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INTRODUCTION

by Maeve Mulrennan



Image: Louise Manifold, 2017

Aerial/Sparks was developed and produced by artist Louise Manifold. Commissioned by Galway 2020 European Capital of Culture, the project took place over six years, culminating in Spring 2021. The core concept, utilising sound to explore and connect with our relationship to the ocean, evolved to encompass an artist residency programme on board the Marine Institute's RV *Celtic Explorer*, a multi-venue exhibition on Inis Oírr, a collection of conversations as part of the Ars Electronica Festival 2020, a radio broadcast, a series of awards for students of Furniture Design & Manufacture in GMIT Letterfrack and a vinyl record.

The Celtic Explorer is the research vessel operated by the Marine Institute Ireland. Each year, surveys by scientific teams from different countries are carried out on board. Louise Manifold began a research and development phase in 2016 with the Marine Institute, funded by the Arts Council. Once she had completed a pilot residency on board the ship, it became clear that this opportunity could, and should, include other artists. This generosity and ambition is the driving force behind Aerial/Sparks. Beginning in 2018, seven artists were invited to take part in residencies as part of research surveys in different parts of the ocean, for varying lengths of time. Writer Kevin Barry was invited to spend time in the lighthouse on Inis Oírr, a prelude to the exhibition on the island in 2020.

The exhibition took place in several spaces on Inis Oírr, the smallest of the Aran Islands, in September 2021. New works, created separately, were brought together to live temporarily on the island, connecting with each other across limestone plains, always in sight of the ocean from where they were conceived. The works were contextualised not only by their surroundings and the islanders, but by several volunteers and also the island's lighthouse keeper, who became the guardians of the exhibition. The island mirrored the *Celtic Explorer* in this instance; a temporary community brought together in search of knowledge and connection.

In a year of great uncertainty, the artworks revealed themselves as compass points in which to navigate unknown waters, and created a new map from which to navigate the island. The island itself was different than usual: in any other year, Inis Oírr welcomes thousands of tourists from near and far, by boat and plane. In September 2020 there were some tourists from the mainland; however, a quietness lay over the island which was conversely made more palpable by the presence of Aerial/Sparks. An island is governed by its relationship to the sea and the weather; a natural safe harbour for the artists' works. An island is home to people who are resilient, mindful of climate change and with a knowledge of the sea that differs to those living on the mainland. Inis Oírr was the lens through which viewers experienced Aerial/Sparks: an in-between space accessed only by sea. For the mainland exhibition viewer, the journey to and from the island is part of Aerial/Sparks, creating a different experience to that of the islander.

Aerial/Sparks also manifested through the programme 'In Kepler's Gardens' as part of Ars Electronica 2020. Ars Electronica is a festival of art, technology and society, usually held in Linz, Austria. In 2020, the majority of the programme took place online. A series of discussions between the artists, scientists and the curator are available on the Ars Electronica website. The site also directed viewers to online iterations of the artworks and a virtual tour of the RV *Celtic Explorer*.

Ailís Ní Ríain

East – West: Where Morning is the Sea

Ailís Ní Ríain is a contemporary composer whose recent works include site-specific commissions in Ireland and internationally. She was invited on board the *RV Celtic Explorer* in 2019, and her resulting film was projected in the theatre of Áras Éanna, Inis Oírr's art centre. The film presents an artists-eye viewpoint of the ocean through a porthole of her cabin, with a contemplative audio comprised of voice and piano. The installation of the film subverts the intimate setting of the artist's cabin. It creates a large portal for the viewer to experience the simultaneous external and internal experience of Ní Ríain. The audio has been created by her exploration and experimentation with a piano, and the human voice weaves the viewer's viewpoint, and their aural imagination, into the work. The viewer is given space through sound and moving image to explore and experiment also. The intimacy of the artist's cabin, her only private space on board, is subverted and now a theatre, allowing for multiple viewers at once.

Carol Anne Connolly

Answering Echoes

Carol Anne Connolly's installation in the Áras Éanna gallery is immersive, playing with the viewer's understanding of micro and macro, and what is seen and unseen. Connolly employed photoelectronic synthesisers to create portraits of a landscape that is out of site to most people. By turning image into sound, the artist allows for the viewer to experience this unseen place in a new way, with the sound creating a spatial experience of place within the gallery. Connolly's photographic prints magnify microscopic elements of the seabed, creating monumental forms. Each form sits against a blank backdrop; she both reveals the form and, by removing it from its context, exposes how this seabed, like any landscape, is understood by us through context as much as through looking at individual elements.

