

Abstract

One of the challenges of contemporary music composition is to speculate upon “possible worlds” as a counterpoint to our contemporary understanding of place, where the lyrical impulse in music is sensitive to relations between human impact and presence in the more-than-human world. Such sensitivity arises from a compositional superfluity where subjectivity is “dislocated presence” for new modes of perception to appear that resist representation, conceptualisation, enframing, quantification and instrumentalisation. Music composition today should ask listeners to listen beyond anthropocentric terms, including the ways in which the resistance of the world—its conflicting and dynamic materiality—exceeds both conceptual thought and technological control.

This “speculative turn” in music composition is indeed not to excise music’s resemblance to language, and by extension music’s capacity for expression, but to decentre music’s humanised expression from its privileged position for the possibility of a music independent of from language, thought and intentions, where music’s materiality can exceed human agency. Such music would suggest a critical materialist sound—a sound world outside of consciousness rather than a sound world fully endowed with consciousness, thus placing the listener in a space where they are required to rethink their personhood within a larger domain of life.

What is Speculative Music Composition?

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TO COMPOSE a speculative music is first to draw associations with the medieval category of a “musica speculativa”, that esoteric part of music theory that lies beyond the practical and theoretical aspects of musical composition to address existential questions of “why?”¹ It was during this period when music was considered part of the quadrivium that included, besides music, the arts of number or proportion, geometry and cosmology.² Mathematics was indeed always considered an essential aspect of a “musica speculativa” that bound the composition of music with a natural philosophy, which included a network of identities, relationships and correspondences so that what was abstract to the senses was given concrete form.³ The topics treated in a speculative music included “the harmonies of the angelic orders, the zodiac, and planetary spheres, the elements, the soul, and the human body; the hidden correspondences of nature; the secrets of number; the power of sound; and the moral responsibilities of a music that wields this power.”⁴ In other words, ideas inherent to a speculative music were considered metonymic: not thought as “evocative metaphors, sufficient to themselves, but as points of entry to a sophisticated network of meanings, which is called into play whenever its components are mentioned.”⁵ It is the latter concerns, “the hidden correspondences of nature; the secrets of number; the power of sound; and the moral responsibilities of a music that wields this power”, that merit a renewed consideration of what speculation in music composition means today.⁶

Such obscure and mystical ideas continued into the period of Johann Sebastian Bach, when the high art of musical counterpoint—the essence of composition in that cultural period—was viewed in relation to the effect of alchemical transformations and magical relations, where “the activity of associations, contiguities, carryings-over coincides with a liberation of symbolic energy.”⁷ The music was often inscribed graphically, as ciphers to be reflected upon by initiates (for the “magic” to be “squeezed out”) as many of the so-called “puzzle canons” demonstrated.⁸



Example 1. Johann Sebastian Bach's "Hudemann" puzzle canon (1728) for four voices, where one must solve the correct time interval for the entrance of each voice.

This “sophisticated network of meanings” that is evident throughout Bach’s music is what the composer Helmut Lachenmann refers to as “aura”,⁹ i.e., “the history of the material in wider extra-musical contexts, in all spheres of our social and cultural reality, of our conscious and subconscious awareness, our archetypal memory and magical predeterminations, both collective and individual.”¹⁰ Such aura is important for a speculative music in that it allows for the entire cultural world of the composing subject to be “registered in the nuances and hints of its detail—a reflection of the intense confinement in which that world is bound, and the accordingly magnified reverberations of the tiniest shift or tremor.”¹¹ Such tremors are what composer Brian Ferneyhough describes in the music of the second Viennese School as “mnemonic triggers” that serve to “evoke much larger primal contexts” in the form of “a magic lantern show” that actively mobilises all sorts of “dimly realized, but nevertheless communal subconscious perceptions” in the imagination of the listener.¹² Aura is essential to a composer’s materials and cannot be extirpated through a reduction to sound—in Pierre Schaeffer’s sense of an *acousmatic listening* where a sound’s sources, including its broader cultural and historical associations, are “bracketed out”.¹³ Indeed, music’s aura, as Lachenmann reminds us, is always dialectically mediated through the acoustic-physical

aspects of sound (the inherent resistances of the sound material as it is produced on instruments by performers), sound's structuring (the local resistances imposed by the composer onto the materials) and tonality.¹⁴ Lachenmann expands upon the tonal aspect of material by including the rhetorical aspects of music—tension and relaxation, gesture, consonance and dissonance—or, what he would later call music's "textual" dimension.¹⁵ "Nothing in music stands alone. Everything becomes what it is in memory and in expectation through its physical contiguity with its neighbor and its mental connection with what is distant from it."¹⁶ No music is devoid of expressive elements and it is the "subject's drive to expression" that animates music, whose content is "the profusion of things which obey the rules of musical grammar and syntax."¹⁷

Speculative music composition cannot do away with music's resemblance to language, since music's most speculative reach happens through a system of interconnections whose tendencies "culminate and synergize, percolating by the reticular connections and antagonisms across the channels of prescribed signification so as to challenge and displace the whole fabric of interpretation but not at all to extirpate it."¹⁸ Indeed, poet Jeremy Halvard Prynne's comments could be extended to musical development where "the latent presence of these system links and connections is stored textually within a knowledge that belongs with the underlying base forms, not declared directly in the surface features but implicit in the motivated sound-structures and time-logic."¹⁹

These underlying base forms in music are what Lachenmann refers to as "sound types" (*Klangtypen*), denoting a sound structure's inner coherence and the time it takes for it to be appreciated by a listener (a sound-structure's "time-logic" or *Eigenzeit*).²⁰ The most important of these sound types is the *Strukturklang* (structure sound) where a strong material identity (with unpredictably rich, continually varying textural components and noise) is subjected to a grammatical syntax,

1. Godwin, Joscelyn. "Speculative Music: The Numbers Behind the Notes". In *A Compendium of Contemporary Musical Thought*. London and New York, NY: Routledge. 1992. Vol. 1. p. 256.
2. Martineau, John (ed.). *Quadrivium: The Four Classical Liberal Arts of Number, Geometry, Music & Cosmology*. New York, NY: Bloomsbury Publishing. 2010.
3. Godwin, Joscelyn. *Music and the Occult: French Musical Philosophies 1750-1950*. New York, NY: University of Rochester Press. 1995. p. 4.
4. *Ibid.*
5. Reeve, Neil H. and Kerridge, Richard. *Nearly Too Much: The Poetry of J.H. Prynne*. Liverpool: Liverpool University Press. 1995. p. 182.
6. Godwin, *op. cit.*, p. 4.
7. Mellors, Anthony. *Late Modernist Poetics from Pound to Prynne*. Manchester: Manchester University Press. 2005. p. 129.
8. Yearsley, David. *Bach and the Meanings of Counterpoint*. Cambridge: Cambridge University Press. 2002. p. 58.
9. Lachenmann, Helmut. "On Structuralism". *Contemporary Music Review*. Vol. 12, Part 1. 1995. p. 98.
10. Lachenmann, Helmut. "Philosophy of Composition Is There Such a Thing?" In *Identity and Difference: Essays on Music, Language and Time*, Collected Writings of the Orpheus Institute. Wieland Hoban (trans.). Leuven: University of Leuven Press. 2004. p. 58.
11. A quality that Prynne notes with respect to Chinese poetry, in Reeve and Kerridge, *op. cit.*, p. 182.
12. Ferneyhough, Brian. "Schönberg's String Trio". Paper read at the Fondation Royaumont, France. 1995. Unpublished manuscript. p. 2.
13. Schaeffer, Pierre. "Acousmatics". In *Audio Culture: Readings in Modern Music*. Christopher Cox and Daniel Warner (eds.). New York, NY: Bloomsbury Publishing. 2004. p. 77.
14. Lachenmann, Helmut. "Bedingungen des Materials". In *Musik als existentielle Erfahrung existentielle Erfahrung: Schriften 1966-1995*. Wiesbaden: Breitkopf & Härtel. 1996. p. 35.
15. Heathcote, Abigail. "Sound Structures, Transformations, and Broken Magic: An Interview with Helmut Lachenmann". In *Contemporary Music: Theoretical and Philosophical Perspectives*. Max Paddison and Irène Deliège (eds.). Farnham: Ashgate Publishing Limited. 2010. p. 334.
16. Adorno, Theodor. "Music and Language: A Fragment". In *Quasi una Fantasia: Essays on Modern Music*. Rodney Livingstone (trans.). London: Verso. 1998. p. 5.
17. *Ibid.*, p. 6.
18. Prynne, Jeremy Halvard. "A Letter to Steve McCaffery". *The Gig*. No. 7. November 2000. p. 44.
19. Prynne, Jeremy Halvard. "Mental Ears and Poetic Work". *Chicago Review*. Vol. 55. No. 1. 2010. p. 139.
20. Lachenmann, Helmut. "Klangtypen der Neuen Musik". In *Musik als existentielle Erfahrung existentielle Erfahrung: Schriften 1966-1995*. pp. 1-20.

