### Noise on the Ocean Before "Pollution": the Voyage of Saint Brendan

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In 1956 Jacques-Yves Cousteau, a French naval officer, conservationist and filmmaker, released one of the earliest filmed documentaries on marine life. Le Monde du silence (The Silent World) is an insight into mid-twentieth-century underwater exploration, framed in the title by the idea of a deep and silent ocean that lies still, waiting for human discovery. The film follows the journey of a group of divers on the former British Navy minesweeper, the RV Calypso, and while the majority of the film features underwater diving, Le Monde du silence is not at all silent. Fifteen minutes into the film, the high squeaks ("cris perçants") of dolphin echo-communication merge into a trumpet fanfare as dolphins glide through the waters. Layers of human voices and musical interpretation help viewers (and listeners) navigate the ocean's depths according to their own social and cultural cues: trumpet fanfare for moments of exuberance, minor keys for eerie coral-reef exploration, and hard sound effects for divers' movements through sunken ships. Later the *Calypso* is accidentally steered into a young sperm whale, who emits mouse-like squeaks ("des cris de souris") before dying from its injuries. A musical soundscape overlaid with the sounds of scuba oxygen tanks and air bubbles underscores the diving scenes—a technique that highlights hearing as an operative sense for underwater exploration while obscuring the 'real' sounds of underwater ocean life.

Le Monde du silence is one of the first film documentaries to use underwater cinematography to depict the ocean floor as a type of underwater paradise, with a variety of species and ecologies, in sound and colour (Cohen 60–68; Duncan 108; Marchessault 53–84). It does so with significant disruption to marine life. As an exercise in acoustemology, or "acoustic ecology" (Schafer 205; Smith Eco-Sonic Media), it raises important questions of

how different media produced before the prevalence of the modern notion of noise pollution communicate the sonic phenomena of ocean life. Since the time of *Le Monde du silence*, "levels of noise in the ocean have doubled every decade, in some regions, [and] increasing anthropogenic underwater noise is a trend now threatening many ocean species and populations. Human activity has contributed to a substantial rise in sonic interference underwater, commonly conceptualized as underwater noise pollution, leading to mass population decline and the stranding of whales. Scientists, conservationists and media scholars alike are taking up the call to study the conceptualization of the sea as a sonic environment, brimming with the vocal calls of sea creatures. A new and urgent emphasis on anthropogenic noise pollution and its effect on nonhuman species now competes with the casual observation and destruction of marine ecologies. However, while the mass deployment of twenty-first-century underwater technology has brought this issue to global attention, the precedent for depicting noise on the ocean, and the pollution of marine environments through the production and manipulation of sound, reaches much further back in our media histories than the 1950s.

Texts from the further reaches of the past depict ocean soundscapes in innovative ways, just as early documentaries brought the ocean depths to television screens in the twentieth century. To take two pertinent examples, Emma Mason notes that texts by Beale

<sup>&</sup>lt;sup>1</sup> Another significant development in deep-sea acoustics arrived in 1970 with the recording of whale songs on Roger Payne's album *Songs of the Humpback Whale*, which spawned the "Save The Whales" movement (Bonner, and Cressey 140–141).

<sup>&</sup>lt;sup>2</sup> The organization OceanCare's work on the conservation of marine mammals has emphasized the importance of hearing as the primary sense of many of these creatures, but especially cetaceans who use this sense for reproduction, communication, finding food, avoiding hazards and navigation. OceanCare Statement given by Sigrid Lüber 1.

<sup>&</sup>lt;sup>3</sup> OceanCare Presentation: "Protecting Cuvier's beaked whales from underwater noise": slide 4. See Filiciotto and Buscaino 67–71; Daniel "World's whaling slaughter tallied"; and National Research Council (U.S.) *Ocean Noise and Marine Mammals*.

and Rossetti qualify the sounds of whales as groans (72, 78), and Brantley L. Bryant has theorized water itself as agentive in Chaucer's *The Book of the Duchess* ("The Power of Water"). This research in the Blue Humanities, or "blue cultural studies", invites a conceptual rethinking of humanity's relationship to the ocean and its ecologies in different "ecomedia", such as texts, prints, recordings and films (Blum, *News* 29–35), and posits the ocean itself as the subject of critical discourse and ontological enquiry. One text from the medieval era that has much to contribute to the Blue Humanities is the *Voyage of Saint Brendan*, a short and popular text recounting an Irish saint's journey across the sea to visit an earthly Paradise. While this text has been widely discussed in its portrayal of ocean navigation and travel, little has been said about how the journey of Saint Brendan is implicated in the production and recognition of different types of maritime or oceanic sound. Revisiting this text from an acoustemological perspective can tell us a great deal about the history of noise on the ocean, and can offer a fresh chronological challenge to the notion that it was only later periods of history that developed the distinctive idea of a global and extra-territorial sea (Mentz, 'Toward a Blue Cultural Studies' 998; Brayton 2; Jeffrey 3, 12).

