument relationships and how they unfold (as scholars like Lydia Goehr and Anna Bull have so convincingly noted), what happens between a musician and their instrument is infinitely more complex than

that. Post-humanist scholars can provide an entry point into this complexity, which, in turn, can help us to understand better how classical music exists, and how its sounds endure – and potentially change – through time.

Ingold's introspection on his own cello playing provides an instructive testimony of the complexity or multidimensionality of this embodied human-instrument relationship, which is not merely physical but also affective and emotional:

Body and instrument are tightly conjoined into an anatomical unity. Yet in the moment I begin to play, something else happens. The instrument itself seems to explode into its constituent materials – of wood, varnish, metallic strings, bow hair, rosin and resonant air. Nor is it only the instrument that explodes. I do too! I am no longer a body with mouth, hands, arms and ears; rather my entire body, in its movements and sensibilities, becomes mouth, hand, arm or ear. I am mouth-body-becoming (breathing), hand-body-becoming (fingering), arm-body-becoming (bowing) and ear-body-becoming (listening). I often dream about my cello, and a persistent theme is that the instrument has literally fallen apart, along with what I experience as the disintegration of my own corporeality. The cello is in pieces and so am I. I used to be disturbed by these dreams. But I now realize that they re-enact the very conditions of performance. For only by breaking apart the therianthropic²⁷ unity of body and cello can it be put together again, not organically or anatomically, but quite differently, as a *bundle of affects*. Where body and cello had been joined *up*, as a totality of parts, wood, varnish, metal, hair, rosin and air join *with* mouth, hands, arms and ears in the generation of atmospheric sound [original emphases]²⁸.

The correspondence that Ingold describes, including his own shifting position as a subject in the relationship to his instrument, shows how thinking becomes an embodied, situated, and open-ended process. Player and instrument join *with* each other in various ways: there is pushing and pulling, becoming together, even unbecoming together.

The music that Ingold is playing and referring to throughout his piece of writing is by Johann Sebastian

Bach. While the composer's cello suites are some of the most famous works of the classical music canon, the author notes that this is "because the arbiters of high culture have decreed that they be apprehended not as sound but as formal compositions rendered in sound, much as the portraits hanging on the walls of the banquet hall are rendered in paint"²⁹. The music thus remains ultimately detached from life and the world; after all, without correspondence, a score stays silent. Based on this, his proposition is to attend to sound as sound:

To attend to sound as sound [...] is to feel these characteristics – of duration, pitch, amplitude and timbre – and to respond to them. Once we allow sounds to become themselves, once we attend to them as such – and not to anything that might be being conveyed by their means – we cannot remain unfeeling in their presence³⁰.

From this perspective, the musical work ultimately is not simply an object or score to be performed: instead, it becomes entangled in this human-instrument relationship, a mediator or channel through which to reach out to and correspond with the world³¹. This understanding contests the idea that there could ever be a finished or definite sonic realisation of any given work, or, for that matter, a definite sound. From this perspective, authenticity in classical music can be reformulated from a matter of faithfulness to the score to one of genuine, embodied engagement with the world. Thus, by attending to sound as a phenomenon of correspondence, we can move on from notions of mechanical performance or execution, from the separation between 'intellection' and performance brought forward by classical music's idealist aesthetics.

A Significant, Sounding Other

The post-humanist readings by Ingold and Gemeinboeck can, as shown above, help us to complicate simplistic understandings of human-instrument relationships, particularly in the context of classical music and its idealist aesthetics. Based on their work, I propose that it can be beneficial to view instruments as *significant, sounding others*: as companions with whom musicians shape both music and sound, as

well as their understanding of and correspondence with the world. It is important to note that the term 'other' should not be understood in the sense of 'othering' but rather, as an acknowledgement of the anatomical boundaries needed in order to join *with* another. However, it is also a term that allows human-instrument relationships to extend beyond moments of playing, helping to understand that they reach far outside practice rooms and performance halls.