often wrestling the material into tonal patterns of cadence, tension and relaxation, antecedent and consequent.²¹ By *Strukturklang*, “what is meant is a way of thinking which cannot just be aimed at the creation, stipulation or drawing of attention to musical structures, but focuses on where such structures emerge, take shape and foster awareness of themselves as a result of the direct and indirect confrontation with existing structures in the material derived from all areas of experience and existence, all realities, including those outside the realm of music.”²²

The “speculative turn” in music composition today is indeed not to excise music’s resemblance to language, and by extension music’s capacity for expression, but to decentre music’s *humanised* expression from its privileged position for the possibility of a music independent of language, thought and intentions, where music’s materiality can exceed human agency.²³ “Intentions are central to music... there is no music which is wholly devoid of expressive elements,” but music is more than intentionality by its “asserting that concepts are foreign to music.”²⁴ Such music would suggest a *critical materialist sound*²⁵—a sound world outside of consciousness rather than a sound world fully endowed with consciousness, thus placing the listener in a “space where we are required to rethink our personhood within a larger domain of life.”²⁶

A critical materialist music has connections to Julia Kristeva’s notion that a truly radical form of expression must engage in a dialectic between the pre-symbolic mediums of experience, or semiotic, and symbolic discourses.²⁷ The semiotic, for Kristeva, refers to the materiality of the symbolic, those “innumerable motivated echoes of non-arbitrary confirmation to the sense or idea”²⁸ that can promote an expectance of connections between “sound and sense, where the noise that is a product of materiality becomes potentially significant.”²⁹ A noise-bearing aesthetics of music composition is essential for interferences in the

“unidirectional data flow” where noise is coded back onto the level of sense, akin to Lachenmann’s *musique concrète instrumentale*. A *musique concrète instrumentale* brings to bear the conditions under which a sound—or noise—is physically produced, what materials and energies are involved and what resistances are encountered.³⁰ Questions of noise and interference, or “waste” as that which remains resistant to conceptualisation, occupy Prynne, whose poetry dialectically repositions a lyrical subjectivity with respect to the complex materiality of language and serves as a model for my own compositional thinking. Waste signifies excess and “rubbish stands as a rebuke and challenge to instrumental systems... because rubbish is what is left when the operation of the system is complete and nothing should be left.”³¹ Rubbish, according to Kristeva, suggests that the expelled and used-up parts are in a constant process of dissolution and exchange with the world and thus resists its being enframed for use value by some manipulative power or as mere decoration within a commodifying culture.³² Waste also suggests an ecological concern where there is an “emergence of a new process of negotiation between different narratives and systems of cultural meaning” that collides with the “powerful instrumental discourses of the culture.”³³

A critical materialism has as its basis resistance and difficulty. Material resistance comes into play when the object cannot be reduced to a conceptual, linguistic or practical determination of the subject. As Prynne states, “The concept of resistance may provide an alternative criterion of intelligibility; one which does not undermine the presence, actuality and existence of an object or person, but which makes accessible the fact of its existence without impairing its status as a substantial, independent entity.”³⁴ And difficulty is the subjective counterpart to resistance: “I experience difficulty when I encounter resistance.”³⁵ Speculative thinking can only exist when sufficient resistance is encountered and difficulty experienced in order to “meet the continuing demand for palpable texture in human

affairs,” where this “priority of givenness over purposiveness seems to be a distinguishing feature of the creative imagination alone of the various capacities of man. It is the imagination’s peculiar function to admit, draw sustenance from, and celebrate the ontological priority of this outside world, by creating entities which subsequently become a part of this world, an addition to it.”³⁶ A celebration of the “ontological priority of the outside world”, where a speculative music can place a listener’s position as not within the world but of the world, affirms the human as one part of the “more-than-human” world.³⁷

In current music compositional trends there is little space for a speculative composing, an unfortunate disposition that began in the late 1960s, when the utopian attitude of serialism and experimentalism became reduced to its sonic effects (a *Texturklang* music that prioritises the ontology of sound over its possible relations). Such a reduction continued in what was later called “spectral music” (particularly in work by Tristan Murail and the orientation at IRCAM),³⁸ whereby any imagination around the speculative potential of music was reduced and enframed by a technological fetishism for sonic manipulation dominated by over-humanised conceptualisation, commodification and control.³⁹ Speculative composing requires resistance that is lost in much of the technological enframing of music that reduces music to mere sound. Speculative composing requires the energy gained from sounds’ material conditions of production as well as the pressures and resistances of sounds’ relations to one another once produced, since the energy of their production can be sustained in a constellation of sound-structures. Many composers today who explore—or perhaps fetishise—“new sounds” on instruments at the expense of sounds’ relation to syntax embrace an “encroaching narcissism of preoccupation” often promoting “unrecognized claims of endorsement from chance occurrence, locked into habits of procedure” and ultimately stifle speculation due to the isolation of a “self-interior.”⁴⁰ This sound fetishism—or *Geräusch Music* (noise music)—is one of the negative effects of Lachenmann’s *musique concrète instrumentale* when divorced from the idea of a *Strukturklang* (and a dialectical engagement with both sound and structure). Lachenmann’s “textual dimension” requires that a listener be active and ever-engaged with the process of music so as not to elicit a passive listening through static sound textures that often appear in the absence of musical syntax.⁴¹ Equally problematic has been the “critical composition”

21. Lachenmann. “Bedingungen des Materials”. p. 17.
22. Lachenmann. “On Structuralism”. p. 100.
23. Bryant, Levi, Srnicek, Nick and Harman, Graham. “Towards a Speculative Philosophy”. In *The Speculative Turn: Continental Materialism and Realism*. Levi Bryant, Nick Srnicek and Graham Harman (eds.). Melbourne: re.press. 2011. p. 5.
24. Adorno. “Music and Language: A Fragment”. p. 1, p. 3 and p. 6.
25. The analogy is to filmmaker Jean-Marie Straub’s “materialist image”. Clark, George and Entwistle, Redmond. “We do everything for this art, but this art isn’t everything: Notes on Danièle Huillet and Jean-Marie Straub”. *Vertigo Magazine*. Vol. 3. Issue 6. Summer 2007. p. 2. For a discussion of “critical materialism”, see Cook, Deborah. *Adorno on Nature*. Durham: Acumen Publishing Limited. 2011. pp. 7-33.
26. Bristow, Tom. *The Anthropocene Lyric: An Affective Geography of Poetry, Person, Place*. London: Palgrave Macmillan. 2015. p. 6.
27. Reeve and Kerridge, *op. cit.*, p. 118.
28. Pope, Alexander. *The Works of Alexander Pope, Esq.* Vol. V. London: Adamant Media Corporation. 2001. p. 61.
29. Solnick, Sam. *Poetry and the Anthropocene: Ecology, biology and technology in contemporary British and Irish poetry*. London and New York, NY: Routledge. 2017. p. 165.
30. Heathcote, *op. cit.*, p. 334.
31. Reeve and Kerridge in their discussion of Kristeva, *op. cit.*, p. 10.
32. *Ibid.*, p. 9.
33. *Ibid.*, p. 9, p. 143.
34. Prynne, Jeremy Halvard. “Resistance and Difficulty”. *Prospect*. No. 5. Winter 1961. p. 27.
35. *Ibid.*, p. 28.
36. *Ibid.*, p. 30.
37. Bristow, *op. cit.*, p. 2.
38. Murail, Tristan. “The Revolution of Complex Sounds”. Joshua Cody (trans.). *Contemporary Music Review*. Vol. 24. Nos. 2/3. 2005. pp. 121-135.
39. Ferneyhough, Brian. “Shaping Sound”. In *Sound*. Patricia Kruth and Henry Stobart (eds.). Cambridge: Cambridge University Press. 2000. pp. 169-170.
40. Prynne, “Mental Ears and Poetic Work”, p. 127.
41. Lachenmann, “Klangtypen der Neuen Musik”, p. 14.

