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Musical Submersion in Anthropocene Seas: Oceanic Aesthetics in Björk and John Luther Adams

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Abstract

This article explores the relationship between musical aesthetics and evolving submarine imaginaries in an age of unprecedented threats to the ocean. The discussion is structured around two case studies: Björk's performance of the song 'Oceania' at the opening ceremonies of the 2004 Olympics, and John Luther Adams's 2013 Pulitzer Prize-winning *Become Ocean* for orchestra. In these examples, culturally and historically situated visions of the ocean are modulated by compositional and sonic devices that ground oceanic imaginaries in bodily sensation. Björk and Adams cultivate an oceanic aesthetics: musical sensations that align with the phenomenology of submersion or that address the materiality and ecology of the undersea. Throughout the article the author asks what music and musicology can offer to the interdisciplinary endeavours dubbed the 'blue humanities'. A turn to music foregrounds listening as a mode of perception and scholarly enquiry less defined by terrestrial categories. Music and sound-based art can be an intellectual resource in cases where visual terms and frameworks have a tough time accounting for the specificity of the oceanic environment.

Introduction

As global ecological crisis intensifies, human activity continues to wreak havoc on marine environments. Ocean acidification, coral bleaching, and islands of floating plastics now dominate the news reports. As the evidence mounts that marine ecologies are facing destruction, the ocean is also becoming the next frontier for resource extraction, viewed by many governments and private companies around the world as a promising site of 'endless' economic production.[1] Clearly, inherited notions of the ocean as a 'blank space' fully outside of human history and politics is fast becoming revised in the Anthropocene. What is more, prospects of rising sea levels and the collapse of ocean currents amplify the presence of the ocean in popularly mediated representations of climate change. These developments pose a challenge to our societal and aesthetic horizons, and a new reckoning with the ocean is underway across the arts and humanities.[2] In this article, I explore the relationship between musical aesthetics

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1 Elizabeth R. Johnson and Irus Braverman, 'Introduction. Blue Legalities: Governing More-than-Human Oceans', in *Blue Legalities: The Life and Laws of the Sea*, ed. Irus Braverman and Elizabeth R. Johnson (Durham, NC: Duke University Press, 2020), 2.

2 Susanne Pratt, Camila Marambio, Killian Michael Quigley, and Sarah Hamylton, 'Fathom', *Environmental Humanities* 12/1 (2020).

and evolving submarine imaginaries in a time of crisis. I build my discussion around two case studies: Björk's performance of the song 'Oceania' at the opening ceremonies of the 2004 Olympics, and John Luther Adams's 2013 Pulitzer Prize-winning *Become Ocean* for orchestra. The examples are stylistically different: one from the world of avant-garde pop, the other from the world of contemporary classical music. This stylistic range allows me to discuss approaches to 'oceanic aesthetics' across very different genres of music. Both examples were born within a decade, and both are explicit attempts at cultivating marine-ecological awareness through innovative musical techniques. The examples can be contrasted along the lines of – roughly speaking – utopian and apocalyptic frameworks for confronting the human–ocean relationship on a blue planet in distress.

As argued by Helen Rozwadowski, the arts and humanities are vital for understanding the full complexities of our human relationships with the blue planet on which we live. At a time when the health of the global oceans is under unprecedented threat, policy decisions and citizen engagement alike are shaped by narratives, metaphors, and historical patterns of meanings tied to the ocean. Rozwadowski calls on scholars to help identify such influences and 'contribute to the creation of new narratives to support better understanding of the marine environment and our ever-changing relationship with it'.[3] In two case studies of close reading, I explore what kinds of encounters with the ocean are facilitated by the sensory details of music. Working through the case studies, I identify musical techniques that both enable and restrict the creation of 'adequate imaginaries for Anthropocene seas'.[4] Key in this regard is the oceanic aesthetics discernable in both examples. By oceanic aesthetics I mean musical resources that produce for its listeners sensations of immersion, depth, and verticality, as well as musical procedures that align with the physiological effects of the oceanic environment on immersed bodies, including the warping of distance and direction as conceived in terrestrial, visual terms.

In some ways, the ocean is familiar terrain for scholars of music and culture. There is a wealth of literature describing the transnational flows of people, ideas, commodities, technologies, and capital across oceans, linking sites of cultural production in diasporic and archipelagic ways. From Paul Gilroy's *The Black Atlantic* onwards, many scholars have positioned the ocean at the centre of their model. Stefan Helmreich even calls the ocean a 'theory machine' for the renarration of sociality in cultural studies since the 1990s.[5] At the same time, the ocean itself is too often rendered invisible. The ocean is positioned as a stage or a flat surface on top of which human history happens. John R. Eperjesi points out how this flattened model 'makes it hard to see, imagine, think about, or act on the ocean as an ecological system, as a space of multispecies entanglements and deep, more-than-human temporalities'.[6]

3 Helen Rozwadowski, 'Ocean Literacy and Public Humanities', *Parks Stewardship Forum* 36/3 (2020).

4 Stacy Alaimo, 'Afterword: Adequate Imaginaries for Anthropocene Seas', in *Blue Legalities: The Life and Laws of the Seas*, ed. Irus Braverman and Elizabeth R. Johnson (Durham, NC: Duke University Press, 2020).

5 Stefan Helmreich, *Sounding the Limits of Life: Essays in the Anthropology of Biology and Beyond* (Princeton: Princeton University Press, 2016), 101.

6 John R. Eperjesi, 'Imagined Oceans: Drexciya's *Bubble Metropolis* and Blue Cultural Studies', *Journal of Popular Music Studies* 34/1 (2022), 126.

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Elizabeth Deloughrey sketches the rise of a 'new oceanic imaginary' driving a shift in scholarly perspective, from surface to submersion. The emerging interdisciplinary conversations dubbed the 'blue humanities' involve a new engagement with ontologies of the sea, no longer seen as being outside human history but rather central to our Anthropocene futures.[7] Though this turn to the ocean is a recent intervention in Western, scholarly contexts, 'blue' knowledges and practices are already integral to many Indigenous cultures around the world, and the blue humanities are nourished by theories that originate with writers and thinkers among the Pacific and Afro-Caribbean diaspora.[8] These perspectives provide depth to surface-like ideas of the sea, reorienting humanistic enquiry to account for the materiality and ecology of the marine world.

There is a musical aspect to this conceptual reorientation happening in blue humanities scholarship. Consider Philip Steinberg and Kimberley Peters, who advance their concept of 'wet ontology' to account for 'the chaotic but *rhythmic* turbulence of the material world, in which, even amidst unique events of coming together, there is a persistent, underlying churn—a dynamic pattern of repetition and reformation that provides stability and texture in an environment of underlying instability'.[9] When reading this paragraph, I am struck by how familiar this vocabulary is to me as a musician and musicologist. Notably, when searching for a new geography of the ocean, Steinberg and Peters turn to a particularly *musical* set of terms. Texture, rhythm, repetition – these concepts have a parallel meaning in music theory. In addition to the concepts listed by Steinberg and Peters, think also of wave, siren, and sounding as concepts that seem to travel easily across the domains of oceanography, auditory sense perception, and music. An oceanic aesthetics in music attends to this productive exchange of analogy between ecological and artistic domains, attempting to anchor knowledge of the ocean in waves of sound.

Melody Jue considers whether a shift in vocabulary is enough to redress sedentary, land-based habits of thinking. Part of the problem, in her words, 'has to do not only with vocabulary but with technologies of perception'.[10] Our access to the ocean is always mediated, and close attention to the operations of mediation illuminates the conditions for sensing and apprehending the natural environment. A turn to music foregrounds listening as a mode of perception and scholarly inquiry less defined by terrestrial categories. Music and sound-based art forms can be an intellectual resource in cases where visual terms and frameworks have a tough time accounting for the specificity of the oceanic environment. Certainly, the undersea is a generative space for musical aesthetics as its impenetrable darkness troubles the ocularcentrism of Western modernity.[11] Below the surface, human vision is distorted

7 Elizabeth Deloughrey, 'Submarine Futures of the Anthropocene', *Comparative Literature* 69/1 (2017).

8 Celina Stifjell provides the most recent and comprehensive review of the aims and limitations of blue literary studies in relation to feminist posthumanism and neighbouring scholarly discourses. See her dissertation, 'She-Monsters and Sea Changes: Imagining Submersion in Speculative Feminist Fiction' (PhD thesis, Norwegian University of Science and Technology, Trondheim, 2024).

9 Philip Steinberg and Kimberley Peters, 'Wet Ontologies, Fluid Spaces: Giving Depth to Volume through Oceanic Thinking', *Environment and Planning D: Society and Space* 33 (2015), 248.

10 Melody Jue, *Wild Blue Media: Thinking through Seawater* (Durham, NC: Duke University Press, 2020), 124.

11 Margaret Cohen and Killian Quigley, 'Introduction: Submarine Aesthetics', in *The Aesthetics of the Undersea*, ed. Margaret Cohen and Killian Quigley (New York: Routledge, 2019), 2.