Many musicians, like Ingold, experience their instruments as companions alongside not merely their musical but also personal lives: take for example the author's recurring dream of his cello – and himself – falling apart. Musicians can recognise their instruments as counterparts of themselves; they learn about their particularities, their histories, and their identities. On one of her research participants, Anna Bull notes: "Jonathan's instrument, like those belonging to many of my participants, had a history and an identity of its own, as well as being a part of his own sense of self"³². In my own ethnographic research at the Conservatorium Maastricht in the context of my PhD project, I have analysed how students discuss and reflect about their instruments, as well as how they interact with them³³. Students regularly referred to their instruments as partners, friends, pets, or antagonists; they gave them names, described how they would physically miss their presence in summer holidays, how their bodies and posture grew around and adapted to the instrument, how they actively took care by wrapping them into soft fabrics to avoid scratches, how they accounted for their various characteristics while playing, or lovingly stroked their surfaces during our talks. They reported on their particularities, their moods, their histories, as can only someone who has known 'the other' for a long time. While their teachers rarely considered this relationship beyond moments of playing and performance – focusing on interactions that produce sound and music – it became clear that for these interactions to take place in the ways in which they did, various affective and physical layers of this embodied conjoinment presented, so to say, an archive that shaped how students would play and understand the music³⁴. Such multidimensionality of human-instrument relationships – and the intimate connection between the physical and the affective levels of embodied engagement – is not exceptional to the context of

classical music. Rather, it constitutes a long-standing yet neglected part of music- and sound-making, of how technical skill and musicality come into being. This embodied relationship can neither be described in terms of the instruments being an extension of the body or the self, nor in terms of exercising control or mastery over a tool or unanimate object. Instead, it is only together that musicians and instruments can make sense of the tradition in which they are embedded, as well as the world around them.

To conclude, the *significant, sounding other* may be understood as a notion that allows for more complex and multifaceted readings of the relationship between musicians and their instruments. In this relationship we may find hitherto unknown spaces of, or new potentialities for, how this music and sound may exist and endure: after all, the music and its sounds are navigated, contextualised, and realised within this very relationship. In the context of classical music, parts of this embodied relationship have been silenced in pursuit of the tradition's aesthetic ideals. Subsequently, attending to this relationship and attuning to its affective and physical layers via the *significant, sounding other* can potentially open up new and alternative ways of approaching classical music and specifically its higher education. This could happen by introducing educational activities that aim to address this complexity and overflowing³⁵. Vitaly, I do not mean to for this notion to become part of the attempt to make the embodied explicit or aesthetically congruent. Rather, such activities should make room for the uncertainties and explorations in corresponding, for affecting and being affected. For example, conservatoire students could explore the role of different or alternative materialities and instrument constructions in music making and sound, or keep an instrument diary / write an instrument biography to better understand how the artefact shapes their ideas of the music, its sounds, and their own playing. Of course, as this relationship is embedded in larger educational and aesthetic frameworks, ideas like these raise the question of how institutions can possibly support and provide space for such activities in the face of increasingly standardised (and competitive) educational policies and settings. This is one of the tasks of classical music education in the future: to navigate this standardisation while acknowledging that this tradition is a situated, intimate dialogue be-

tween humans and materials. The *significant, sounding other* can help to draw attention to this tension, and open up more or new ways of conjunction – for being *with* – than the aesthetic ideals of classical music have hitherto allowed for without necessarily contradicting them. This situates this music as a way of engaging with the world, instead of presenting a confined aesthetic tradition that needs to be adhered to. Connected to this, the notion enables us to question mechanisms of exclusion and inclusion in classical music, for example when looking at able-bodiedness. It allows learning about neglected or other skills and embodied knowledges, which may shift and extend the part of classical music's idealist aesthetics that prioritises certain body types and modes of functionality over others. By helping to create new entries into such situated embodied relationships, we may also learn more about ideas of craftsmanship both generally and in a classical music context, as well as how it is (or can be) practised.