(*Kritisches Komponieren*)⁴² of Mathias Spahlinger and Nicolaus A. Huber with an exorcising of any subject position in music through an impersonal production of sounds, where the resulting music has a monolithic object-status and the listener is often rendered passive.⁴³ Such an orientation has developed into today's conceptual music (*die Konzeptmusik*),⁴⁴ which furthers the object-status of music as commodity and offers a full embrace of commercial culture in which concepts and "branding" are paramount for maximal exchange value and managing artistic (and financial) risk, musics that seem "every bit as restrictive in their ideological conformity as to satisfy the expectations of a predefined market."⁴⁵

Critical materialism—and the resistance and difficulty that accompanies it—is important for speculation to manifest itself. For Adorno, a speculative thinking is equivalent to a materialist thinking where "somatic contamination is merely not an impurity, but a condition of thinking's possibility."⁴⁶ As with a *musique concrète instrumentale*, the bodily performative experience is allowed to speak and the body itself is seen as a "conduit for material and cultural forces passing through it."⁴⁷ The speculative moment, then, is that "which does not allow its law to be prescribed to it by the given facts", yet transcends those facts in the closest contact with the objects' material conditions and "in renunciation of any sacrosanct transcendence".⁴⁸ This critical aspect of materialism points to the internal contradictions of the object's essence that are the forces of its appearance. Such a critical aspect is key in preventing materialism, as Patrice Haynes suggests, from lapsing into a "naïve realism", where thought rests in sheer givens such as Being, Life, Sexual Difference, Matter, Vitality, which assume "access to a non-dialectical positivity" requiring a "leap out of all history" and to effect a false reconciliation between subject and object.⁴⁹ Such materialism detaches material realities from "the matrix of social embodiment, thus lending a certain otherworldliness to these material

realities."⁵⁰ Indeed, it is the non-identity between thought and the material object that provides a basis for speculative thinking through the resistance materialism provides and subjective difficulty encountered therein. "By maintaining both subject and object in dialectical tension, Adorno is able to preserve the force-field between mind and matter which sustains both social criticism and objects in their sensuous particularity."⁵¹

Speculative listening—the necessary complement to a speculative composing—requires, what Prynne calls "mental ears". To paraphrase Prynne's notion into the realm of music composition, "mental ears" permit reconstruction of sounds—or what Ferneyhough would call "vocables",⁵² as sounds with a humanised agency—across preceding historical eras, so that the alert listener can "tune in" to earlier schedules of musical composition: "the percipient self re-locates so as to occupy a prior station already inflected by knowledge of successor historical conditions. Mental ears are thus evolutionary by retroflex recognizance, from the outcomes of experiment back to the experimental matrix itself and its shifting points of origin."⁵³

Prynne's focus upon a phonological template for poetic language has great bearing on music composition, because "the sounds that poems make are not here treated as acoustic sonorities, but as semi-abstract representations of relations and orderings between and across sounds."⁵⁴ Indeed, mental ears are "empowered by linkages of memory and retrospect, as reconstruction of what originally faced towards the undeclared future. Mental ears will hear in older sounds the then new sounds of making and marking a track into forward space: a future in the past."⁵⁵

Philosopher David Lewis saw speculation as a fundamental problem in philosophy—how to account for such modal statements as "possibly the case"?—and developed a modal realism for "possible worlds" to account for the infinite number of possibilities that are always present to us and run

parallel to the “actual” world—of “how things are”—where our paths are often shaped by environmental, societal and economic pressures.⁵⁶ Using Lewis’s proposal of a “transworld identity”,⁵⁷ a speculative identity across possible worlds, I suggest that mental ears can re-hear earlier works and speculate on how a music’s identity and “authenticity” could have been otherwise, or, as Prynne notes, to recover song “across former generations, and the span of many layers and locations of practice, set out a format of provisional continuity.”⁵⁸ Such speculation can ground the listening experience in this transworld identity through “linkages of memory and retrospect”, where multiple historical times, places and geographies are simultaneously present. The composer Bernd Alois Zimmermann has proposed the term *Kugelgestalt der Zeit* (spherical form of time) for such a transworld orientation, where an abrupt shift in scales for the listening experience can have the result of presenting the idea of totality as unattainable and implying something much larger of which all subjects and discourses are interpenetrative parts.⁵⁹ “A symphony’s possibilities must be like the world and embrace everything,” Gustav Mahler once said to Jean Sibelius.⁶⁰ Indeed, Mahler’s “deviational” orchestration, as a way of musical estrangement, projects an image of “nature” as all that is “other” to the discourse of music, essentially revealing that much of what is regarded as “nature” in music is “second nature” (the “norms” of a musical language that have come to suggest the illusion of “naturalness”).⁶¹ Such a revelation in the listening experience can open up a larger space in which the discourse of music is resituated in the complex variousness of the world, including humans, society and their environments. These “thetic” moments, to use a term of Julia Kristeva’s, as moments of “rupture and/or boundary” are the moments when the subject, as listener, is “repositioned in relation to new objects”, which might afford “moments of opportunity and overflow, moments when the symbolic dissolves into the semiotic, necessitating the intervention of new forms of the symbolic.”⁶² These moments of overflow also open up the musical experience to “mystery”, what John Keats referred to as “negative capability”—“capable of uncertainties, doubts, without any reaching after fact and reason”—where “mystery” is that which is ungraspable and is resistant to appropriation by the subject.⁶³ This resistance is the reaffirmation of the actual world—“how things are”—a world that is much larger than its more-than-human dwelling place in which we reside. The challenge of contemporary music composition is indeed to

42. Huber, Nicolaus A. “Critical Music”. Petra Music and Philipp Blume (trans.). *Contemporary Music Review*. Vol. 27. No. 6. 2008. pp. 565-568; Spahlinger, Matthias. “Political implications of the material of new music”. Alistair Zaldua (trans.). *Contemporary Music Review*. Vol. 34. Nos. 2/3. 2015. pp. 127-166.

43. Reeve and Kerridge, *op. cit.*, p. 109.

44. Lehmann, Harry. “Konzeptmusik. Katalysator der gehaltsästhetischen Wende in der Neuen Musik”. *Neue Zeitschrift für Musik*. No. 1. 2014. pp. 22-25, pp. 30-35, pp. 40-43.

45. Prynne, “A Letter to Steve McCaffery”, p. 40.

46. Jarvis, Simon. “What is Speculative Thinking?” In *Theodor W. Adorno: Critical Evaluations in Cultural Theory*, Vol. III. London and New York: Routledge. 2007, p. 276.

47. Reeve and Kerridge, *op. cit.*, p. 22.

48. Jarvis, *op. cit.*, p. 274.

49. Haynes, Patrice. *Immanent Transcendence: Reconfiguring Materialism in Continental Philosophy*. New York, NY: Bloomsbury Publishing. 2012. p. 128.

50. *Ibid.*, p. 127.

51. *Ibid.*

52. Ferneyhough, Brian. “Form – Figure – Style: An Intermediate Assessment”. In *Collected Writings*. Newark, NJ: Harwood Academic Publishers GmbH. 1995. p. 22.

53. Prynne, “Mental Ears and Poetic Work”, p. 129.

54. *Ibid.*, p. 130.

55. *Ibid.*, p. 133.