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and eventually voided, and the ear remains a primary perceptual interface for oceanographic investigations. Indeed, sonar and other acoustic technologies are essential tools across all branches of marine science. In recent years, the rich polyphony of marine life – and its struggles to cope with anthrophonic noise pollution – has been revealed to listeners in works of underwater sound art that do away with inherited notions of the ocean as a silent world.[12] This article remains focused on music, which nonetheless provides a repertoire of auditory sensations and listening practices that allows for knowing the ocean in varied ways. Music can provide direct, sensory and bodily experiences of rhythm, duration, flow, and depth. These are sensations that align with the phenomenology of submersion and the materiality of the underwater world.

My approach is an interdisciplinary cultural analysis that lingers on such 'shared ground' where the musical and the oceanic animate each other. In eco- and ethnomusicology, several studies have explored humans' sounding relationships with lakes, rivers, and waterways.[13] A musicological literature dealing with the deep ocean is less visible, though emerging.[14] One example is Karen Leistra-Jones, who uses the oceanic concepts of depth and immersion to frame her analysis of Edward Elgar's song cycle *Sea Pictures*, which she contextualizes in relation to the emerging science of deep-sea exploration after 1850 and Victorian-era seaside cultures.[15] In popular music, oceanic aesthetics have been explored by, among others, Kodwo Eshun. In African-American popular music since 1960, Eshun traces 'a fascination with immersion and dissolution into the oceanic, the pacific, the tidal and the eruptive', achieved via the studio technologies of reverberation, echo, and delay.[16] Stefan Helmreich has explored such interfaces between sound, music, and ocean extensively in several publications. In his poetic essay 'Radio Ocean', the wave becomes a central heuristic that allows him to set oceanography and musicology into conversation in new ways.[17] With his media theory approach to

12 A prominent figure in contemporary underwater sound art is Jana Winderen, whose work is detailed in Tobias Fischer and Lara Cory, 'The Secrets of the Deep' and 'Hacking into the Shrimp Network: Jana Winderen', in *Animal Music: Sound and Song in the Natural World* (London: Strange Attractor Press, 2015).

13 For example, Nancy Guy, 'Flowing Down Taiwan's Tamsui River: Towards an Ecomusicology of the Environmental Imagination', *Ethnomusicology* 53/2 (2009); Mark Pedelty, *A Song to Save the Salish Sea: Musical Performance as Environmental Activism* (Bloomington, IN: Indiana University Press, 2016); Olusegun Stephen Titus, 'Ecomusicology, Indigenous Knowledge and Environmental Degradation in Ibadan, Nigeria', *African Music: Journal of the International Library of African Music* 11/1 (2019); Brian Diettrich, '"Summoning Breadfruit" and "Opening Seas": Toward a Performative Ecology in Oceania', *Ethnomusicology* 62/1 (2018); and Gavin Steingo, 'Whale Calling', *Ethnomusicology* 65/2 (2021).

14 See also Nettrice Gaskins, 'Deep Sea Dwellers: Drexciya and the Sonic Third Space', *Shima* 10/2 (2016); Helmreich, *Sounding the Limits of Life*, 137–54; Mark Pedelty, 'Recomposing the Sound Commons: The Southern Resident Killer Whales of the Salish Sea', in *Sounds, Ecologies, Musics*, ed. Aaron S. Allen and Jeff Todd Titon (Oxford: Oxford University Press, 2023); and Josh Wodak, 'Siren and Silent Song: Evolution and Extinction in the Submarine', in *The Aesthetics of the Undersea*, ed. Margaret Cohen and Killian Quigley (New York: Routledge, 2019).

15 Karen Leistra-Jones, '"The Deeps Have Music Soft and Low": Sounding the Ocean in Elgar's *Sea Pictures*', *Music & Letters* 97/1 (2016).

16 Kodwo Eshun, 'Drexciya as Spectre', in *Aquatopia: The Imaginary of the Ocean Deep*, ed. Alex Farquharson and Martin Clark (London: Nottingham Contemporary and Tate, 2013), 141. See also David Toop, *Ocean of Sound: Ambient Sound and Radical Listening in the Age of Communication* (London: Serpent's Tail, 1995).

17 Stefan Helmreich, 'Radio Ocean', in *Tidalectics: Imagining an Oceanic Worldview through Art and Science*, ed. Stephanie Hessler (Cambridge, MA: MIT Press, 2018).

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ocean waves, he asks what messages 'Radio Ocean' broadcasts along the frequency bands of ripples, swells, and surges. Inspired by Helmreich and others, I listen out for the ocean's meanings as modulated by the compositional and aesthetic decisions of Björk and Adams. In addition to detailing their oceanic aesthetics, I also aim to critically evaluate the resulting configurations of the ocean and whether they help disclose the political stakes of submersion in Anthropocene seas.

Björk's siren song

In 2004, the Icelandic composer, singer, and artist Björk (b. 1965) was commissioned to perform at the opening ceremonies of the Olympic Games in Athens. Björk was originally asked to compose a song that would celebrate Olympic ideals, a global unifying anthem. Björk responded by turning to the ocean. In collaboration with fellow Icelander, lyricist and poet Sjón (pen name of Sigurjón Birgir Sigurðsson, b. 1962), she ended up producing an avant-garde performance that achieves a merging of the human and the ocean on many levels: lyrical, musical, and visual. 'Oceania' celebrates the oceanic origins of human societies. From the perspective of Mother Ocean, Björk addresses the various nations gathered in the Olympic arena as her 'children', implicating them in a harmonious ecology of watery lifeforms.[18] The song, and its performance at the Olympics, presents an opportunity to explore the significance of song in Western imaginations of the ocean. In the following, I will discuss this by reference to the mythological figure of the siren, whose voice travels across the boundary of human and oceanic Other.

The performance of 'Oceania' in Athens was spectacularly staged by art director Dimitris Papaioannou. Following the parade of nations, where athletes and officials from each participating country enter the stadium bearing their flags, Björk appeared on a podium at one end, clothed in blue to represent an ancient, maternal sea watching over the field of people from 201 different countries.[19] As she sang, her shimmering blue dress – designed by Sophia Kokosalaki and made of 210 metres of fabric – slowly unfurled in a giant wave to envelope the athletes watching from the floor of the stadium (Figure 1).[20] The television broadcast drew an estimated 25.3 million viewers in the United States alone, and more than half a billion viewers worldwide,[21] making for a sizable audience seeing and hearing the performance of a song that, in Björk's own words, was 'written from the point of view of the ocean that surrounds all the land and watches over the humans to see how they are doing after millions of years of evolution'.[22]

18 For a rich discussion of Björk's maternal aesthetic in this and other performances, see Shana Goldin-Perschbacher, 'Icelandic Nationalism, Difference Feminism, and Björk's Maternal Aesthetic', *Women and Music: A Journal of Gender and Culture* 18/1 (2014).

19 International Olympic Committee, 'Athens 2004', https://olympics.com/en/olympic-games/athens-2004.

20 International Olympic Committee 'Bjork, That Dress and the Extraordinary Athens 2004 Opening Ceremony', https://olympics.com/en/news/bjork-that-dress-and-the-extraordinary-athens-2004-opening-ceremony.

21 Sports Marketing Survery Ltd, 'Athens 2004 Olympic Games Global Television Report', ed. International Olympic Committee (Olympic World Library, December 2004).

22 Bjork.com, 'Björk & Medúlla & Oceania & Olympics', 13 August 2004, http://bjork.com/news/?id=480;year=2004.

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Figure 1 Björk performs during the opening ceremony of the 2004 Olympic Games in Athens on 13 August 2004. Still image from the television broadcast, archived online. Olympics, 'Athens 2004 Opening Ceremony – Full Length', *YouTube*, www.youtube.com/watch?v=YYvnvr8Cpzo.

The musical texture of 'Oceania' consists solely of human voices. Vocal performances by Björk herself, along with a choir and beatbox artist Shlomo, are arranged into a familiar 'instrumental' combination of beats, bass, and background harmonic riffs, all supporting the lead vocal line. Some of the voices are processed using digital music technology to extend the capabilities of the human vocal apparatus in new directions. The result is a swirling soundscape where vocals are mechanized and beats vocalized, where human and synthetic sounds commingle in ways that disturb received notions of voice/instrument and human/other. This is a well-known compositional approach for Björk, analysed in detail by Nicola Dibben and related to Donna Haraway's figure of the cyborg.[23] In 'Oceania', a digitally processed choir of female voices is a key musical element for realizing the song's oceanic aesthetics.