Back at the conservatoire, or rather, lingering around at its front doors, I am now aware of how much there is that I cannot hear or listen to at all. I note a cellist talking to some friends in front of the building, smoking a cigarette. Next to her stands a large blue-metallic case, it is plastered with stickers and equipped with an ergonomic or back-friendly carrying system – the latter, an indicator of how much weight this person has, probably for many hours of her life, carried. The former, an indicator of belonging and self-expression. The cello case, bulky and pear-shaped, is almost as tall as she is; in its physical presence, it looks literally like an *other*. After the student stomps out the cigarette, she picks up the case and slowly lifts it on her back in a familiar yet attentive motion. She unlocks her bike, waves to her friends, and, with considerable effort, heaves herself and the case onto the vehicle, an act that is more complicated with the cello than it is alone. I watch her as she quickly gains balance and cycles away; I can only see the cello case on her back, her arms peeking out at the sides. Why, I wonder, should moments like this one matter less to music and sound?

Endnotes

1. Although classical music encompasses a diverse range of forms, styles, and historical periods, I will use the term in its singular form to denote a particular dimension of Western art music's tradition. As I describe in more detail in the text, this romantic tradition conceptualises classical music as a transcendent art form consisting of autonomous artworks. Connected to this, Friedrich Blume asserts that the "classic" and the "romantic" are closely related and that there is "no possibility of precise separation". See Friedrich Blume, *Classic and Romantic Music: A Comprehensive Survey*, Faber & Faber 1979, p. 16 (original work published 1970 by W. W. Norton & Company).
2. Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music*, Oxford University Press 2007 (original work published 1992 by Clarendon Press).
3. This term is taken from Tim Ingold, *Thinking through the Cello*, in: Jane Bennett and Mary Zournazi (eds.), *Thinking in the World: A Reader*, Bloomsbury 2020, see pp. 214-215.
4. I occupy a social constructivist position inspired by practice-based approaches to the making of art and artistic objects or performance. This is closely connected to my own background in science and technology studies (STS), a field in which scholars have long attuned themselves to the idea that artefacts, objects and instruments are material agents that shape scientific history, knowledge, and practice. These scholars have also investigated how the meanings and practices of (classical) music are deeply interwoven with material artefacts and environments. This makes instruments valuable objects of study for this field. It needs to be noted that there is a significant overlap between STS and sound studies, the latter of which provides an especially fruitful ground for examining the role of instruments and technologies in different musical cultures. Notable examples include: Karin Bijsterveld and José van Dijck (eds.), *Sound Souvenirs: Audio Technologies, Memory and Cultural Practices*, Amsterdam University Press 2009; Karin Bijsterveld and Peter Peters, *Composing Claims on Musical Instrument Development: A Science and Technology Studies' Contribution*, in: *Interdisciplinary Science Reviews*, vol. 35, no. 2, 2010, pp. 106-121; Karin Bijsterveld and Marten Schulp, *Breaking Into a World of Perfection: Innovation in Today's Classical Musical Instruments*, in: *Social Studies of Science*, vol. 34, no. 5, 2004, pp. 649-674; Ruth Benschop, *STS on Art and the Art of STS: An Introduction*, in: *Krisis: Journal for Contemporary Philosophy*, vol. 29, no. 1, 2009, pp. 1-4; Darryl Cressman, *Building Musical Culture in Nineteenth-Century Amsterdam: The Concertgebouw*, Amsterdam University Press 2016; Peter Peters, *Crafting Baroque Sound: How the Making of Organ Pipes Matters Artistically*, in: Henk Borgdorff, Peter Peters, and Trevor Pinch (eds.), *Dialogues Between Artistic Research and Science and Technology Studies*, Routledge 2020, pp. 125-136; Peter Peters and Darryl Cressman, *A Sounding Monument: How a New Organ Became Old*, in: *Sound Studies: An Interdisciplinary Journal*, vol. 2, no. 1, pp. 21-35; Trevor Pinch, *How STS Provides a New Way of Thinking About Musical Instruments and Their Sounds*, in: Harro van Lente, Tsjalling Swierstra, Sally Wyatt, and Ragna Zeiss (eds.), *Wegwijs in STS: Knowing Your Way in STS*, Maastricht University Science, Technology and Society Studies 2017, pp. 105-109; Trevor Pinch and Karin Bijsterveld, *'Should One Applaud?': Breaches and Boundaries in the Reception of New Technology in Music*, in: *Technology and Culture*, vol. 44, no. 3, 2003, pp. 536-559; Trevor Pinch and Karin Bijsterveld, *Sound Studies: New Technologies and Music*, in: *Social Studies of Science*, vol. 34, no. 5, 2004, pp. 635-648; Trevor Pinch and Frank Trocco, *Analog Days: The Invention and Impact of the Moog Synthesizer*, Harvard University Press 2002.
5. This proposition and parts of the argumentation are based on Chapter 7 and Chapter 8 of my doctoral dissertation *Archives of Change: An Art Conservation Approach to Innovating Classical Music*, Maastricht University 2023. More specifically, for one of my case studies I conducted ethnographic research (participant observations and semi-structured interviews with students and staff) over the course of one academic year at the Conservatorium Maastricht. Considering that this project was anchored in the Maastricht Centre for the Innovation of Classical Music (MCIM), the goal of this research was to understand how classical music is taught to and learned by cello students, and how – based on these insights – classical music education may be innovated. Over the course of the research, it was particularly the embodied relationships between the musicians and their instruments that proved vital to this question.
6. Goehr 2007, *The Imaginary Museum of Musical Works*.