56. Lewis, David. *On the Plurality of Worlds*. Oxford: Blackwell Publishing Ltd. 1986.

57. Lewis, David. “Counterpart Theory and Quantified Modal Logic”. In *The Possible and the Actual: Readings in the Metaphysics of Modality*. Michael J. Loux (ed.) Ithaca, NY: Cornell University Press. 1979. pp. 110-128.

58. Prynne, “Mental Ears and Poetic Work”, p. 128.

59. Zimmermann, Bernd Alois. *Intervall und Zeit*. Mainz: Edition Schott. 1974. p. 96. Zimmermann describes the *Kugelgestalt der Zeit* as where future, present and past are interchangeable.

60. Oestreich, James R. “Pursuing the Sublime in Mahler”. *The New York Times*. November 18, 1994.

61. Adorno, Theodor. *Mahler: A Musical Physiognomy*. Chicago, IL: The University of Chicago Press. 1992. p. 16.

62. Reeve and Kerridge, *op. cit.*, p. 120.

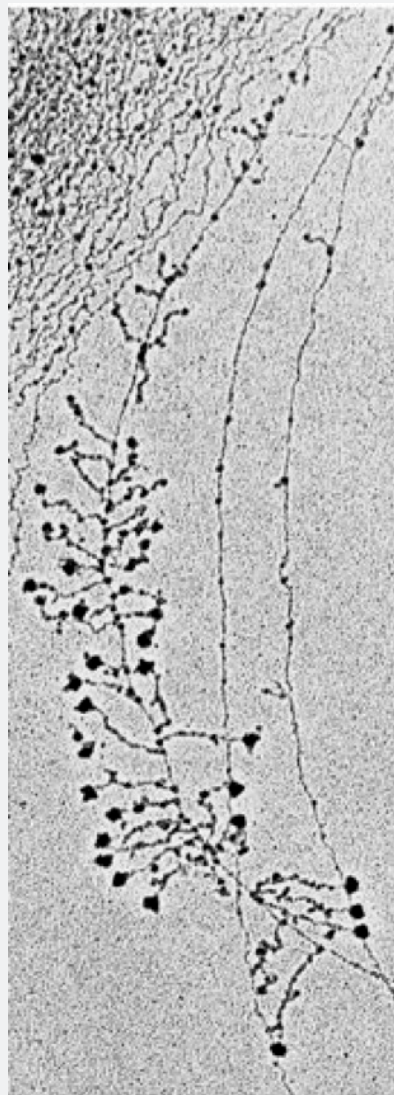
63. Keats, John. *Complete Poems and Selected Letters*. New York, NY: The Modern Library. 2001. p. 492.

speculate upon “possible worlds as a counterpoint to our contemporary understanding of place” where the lyric in music is sensitive to relations between human impact and presence in the more-than-human world.⁶⁴ Such sensitivity arises from a compositional superfluity, where subjectivity is “dislocated presence” for new modes of perception to appear that resist representation, conceptualisation, enframing, quantification and instrumentalisation.⁶⁵ Music composition today should ask listeners to listen “beyond anthropocentric terms, including the ways in which the resistance of the world—its conflicting and dynamic materiality—exceeds both conceptual thought and technological control.”⁶⁶

As a composer, I have been engaged in such an approach through a renewed sense of a “musica speculativa” by proposing “what if” scenarios to re-hear the past in alternative contexts, as if the possibilities for history could have been otherwise. The sonic resonances of history are often suppressed and de-valued in the face of that which can be re-seen. But light travels faster than sound, meaning that the sonic resonances that still linger often tell far more about a history, people and their environments than the images that return to memorialise them. Indeed, to listen deeply and with enhanced attention to the sedimented products of an earlier era is, as Prynne notes, to “encounter the meaning of a cultural process, the intricate play of ethical agency and imaginative conjecture as composing a pedigree for full present-tense creative empowerment.”⁶⁷ This intricate play of ethical agency and imaginative conjecture is at the essence of what I call “speculative composing”, or as Prynne writes: “to put under test by imagination as a screen of poetic conscience, to coax and hurl at finesse and judgment, and to set beliefs and principles on line, self-determining but nothing for its own sake merely, all under test of how things are.”⁶⁸

Much of my material is derived from transcribing other music through the method of what biologists have called “reverse transcriptions”.⁶⁹ Transcriptions

came about through the central dogma of genetic mapping—the model of “unidirectional data flow” of DNA onto RNA—which was then challenged by the phenomenon of reverse transcription (of RNA back onto DNA) where *noise* in the communication channel becomes part of the message and viruses can manifest.⁷⁰



Example 2. DNA transcription where the RNA processing machinery is contained inside structures called “terminal knobs” in nascent RNA transcripts. Terminal knobs are visible in this electron micrograph of chromatin spreads from yeast (© 2002 Nature Publishing Group).

The importance of organic networks such as genetic mapping is that they can suggest “a sense of language different to that of mammalian agency, one aware of the deposits and relationships” that comprises sounds before they are recruited into the “action of human agency”.⁷¹ Instead their “connected roots develop their own internal agency and activity”, which is part of the organic connection of the whole relation of music to world and to nature.⁷² Indeed speculative music composition induces “difficult grafts to grow” from these “deposits and relationships” of the world’s sounds and noises, where the “ludic syntax” of music’s intentionality gradually casts its “weights and shadows parasitically into the playing-fields”, suggesting a music whose resemblance to language exceeds anthropomorphic terms.⁷³

Reverse transcriptions in my music conjure the sonic image of a polyphony between multiple musical figures and quotations that have been damaged and warped through the “ludic syntax” of polyrhythmic “weights and shadows” and, most importantly, structurally blended— as “difficult grafts”— with noise to create a dense *Strukturklang*, where moments of subjectivity and lyricism can be heard through the figural traces in the overall mass of sound. *Strukturklang* in my music is the *rhythm* where noise, waste and the materiality of sound production are “mapped onto determinations and coercions” that embody an interrogation of intentionality as the action of human agency in order to exceed such agency.⁷⁴ Much of the “determinations and coercions” that embody an “interrogation of intentionality” is my working against

the “time-logic” of the *Strukturklang* by forcing it into metrical spaces that break open a chain of associations and decentre its “natural” modes of expression in order to suggest a sense of language that exceeds human agency. The noise that is a product of materiality becomes potentially significant: sense-generating engagements with sound can happen, from which the particularity of the sounding event resists the generalising logic of exchange value.⁷⁵ Noise can tune into the accumulated layers of signification accrued through music’s evolution and reactivate past codes as the “contamination of damaged forms”.⁷⁶ The capacity of reverse transcriptions to damage and wound the original flow of information, where new musical constructions can emerge from a degraded lexicon, imposes limitations on musical expression in order to decentre music’s capacity for lyricism, whereby the organic connection of the subject to the “unfathomable wilderness” on the other side of being is opened up and nourished.⁷⁷

Music’s forms give rise to objects, such as gestures that convey subjective expression and intentionality, which are fundamentally “dielectric” in that they constitute a material “across which electric current acts but... does not itself conduct electricity, it is an insulator and therefore resistant to a current’s flow.”⁷⁸ Musical objects can only display the type and quantity of energy applied to them, through the damage they present to us. But to regard musical objects as *vibrant* in themselves would perpetuate the “ideology of the transparency to expression of the single gesture”⁷⁹ and make the “struggle of the fractured

64. Bristow, *op. cit.*, p. 4.

65. Bristow, *op. cit.*.

66. Solnick, *op. cit.*, p. 190.

67. Prynne, “Mental Ears and Poetic Work”, p. 128.

68. Prynne, Jeremy Halvard. “Poetic Thought”. *Textual Practice*. Vol. 24. No. 4. 2010. p. 597.

69. Solnick, *op. cit.*, pp. 164–165, p. 167, p. 184.

70. *Ibid.*

71. *Ibid.*, p. 171.

72. *Ibid.*

73. Prynne, “A Letter to Steve McCaffery”, p. 41.

74. *Ibid.*

75. Solnick, *op. cit.*, p. 165.

76. *Ibid.*, p. 172.

77. Celan, Paul. “Edgar Jené and The Dream About The Dream”. In *Collected Prose*. Rosmarie Waldrop (trans.). New York, NY: Routledge, 2003. p. 3.