The Voyage of Saint Brendan recounts the story of Brendan the Navigator (c.486–575), an Abbott of Clonfert in Ireland, who has an unceasing desire to see Paradise for himself. This desire is so strong in Brendan that he sets sail in a small boat with a group of monks and travels for years across the ocean in a journey interpreted by many not only as a navigation of the soul towards God, but also perhaps, as an actual journey that covered a large part of the "stepping-stone" route to North America, including the Hebrides, Faroes,

<sup>&</sup>lt;sup>4</sup> Key studies of the ocean and oceanic ecologies that have been valuable to this discussion include Blum's seminal "The Prospect of Oceanic Studies" 670–677; Cousteau "The Perils and Potentials of a Watery Planet"; DeLoughrey "Submarine Futures of the Anthropocene" 32–44, and "Ordinary Futures" 352–372; Jeffrey *The Mortal Sea*; Mentz *At the Bottom of Shakespeare's Ocean*; and Rozwadowski *Vast Expanses* and *Fathoming the Ocean*.

Iceland and Greenland (Barron & Burgess 8). This travel narrative was immensely popular in the Middle Ages and beyond, and versions of the tale circulated in a variety of languages. The Latin source text, *Navigatio sancti Brendani abbatis*, composed anonymously probably before the ninth century AD, survives in over 116 medieval manuscripts (Farmer, "Brendan (Brandon) the Navigator") and was read by Columbus, perhaps inspiring his own travels Westward with descriptions of moving islands (undoubtedly a reference to whales), a land of smith's forges (perhaps Iceland's volcanoes?) and huge white pillars jutting out of the sea (most likely icebergs).

The Irish spiritual quest genre *immrama* (meaning "rowings about", Barron & Burgess 11), influenced the writing of the *Navigatio*, and features in the Old French *Voyage* as a fusion of proto-romance and hagiography. The text's patron was Queen Adeliza, second wife of King Henry I, whose court was reeling in the aftermath of the White Ship maritime disaster of 1120.<sup>5</sup> The context in which this innovative vernacular translation circulated was culturally and linguistically significant. After the turn of the millennium the cultures of Europe and the British Isles saw a shift in human-ocean entanglements, with an increased consumption of sea fish and whale hunts, especially from the eleventh century onwards (Jeffrey 27–32). The Anglo-Norman version of the *Voyage* thus sits at an ecological and cultural pressure point—an early French vernacular depiction of ocean ecologies. As a significant development in the history of ecomedia, this text paints ocean sonic exploration in a form of literary technicolour that would many centuries later be achieved cinematically in the French film, *Le Monde du silence*.

Discussions of sound in medieval texts are particularly fruitful for thinking about ecomedia because sound, especially noise, is always ambivalent to some degree: "noise" in

<sup>&</sup>lt;sup>5</sup> In this disaster Henry's son and heir from a previous marriage perished in a Channel crossing (King 62–64).

both English and French is "both trigger and trickster" (Cazelles 155). The soundscape of the Voyage can be read productively in relation to modern methods of conceptualising sound. While the spiritual metaphors of the *Voyage* resound with visions of monastic life, Brendan and his companions contribute substantially to sonic environments in ways that demonstrate that "oceanic spaces are not friction-free" (Blum 33). Sound in this text is interpreted in socially and culturally specific ways that highlight cross-species relationality and contrast and resonate with key elements of sonic recording in other ecomedia formats, such as film documentary, theoretical works on sound (Noudelmann 43–56, Stefan "An Anthropologist Underwater"), and scientific literature (Farina 143). In this discussion I highlight how sound is essential to 'Blue' criticism. I draw on two forms of connected friction in the Voyage—the ecological pressures arising from the monk's production of noise on the ocean, and the ways that such relations are implicated in "pollution ideas" (Douglas 3), which constitute an understudied set of principles in ecocriticism and studies of sound that are open to interpretation. By considering this medieval text trans-historically and as a form of ecomedia, I attend to the ways that sound is interpreted. I demonstrate that thinking alongside the lens of noise "pollution" reveals patterns of friction in a medieval text that enable divergent interpretations of noise and species contact.

### Anthropogenic Noise and the Deep Sea

Le Monde du silence is implicated in ecological destruction and underwater conquest by the white male body, aspects of the film that have gained significant critical attention (Crylen 21–22). In contrast, readings of the Voyage are rarely critical of the effect that these Irish monks have on the places that they discover on their journey. The Voyage narrative is designed to suggest not that the monks pollute the environment through which they travel in

the modern negative sense, but the opposite; their journey to witness the marvels of the natural and supernatural worlds is aided by angels (Burgess "Les fonctions"; Le Saux "La faune marine"). A quest of this magnitude, however, does not come without environmental consequences. The disturbance of the physical and sonic environments through which the monks travel is typically emphasized by their incessant singing of the mass and their celebration of the feast days on the sea and on each of the islands that they find. These aspects of this narrative can be productively read alongside ideas of pollution, a word originating in the post-classical Latin *pollution*, meaning 'defilement, desecration', or the ejaculation of semen outside of sexual intercourse (*Oxford English Dictionary*, "pollute v."). To pollute in a medieval sense is to corrupt or defile through sexual desire or ritual uncleanness, that is, to make something morally impure or ceremonially unclean. The verb 'pollute' in modern English retains the sense of corrupting something or rendering it physically impure (Douglas 7–29), while also taking on the meanings of excessive light, material detritus, or soundscapes filled with human interference or corruption.