7. See Bruce Haynes, *The End of Early Music: A Period Performer's History of Music for the Twenty-First Century*, Oxford University Press 2007, p. 6; as well as James Johnson, *Listening in Paris: A Cultural History*, University of California Press 1996 and Richard Taruskin, *Text and Act: Essays on Music and Performance*, Oxford University Press 1995.
8. Christophe de Bézenac and Rachel Swindells, *No Pain, No Gain? Motivation and Self-Regulation in Music Learning*, in: *International Journal of Education & the Arts*, vol. 10, no. 16, 2009, p. 10.
9. Richard Sennett, *The Craftsman*, Penguin Books 2008.
10. Helena Gaunt, *One-to-One Tuition in a Conservatoire: The Perceptions of Instrumental and Vocal Students*, in: *Psychology of Music*, vol. 38, no. 2, 2009, pp. 178-208. Importantly, Gaunt also criticises the consequences of one-to-one tuition, which can result in the inability of students to develop learning strategies independently, overdependence on a teacher, or a lack of transferability of skills acquired.
11. Anna Bull, *Class, Control, and Classical Music*, Oxford University Press 2019, pp. 75-78.
12. Here, Bull criticises in particular Richard Sennett's descriptions of craftsmanship in music, see Bull 2019, *Class, Control, and Classical Music*, p. 84.
13. Bull 2019, *Class, Control, and Classical Music*, p. 84.
14. Izabela Wagner, *Producing Excellence: The Making of Virtuosos*, Rutgers University Press 2015, p. 161.
15. Lisa McCormick, *Performing Civility: International Competitions in Classical Music*, Cambridge University Press 2015.
16. McCormick 2015, *Performing Civility*, p. 149.
17. Sennett 2008, *The Craftsman*, pp. 151-153.
18. Tim Ingold, *Making: Anthropology, Archaeology, Art and Architecture*, Routledge 2013, p. 114.
19. Petzold 2023, *Archives of Change*, p. 196.
20. Tim Ingold, *Of Work and Words: Craft as a Way of Telling*, in: *European Journal of Creative Practices in Cities and Landscapes*, vol. 2, no. 2, 2019, p. 9.
21. Ingold 2019, *Of Work and Words*, p. 9. Importantly, Ingold borrows the term 'hapticality' from Stefano Harney and Fred Moten, *The Undercommons: Fugitive Planning and Black Study*, Minor Compositions 2013, p. 98.
22. Ingold 2013, *Making*, p. 108; see also Ingold 2020, *Thinking through the Cello*, pp. 206-207.
23. Tim Ingold, *Correspondences*, University of Aberdeen 2017, p. 13.
24. Petra Gemeinboeck, *Dancing with the Non-Human*, in: Jane Bennett and Mary Zournazi (eds.), *Thinking in the World: A Reader*, Bloomsbury 2020, p. 150.
25. Gemeinboeck 2020, *Dancing with the Non-Human*, p. 163.
26. Gemeinboeck 2020, *Dancing with the Non-Human*, p. 164.
27. With the term 'theriantropic', Ingold describes a 'shapeshift' in which human and cello (be)come incorporated into each other.
28. Ingold 2020, *Thinking through the Cello*, pp. 214-215, original emphases.
29. Ingold 2020, *Thinking through the Cello*, p. 203.
30. Ingold 2020, *Thinking through the Cello*, p. 204.
31. Tim Ingold, *From the North with my Cello, or, Five Propositions on Beauty*, in: Stephanie Bunn (ed.), *Anthropology and Beauty: From Aesthetics to Creativity*, Routledge 2018, p. 457.
32. Bull 2019, *Class, Control, and Classical Music*, p. 71.
33. Petzold 2023, *Archives of Change*, see specifically Chapter 8: 'The Feeling of Having it Here': *Embodying Tradition in and through Human-Cello Engagements*, pp. 200-230.
34. The notion of the archive has been conceptualised and theorised as a source for innovation in detail throughout Petzold 2023, *Archives of Change*. Further work on this concept includes Denise Petzold, *The 'Museum Problem' Revisited: Learning from Contemporary Art Conservation*, in: Neil Thomas Smith, Peter Peters, and Karoly Molina (eds.), *Classical Music Futures: Practices of Innovation*, Open Book Publishers 2024, pp. 229-251.
35. While many conservatoires today provide offers to improve physical and mental wellbeing for the students, these activities are largely aimed at keeping the human-instrument relationship functional or intact, remaining in line with traditional classical music aesthetic ideals.