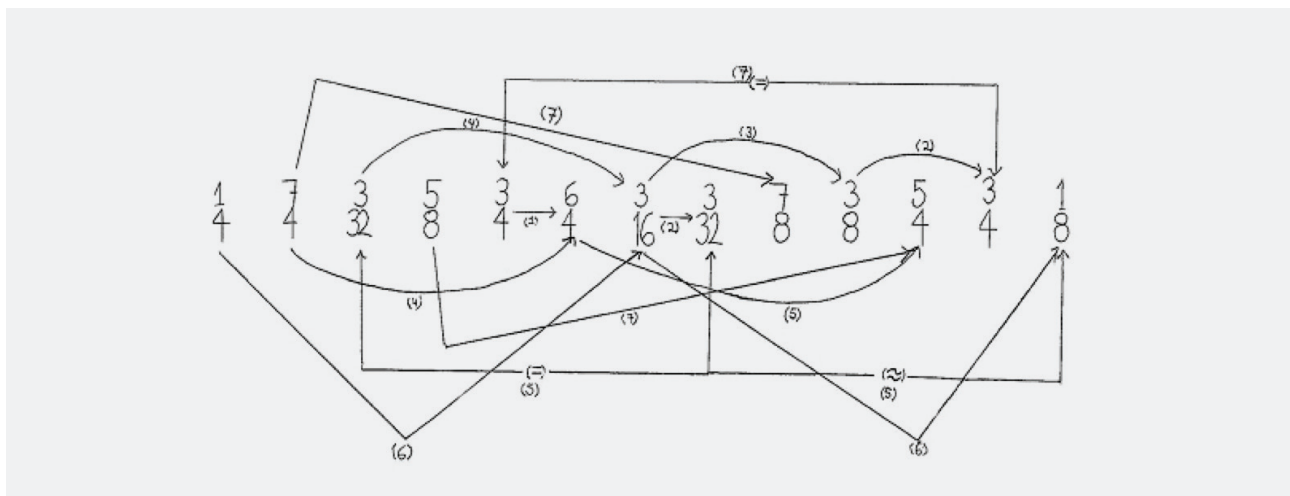
78. Solnick, *op. cit.*, p. 190; Prynne, Jeremy Halvard. *Poems*. Eastburn: Bloodaxe Books. 2015. p. 641.

79. Ferneyhough, Brian. “Interview with Richard Toop”. *Collected Writings*. p. 282.

subject with itself superfluous”.⁸⁰ Rather, they create that bridge between sound and the forces being applied. Ferneyhough’s idea of the *figure* is essential to the dielectric qualities—as “continuous jostlings of positive and negative charges”⁸¹—through which music acts as a *seismograph* that traces the lines of force applied to the central nervous system of highly *pressurised* materials. Such music is not a question of reproducing or inventing forms, but of harnessing forces.⁸² At the centre of a musical gesture is no nucleus of tangibility, but instead a system of relationships. What matters is what happens between gestures, between sounds, where the direction of energy is always outward and physical towards perceptions rather than ideas. Lines of force arise in the space between these objects—“not space as temporal lacuna, but at that moment of conceptual differentiation in which identity is born”⁸³—and can generate *figural energies* established in the act of moving from one discrete musical gesture to another.⁸⁴ Unlike a traditional musical gesture that rarely leaves its descriptive context, the figure congeals and dissolves into a field of processes as pure energy, where complexity arises from *multiple* “perspectival causal energies” that occur in the “momentary successive or overlapping chaotic vortices of perturbation”.⁸⁵ The energy that is projected is automatically part of music’s *content*: insofar as music transmits energy it is also “about” that energy.⁸⁶

A speculative compositional process projects its “content” as “perspectival energies” out into the world that forces one to “reperspectivise the world of everyday existence which confronts us beyond the limits of the work.”⁸⁷ Thus poet Charles Olson’s dictum “form is never more than the extension of content”⁸⁸ implies more than a determination of form by content (the credo of organic form), but that musical energy “literally extends the content, makes it grow, projects it outward into neighboring areas.”⁸⁹ Indeed, the essence of contemporary reality is where “man and nature are revealed to be partners in a larger continuum which enfolds them both” and “song is the agent of this revelation.”⁹⁰ Such “humilitas” is the essence of a more-than-human lyric that is a point of entry into the processes where one can gain a measure of the forces and energies deployed.⁹¹ Music’s damaged, violated integrity signals the opposition and resistance that certain lyric procedures meet or defy, where the “nature and power of the forces to which they are exposed need to be calculated with a view to gradual ‘weathering’, erosion, or their sudden omnidirectional ‘dematerialization’.”⁹²

It is through reverse transcriptions that the “dielectric” qualities and materiality of music can be brought to bear.⁹³ Electricity as energy, as well as noise, can be managed on many different levels.



Example 3. Ming Tsao, “Metric Scheme”, from “Fragments of a Compositional Methodology”, *Search Journal for New Music and Culture*, Winter 2008.

Metre and rhythm in music create a *rhythmic grid* that can become aggressively irregular, placing intense pressure on the sounds in order to produce a tortured syntax and an intense compression of energy. Metre schemes can emphasise the alternation between the short and long durations, similar to poet Ezra Pound's "weights and durations" in poetic metre,⁹⁴ in order to create electric and magnetic fields of a "locus", or "vortex", that can emerge as "a work-internal assembly of forces" and a "virtual topology of possibilities."⁹⁵ In Example 3, the metric progression suggests a "vortex" (with a radiant node towards the centre) either through subtle additive movements (such as "+" or "-" one beat) or through more drastic multiplicative movements (such as doubling or halving the beat unit).

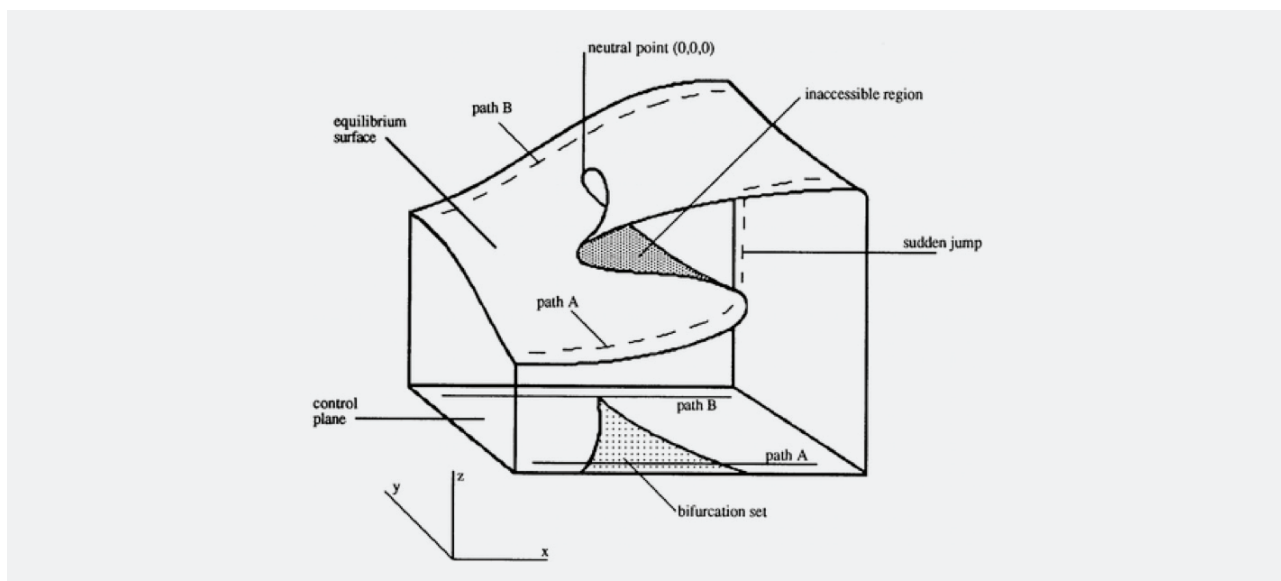
A composer's metrical choices function as rules for the base structure that give shape and expression to the musical grammar, or, as Prynne would state with respect to language, to its "rational and evolutionary linguistic skeleton, which supports the productive inventiveness of textuality."⁹⁶ Metre and rhythm, as possible resistances to the violence of an over-humanised musical language with its "domesticated" categories of sensation (such as consonance, melody and pathos), can bring awareness to the forces of this violence in order to corrode, what Lachenmann has called, "the boundaries of the old, ruling idea of music."⁹⁷ Metre in particular can "disrupt a complaisant surface harmony by the head-on turns which generate energy of conception and conscience and bring discrepant aspects face to face."⁹⁸ Metre and rhythm can inscribe "new sets of sense-bearing differences upon the schedule of old ones",⁹⁹ where a "measure is not primarily a unit of emphasis, of agogic priorities, but a space, serving to delimit the field of operations or presence of specific sound qualities, of musical processes. The consistency of iterative impulses serves primarily to set off the limits, operative boundaries between one such space and another."¹⁰⁰ According to this principle, "degrees of compression, distortion, convergence or mutual interference are calculable in respect of the degree to which the sense of clock time is supported or subverted by the specific tactility of impulse density setting the 'inner clock' of a particular metric space. Expressions of ratio relationships and proportionally-related structures are, in essence, expressed by means of different categories of perceptual mechanism."¹⁰¹