The performance at the Olympics began with the sounds of a female choir performing a rapid, upwards glissando across several octaves, synchronized to the dimming of the stadium lights, setting the stage for Björk's performance of the first verse a cappella before being joined by the full vocal arrangement on the second verse. The studio recording of 'Oceania' begins slightly differently; but here, too, the wordless female choir is immediately striking. The choral voices move in a wave-like melodic movement: on their first entrance, the voices ascend from the depths of a low bass register upwards to the high soprano. On their second appearance, the voices plummet back down along four octaves of vertical movement. Such disregard for the limitations of the female vocal range is not possible in acoustic choral performance; in this case, voices belonging to members of the ad hoc 'London Choir' have been sampled, with

23 Nicola Dibben, *Björk* (Sheffield: Equinox, 2009).

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the samples adjusted to different pitches along an extended tonal range, with the choir then 'played' using a MIDI keyboard. In conceiving and producing this digital choir, Björk has made no effort to hide the technological treatment involved. Rather, the vocals sound eerily synthetic, emphasizing their digital processing. The resulting effect is uncanny: the voices are recognizably human in origin, yet they move and sound in ways that are unfamiliar, and not possible in acoustic performance. These somehow-human voices were described by Björk as 'sirens', pinpointing their position on the boundary between the human and the oceanic.[24]

The siren is an archetype found in the myths and folk legends of most human cultures around the world that takes the form of a being dwelling in or near water, at once human-like and non-human, frequently human–fish or human–bird hybrids.[25] The siren is often female, and her defining characteristic, shared across all her different appearances, is her musical abilities, and especially her vocal powers. In Western Europe, the siren has many sisters and offspring such as the mermaid, the Irish *selkie*, and the Faroese and Icelandic *selkonu*. These various water-women are all associated with the acoustic world and the powers of sound. This association speaks to the siren's liminal position on the borders of the human realm, calling out from an aquatic existence in between the imagination and the senses. As such, the siren prefigures the paradoxical qualities of the recorded voice, which indexes a body that is nonetheless out of reach. I will return to this idea later, as it is central to how the digital sirens in 'Oceania' function.

Musical treatments of the siren in Western classical music often make use of wordless, female voices: consider, for example, the third movement of Debussy's *Nocturnes for Orchestra* (1899), titled 'Sirènes'. The composer included a woman's choir, singing without words, in watery phrases that merge with the strings and woodwinds. The 'Rhinemaidens' of Wagner's opera cycle, *Der Ring des Nibelungen*, are women water-beings based on the river mermaid (*Nixe*) of Germanic folklore. As they enter the stage in Act 1 of *Das Rheingold* (1854), their voices emerge out of the instrumental prelude, initially singing a stream of nonsensical vocalization. The first utterance is made by the character Woglinde, who blends nonsense syllables with phonetically similar words so that, in Lawrence Kramer's words, 'there is little distinction to be made between articulate speech and pure vocalic wave motion without meaning'.[26] Moreover, Kramer reflects on the distinction between voice and speech as indicative of the concept of the human in modernist thought.[27] Voice is seen as prior to speech, and in Björk's performance this fact serves the evolutionary argument of the song as a whole. Björk, as the character 'Mother Oceania', sings to the modern humans assembled in the Olympic arena and frames them as the descendants of an

24 Björk, 'Episode 4: Medulla', *Björk: Sonic Symbolism* (podcast audio), September 2022, https://mailchimp.com/presents/podcast/sonic-symbolism/medulla/, 35:20–36:00.

25 Inna Naroditskaya and Linda Phyllis Austern, 'Introduction: Singing Each to Each', in *Music of the Sirens*, ed. Inna Naroditskaya and Linda Phyllis Austern (Bloomington, IN: Indiana University Press, 2006), 2.

26 Lawrence Kramer, '"Longindyingcall": Of Music, Modernity, and the Sirens', in *Music of the Sirens*, ed. Naroditskaya and Austern, 208.

27 Kramer, '"Longindyingcall"', 208.

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oceanic past: 'You have done good for yourselves / Since you left my wet embrace / And crawled ashore.'

On the studio recording of 'Oceania', which appears as the ninth track on the *Médulla* album (2004), the digital sirens vocalize discreet phrases, separated by silences, ten times during the first verse. Each phrase is unique, in terms of both melodic content and its sonic characteristics: at times, they sound like a regular woman's choir recorded without any audible post-production. At other times, the digital treatments are pushed to the extreme, such that the humanness of the voices is pulled into doubt. An example of the latter is the very first entrance of the sirens on the track, at 0:02–0:06. Here, the sounds have a recognizably sampled quality: vocal recordings have been cut-up into short chunks, each with a duration of about 50 milliseconds, then assigned to the keys of a MIDI keyboard. The sampled quality arises from the fact that each 'chunk' of recorded sound (i.e., each sample) is played back many times in response to someone holding down the same key on the keyboard for a duration longer than the duration of the sample. The first entrance of the sirens is a sequence of notes that end on a high F, which is held for a full second, during which the sample is played back many times in rapid succession. This lends the vocals a mechanized quality, as the continuous sound of a vocally produced tone is replaced by a rhythmic burst of regular, short chunks (Example 1).

At other times, the sirens seem to be literally representing aspects of the song lyrics, including imitating animal sounds, such as the particularly chaotic vocal shouts that enter on the words 'hawks and sparrows race in my waters' (1:48–1:56). Here, the sirens exceed human vocalization, perhaps voicing the sounds of an aquatic ancestor (considering the song's evolutionary narrative) or simply suggesting the animality of the human species when seen from the perspective of its marine mother. The various entrances of the sirens are all defined by melodic contours that suggest the movements of marine mammals: they race upwards to break the surface, jump and play around, then dive back down. The vocalizations consist mostly of choral 'o's and 'a's, at times forming phonemes such as *woo* and *woa*, but never approaching any intelligible semantic content, which also downplays their humanness. These vocal techniques converge with the digital processing on the track to heighten some of the mysterious workings of the recorded voice – including what Freya Jarman calls its 'queer potentials'.[28]

When a voice is recorded, it is detached from the body that produced it. Still, that voice carries with it the characteristic sounds of its bodily production. It supplies the outlines of a body, so to speak, which the listener – in her/his process of identification with or against the recorded voice – must fill in. That is why Jarman urges us to think not only of the voice's production *by* the body, but also its production *of* bodies.[29] On hearing a voice, the listener must assign it a source. In the case of a disembodied, recorded voice, the listener will imagine a

28 Freya Jarman-Ivens, *Queer Voices: Technologies, Vocalities, and the Musical Flaw* (New York: Palgrave Macmillan, 2011). For an in-depth study of 'internal' and 'external' technologies of vocal production, see Victoria Malawey, *A Blaze of Light in Every Word: Analyzing the Popular Singing Voice* (Oxford: Oxford University Press, 2020).

29 In his work on ventriloquism, Stephen Connor puts forth the term 'vocalic body' to describe the body that is produced by the voice when it is heard. Stephen Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford

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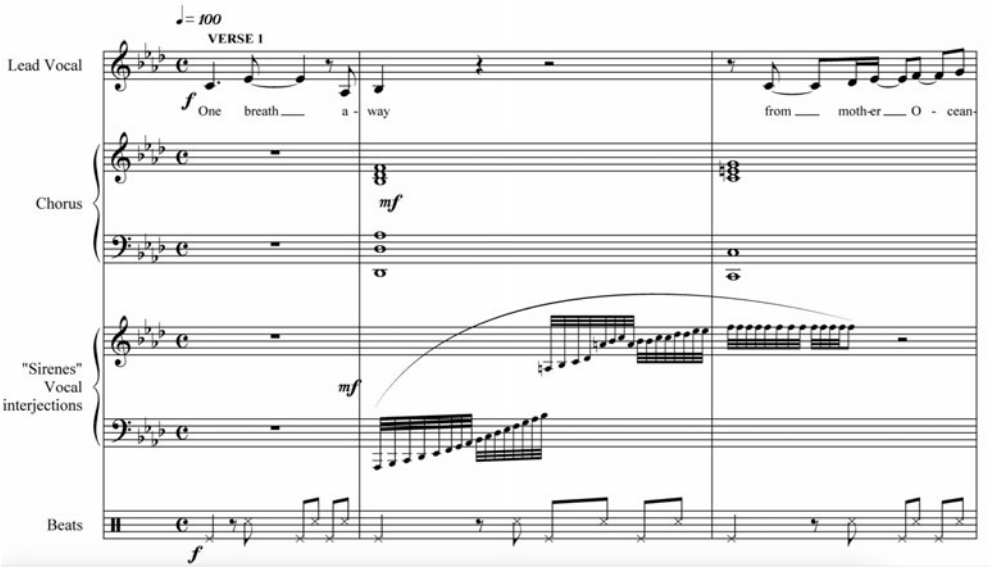

Example 1 The first entrance of the sirens on 'Oceania'. The transcription shows the ascending wave-like melodic movement culminating in a rapid burst of vocal samples on the same pitch. Excerpt from transcription of 'Oceania' by Victoria Malawey, used with their kind permission. Victoria Malawey, 'Temporal Process, Repetition, and Voice in Björk's *Medúlla*', PhD dissertation, Indiana University Bloomington, 2007.

body that is already partly supplied by the characteristics of the voice as it is heard. This operation includes an act of gendering, as a listener will typically categorize a voice according to gender. In this process lies a queer potential which is 'felt most intensely at those points where technologies become audible'.[30] Upon hearing technologically treated voices, such as the digital sirens in 'Oceania', a listener encounters vocal sounds that admit to the constructedness of the relationship between voices and bodies. The 'Oceania' sirens are characterized by a pitch range and vocal timbre that is not easily mapped onto gender categories. Arguably, Björk's sirens are not as readily female as the earlier examples mentioned (those of Wagner and Debussy). In other words, 'Oceania' grabs hold of the cultural figure of the siren – decidedly female – only to queer it (i.e., to expose and to simultaneously question the ideological foundations that naturalizes certain links between voices, bodies, and gender identities). Out of this process emerges a queer siren in the service of an aquatic destabilizing of the human.