The physical pollution of the ocean by human-made material goods—plastics, ropes and nets, oil spills—inflects modern discourse on noise pollution, despite the former representing only a small fraction of human interference with marine ecologies. Physical waste was a concern for some later medieval writers (Johnson 460), and the *Voyage* foreshadows an anxiety about the loss of objects to the ocean. One famous episode from the *Voyage* links physical waste to vocalized sound in ways that emphasise the connected nature of physical and sonic "pollution", or ecological defilement, in medieval contexts. The monks unsuspectingly alight onto a whale's back and begin to prepare a fire in order to cook food. Once they are seated, they are surprised that the 'island' suddenly begins to move away from the boat. They shout out at the top of their voices ("mult haltement" 452) for Brendan to wait

for them as the island moves further away.<sup>6</sup> Brendan advises his brothers to call upon the Lord God, before throwing them ropes and helping them to board the boat. They watch perplexed as the island disappears from view, still with the fire burning atop as the light fades into the distance. The recipient of anthropogenic disturbance here is the whale, who remains anonymous at this point in the Old French version of this story, returning later in the narrative and described as a "jacoines", or jasconius.

The subject of "pollution" in the scene with the *jasconius* is complicated by religious symbolism and quasi-naturalism (Le Saux 116), and the depiction of close physical and sonic cross-species interaction. When they flee the whale's back the monks leave behind a fire and a cauldron that they thought they had lost, but which the whale keeps for them for the following year (835–838). This scene can be read as a communicative effort at cross-species companionship while also bound in a form of anthropocentric logic. The sea creature has the charge of preserving the monks' livelihood as they travel, even though their meetings are separated over great lengths of time, sometimes years. A precursor to the episode occurs when the monks meet white birds, who tell them that they will return to the whale every Easter throughout their journey (551–552). In this way, the monks' journey puts pressure on oceanic ecologies. Although the monks had not planned to leave their items with the whale, in effect through this form of material detritus the *jasconius* becomes a symbol of the dual function of ecology in this medieval text: the *jasconius* is a servant of God, ultimately serving the journey of the saint and his human companions, while also communicating the whale's sentience and sensitivity.

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<sup>&</sup>lt;sup>6</sup> All quotations from the *Voyage* are from Benedeit, *The Anglo-Norman Voyage of St Brendan*. Translations from Old French to modern English are my own, incorporating verbatim from *The Voyage of St Brendan: Representative Versions of the Legend in English Translation*.

Alongside the physical objects left behind on the whale's back, the monks also generate a form of noise "pollution" linked to the jasconius' perspective through the acceleration of narrative pace. At their first encounter, as the monks settle on the back of the whale to make their fire, the 'fish' begins to move, and the monks shout in panic. This quickening is communicated primarily through the choice of verbs indicating movement. The earliest movement of the whale, initially described with the verb mover, 'to disturb' or 'to stir', soon becomes one of flight or escape: "lur isle mult tost s'en fuit" [their island moved away (lit. fled from them) very rapidly] (464). Could this be an indication of the whale's instinctive or emotional response to the noise of the monks' shouting? The fear the monks feel when the whale begins to move is communicated through their own shouting as well as Brendan's subsequent interpretation of the scene as coordinated by God. The whale's perspective is also presented in this episode through the speed at which it departs from the now disturbed environment. In this sense the scene is a proto-modern example of the disturbance of whale activity by the human production of noise, provoking disturbance. The quickening of narrative pace, and the attempt to communicate multiple perspectives at once, resonates with the killing of the sperm whale in Le Monde du silence. In this infamous episode, the boatmen hit a sperm whale and then track its slow and gruesome demise as it is eaten by sharks. The scene is underscored with orchestral music, including a repetitive violent tremolo in the strings section, which signals the antagonistic relationship between the divers and the sharks, and the subsequent breakdown of social contract, both between humans and across species divides (54:50–59:00).

The ecological pressure points of material detritus and the disturbance of ocean layers invite readings through the critical lens of "pollution". Despite being fashioned by God, the whale's behavior is indicative of either surprise or annoyance at the monks' shouting, shouting being a form of man-made noise that disrupts the different strata of the ocean, both

above and below the surface of the water. The theme of anthropogenic noise affecting different oceanic zones is critical to understanding the soundscapes of the *Voyage* because it highlights the complex relationships between the monks, the deep-sea creatures and the shallow-sea creatures. We can speculate that the type of noise "pollution" here produced by the monks reaches into the epipelagic or 'sunlight' zone of the ocean, where a whale might feasibly bathe in rays of light. The noises the monks produce pierce through this oceanic layer, causing a rippling effect on the underwater ecology, and establishing their own relationship with the *jasconius*, later forming an anthropocentric social contract through which he returns with their cauldron.