80. Lachenmann, Helmut. "Open Letter to Hans Werner Henze". Jeffrey Stadelman (trans.). *Perspectives of New Music*, Vol. 35. No. 2. Summer 1997. p. 191.
81. Prynne, *Poems*, p. 641.
82. Smith, Daniel W. "Introduction". In *Francis Bacon: The Logic of Sensation*. Gilles Deleuze. Daniel W. Smith (trans.). Minnesota, MN: The University of Minnesota Press. 2002. p. xiii.
83. Ferneyhough, "Il Tempo della Figura". *Collected Writings*. p. 35.
84. *Ibid.*, pp. 37–38.
85. Ferneyhough. "Parallel Universes". *Collected Writings*. p. 77.
86. Stein, Charles. *The Secret of the Black Chrysanthemum*. New York, NY: Station Hill Press. 1987. p. 26.
87. Toop, Richard. "On Superscriptio: An Interview with Brian Ferneyhough, and an Analysis". *Contemporary Music Review*. Vol. 13. Part I. 1995. p. 3.
88. Olson, Charles. "Projective Verse," *Collected Prose*, ed. Donald Allen and Benjamin Friedlander (Berkeley: University of California Press, 1997), p. 240.
89. Waldrop, Rosmarie. "Charles Olson: Process and Relationship". *Twentieth Century Literature*. Vol. 23. No. 4. 1977. p. 478.
90. Reeve and Kerridge, *Nearly Too Much*, p. 44.
91. Olson, "Projective Verse", p. 247.
92. Ferneyhough. "Il Tempo della Figura". p. 35.
93. Solnick. *op. cit.* p. 190. Solnick repels the word "dielectric" as "dialectic" to draw its relationship to dialectical thinking.
94. Pound, Ezra. *ABC of Reading*. New York, NY: New Directions. 1934. p. 199.
95. Ferneyhough, Brian. "Barbarians at the Gates". Paper read at Goldsmiths College, London, 2002. Unpublished manuscript. p. 7.
96. Prynne, "Mental Ears and Poetic Work", p. 131.
97. Lachenmann, "Philosophy of Composition Is There Such a Thing?", p. 65.
98. Prynne, "Mental Ears and Poetic Work", p. 141.
99. Prynne, Jeremy Halvard. *Stars, Tigers and the Shape of Words*. The William Matthews Lectures 1992. London: Birkbeck College. 1993. p. 34.
100. Ferneyhough, "Duration and Rhythm as Compositional Resources", p. 52.
101. *Ibid.*

The uses of “irrational measure lengths”, whose denominators cannot be expressed as powers of two (such as $3/10$ or $5/24$), are useful as “local ‘dissonances’ serving to refocus attention and instantiate reassessment of the prevailing temporal perspective.”¹⁰² They can also act as “catastrophic” leaps that open faults and cleavages within the textual domain of music, where such an activation of a “system of discontinuities and breaks”, as Prynne notes, “interrupt the intrinsic cohesion and boundary profiles of its domain, so that there is constant leakage inwards and outwards across the connection with the larger world order.”¹⁰³ This leakage “provides a challenge to the humanist paradigm and its place in the late-capitalist culture by imposing shifts of scale which immediately disrupt any sense of personal, unmediated perception.”¹⁰⁴ What the textual domain of music opens up to is what Lachenmann calls “situations”,¹⁰⁵ or what John Cage would refer to as “anarchic harmony”, where sound is freed from a human intentionality and reaches into the artlessness of nature.¹⁰⁶ Yet in Lachenmann’s music, despite the materiality of sound through reverse transcriptions continually interfering with the flow of expression to create presence, the subject position of the lyric is always central, unmovable and dominates all other positions from disrupting the

discourse of meaning, which can reduce the lyrical impulse to a cultural nostalgia. When the “textual domain” of music becomes nostalgic, then the capacity for “situations” can be relegated to garden-like spaces where freedom in the act of listening can lose its “sense of risk”¹⁰⁷ and become dominated by an over-humanised lyricism. Conversely, in Ferneyhough’s music, despite the constantly shifting subject positions for a listener to inhabit that can ward off the tendency to reification, the absence of a reverse transcription back into the flow of expression—as *musique concrète instrumentale*—causes the free play of figural energies to be absent of a “ground” against which any listening will take place. Without the presence that a “ground” provides, the music can become merely abstract and reduced to a “play of surfaces”.

Reverse transcriptions occasionally find their way into the music of Iannis Xenakis, who used mathematical methods in music composition to get closer to the conflicting and dynamic materiality of nature, to bring one “closer to the data”.¹⁰⁸ What I find particularly relevant is the engagement with catastrophe theory of discontinuous behaviour arising from continuous underlying forces yielding a loss of stability in a dynamical system.¹⁰⁹ A sequence of



Example 4. A cusp catastrophe, where the state of the topological surface is not “smooth” at every point and presents a catastrophic “sudden jump” along path A. (From E. C. Zeeman, “Catastrophe Theory”, in *Scientific American*, April 1976, pp. 65–83).

proportional measures can create a morphogenetic field—as patterned rhythmic energy where short measures act as attractors—that draws energy towards its centre. The presence of “irrational” measures at the centre of each sequence is a (temporal) discontinuity that can cause a catastrophic jump. Any discontinuous transition can occur when a system has more than one stable state, or can diverge and follow more than one stable pathway of change (Example 4).

A catastrophic change of a state mapped in a musical work brings to the surface the inherent sense of contradiction in the materials as divergent and even conflicting “lines of force”. Lines of force can promote the onward-flowing projection of multiple, ambiguous and even contradictory perspectives as “depth effect”.¹¹⁰ Such vertiginous, paradoxical perspectives can be represented in catastrophe theory by “the concept of multiple attractors—or multiple system equilibria—when operating in the range of the bifurcation set. Depending on the level of parametrization, the musical form modelled with catastrophe theory presents ‘gaps’ of behavior, creating zones of divergence from the established musical material; in these zones the uniformity, unanimity and stability of the musical structure is undermined by introducing conflicting elements into the form.”¹¹¹ Irrational measures, as local “catastrophes”, enact the “constant slippage of what felt secure and underpin the engagement with a problematically intermediate position between stasis and permanent flow.”¹¹²