To fully describe the effects produced by these queer voices, we might turn to Stacy Alaimo's concept of trans-corporeality, which recognizes 'the permeability of the human' in its continuous interchange with material forces in the environment, 'dissolving the outline of the subject'.[31] This idea – the dissolution of the bounded subject – is musicalized in

University Press, 2000). Connor's work has been influential for later studies of the voice in recorded popular music, including studies by Philip Auslander and Stan Hawkins.

30 Jarman-Ivens, *Queer Voices*, 21.

31 Stacy Alaimo, *Exposed: Environmental Politics and Pleasures in Posthuman Times* (Minneapolis, MN: University of Minnesota Press, 2016), 112.

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'Oceania' by way of the digital sirens. Their trans-corporeality is expressed both in their digital-acoustic origin (extending and dissolving the human in and through digital technology) and in their waves of speechless song, which suggest a fluid agency that cannot be contained by modern conceptions of the bounded individual. Trans-corporeality is also expressed by the fact that the entire musical arrangement consists of human voices that inhabit different musical 'bodies' that interact and frequently spill over and into each other. More importantly though, there are some fundamental aspects of the ontology of the voice that make experimental vocal music well suited to express trans-corporeality.

The voice always exists in a relation, linking two bodies together: it comes from the speaking/singing body, yet it must travel to the listeners body in order to be heard, and thus to happen at all, since it is in the hearing that it properly exists.[32] The voice must leave one body and implant itself in another. Paradoxically, the voice is also *not bodily*, operating in the space between two bodies as sound waves.[33] This is a central feature of the ontology of the voice – existing in between voicer and listener – which gives it the capacity to 'detach the signifier of the vocal wave form from the signified of the identity of the voice's producer' and thus open up the possibility for multiple and queer identities to emerge.[34] Jarman summarizes:

> Its [the voice's] bodily origin and destination, and its operations across borders and through borders, and its traversal of the space between bodies, collectively give the voice a physical location in two bodies and in no body at all, and its meaning arguably arises in all three locations too. . . . In gendered terms, then, the voice is a slippery beast and already potentially queer in this way.[35]

The slippery and queer qualities of the recorded voice are heightened in the vocal arrangements of 'Oceania', where voices are cast into and out of various bodies both human and technological, producing aesthetic effects that align with Alaimo's trans-corporeality, in that they provide listeners with an aural sensation of 'the porousness of the human'. These swirling, oceanic voices seem to invite the strange recognition that we are all of the sea: we are all sirens.

'Your sweat is salty, I am why'

When discussing the sirens in Wagner's *Ring*, Lawrence Kramer notes how their speechless song represents origins and original powers: 'For Wagner the origin and its echo in the siren song do not so much belong to the past as to the depths beneath the present.'[36] Likewise, Björk places the present historical moment, the Olympic Games, into a deeper evolutionary and ecological context, using siren song to supply 'depths beneath the present'. Björk's deepening of the present also involves a deepening of the human, by dissolving boundaries between humans and other marine creatures. Björk – in the role of Mother Ocean – sings to her children, and thereby frames humans within in a broader 'community of descent' – Charles

32 Connor, *Dumbstruck*, 3; Jarman-Ivens, *Queer Voices*, 2.

33 Jarman-Ivens, *Queer Voices*, 2–3.

34 Jarman-Ivens, *Queer Voices*, 3.

35 Jarman-Ivens, *Queer Voices*, 19.

36 Kramer, '"Longindyingcall"', 208.

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Darwin's term for the shared characteristics and evolutionary trajectories that expose modern humans as an amalgamation of creatures both other than and the source of the species. Björk's song imbricates the human into a network of lifeforms both terrestrial and aquatic, all carrying within them the inheritance of their ancestral sea. 'Oceania' connects the distant evolutionary past with the immediacy of our present bodily existence: 'Your sweat is salty / I am why'.

Stacy Alaimo finds it worth considering what sort of cultural work evolutionary origin stories 'featuring fishy mothers and fathers' could perform.[37] Asserting the aquatic origins of humans may at the least provoke an ethical sense of kinship towards marine animals, and a concern for ocean ecologies so frequently rendered invisible in the contemporary mediatized world. In a particularly rich discussion that draws in the voices and arguments of Rachel Carson, Sylvia Earle, Julia Witty, and Stefan Helmreich, Alaimo summarizes:

> The idea that humans originated from the seas and that we still carry the seas within us situates potential ethical and political recognitions as arising from a trans-corporeal tracing that traverses time and space. . . . In such figurations, ethics begins not with an encounter between self and the other, but with discerning the genealogies, substances, and agencies that diminish the distance between human and sea, as the human becomes more liquid, less solid.[38]

Still, Alaimo is cautious. Tracing deep evolutionary connections in order to render the relationship between humans and the ocean as perfectly natural and harmonious effectively ignores centuries of human exploitation of marine creatures and ecologies, not to mention the present human destruction of ocean habitats through trawling, dumping, and drilling. I wonder: if Mother Oceania turned up to sing us a song, would she not be a tad angry with our recent behaviour? Indeed, Björk's ocean seems impervious to human harm, which is hardly a productive starting point for marine environmentalism. While narratives of oceanic origins might spur a sense of kinship based on a community of descent, artistic attempts to create 'adequate imaginaries' also need to account for the ocean as impacted by and entangled with human actions in the Anthropocene. Björk and her choir of digital sirens sing of multispecies flourishing, which can certainly promote conservation efforts. But these same musical techniques conflate human and marine life in ways that obscure responsibility.

The colonial histories of Oceania

At the Olympic stadium in 2004, Björk's dress unfurled to cover athletes from all around the world in one and the same piece of cloth. Despite such universalizing gestures, the meanings of the ocean differ widely across the globe, and these differences are only being accentuated by present-day anthropogenic climate collapse. With this in mind, Björk's use of the title 'Oceania' needs be scrutinized. At the stadium in 2004 were athletes and representatives

37 Alaimo, *Exposed*, 116.

38 Alaimo, *Exposed*, 123.

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from several Pacific Island nations, whose homelands (and homeseas) were first dubbed Oceania by French geographers in the early 1800s.[39] This part of the world is uniquely vulnerable to rising sea levels. The ocean embodied by Björk in her song is presently threatening to devour the very lands, peoples, and cultures associated with the song's title.

On the occasion of the Olympic Games returning to their ancient home in Athens, Björk drew on Greek mythology in titling her song. The ancient Greeks conceptualized their god of the sea, *Okeanos*, as a great river encircling all the lands of the world. Björk feminized the masculine noun, *okeanos* into *okeania*, emerging a female goddess. Through this process, she nonetheless landed on a word that has a rich (and problematic) history for many people and has become something of a key term associated with a decolonial conversation in Pacific studies and blue humanities scholarship.[40] Originally a word introduced by European colonists, 'Oceania' has been reclaimed and recuperated by Indigenous Pacific writers, now serving as a means to conceptualize an expansive and liberating place defined by its fluidity and mobility across an ever-traversed sea. In his classic essay 'Our Sea of Islands', Epeli Hau'ofa writes himself free of the bondage that is the European cartographic imagination, which insists on the Pacific as an empty space on the 'wrong' side of the globe, populated by islands too small to function outside of neo-colonial systems of aid. Hau'ofa notes how this way of thinking arises from a worldview that equates land with presence and ocean with absence. Such a worldview imposes artificial geographies that carve up and divide the once-unbounded space populated by expert voyagers and skilled sea-people for whom the ocean is not absence but routes of connection and mobility in a region of unparalleled cultural and linguistic diversity and exchange. Hau'ofa notes the important distinction between viewing the Pacific as 'islands in a far sea' and 'a sea of islands' – the latter shaking off land-based viewpoints in order to recompose a holistic view of the region.[41]

Björk's musical vision of a world defined by its boundless oceans – where people are united in their shared oceanic origins – might appear to have found an ally in Hau'ofa's vision of 'a sea of islands' (cf. the song lyrics of the second verse: 'You see continents / I see islands'). Hau'ofa, like Björk, even calls the ocean 'mother'.[42] But there are tensions here. Björk's performance operates in the service of an Olympic globalism that is European in origin and conflates global difference. Hau'ofa, on the other hand, writes from an Indigenous Tongan position that is openly acknowledged, taking care to situate his arguments within the specific historical and geopolitical discourses that he attempts to shift. As such, his aspirational reclamation of Oceania recognizes colonial histories while overcoming them. Björk's performance, on the other hand, frames all modern humans as one homogenous group, and as such cannot attend to the historical wrongdoings of Western imperialism in the part of the world implicated by the song's title.