Scenes linking noise and ways of knowing the behaviors of different species make the *Voyage* speak to discussions of acoustemology. At the height of their seafaring journey, the brothers celebrate the feast of Saint Peter the apostle while afloat. Brendan decides to perform the service, singing in a very loud, clear voice ("mult halt a voiz clere" 1037), as prescribed by "the law". This has the unusual effect of inciting the brothers to ask Brendan to sing quietly, for they fear what might happen if he disturbs the creatures in the sea below. The monks point out that the water beneath them is clear, permitting them to see to the very bottom of the ocean. Close to the ocean floor they see large, cruel fish, the likes of which they have never known. The brothers instinctively link their discovery to the dangers of stimulating or disturbing the fish through human "noise", which could lead the fish to kill them all: "Si la noise les en commout | Sachez, murir nus estout" ["Should the noise arouse them, you must realize we would not escape death"] (1047–1048, my emphasis). By paying attention to their own sounds, the monks realize in this moment that anthropogenic noise may bring about their own downfall.

On the level of lexis, *noise* is an abstract noun in Old French that is unusual for the description of a saint's singing. What this description does achieve, however, is a refocus

from Brendan's production of sound towards its effect on the environment. Although the Old French noise is used only once at this moment in the Voyage, it is an important noun for identifying patterns between sound and cross-species relationality in the text, with possible roots including "the Latin nausea (seasickness; French "nausée"), nocere (to harm; French "nuire"), and noxia (nuisance)" (Cazelles 19-20). Noise in the Voyage acts as a categorisation for vocalized sound with the potential for harm or disturbance. According to Brendan's brothers, noise is thus something they should avoid, precisely because of its potential to disrupt the marine ecology at the deep-sea level, which would incur harm on themselves. On hearing the brothers express their anxiety about how loudly he is singing, Brendan's riposte is that they should sing louder and clearer than before, thus deliberately disturbing the fish under the protection and guidance of faith. This is a critical moment in the Voyage for a discussion on medieval anthropogenic noise "pollution", as anthropogenic noise and the act of praising God become significantly blurred. The moment at which Brendan instructs his brothers to sing their praises louder is striking in that his purpose is to deliberately cause a disturbance in the marine environment. As predicted, the brothers' collective noise provokes the fish to rise up as they come to the surface to join in the service, but instead of devouring the monks they skirt the side of the boat and rejoice in pleasure at the singing until it finishes.

The effects of anthropogenic sound in the *Voyage* should not necessarily be read in a solely negative sense. Haylie B. Swenson proposes an alternative reading of this scene: "While it certainly serves as another example of the recuperation of the frightening sea into the aegis of God's plan, we should also read this as a moment of coming together, of shared aesthetic pleasure in a confidently voiced song" (33). This reading is consistent with the form and function of medieval hagiography and offers the chance to trouble the category of noise "pollution" itself. Saints' lives often demonstrate modes of nonhuman encounter that reveal the manifestation of a divine plan, as when Francis preaches to the birds in his famous

sermon (Bonaventure 294–295, Sorrel 55–68). The same applies to the interaction between the brothers and the deep-sea creatures, which reveals Brendan's ultimate concern—praise of God. This is a form of praise that pierces through the oceanic layers to the very depths of the sea, where it generates a disruptive, but ostensibly positive, effect on the fish. Where this sound reaches the nonhuman creatures at these different levels, Brendan anticipates the protection of God and the expression of a creaturely form of praise that syncs to his own agenda. This episode demonstrates that trans-historical models of noise "pollution" may be more complex than a pervasive and purely negative model of pollution allows. Instead, "pollution" in this text emphasises decision-making and relationality between vocalising and listening agents, and alternative forms of interpretation for either.

An acoustemological reading of the *Voyage* demonstrates how episodes incorporating anthropogenic sound may be read against the grain in the context of noise "pollution". The disruption of sea creatures by anthropogenic noise highlights the monks' exceptional faith and anthropocentric *logos* (Cazelles 18), but it leaves behind a residue of intrusion and disorder in the troubled waters. The conceptualization of *noise* as something that disturbs or defiles an environment is one that the text itself generates; this conceptualization places Brendan's instruction to his brothers to sing as loudly as they can into an interpretive context that accentuates the polluting effects of human-made sounds. The communal celebration of the mass, brothers and fish all together, only becomes possible once the deepest waters of the ocean have been disturbed by human interference, and it is only by testing the waters with their voices that the expression of divine mastery over the maritime environment is revealed. In this expression of deep-sea encounters as the product of both disturbance and cross-species celebration, praise and "pollution" are one and the same thing.