Mirandas Atemwende, the second act to my opera *Die Geisterinsel*, provides

an example of reverse transcription embedded with local catastrophes that mirror the “constant slippage” of the protagonist’s grasp on the effects of language. The first act, *Die Geisterinsel*, is based upon a late-eighteenth-century *Singspiel* with the same title by the German composer Johann Rudolf Zumsteeg, and is an adaption of Shakespeare’s *The Tempest*. Zumsteeg’s music is in the late-classical style of Wolfgang Amadeus Mozart and Joseph Haydn, and the libretto by Wilhelm Friedrich Gotter is characterised by its classically elevated German reminiscent of Goethe, which stands in sharp contrast to Shakespeare’s “late style” writing with its condensed information, use of vernacular and somewhat harsh and jagged rhythms. In my *Die Geisterinsel*, this late-classical musical style of Zumsteeg, its formal structures, harmonic language, etc., are reworked within my own noise-based aesthetics. After its premiere, I felt the need for a second act in order to somehow balance and enrich the main characters of *Die Geisterinsel*, where Caliban and Miranda and their respective relationship to Prospero introduce a more subtle critique of Prospero’s dominant position on the island where William Shakespeare’s *Tempest* takes place. Influenced by Prynne’s analysis of Shakespeare’s Sonnet 94 (“They that Haue Powre to Hurt”), where he exhaustively excavates its highly condensed semantic structures, as well as poet Paul Celan’s energetic and sound-focused translations of the Shakespeare sonnets, I began to work with texts as materiality more than as a carrier of narrative meaning and ideas. In *Mirandas Atemwende*, only Miranda and Caliban remain as characters from *Die Geisterinsel*

102. Cody, Joshua. “Brian Ferneyhough in Conversation with Joshua Cody”. 1996. Unpublished interview. p. 2.

103. Prynne. “Mental Ears and Poetic Work”. pp. 126–127.

104. Reeve and Kerridge, *op. cit.*, p. 4.

105. Heathcote, *op. cit.*, p. 334.

106. Cage, John. *Silence*. Hanover and London: Wesleyan University Press. 1961. p. 64.

107. Barthes, Roland. *The Responsibility of Forms*, Richard Howard (trans.). Berkeley, CA: University of California Press. 1985. p. 256.

108. Xenakis, Iannis. *Formalized Music: Thought and Mathematics in Composition*. Pendragon Revised Edition. New York, NY: Pendragon Press. 1992.

109. Thom, René. *Structural Stability and Morphogenesis*. Redwood City, CA: Addison-Wesley Publishing Company, Inc. 1989. pp. 320–321.

110. Ferneyhough, “Il Tempo della Figura”. p. 38.

111. Kosona, Fani and Hadjileontiadis, Leontios. “Catastrophe Theory: An Enhanced Structural and Ontological Space in Music Composition”. In *Mathematics and Computation in Music*. Carlos Agon, Moreno Andreatta, Gérard Assayag, Emmanuel Amiot, Jean Bresson, John Mandereau (eds.). Berlin: Springer-Verlag. 2011. p. 359.

112. Reeve and Kerridge, *op. cit.*, p. 64.

who extend their resentment of Prospero's authority over them to a more general critique of Prospero's language and its implied relations of hierarchy and power. The first eight tableaux of *Mirandas Atemwende* focus on Miranda through a speculative reverse transcription of Arnold Schönberg's monodrama *Erwartung*.

A sense of expectation for the possibilities of a radically new language—musical and poetic—away from Prospero's influence—and in Schönberg's case, from tonality—condition these tableaux. By quoting expressionist musical gestures rather than building upon a psychologically rooted expressionism, the music could be regarded as a documentary about expressionism, where expression is mediated through

6

II. Scene (Tiefstes Dunkel, breiter Weg, hohe, dicke Bäume. Sie tastet vorwärts) (sitternd auf, versucht ihre Hand (nach hinter der Szene) (Nicht sich, greift mit den Händen, aufsehend) zu betrachten)

Frau: Ist dann noch der Weg?.. Hier ist es e - - - ben. Was? Ist los!.. Eingeklemmt? Nein,...

U. E. 5561

Example 5. Arnold Schönberg, *Erwartung* mm. 37–41 (Vienna: Universal Edition, 1909). Schönberg composed the expressionist monodrama *Erwartung*, with a libretto by Marie Pappenheim, for a dramatic voice who claims to be the lone shaper of her own expression and the sounds of the orchestra respond in turn to her inner psychological state.

the lyric in music subjected to a stringent formal rigour, accompanied by the often delicate balance between extreme organisation and unfocused chaos. The libretto begins with syllabic fragments from Paul Celan's translation of Shakespeare's *Sonnet 105* and concludes with poems taken from his collection *Atemwende* (Breathturn), where the very integrity of the German language is put into question. Celan's

translation of Shakespeare into German, with its particular emphasis on sound and the materiality of language, is a stepping stone into his own poetry in which poetic expression is clearly alienated, broken and bordering upon mute. Celan's poetry as Miranda's text, whose words are forged together from fundamentally different categories (such as *Wortmond* or *Wundenspiegel*), creates a metaphorical

22

Es gibt einen Ort
♩ = 63

The musical score is a complex arrangement for a large ensemble. It includes parts for Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Bass Clarinet (B. Cl.), Horn (Hn.), Trumpet (Tpt.), Trombone (Tbn.), Percussion 1 (Perc. 1), Percussion 2 (Perc. 2), Percussion 3 (Perc. 3), Piano (Pno.), Cello (Cel.), Guitar (Gtr.), and Strings (Vln. I, Vln. II, Vla., Vc.). The score is marked with a tempo of 63 bpm and a time signature of 4/4. The title 'Es gibt einen Ort' is written above the first staff. The score includes various dynamic markings such as *pp*, *mp*, and *f*. There are also performance instructions like 'straight mute' for the brass instruments and 'motor on, slow' for the percussion. The score is divided into measures 78-81, with a tempo of 63 bpm. The title 'Es gibt einen Ort' is prominently displayed at the top of the score.

Example 6. Ming Tsao, *Miranda's Atemwende*, mm. 78–81 (Leipzig: Edition Peters, 2014–2015). A speculative reverse transcription of Example 4 from Arnold Schönberg's *Erwartung* to invoke a sense of expectation (*Erwartung*) for the possibilities of a radically new language, musical and poetic, away from Prospero's influence. In this new language, lyrical subjectivity is measured through Miranda's place in the more-than-human sounds of the island.

language that escapes Prospero's garden of rational discourse and re-establishes a necessary relationship between fact and value in order to have a power of consequences, a sense of existential meaning and purpose that had been lost on the island. As Miranda discovers, "poetic language is the language of an originary thinking that is free from the representationalism of rational enquiry. Because it speaks to, rather than through, consciousness, poetic thinking is the ethical capability to simultaneously let-be and bring-forth with regard to being."¹¹³

Miranda's "Atemwende" symbolises a radical poetic reorientation and solstice of breath by means of which poetry (Miranda's newly discovered language) is actualised. As Celan states in his *Meridian* speech: "The attention the poem tries to pay to everything it encounters, its sharper sense of detail, outline, structure, color, but also of the 'tremors' and 'hints,' all this is not, I believe, the achievement of an eye competing with (or emulating) ever more perfect instruments, but is rather a concentration that remains mindful of all our dates."¹¹⁴ Miranda's final lines from Gotter's libretto of *Die Geisterinsel*, "Ich will alle meine Sinne anstrengen" [I want to exert all of my senses],¹¹⁵ mirror Celan's sentiments, to become more "mindful of all our dates", that is, to have a greater awareness of one's sense of *being*, which Prospero's more "perfect instruments" have reduced to an abstraction of numbers. Miranda recites Celan's text "in order to speak, to orient myself, to find out where I was, where I was going, to my reality."¹¹⁶ As Celan notes: "A poem... may be a letter in a bottle thrown out to sea with the—not always strong—hope that it may somehow wash up somewhere, perhaps on a shoreline of the heart. In this way, too, poems are *en route*: they are headed toward. Toward what? Toward something open, inhabitable, an approachable you, perhaps, an approachable reality."¹¹⁷

Miranda's poetic language becomes the place for such an encounter—a meeting that conquers the self-distance she has acquired through Prospero's

education and her isolation on the island—from which she can construct an identity for herself. Miranda's message, in a bottle cast away from Prospero's island, is, throughout the opera, underway and her voice comes to symbolise fragility through this possibility of an unanswered poetic invocation. Miranda, through Celan's poems, seeks communication, contact, connection outside of the island as the dwelling place of mankind: "there are / still songs to sing beyond / mankind."¹¹⁸ Celan's poems almost always have a "you" (*dich*) to whom the poems are addressed. "The poem wants to head toward some other, it needs this other, it needs a counterpart. Everything, each human being is, for the poem heading toward this other."¹¹⁹ Miranda reaches for this other in the absence of Prospero, who is now gone, a counterpart to which she can be underway and headed towards. Indeed, Miranda embodies poetic discourse from the very beginning—the desire to forge Prospero's words into a new language that cannot divide and classify, one that explores the very limits of consciousness and establishes a necessary relationship to truth. In this sense, Miranda becomes fully aware of her potential—as poetic discourse—for propelling and allowing action. Through Miranda, poetry and music become *the* necessary force to counter Prospero's art by offering an alternative that is not dominated by instrumental reason and accepts the island as it is (and not to be cultivated into a garden as mankind's dwelling), revealing a history far older than when Prospero arrived, whose stewardship Miranda now feels responsible for.