39 Bronwen Douglas, 'Terra Australis to Oceania: Racial Geography in the "Fifth Part of the World"', *Journal of Pacific History* 45/2 (2010).

40 Alice Te Punga Somerville, 'Where Oceans Come From', *Comparative Literature* 69/1 (2017).

41 Epeli Hau'ofa, 'Our Sea of Islands', *The Contemporary Pacific* 6/1 (1994), 152.

42 Hau'ofa, 'Our Sea of Islands', 156.

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Epeli Hau'ofa articulated the critical potential of an oceanic worldview that disrupts the modern geopolitical order founded on land-based notions of nation-states. Björk's 'Oceania' activates this potential at a very opportune moment. Her performance at the Olympics intervenes in the very space where a nation-centric form of globalization reproduces itself every four years. Setting modern humans adrift in an aquatic ecology, Björk's song attempts to render national identity futile, certainly an uphill battle as the singer faced athletes proudly bearing 201 different national flags. Defiantly, 'Oceania' envisions another kind of political community united in a shared intimacy with all human and non-human life. Björk's oceanic aesthetics enacts solidarity across national as well as species boundaries. However, I admit that this performance can also be read as contributing to a depoliticized universalism. Through its appeal to unifying, amniotic saltwater, the song masks rather than illuminates the terms and conditions of environmental justice in the blue Anthropocene.

Thinking with Hau'ofa and a Pacific perspective means confronting the urgency of sea-level rise following global warming. A stage performance where the audience is gradually covered in blue fabric carries different connotations twenty years after its original conception. Today, sea-level rise is impacting coastal communities around the world, nowhere more so than in the Pacific, where low-lying atoll environments are especially vulnerable to the damages caused by rising seas: coastal erosion, flooding, and the contamination of agricultural systems by seawater, not to mention the calcification of coral reefs in the context of increased ocean acidification, which diminishes the reefs' ability to protect human settlements as sea walls.[43] Environmental transformation constitutes an unprecedented threat to Pacific peoples, their lifestyle and culture, whose diasporic future is probable.[44] This is an overarching fact of life in the region, with Mother Oceania now carrying a different set of meanings from those expressed in Björk's performance. As we face the Anthropocene ocean, the figure of a timeless and benefactory Mother might be in need of revision. This figure is inspiring, but it is obviously not the whole story, and it does little to illuminate the politics of survival on a blue planet in distress. In 'Oceania' as in her later work more broadly, Björk generates narratives that anticipate desirable worlds teeming with life and creative action. This utopian musical practice can risk ignoring or mystifying injustices in the present.[45] In the words of Ursula Biemann: 'this focus on affirming what we want still requires that we engage with the world as it is'.[46]

John Luther Adams's orchestral apocalypse

From the first bar onwards, the slow build-up of the musical tidal wave is relentless. *Become Ocean* mobilizes a large orchestral force to provide the sensory experience of oceanic

43 John Connell, 'Vulnerable Islands: Climate Change, Tectonic Change, and Changing Livelihoods in the Western Pacific', *The Contemporary Pacific* 27/1 (2015).

44 'The climate crisis forces a consideration of not just environmental transformation but also the impending trauma of cultural upheaval', Diettrich, '"Summoning Breadfruit" and "Opening Seas"', 4.

45 Tore Støvold, 'Confronting Climate Change in Popular Music Texts: Nostalgia, Apocalypse, Utopia', in *Handbook of Popular Music Methodologies*, ed. Mike Dines, Gareth Smith, and Shara Rambarran (London: Intellect, 2025).

46 Ursula Biemann, 'The Poetics and Politics of Worlding', *Becoming Earth* (2021), https://becomingearth.unal.edu.co/home.

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submersion. In this one-movement piece – 42 minutes of continuous music, to be precise – a large array of melodic percussion instruments (harps, piano, celesta, marimba, and vibraphone) supply non-stop arpeggi throughout, an up-and-down vertical motion that is, in turn, surrounded by the horizontal movement of drawn-out, slowly mutating chords in the strings, woodwinds, and brass. *Become Ocean* was composed by John Luther Adams (b. 1953) and premiered in 2013 to critical acclaim.[47] Its compositional structure addresses the depth and volume of the world below the waves. While the music prompts reflection on climate change and rising sea levels, it does so using a Romanticist aesthetic of sublime 'vastness' that risks abstracting the ecological realities of the marine world. Stylistic tropes in the music, as well as exoticist inheritances (in the prominent use of the harp), tell us a great deal about culturally situated visions of the ocean activated in this music.

It begins in the trenches of the orchestral deep. A texture of contrabass, bass drum, and piano produces a very quiet murmur of sound (marked *ppp*). The pianist is tasked with executing rapid arpeggi in the lowest possible register, with the sustain pedal continuously pressed, making the individual notes blend and forming a complex sound rich with overtones from the sympathetic vibrations happening inside the grand piano. A bass drum roll, in combination with sustained notes in the contrabasses, further contributes to the impression of a dense, low-pitched grumble. The contrabasses are separated into two sections, the first playing the lowest conventional note on the instrument (E) and the second de-tuning the lowest string to achieve an even lower note (D). This results in a major second harmonic dissonance in the bass register that is carried through the opening of *Become Ocean*. These bars exemplify some of the textural elements and instrumental techniques that Adams uses to create murky waters of sound, that is, opaque orchestral textures where the listener is unable to make out the individual instrumental timbres. The sounds are packed into a dense mass, out of which incessant movement (in the form of perpetual arpeggi) are at times glimpsed.

Mobilis in mobile: on the tidalectics of form

The ocean is a dynamic world of endless movement and circulation. Far below the surface are ocean currents, gyres, unseen whirlpools, and even submarine waterfalls where cold, dense, and saline water spills over and falls below basins of warmer, less dense water. In *Become Ocean*, this fact is reflected in the orchestra's division into three ensembles, whose music appear to move at three different speeds. In the instructions given on the first page of the score, the composer describes this as 'three orchestral choirs moving in cross-rhythmic relationships'. Although the whole orchestra is synchronized to the click track (running at 60 beats per minute), the three orchestral choirs are given three different metric frameworks that govern the rhythmic expression of each choir. Choir 1 (the woodwinds, harps, and marimba) always divide each crotchet into five. Choir 2 (the brass, harps, and marimba) divide each crotchet into six. Choir 3 (the strings, piano, and celesta) divide each crotchet

47 *Become Ocean* won the 2014 Pulitzer Prize for Music and the 2015 Grammy Award for Best Classical Contemporary Composition.

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into seven. As such, a disorienting polyrhythm of five-against-six-against-seven is maintained throughout. The three choirs become three ocean currents spilling over each other.

The three choirs perform their music with a dynamic expression that resemble waves, made up by long crescendi and decrescendi. Each choir has a different wave pattern with cycles of crescendi and decrescendi of varying shape and length. The three musical waves begin at different points, making each wave of music phased in relation to the other two. The phasing of the waves is done in such a way that they meet up and synchronize into big climaxes a total of three times over the course of the piece. The first of these *fff* climaxes occurs at bar 106 (roughly 7:00 on the recording). The second is at bar 316, which marks the exact half-way point of the piece, after which the music begins to move in reverse. The overarching form of *Become Ocean* is palindromic, reflecting the concept of a rising, then receding, tidal wave of music.