Summary

This article aims to investigate and challenge common understandings of sound and sound-making in the context of classical music. It first illuminates how the idealist aesthetics that have regulated classical music practice for centuries have led to viewing musicians and their instruments as mostly 'passive' transmitters of a transcendent artform. Building on this, I propose that classical music and its practice can be understood in new ways by employing post-humanist and new materialist approaches. By introducing the notion of the *significant, sounding other*, I draw attention to the relevance of situated, embodied human-instrument relationships in the ongoing existence of this music and its tradition. I argue that the *significant, sounding other* can help us to open up long-standing ideas of *Werk-treue* in classical music: it highlights the complexity and agency of human-instrument relationships in shaping the sounds of this music's tradition, rendering visible to the often-overlooked affective and physical dimensions of their engagement. Consequently, this recognition raises new potentialities for the existence and evolution of classical music and its tradition, including for example novel approaches to higher music education.

Author

Denise Petzold is Assistant Professor in Cultural Heritage and Performance Art at Maastricht University, the Netherlands. Her research interests revolve around the role of technology in artistic practice and heritage conservation, inter- and transdisciplinary practices connecting the arts with science and technology, ephemeral materials and new materialisms, as well as processes of craftsmanship and making. In her PhD thesis *Archives of Change: An Art Conservation Studies Approach to Innovating Classical Music* (Maastricht University 2023), she combined classical music with approaches from the field of contemporary art conservation to rethink how this music can be understood and practised, as well as how it may be brought into the future in meaningful ways from the perspective of its practitioners.

Petzold's research is part of the Maastricht Centre for the Innovation of Classical Music (MCICM). In the past, she worked as an assistant curator at the Ludwig Forum für Internationale Kunst, Germany, and as a research assistant at Tate, UK.

Title

Denise Petzold, Exploring Human-Instrument Relationships in Classical Music: From Idealist Aesthetics to Post-Humanist Perspectives on a *Significant, Sounding Other*, in: [kunsttexte.de/Auditive Perspektiven](http://kunsttexte.de/Auditive_Perspektiven), no 2, 2024 (9 p.), www.kunsttexte.de.
DOI: <https://doi.org/10.48633/ksttx.2024.2.106276>