The last third of *Mirandas Atemwende*, tableaux nine through twelve, focuses on Caliban. Tableaus nine and ten, in particular, reference a part from *Mouvement* (*—vor der Erstarrung*) by Lachenmann. Lachenmann's idea by the time of composing in the early 1980s was to take the material of "noise" and to bring it into a compositional sound structure.¹²⁰ Taking this as a metaphor for Caliban's awareness of Prospero's taming or colonising of the island through his art (or compositional "language") and with poems

from *The White Stones* and *Word Order* by Prynne, Caliban's consciousness is enriched so that he may "dissolve the bars to it and let run the hopes, that preserve the holy fruit on the tree", that is, for Caliban to become more acutely aware of the material processes of the island from which Prospero's language had alienated him.¹²¹ In these tableaux, Caliban attempts to address the wound inflicted by Prospero's language, the wound that remains gaping through Celan's poetry. Caliban uses Prynne's poetry to express "the paradigmatic moment of impulsive feeling which escapes, or rather precedes, the conscious attempt to process and understand it",¹²² an impulsive feeling that is then diagnosed in *Mirandas Atemwende* as "the moment of pain". One can also hear faint echoes of Lachenmann's "... *zwei Gefühle*..." when the wound is opened up by Caliban's "two feelings" (represented by two separate actors) for the "threatening darkness" of Prospero's garden and his own "desire to see with my own eyes" whatever wonderful things might be on the island in Prospero's absence, in order to behold that "unfathomable wilderness" of the other side of being.¹²³

Caliban, like Miranda, is wounded by Prospero's enlightenment education and the desire to break up the continuum of time with ever more perfect instruments. Caliban's response is to rediscover those natural processes of the island, "the unison of forms", and to let them flow again: "If we arbitrarily break up the continuum of time into fixed intervals, upon which we then project hopes or expectations deferred from the present, we lose contact with natural processes."¹²⁴ Similar to Friedrich Hölderlin's sentiments in his famous poem *Hälfte des Lebens*, "Fruit' should not be declared 'holy', with the sense of being set apart, usually preserved on a tree. The fruit is a stage in the continuing cycle of the plant's life, not just the final outcome. Whatever lives by continuous change and development, we distort by solidifying—unless we are able to 'let run' what at present we anxiously 'rein in'."¹²⁵ Caliban's words come from a renewed, heightened attention to the processes of the island, a vantage point where the final nail is driven into the coffin of Prospero's art.

The compression and intensification of verbal and musical language in *Mirandas Atemwende* are ways of engaging with a late-modernist form of expression that makes the connections between romanticism and formal rigour, extreme expressionistic abstraction and documentary "authenticity". In

113. Mellors, *op. cit.*, p. 171.

114. Celan, Paul. *The Meridian: Final Version—Drafts—Materials*. Bernhard Böschstein and Heino Schmull (eds.). Pierre Joris (trans.). Palo Alto, CA: Stanford University Press, 2011. p. 9.

115. Gotter, Friedrich Willhelm. *Die Geisterinsel*. Berlin: Berliner Ausgabe. 2013. p. 10.

116. Celan, Paul. "Speech on the Occasion of Receiving the Literature Prize of the Free Hanseatic City of Bremen". In *Collected Prose*, Rosmarie Waldrop (trans.). New York, NY: Routledge. 2003. p. 34.

117. *Ibid.*, pp. 3435.

118. Celan, Paul. *Breathturn*. Pierre Joris (trans.). Los Angeles, CA: Green Integer. 2006. p. 97.

119. Celan, *The Meridian: Final Version—Drafts—Materials*, p. 9.

120. Tsao, Ming. "Helmut Lachenmann's 'Sound Types'". *Perspectives of New Music*. Vol. 52. No. 1. Winter 2014. pp. 217- 238.

121. Prynne, *Poems*, p. 64.

122. Basu, Jay. "The Red Shift: Trekking J. H. Prynne's *Red D Gypsum*". *The Cambridge Quarterly*. Vol. 30. No. 1. 2001. p. 26.

123. The two feelings as "a fear of the threatening darkness of the cavern, but a desire to see with my own eyes what might be miraculous within it" from Leonardo da Vinci's *Codex Arundel* that Lachenmann quotes in the programme notes to "... *zwei Gefühle*..." From Williams, Alistair.

Music in Germany since 1968. Cambridge: Cambridge University Press. 2013. p. 116.

124. Reeve and Kerridge, *op. cit.*, p. 41.

125. *Ibid.*

126. Schreiber, Stefan.
 “Mirandas Atemwende”.
 In *Ming Tsao: Plus Minus*.
 Vienna: Kairos Music. 2017.
 p. 4.

127. *Ibid.*

128. *Ibid.*

129. *Ibid.*

working with expressionism as a way to let the material express itself, but without psychologising, is to renew the idea of the lyric in contemporary music that becomes in my music fractured, damaged, multi-perspective, complex and problematised in order to negotiate the complexities of the surrounding world. Lyrical subjectivity is ultimately placed in the musical sounds themselves rather than with a single consistent “speaker”, a sense of artistic expression that embraces the exteriority of the world rather than retreating from it. As Stefan Schreiber writes about Miranda’s singing in *Mirandas Atemwende*: “Miranda’s distinctive vocal technique stands in contrast to the complex poetic-philosophic language of Caliban. With a kind of documentary distance, Caliban’s actors develop a web of thoughts and images that separates itself lucidly from the instrumental sounds and noises, appearing to be wrested from the soundscape. At the same time, Miranda displays her new world of singing, which, nestled in these sounds, frequently coalesces with them.”¹²⁶

In contrast, confronted with the effects of nature on her inner life, the dramatic voice in *Erwartung* claims to be the lone shaper of her own expression where the sounds of the orchestra respond in turn to her inner psychological state. Yet in *Mirandas Atemwende*, Miranda, as the “sensitive inventor of a new kind of singing”, begins to envision a different sort of lyrical subject who needs the wilderness beyond the garden, in order to find a way to this “new-other song”, consisting of “multifaceted nuances situated between precise-brittle tones and vocal noises produced by the sudden

turning of the in- and exhalation of the singing-breath.”¹²⁷ Miranda’s aim is to reaffirm the world in its complexity and to account for our accounting of mankind’s place within this world. Indeed, Miranda’s *Atemwende* is to acknowledge that our garden is larger than the dwelling place that we have made it and extends through that “unfathomable wilderness” to the other side of being.

The decentring of the lyric in the more-than-human world as the desire for a wounded and sometimes fragile expressiveness leads directly to Celan’s poetry. Miranda’s particular appropriation of Celan’s poetry emerges from the contradictory positions of Schönberg’s *Sprechgesang*—the technique’s origin in the excessive language of the monodrama and its critical turn towards the tone of cabaret—that is, “from the technique’s myriad expressive forces, it attains in the end the distance of documentary speech.”¹²⁸ Retracting any sort of definite position in the distance of this kind of speech, a chain of disassociations and gaps—like a virus—begins to mobilise and infect the network of language. According to Schreiber, this chain ultimately “tears open and calls into question the internal cohesion of language along with the conception of its limits, in order to be able to hear, in a primal world beyond the garden, another voice and its continually new-other singing”¹²⁹—the “songs to sing beyond mankind”—which is the lyric of the anthropocene.