Even though *Become Ocean* produces for its listeners an encompassing and undifferentiated experience of sound, there is in fact a strict numerological structure governing the organization of the music. This is a typical compositional approach for Adams: much of his output reveals a mathematical interest in numbers and proportions. In *Become Ocean*, there is an interesting relationship between the metrical frameworks of the three choirs (based on subdivisions of 5, 6, and 7) and the larger form of the music, consisting of waves whose durations are fixed to exact numbers of bars dividable by 5, 6, and 7. For example, each section of dynamic waves in choir 3 (whose rhythms are based on the number 7), contains seven 'crests' (dynamic peaks), spaced 21 bars apart (a number dividable by 7).[48]

The dynamic waves of *Become Ocean* emulate physical aspects of wave formation at sea. Generally, ocean waves will fall in with waves travelling at a similar speed. When different waves fall into phase, they will reinforce each other: this remains true for the dynamic climaxes of *Become Ocean*. The three waves fall into phase around bar 90, reinforcing each other and forming one big cycle reaching a high crest at bar 106. Then, they gradually fall out of phase again, which reduces their individual wave heights. By 'wave height' I mean differences in dynamic increase, with the highest waves moving from *ppp* trough to *fff* crest, but 'lower' waves reaching only *f* (Figure 2).[49]

A remarkable feature of *Become Ocean* is how this strict, numerological construction results in music that sounds anything but strict. In contrast to the classic minimalist ideals of Steve Reich, the compositional process is not audible or apparent to the listener. For Adams, it is not

48 The patterns of dynamic waves in *Become Ocean* are as follows: Choir 1 performs a dynamic wave composed of a total of 15 cycles, grouped into three sections of five cycles each. Each cycle (the music from trough to crest to trough) has a duration of 32 bars, but the wavelength (the distance between crests) is 42 bars, due to 10 bars of silence inserted at the end of each cycle, preceding the onset of the next cycle. Choir 2 performs nine cycles, grouped into three sections of three cycles each. Each cycle lasts 54 bars, and the wavelength is 70 bars, due to 16 bars of silence inserted before the onset of each new cycle. Choir 3 performs a total of 21 cycles, grouped into three sections of seven cycles each. Each cycle lasts 30 bars, and the wavelength is also 30, as there is no amount of silence in between each cycle.

49 None of these details are evident when simply hearing the music. It is only with the score in hand that I noticed, for instance, that the music is notated on 42 staves. This is hardly a coincidence. Owing to the 60 beats per minute metronome used for performance, the 630 bars of music take exactly 42 minutes to perform. Moreover, the 42 staves are grouped into 15 staves per orchestral choir: $42 \times 15 = 630$!

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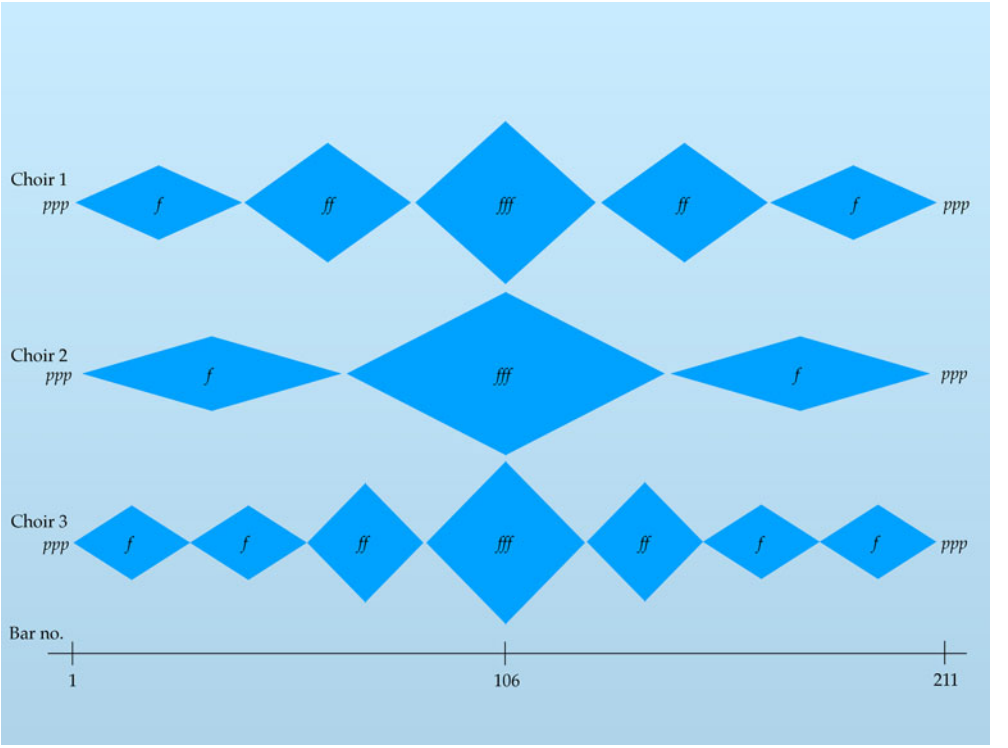

Figure 2 A graphic illustration of the three different wave patterns during the first 211 bars of music in Become Ocean, clearly showing the synchronized climax at bar 106. This exact wave structure is repeated two more times over the course of the 630 bars of music.

the individual patterns that matter, but the larger integration of patterns into a sounding wholeness that reflects his approach to ecological thinking. For Adams, composition by way of numbers and patterns is a fundamental part of his musical conception of ecology (and, conversely, his ecological conception of music). In his 2009 essay, 'In Search of an Ecology of Music', the composer reflects on his own artistic practice using the language of ecology: 'Beyond the particular patterns themselves, ecology considers the *totality* of patterns and the larger systems they create.'[50] *Become Ocean* is one such totality of patterns. It impresses a sense of unity and wholeness, yet its constituent patterns relate to each other in unforeseen and intriguing ways.

The formal structure of *Become Ocean* – built on regular cycles of dynamic waves – recall principles from classic minimalism, in the sense that the music is set into motion and left to unfold according to a pre-determined process. The specific timbres of piano, marimba, and vibraphone also recall canonic examples of the style, such as Reich's *Music for Eighteen Musicians* (1975). Such tools of the trade among American postminimalist composers are put to new use in *Become Ocean*, chiefly to produce a musical oceanography: all the various

50 John Luther Adams, 'In Search of an Ecology of Music', in *The Place Where You Go to Listen: In Search of an Ecology of Music* (Middletown, CT: Wesleyan University Press, 2009), 1.

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musical parameters express some physical aspect of the ocean, including its depth and volume, but also its endless motion-within-motion of currents, waves, and tides. Consider the many levels of wave patterns: waves at the level of melodic movement (rising and falling arpeggi), then waves at the level of dynamics (regular cycles of crescendi and decrescendi), and finally waves at the level of form (the palindromic tidal structure).

I interpret Adams's waves as a tidalectic musical form. The term, as theorized by the poet and literary scholar Kamau Brathwaite, refuses the usual resolution of the dialectic. It originates in Brathwaite's poetics of the (post)colonial Caribbean and takes its inspiration from the movement of water and the continuous churn of pasts, presents, and futures contained in the cyclical temporality of oceans. Tidalectics has become an important touchstone in literature on oceanic aesthetics in poetry and visual arts. The curator and editor Stefanie Hessler finds tidalectics to be a productive foundation for an oceanic worldview where the unresolved cycle replaces a forward-directed argument of progression.[51] The figure of the unresolved cycle is key to understanding the formal properties of *Become Ocean*: the music ends only by setting up the process to begin all over again. A similar formal device is found in Björk's 'Oceania'. The song is based on an 8-bar chordal loop featuring prominent fifth-based harmonic movement that 'turns around' and lands on the tonic for each iteration, an open-ended pattern that could easily go on indefinitely. As Björk's voice exits the musical arrangement following the final repetition of the line 'I am why', the background choral voices continue their statement of the harmonic sequence, ending on the final chord of the loop (the fifth), effectively unresolved.

Into the deep

The sea is a common theme in music history as in art history in general. However, as Alex Farquharson notes, seascapes are not seascapes at all: they are 'depictions of the exterior surface of the sea seen from dry land or an oceangoing vessel; their element is not aquatic, but terrestrial and aerial'.[52] If anything, seascapes belie a terracentric worldview that renders the ocean as simply more surface, a blue land, and thereby obscuring its true nature. As Farquharson goes on to say, 'the actual three-dimensional space of the ocean is a very rare subject in art, and still a necessarily imaginary one'.[53] In music, Romantic seascapes employ horizontal movement and melodic wave figurations to suggest the sea as 'seen' from land. *Become Ocean* differs from this maritime pastoral lineage by moving from a terrestrial point of view and into the wetness itself. Adams is not concerned with figurative 'tone painting', rather, his music facilitates the sensory experience of submersion in sound.[54]

51 Stefanie Hessler, 'Tidalectics: Imagining an Oceanic Worldview through Art and Science', in *Tidalectics: Imagining an Oceanic Worldview through Art and Science*, ed. Stefanie Hessler (Cambridge, MA: MIT Press, 2018), 33.

52 Alex Farquharson, 'Aquatopia: The Imaginary of the Ocean Deep', in *Aquatopia: The Imaginary of the Ocean Deep*, ed. Alex Farquharson and Martin Clark (London: Nottingham Contemporary and Tate Publishing, 2013), 6.