## Distinguishing Noise and (Dis)harmony on Land and Sea

What the *Voyage* contributes to this broader discussion about seascapes is the notion that thinking about sound is essential to a "Blue" criticism because sound functions as both cause and effect of rootlessness. The *Voyage* makes clear a state of rootlessness in the passage above when the monks demand that Brendan lowers his voice to sing the mass so as not to arouse the fish from the deep-sea, as well as in the monks' seemingly perpetual and meandering quest for a glimpse of Paradise. Uncovering the instability of watery environments in relation to more stable ones is a key theme of Bryant's analysis of water as metaphor in Chaucer's *The Book of the Duchess*. Bryant unpicks how two late-medieval authors use "the intrusion of the watery element into human space" (1029), through watery metaphors and phantoms as a reminder of water's pooling materiality. In the *Voyage*, water can be read in reverse, as it is the humans who intrude on the ocean and its related unstable spaces, rather than water flowing into human physical and mental realms. Similar traces of thinking about oceanic instability are found in Stacy Alaimo's notion of a "posthuman" and "postterrestrial" form of criticism of sea environments that draws on there being "no solid ground, no foundation, no safe place to stand" (489–490).

A distinction between land and sea brings the conceptual rootlessness of noise into relief in the *Voyage*. The concentration of sonic motifs on the maritime journey communicates competing senses of harmonious sound and disharmonious noise, a distinction that passages comparing the soundscapes of land and sea bring into sharp focus. Such distinctions expose tensions between the divine plan for the monks' journey and the environmental disturbance that the monks incur. In an episode that highlights a clear contrast between the types of sound encountered and produced on land compared to those produced

on the ocean, the *Voyage* introduces an island described as the Paradise of Birds, harboring an enormous white and red tree covered with white birds. On sight of this marvel, one of the birds flies down from the tree and settles on Brendan's boat, its wings striking the air like the clapping of a little bell: "*Tant dulcement sonat li vols | En eschele cum fait li cols*" [Its flight sounded as sweet as the striking of a bell] (508–509). Alongside the bird's color, the sounds of its wings ringing out like bells emphasizes its symbolic angelic interpretation even before it has landed on the monks' boat. Likewise, the sound recalls the maritime bells of boats and ports clanging in the wind—sounds related to the human world that the monks have abandoned for their sea quest.

On the Paradise of Birds the monks experience a true symphony of avian sound following the initial meeting with the bird on the boat. In contrast to previous episodes highlighting *noise*, the narrative here emphasizes the monks' participation in an already lively and busy acoustic setting. The first bird describes how, as an angel in Heaven, it fell with its companions to this island from on high for following Satan. On hearing this the monks come onto the island and, towards eventide, these angelic creatures begin to sing hymns, giving thanks to God and offering an avian parallel to Brendan's singing: "Od dulces voices mult haltent crient | E enz en le cant Deu mercient" [With sweet voices they sang at the top of their lungs and through their hymns they gave thanks to God] (557–558). The important distinction made here is between Brendan's singing on the ocean, interpreted by the monks above as noise, and the birds' sweet voices. This comparison exaggerates the birds' naturalistic and angelic status by suggesting that avian song is harmonious, rather than disruptive. While there are distinct layers of anthropogenic sonic production and interference on the seascape, the birds in their tree represent a quasi-supernatural form of sonic production that is markedly different, and not anthropogenic.

The types of disharmonious noise the monks contribute to ocean soundscapes (shouting, clamour and *noise*), which are blurred with praise in the episode of the deep-sea creatures, are now clearly distinguished from the harmonious sounds they produce on stable ground with the angelic birds (psalms and meditative discussion). When the monks find their feet on solid ground, as on the Paradise of Birds, they leave behind the uprooting and disturbing effects of sound-making on the waves, and instead enter a state of earthly harmony. On the island of the Paradise of Birds, the monks join with the birds to sing night prayer before lying down to sleep. There are no anxieties in this episode about disturbing the environment. Night passes and the cockerel's crowing heralds daybreak as the monks wake to say pre-dawn matins in a return to their monastic routine. In a scene of harmonious, crossspecies worship, the birds and the brothers sing together. The soundscape evoked in this episode resonates with the themes of song, with call and response, and with cross-species communal worship (555–577). Whereas the shouting of the monks from the back of the whale represented a significant disturbance of that ocean soundscape, here the narrative is harmonious. The singing of psalms and the mass remains the sonic anchor for the monks' navigation on land and even when they resume their sea travel. The distinctions between harmonious and disharmonious types of sound in the Voyage encourage divergent ways of thinking about noise.

After the monks' initial meeting with the white birds, the singing of these angelic creatures returns as a guiding motif for the weary travellers once they are back at sea:

E les oiseals sur la branche

De luin en mer bien oïrent

Cum li oiseals les goïrent:

De lur canter ne firent fin

#### Desque arivé sunt li pelerin

[From far out at sea they could hear how the birds welcomed them on the branches. They carried on singing until the pilgrims had arrived] (*Voyage* 850–854)