53 Farquharson, 'Aquatopia', 6.

54 On the maritime pastoral in Romantic music, see Benedict Taylor, 'Seascape in the Mist: Lost in Mendelssohn's *Hebrides*', *19th-Century Music* 39/3 (2016); and Daniel Grimley, 'Landscape and Ecology', in *The Oxford*

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To this end, Adams's music takes seriously the capacity of undersea environments to nullify land-based faculties of perception. His oceanic aesthetics mirror the physiological impacts of submersion on human bodies, including the warping of vision. In this music, the dense orchestral texture makes it hard to distinguish between features, everything washes together. There is no foreground or background, and no musical direction in the traditional sense. The multiple musical currents move in all directions at once. Some dynamic waves are rising while others are falling. What is up, where is down? Are we moving forward or backward? *Become Ocean* refuses to adhere to terrestrial or visual categories of musical syntax. Here is a new set of compositional techniques for constructing a musical form based on oceanic principles: no ground, no horizon, no goal-directed climb, but waves, currents, depth, and volume. Because so much of the ocean's cartographic and visual culture is based on a surface point of view, Adams's move into the deep is significant, registering the changing imaginaries of the ocean in the Anthropocene.

One example of the construction of an undersea point of view in this music is the occasional move from textural opacity to clarity. In general, Adams's orchestration creates an impression of 'low visibility' in the deep register, where the overtone-rich piano blends into the bassoons and low brass. The lower and middle registers are completely saturated with sound. At certain moments, though, the orchestral texture undergoes a transformation from opacity to clarity, accompanied by a rising in pitch. The impenetrable waters are flooded with light, and the listener is then able to 'see' through a sparser and clearer texture. One example is heard at 8:50–10:00 on the recording (corresponding to bb. 121–49 in the score). The strings (choir 3) perform a dynamic increase coupled with rising pitch: from middle C♯ in b. 121 through an octave to a high D♯ in b. 133, which is held for six bars. The bright violins cut through the orchestra. Subsequently, as choir 3 fades away, the harp and marimba of choir 2 are heard more clearly, as if the violins illuminated the darkened deep. Listening to these bars, there is a distinct sensation of rising upwards through the water column, approaching the shallows, and encountering the light of day.

Titling his piece *Become Ocean*, Adams connects these physical sensations of immersion with aspects of the human psyche. Indeed, the term 'oceanic' is frequently evoked in psychoanalytic music scholarship that seeks to understand the dissolving of subjectivity in sound. John Richardson and Susanna Välimäki have termed the repetitive qualities of minimalist music 'oceanic' with reference to Julia Kristeva and Naomi Cummings.[55] Similarly, Rebecca Leydon has suggested that certain styles of repetitive music evokes 'an imagined oceanic state of contentment'.[56] These statements reference Romain Rolland and Sigmund Freud's discourse on 'the oceanic feeling'; the experience of original unity between self and

Handbook of Music and Intellectual Culture in the Nineteenth Century, ed. Paul Watt, Sarah Collins and Michael Allis (Oxford: Oxford University Press, 2020).

55 John Richardson and Susanna Välimaki, 'Disaffected Sounds, Temporalized Visions: Philip Glass and the Audiovisual Impulse in Postminimalist Music', in *The Ashgate Research Companion to Minimalist and Postminimalist Music*, ed. Keith Potter, Kyle Gann, and Pwyll ap Siôn (Farnham: Ashgate, 2013), 227.

56 Rebecca Leydon, 'Towards a Typology of Minimalist Tropes', *Music Theory Online* 8/4 (2002), 2. This characteristic of repetitive music is further unpacked in Robert Fink's study of minimalist music as cultural practice, *Repeating Ourselves: American Minimal Music as Cultural Practice* (Berkeley, CA: University of California Press, 2005).

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world.[57] Psychoanalytic theory offers compelling explanations of what it may mean for a listening subject to *become* ocean. In Freud's usage, the oceanic feeling is related to the pre-symbolic world of the infant in its unity with the maternal body, and he uses it to describe certain religious states of mind. Minimalist music produces such an oceanic feeling – an emptying out of subjectivity – by the avoidance of conventional, subjectivizing musical structures. The oceanic is usually interpreted as a blissful state of contentment. In *Become Ocean*, however, these qualities of pre-subjective experience serve an ecocritical end. As the music creates sensations of verticality and volume, the 'oceanic feeling' is less blissful and more ominous as the listening subject is 'drowned out' – the ego extinguished in the Anthropocene flood – gesturing towards human extinction.[58]

The great wave of the Anthropocene sublime

The sheer duration and volume of *Become Ocean* gradually builds a sense of unease, an anxiety that wells up from the depths beneath the 'mechanical' minimalist surface of Adams's music.[59] The endless arpeggi and cyclical waves suggest an emergent terror, something that builds and builds, a terror that does not forcefully announce its presence because it was always already there, lurking in the deep. This is the 'Anthropocene unconscious', as theorized by Mark Bould.[60] The music is pregnant with catastrophe. Adams put it plainly in the short programme note that accompanies concert performances and the CD release of the music: 'Life on this earth first emerged from the sea. Today, as the polar ice melts and sea level rises, we humans face the prospect that we may once again, quite literally, become ocean.' On the album cover of the CD release, this note is printed alongside an undersea photograph, taken with the camera looking up towards the surface from a submerged point of view (Figure 3).

Adam's short note captures the tidalectic temporality of the ocean. The Freudian oceanic feeling is dependent on latent memories of the boundless experience of the infant: it is a retrospective, or regressive, state. The oceanic in Adams's music is prospective: it foreshadows a submerged future while making it phenomenologically apprehensible in a drawn-out present. While prospective, the programme note also makes a call back to the aquatic origins of humans (like Björk), and the stated prospect is that humans will *again* become ocean. The ocean, then, is both origins and endings at once. In the words of Nicholas Stevens, *Become Ocean* portrays the Earth's waters as an 'annihilating originator'.[61]

57 Sigmund Freud, *Civilization and its Discontents*, trans. James Strachey (New York: Norton, 2010), 7.

58 Sam Cleeve develops similar themes in a psychoanalytic reading of Gavin Bryar's *The Sinking of the Titanic*, another ocean-themed piece of repetitive music. See his 'Searching for Lost Time: Psychoanalytic Perspectives on Gavin Bryars's *The Sinking of the Titanic*', *Perspectives of New Music* 53/2 (2015).

59 In studies of minimalist and postminimalist music, scholars have attempted to address this combination of a 'disaffected' or even 'mechanical' musical process with an overwhelming sensory and affective result. See Susan McClary, 'Minima Romantica', in *Beyond the Soundtrack: Representing Music in Cinema*, ed. Daniel Ira Goldmark, Lawrence Kramer, and Richard Leppert (Berkeley, CA: University of California Press, 2007).

60 Mark Bould, *The Anthropocene Unconscious: Climate Catastrophe Culture* (London: Verso, 2021).

61 Nicholas Stevens, 'John Luther Adams. *Become Ocean*. Cantaloupe Music B00L5VZL4S, 2014, CD and DVD', *Journal of the Society for American Music* 11/3 (2017).

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Figure 3 Album cover of *Become Ocean* (Cantaloupe Music B00L5VZL4S, 2014).

The programme note invites listeners to hear the spectre of extinction that haunts this music. On the first page of the score, the composer indicates the tempo of the musical sea-level rise as 'inexorable'. Through its 42 minutes of continuous sound, the music suggests an encounter with forces that exceed our understanding and control. The inscrutable motion-within-motion of polyrhythmic currents couched in cyclical formal arrangements suggests an agency that operates on unfathomable scales. In Timothy Morton's terms, we are encountering the hyperobject itself, announcing its presence through an other-than-human musical syntax.[62]

Still, in my hearing, the music stops short of fully exploring this eerie dread of ecological reckoning, opting ultimately to package prospects of human extinction inside a lush, tonally beautiful musical experience. Writing for the *New Yorker*, music critic Alex Ross termed *Become Ocean* 'the loveliest apocalypse in musical history'.[63] Ross's coinage is instructive for understanding the Romantic aesthetics of the sublime at work in this music. The experience of listening to *Become Ocean* is characterized by a combination of pleasure and terror – an intimation of catastrophe that is nonetheless 'lovely'. Even as the programme note and the

62 Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis, MN: University of Minnesota Press, 2013).

63 Alex Ross, 'Water Music', *New Yorker*, 1 July 2013, www.newyorker.com/magazine/2013/07/08/water-music-3.

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album cover encourage listeners to interpret the musical experience as a simulated drowning – the Freudian ego and concert hall alike gradually submerged in annihilating sound – the music returns to a quiet, more distant and contemplative mood at the end, allowing listeners and critics such as Ross to summarize the musical extinction event as 'beautiful'.

Indeed, there remains a noteworthy romanticist inheritance in Adams's music and his discourse on his own compositional aims. Writing of earlier, concert-length orchestral works, Adams described how he 'aspired to evoke those intimations of the sublime that we sometimes feel in a beautiful landscape. But just as we can find transcendent peace in the beauty of nature, we can also discover a different kind of transcendence in the presence of elemental violence'.[64] This notion of 'transcendence', which Adam's finds in 'beautiful landscapes' as well as in 'elemental violence', suggests a certain positionality: one where the composer is removed from the realities of ecological relatedness and therefore able to configure the natural environment as aesthetic objects for human enjoyment. The music risks sublimating the catastrophe of anthropogenic climate collapse, turning rising sea levels into a romantic exercise in transcendence.