The monks hear the birds from afar in a sequence that foreshadows Brendan's eventual discovery of Paradise, as anticipated in the description given by the hermit Barrind towards the beginning of the *Voyage* (100). The text emphasises that the birds are singing from far out at sea ("de luin") and that they do not stop their song until the brothers have returned to the safety of the Paradise of Birds. The birds' material bodies, which ring like bells in flight, force a reconsideration of the effort required to guide the travellers on their sea journey, and raise a question concerning the birds' narrative function: if the brothers had not been travelling on the ocean, would the birds have needed to sing for such a length of time? While it is true that the birds' singing acts as an important guide for Brendan's navigation, the scene suggests a form of anthropocentric utilitarianism that serves human purposes at the expense of nonhuman voices, a similar logic to the one that guides modern exploitation of marine environments. Cross-species encounters such as this, bound by an obligation to the travelling humans, become punctuating narrative moments that cultivate a sense of chronological progression along the journey. Indeed, the most significant encounters with sea creatures in the Voyage include competing harmonious or disharmonious sonic aspects, not limited to the birds. The *jasconius* was initially frightened by the monks' shouting but returns nevertheless to help them in a divinely inspired move that complicates the notion of anthropogenic noise as "pollution". Likewise, the nonhuman is helpful to the human, but just

<sup>&</sup>lt;sup>7</sup> The anthropocentric logic of nonhuman sound-making is not an unusual process of representation and interpretation in medieval texts. Its interpretations by textual audiences are, however, subject to debate. See Van Dyke 133–152, Steel 221–245, and Crane 101–119.

as the *jasconius* has to keep the monks' cauldron safe for them, the birds are required to keep up their excessive singing to ensure human spiritual and physical safety.

Complex loops of responsibility and sonic relationality trouble and diversify ideas of "pollution" in this medieval narrative. The sounds connected to creatures of the land and sea expose different layers of the sonic environments in the *Voyage*, demonstrating how an anthropocentric Christian cosmology underscores these sonic phenomena, propping up the positive interpretations of excessive singing while highlighting the disturbance of oceanic environments. The watery journey the monks undertake invites a continual suspension of the physical and spiritual stability they find on land, and they rely on nonhuman creatures, who come to their aid as guides and pinpoints on the unnavigated ocean. However, while the perspectives prompted by human presence in ocean soundscapes are diverse, there are broader cosmological sonic components of this medieval narrative that demonstrate the relationality of sound as far more than a simple recourse to human reasoning.

### The Relationality of Sound

The deafening sound of anthropogenic underwater noise in our oceans mirrors the silencing of nonhumans in the Western metaphysical tradition more generally, which has deprived nonhumans of the ability to speak back to human presence and politics. In modern conceptualizations of anthropogenic noise pollution the relations of power between humans and other species are usually one directional. Noise is produced for human benefit (in the form of underwater drilling, boat engines and construction) at the expense of the lives of

<sup>&</sup>lt;sup>8</sup> See de Fontenay 17–32. The notion of articulate and inarticulate sound has likewise troubled philosophers over the centuries, leading to a separation of man from the animals based on the attribution, or not, of voice to the sounds that each makes (Noudelmann 76–77).

different species, who depend on sound for feeding and communication (OceanCare Presentation, Filiciotto and Buscaino 67–71). However, cross-species sonic relationality is one aspect of the *Voyage* that differs significantly from modern discourse on ocean noise pollution. Numerous episodes in the *Voyage* present nonhumans as sonic agents, and their sounds as deliberately obstructive to humans. This reverse relationality is ascribed to the producers and auditors of different types of sound in ways that demonstrate the function of noise on the ocean before the modern concept of anthropogenic noise pollution.

In a premonition of the arrival of a sea serpent the monks feel a chill run through their veins (898). This is contrasted with the extravagance of the serpent's arrival as it soars in a sea of flames towards them, bellowing louder than fifteen bulls: La flamme est grant, escalféd fort, | Pur quei icil crement la mort. | Sanz mesure grant ad le cors; | Plus halt braiet que quinze tors. [The flames were great and burned strongly, causing them to fear for their lives. The body was large beyond measure and it roared louder than fifteen bulls.] (Voyage 909–912). The sheer force and brilliance of the sea serpent is accentuated through the vocabulary of this passage. The verb braire, "to roar", indicates a way of depicting monstrous nonhuman sound in terms of aggression, and the affective properties of the sea serpent's sound incur a strong emotional response for the monks. Brendan's own interpretation recharacterizes the serpent as non-threatening; to assuage the brothers' fear, he gives them some advice, stating that no one following a religious life need be afraid of a bellowing beast: "Quar que Deus prent en sun conduit | Ne deit cremer beste qui muit" [For no one under God's protection should fear a bellowing beast] (923–924, my emphasis). A comparison with bovine species through the verb muire ("to bellow", "to moo"), used in Old French texts to describe the sounds of large animals such as cattle, renders this vocalized sound comprehensible, and therefore less frightening, to the brothers in their boat.

Brendan's revision of the serpent through the reinterpretation of its sound is juxtaposed with a divine response, adding further levels of noise into the scene and emphasising sound as communicative. The arrival of a second beast to fight the first is accompanied by a violent howl or roar ("a rage braist" 930) from a second beast sent by God to do battle with the serpent. This is another example of the monks' provocative presence in unfamiliar watery territory: "Les plaies sunt mult parfundes, | Dun senglantes sunt les undes. | La bataile fud estulte: | En la mer out grant tumulte" [The wounds were very deep, and the waves stained with blood. The battle was fierce, and the sea greatly disturbed] (943–946). The volatility of the beasts, rather than the noise of the monks, is in this case what disturbs the ocean. This example of an encounter with a deafening sea creature reveals that it is not only human sound that can pollute a sonic environment; nonhumans can also disrupt soundscapes to extraordinary effect. However, the anchor for oceanic disruption in the examples so far is human presence, and the bloody battle between the sea creatures in the Voyage suggests that the mere presence of humans in ocean environments has noisy, violent and ultimately deadly consequences for different creatures.

Nonhuman sound in the *Voyage* is provoked by human presence but nevertheless speaks to an understanding of nonhuman agency that contrasts with the unidirectionality of anthropogenic noise pollution in modern discourse. In *Le Monde du silence*, unidirectionality features in a notorious scene in which the crew use dynamite on a coral reef to gather census information on the species of marine life in the area. The "inevitable" blast (22:20) demonstrates the sheer force of human impact on the shocked and dead fish, reduced now to a "scientific" survey. The roaring of the sea serpent in the *Voyage* functions in the opposite way, emphasising the serpent's agency and rousing the fear of the human seafarers to demonstrate relational encounter on equal terms. The episode with the sea serpent encodes cross-species relationships in a set of ethical questions not dissimilar to those raised by critics

of *Le Monde du silence*: who is responsible for the death of these creatures, not only for the noise disruption but also for the sea stained with blood? In the *Voyage*, does that responsibility lie with God, with Brendan who desires to see Paradise so strongly, or with the various human and nonhuman guides who have directed the brothers? While the crew of the *Calypso* justify the desecration caused by the dynamite survey under the auspices of science, the frightening nonhuman sounds encountered on Brendan's navigation highlight the uncomfortable junction between the natural and supernatural, the human and nonhuman, and right and wrong.

engender forms of physical disturbance and noise "pollution" that emphasise how relationality is shared amongst living creatures. Two important and contrasting scenes towards the end of the *Voyage* bring this to light by incorporating sounds not associated with earthly creatures, but with devils and angels. The first of these is Brendan's conversation with Judas, who they find clinging to a rock in the middle of the ocean. Judas describes two Hells, separated by the salt sea, that compete for which offers the most hardship and suffering. He explains that he is on his rock on a brief respite from his torment by devils. Each time he is set to return to his punishment in Hell, he hears the sound of approaching devils who come every week to drag him back. As the monks are well aware, Hell, like the depths of the ocean, is but a short distance away, just far enough that Judas cannot hear the devils when he is on his rock: "*Tant en sui luign que ci nes oi*" [I am just far enough that I do not hear them] (1326). When the devils do eventually arrive to take Judas back to Hell, Brendan's prayers offer Judas a brief respite but cannot hold back the demons forever.

Brendan's encounter with Judas reinforces the notion that sound in the *Voyage* is not solely restricted to earthly creatures; the noises of Hell spill out into the ocean environment when the devils come to take Judas away. The devils argue with Brendan "aggressively and

with raucous voices" ("A grant greine, a voiz trouble" 1481), stating that Judas should now suffer twice the amount of pain he usually receives because Brendan has given him a respite. The raucous voices of the devils thus trouble the monks' acoustic journey to Paradise. Simultaneously, the devils call attention to Brendan's disruption of their routine acts of torture. One type of sound—prayer and the singing of psalms, which I argued earlier constitute a frictional form of "pollution" in certain contexts—is being pitched against another, that of devilish torment. The notion that the cosmos hangs in a sonic balance is here made audible through different types of noise from human and supernatural agents, and the competing perspectives they offer.

The question of relationality is central to the interpretation of sound at the end of the *Voyage*. The ways that some forms of sound are distinguished from others reveal how ocean travel disrupts sonic agency. When the monks finally arrive at the gates of earthly Paradise, the definitive climactic episode of the narrative, the sounds they experience are once again highly evocative of their physical and spiritual situation. Paradise offers the monks an overload of summertime sensory stimulation, incorporating visions, smells and sounds of everything that they have missed while travelling on the ocean: fragrant smells of flowers and fields, woods fully stocked with game and rivers with fish, reed beds exuding honey through the dew that comes from Heaven, a mountain made of gold, no hardship, affliction or hunger, and a plentiful supply of whatever they most desire (1729–1766). However, when Brendan stands at the summit of a high mountain in this Paradise, he experiences a "vision"—also an auditory experience—that is almost too much for his human body to handle:

Angeles veient e sis oient

Pur lur venir cum s'esgoient.

Oient lur grant melodie,

Mais nel poient suffrir mie:

Lur nature ne poet prendre

Si grant glorie, ne entendre.

[They saw angels and heard how they rejoiced in their coming. They heard their great melody, but they were not able to endure this for long, since their nature could not take in or comprehend such great glory.]