The romantic imagination has tended to replace living and fragile ecosystems with fantasies of 'vastness' and permanence. In Adams's music, this tendency is compounded by the history of imagining the ocean as an empty and lifeless immensity. In this sense, *Become Ocean* reflects a prominent strain in Western imaginations of the ocean as unbounded and unlocated.[65] Countering this imaginary – by foregrounding the lively and relational ecologies of the sea – is essential, as the vision of a passive vastness has long supported the notion that the ocean is impervious to human harm. Such renderings of the ocean form an epistemological ground that enables colonial expansion at sea and resource extraction in the deep.[66]

Adams's romantic vision of the ocean is supported by the musical construction of timelessness. The compositional procedure of gradually building a musical texture from a static drone in the contrabasses is linked to evocations of a permanent Nature in canonic examples of Romantic orchestral music, including the openings to Beethoven's ninth and Mahler's first symphonies. Yet no comparison is more apt than Wagner's prelude to *Das Rheingold*. In his grand musical metaphor for the creation of life from nothingness, Wagner begins with a 'timeless' drone out of which wave-like arpeggiated motifs ascend in progressively higher registers. The initial sound of contrabasses, soon thickened by the bassoons in a perfect fifth, is commonly interpreted as evoking the depths of the Rhine. Like *Become Ocean*, the music dwells in a timeless murkiness until melodic gestures eventually become perceptible. Warren Darcy describes this effect: 'In an ideal performance, the audience is unable to discern exactly when the initial contrabass tones begin; the listener only gradually becomes aware of a sound that, in effect, has *always* been there.'[67] Such romanticist tendencies in *Become Ocean*

64 Adams, *The Place*, 2.

65 Cohen and Quigley, 'Introduction', 5.

66 The impact of this ocean imaginary on law, policies and individual actions is explored across several essays in the anthology *Blue Legalities: The Life and Laws of the Sea*, ed. Irus Braverman and Elizabeth R. Johnson (Durham, NC: Duke University Press, 2020).

67 Warren Darcy, 'Creatio ex nihilo: The Genesis, Structure, and Meaning of the "Rheingold" Prelude', *19th-Century Music* 13/2 (1989), 93.

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act to contain the potentially dangerous aspects of an encounter with the unfathomable facts of the Anthropocene sea. This leads to the doubleness indicated in Ross's description of the 'loveliest' apocalypse in musical history.

Aesthetics and ethics are closely linked in Adams's writings. His musical output is based on a conviction that music enhances our perception of the natural world and cultivates ecological awareness. In the aforementioned 2009 essay, Adams writes of the need to mobilize the arts to guide us to 'a more complete and integrated relationship with the earth', which he sees as the central challenge of our time.[68] Adams guides listeners towards ecological awareness through the compositional strategy of 'sonic geography' which Holly Watkins describes as 'a virtual reorientation toward the actual'.[69] In *Become Ocean*, Adams places the listener into a virtual oceanic environment that rehearses a greater sensitivity to the features and patterns of the actual ocean. Still, we must ask what *kind* of ocean is being virtually modelled and whether it bears any resemblance to actual marine ecosystems.

Holly Watkins provides a thorough analysis of the tensions and contradictions in Adams's environmental ethics. Adams's observations on music, sound, and listening makes frequent reference to John Cage, as does the title *Become Ocean*, taken from Cage's poem 'For Lou Harrison'. In this way, he situates himself in a lineage of North American experimentalism which has frequently concerned itself with opening our ears to ecological relations. Among these composers, however, the modernist ideals of 'reduced listening' and aesthetic autonomy have served to undercut their environmental ethics. In Watkins's words, 'Cage's and Adams's genuine fascination with the natural world makes odd bedfellows with the austere view of sound promoted by both composers.'[70] Watkins is referring here to the rhetoric of 'letting sounds be themselves'. In an earlier essay, Adams writes: 'sounds as they occur in the world are not symbols, subjects or object. Inherently, they do not represent or evoke anything other than themselves. They simply *sound*. Their greatest power and mystery lie in their direct, immediate and non-referential nature. If we listen carefully enough, occasionally we may simply hear them just as they are.'[71] Here, Adams idealizes a contemplative form of listening that reduces nature to a collection of sounds to be appreciated 'just as they are', as opposed to being heard as referents of non-human presence, agency, and intent. This entails a lack of ethical recognition of non-human animals and organisms as sounding subjects in their own right. This can be contrasted with Björk's feminist posthumanism, where human and more-than-human voices commingle and 'make kin' as marine companion species, to use Donna Haraways terms.[72] That said, there is ambiguity in Adams's published essays and his music. Watkins finds that the composer at times does *not* 'let sounds be themselves' as he certainly ascribes symbolic reference to natural sounds in works such as *Earth and the*

68 Adams, *The Place*, 10.

69 Holly Watkins, *Musical Vitalities: Ventures in a Biotic Aesthetics of Music* (Chicago: Chicago University Press, 2018), 148.

70 Watkins, *Musical Vitalities*, 138.

71 John Luther Adams quoted in Watkins, *Musical Vitalities*, 135.

72 Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham, NC: Duke University Press, 2016).

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Great Weather (1993). *Become Ocean* features no recordings of or stylistic renderings of environmental sounds, yet in this case Adams trades in stylistic tropes and semiotic devices that imbue his ocean with referential meanings as well. As argued earlier, those meanings tend towards Romanticist categories of permanence and timelessness which may become ideological hindrances to actual ecological awareness.

Conclusion: towards a blue musicology

The case studies in this article speak of culturally and historically contingent knowledge of the ocean, modulated by compositional and sonic devices that ground oceanic imaginaries in bodily sensations of submersion. By focusing on oceanic aesthetics, I hoped to understand how these examples arrange the ocean for our listening perception, as well as interrogate the ideological commitments involved.

John Luther Adams's ocean is ahistorical. The musical oceanography models the depth and volume of the sea, allowing listeners to *become* ocean, yet they do not learn much about the human or marine ecologies and histories of our blue planet. By contrast, Björk's ocean is teeming with life. 'Oceania' is full of more-than-human voices and agencies that model an ecology of evolutionary co-dependence. 'Oceania' and *Become Ocean* both challenge bounded subjectivity, but to different ends. With Adams we encounter prospects of human extinction through the 'washing out' of subjectivity; with Björk we recognize the entanglement of human and non-human lifeforms in a community of descent.

Both examples, then, respond to the underwater environment and its challenges to human subjectivity, with the potential to generate new posthumanisms. The avant-garde aesthetics of 'Oceania' estrange the human, using the figure of the siren to express kinship with marine species. Margaret Cohen and Killian Quigley write: 'Subaqueous phenomena can appear to frustrate humanism's fundamental terms: much as human-submarine relations vary enormously across place, culture, and time, the undersea is basically not anthropic.'[73] All the more significant, then, that Björk composed a musical texture consisting solely of voices – that most anthropic of musical instruments – suggesting that there *is* a place for (post)humans in and among the ecologies of the sea.

Marine ecological crises urge the critical musicologist to examine how musical examples connect with or fail to connect with the perils that ocean ecosystems face and their catastrophic consequences for human and non-human populations. In the end, both examples in this article expose the tenaciousness of popular imaginations of the oceans as outside the reach of human impact. Whether configured as a utopic site of multispecies flourishing or as a vast and threatening hyperobject, these cultural arrangements circumvent the uncomfortable fact that the Anthropocene seas are already saturated with the intended or unintended consequences of human activity.[74]

With this article I wanted to probe my intuitive sense that certain characteristics of music – its temporal, spatial, and textural qualities – were useful tools ('good to think with') in

73 Cohen and Quigley, 'Introduction', 7.

74 Alaimo, 'Adequate Imaginaries', 318.

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attempts to develop productive figurations of the ocean. The interdisciplinary studies that make up the blue humanities are held together by a set of core concepts derived from taking the oceanic environment seriously as an epistemic partner. These core concepts tend to resemble musical terms. There is much potential, then, for musical aesthetics to sensorially substantiate these 'blue' conceptual efforts. In my case studies, I hope to have opened a few avenues for methodological debate concerning a 'blue musicology', where oceanic concepts provide new entry points for music analysis and helping to estrange musicology from terrestrial habits of perception. For instance, spatial metaphors based on a terrestrial point of view have long been used in musicology. Attention to the oceanic environment could uproot such models and inspire a new critical vocabulary. Re-centring musicology under the sea, we can ask 'what is a voice?' and 'what is a musical subject?' – questions posed in different ways by Björk and Adams. Indeed, the oceanic environment can inspire new discussions on key musicological problems of immersion, representation, subjectivity, and agency. Most of all, a 'blue musicology' would spark a conversation on musical resources for promoting ocean literacy in a time of anthropogenic climate collapse and marine extinction.

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