(Voyage 1779–1784)

The *Voyage* narrative peaks at this moment in the final section of the text, which plays on rhymes evoked by the riff on the syllable //ient// in the Old French words "veient" (from "to see") and "oient" (from "to hear") and repeated through the lines that follow. Rhyme is key to discussions of sound in this text, because rhyming choices, as above, are used to juxtapose sensory experiences. The visual and auditory input sustained throughout the journey undertaken by Brendan and his monks is ended in this final experience of Paradise, at which point the singing of the angels in their purest form becomes unbearable for human ears. The sonic impasse represented at the summit of the mountain in Paradise highlights the abyss that separates human and nonhuman encounter in the earthly and oceanic realms with the indescribable experience of spiritual enlightenment in Paradise. In disrupting Brendan's journey, the angels' singing mimics the disruption of the lives of the sea creatures by the monks' singing throughout the *Voyage*.

The scene of Paradise thus offers a reversal of the stakes of noise "pollution" as they have featured so far in this discussion. It is no longer the humans whose noise interrupts and disturbs the oceanic environment; here it is the sounds of angels that interrupt Brendan's own voyage and bring his travels to a close. Noise, this time not caused by humans or fish but by angels, thus comes full circle and offers a bodily, sensorial barrier to the full progression of

the saint's journey. This final section of the text also highlights that the sounds of supernatural agents, like those of the vicious sea serpents, contribute to a textual soundscape in much the same way, this time exerting an effect on the soundscape as experienced from the human perspective. Whereas human presence in ocean environments is a form of disturbance highlighting relationality, often incorporating aspects of noise "pollution", the supernatural sounds that Brendan encounters are eternal, and create a disruption only to human earthly desire. These agentive, eternal sounds function as a counterpoint to the sounds of earthly and oceanic creatures, framing creaturely noise, and anthropogenic noise, in a broader interpretive context in which humans are not the sole masters of their environments.

# Conclusion: A Medieval Acoustemology of Noise "Pollution"

The term "noise pollution" is a relatively recent one in discourse on noise and sonic interference. Scientists in particular have used it to highlight a series of unidirectional effects of anthropogenic noise affecting specific environments, be they on land or at sea. In twenty-first century environmental policy and conservation, this term generally refers to anthropogenic noise produced by human technologies pervasive and loud enough to cause significant disruption over vast distances. However, it may also refer to discreet environments—a car park, a road lined with trees, a shoreline—or apply to ecomedia soundscapes, such as the mobile laboratory of Cousteau's *Calypso*, in which noise affects the representation of living organisms. In this discussion I have shown how the interpretation of noise "pollution" in the *Voyage* generates readings that do not always fit neatly into pollution as a critical category; while pollution as ecological destruction may be inferred in some scenes of *Le Monde du silence*, it does not account for all significant features of sound in the *Voyage*. It does not account for cross-species relationality, nonhuman agency, and the

manifestation of a divine plan. By placing "pollution" ideas into a trans-historical frame and across different types of ecomedia, we gain a deeper and richer understanding of the frictions of sonic interpretation.

An acoustemology of a medieval saint's journey across the ocean must balance multiple perspectives, some of which are ambiguous but rendered *hear*-able through descriptions of sound. By teaching us the lessons of nonhuman agency and the relationality of sound, the *Voyage* puts the modern concept of noise pollution into critical perspective.

Brendan's deliberately noisy contributions to the ocean soundscape suggest that sound can be manipulated in ways that parallel the cinematic effects of film documentaries and recordings. Noise in the *Voyage* is a construct built on a layering of sounds, which from an acoustemological standpoint distinguishes some sounds from others based on who is producing or hearing the sounds. Likewise, it expresses how deep that sound might need to penetrate into layers of ocean environments in order to reach auditors. Layers of human, nonhuman and angelic sound are simultaneously stacked onto each other in ways that complicate the notion of noise "pollution" as a purely anthropogenic matter. To this end, I have argued for a rethinking of anthropogenic noise in networks of relation with other types of sound, be they from creatures themselves, from the land or the sea, or from the realms of Paradise and Hell.

In the Blue Humanities modes of listening matter, especially for human auditors, and certainly for conservation practice. Twentieth-century scientific developments were slow to catch up with the affective consequences of noise "pollution" as they are communicated in early texts such as the *Voyage*. Efforts have instead been placed on recording and distributing the sounds of nonhuman creatures in "objective" ways. Despite this, our own capacity to listen must not be restricted by the tantalizing unidirectionality of modern concepts such as noise pollution. Instead, we must continually revise such concepts in order to revisit

alternative models of environmental change and disruption, inviting in different ecomedia to challenge restricted notions of species boundary, sonic directionality and environmental interference. The *Voyage* sheds light on understandings of sea creatures' responsivity to, and participation in, soundscapes that foreshadow our own desire to hear what these creatures have to say for themselves. The friction between modern and medieval exposes the utilitarianism and anthropocentric *logos* that frames "pollution" ideas, and highlights the ways that multiple species, earthly and supernatural, share responsibility for the overlapping soundscapes represented and the perspectives they offer. Although it is our human eyes and ears that will be our guides for a future *after* "pollution" the medieval *Voyage* tells us that we are not alone in speaking out, and that our fellow earthly creatures will also be heard.

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