David Stalling
Palace of Ships

Stalling's audio-visual installation was placed in the handball alley on Inis Oírr. As with Connolly's work, the viewer is faced with the limits of the human senses and our ability to understand and know our world. David Stalling completed his residency on board the *RV Celtic Explorer* in 2018 during a scientific survey that employed seismology in its research. The seismometers take the pulse of the earth, recording vibrations, sounds of living creatures, human activity and seismic waves on the seabed over nineteen months. The data needs to be interpreted, and Stalling has manipulated audio data and interwoven this with an 8th century poem – another type of human activity – and video of rough seas. In their discussion as part of the 2020 Ars Electronica programme, Professor Sergei Lebedev remarks on the commonalities between the survey team and the artist: they were all there to listen to the earth. In the same discussion Stalling also tells of his experience on the ship, with rough seas, what he calls 'the confused sea' making eating, sleeping and moving extremely difficult and heightening sensory perceptions.

Magz Hall
Waves of Resistance (Radio art without borders)

This installation in Áras Éanna comprising of transmitter, multiple radios and a kitchen table, addresses the legal aspect and power of radio as a political and artistic forum. Hall creates a space where the mythical island of Hy-Brazil is given voice, with a manifesto of hope and unity. The transmission speaks of Margareta D'Arcy, the pirate queen who broadcast *Women's Scéal Radio* from her Galway kitchen. The Irish language in this artwork reminds us that although the land is free, the language is still colonised, with Irish people relying on the English version of the manifesto. The looped transmission creates the sense that there is someone, in an othered space that may or may not be real, attempting to be heard and understood. There is an echo of the Voyager's Golden Records: two phonographs with images and recordings of what it is to be human, expressed through poetry, song, voice and mathematics, that were placed on the Voyager in 1977. The Golden Records were an attempt to connect and communicate with the unknown, with the makers understanding that these may never be heard.

Kennedy Browne:

Collaborative practice of artists Gareth Kennedy and Sarah Browne
Island Affinities

Island Affinities captures artistic human endeavour through collaboration with the Devane brothers: a musician and sean nós dancer aboard a shipwrecked US military training vessel on the beach of Inis Oírr. Installed in Áras Éanna, the video juxtaposes Irish tradition with specific local cultural styles with a destroyed military vessel that speaks to how the ocean is part of wider political and capitalist systems. The use of specific microphones and the dancers position on top of the vessel make the dancers movement and music vibrant, while the vessel is no longer of value and discarded. The co-existence of the ocean as a space to research and to colonise is contrasted against our romantic notions of the ocean and of traditional arts. Rather than being used to generate capital through tourism and performance, the music and dance become a way of understanding, revealing and making knowledge.

Roberta Šebjanič

Selachophilia: Cetorhinus Maximus – Limaria Hians

Selachophilia, or a love of sharks, refers to the artist's sighting of a basking shark during her residency on board the RV *Celtic Explorer*. The piece also refers to her sighting of *Limaria Hians*, or Flame Shell, a seabed dweller in the North Atlantic which creates a reef-like habitat that is essential to biodiversity on the seabed. The artist, as with Kennedy Browne, looks to the sean nós tradition – this time in song – to transmit and understand knowledge of place, and has interwoven it with scientific information. The sound installation in the island's church underlines the importance of these two forms of knowledge. In the Ars Electronica discussion with the artist and curator Louise Manifold, Dr. Chris McGonigle uses the word 'interrogate': the research survey utilises sound to interact with and interrogate organisms and habitats. The word interrogation may have negative connotations, especially when situated within an artwork in a church on an island. However the scientific use of the word brings an objectivity to the word. On the other hand, the presence of an artist and her subjective perspective allows space for other perspectives of the meanings gleaned from the scientific methods and data collected.

Kevin Barry

Island Time

Writer Kevin Barry was invited to Inis Oírr Lighthouse for his residency, offering a different perspective from the *RV Celtic Explorer* residencies. The resulting film, made with foley artist Jean McGrath and Aerial/Sparks curator Louise Manifold, explores the psychological aspects of isolation, perception, within / without that the seafaring artists experienced aboard the ship. The lighthouse, again like the ocean may have suffered from romantic notions of artists who came before Aerial/Sparks. However Barry's work presents a realistic perspective. The strict timing of the lighthouse creates a situation where the lighthouse keeper has nothing but time – time to catastrophise, scheme and regret. Although on land, the sea dominates and the physical aspects of basic living: eating, sleeping, moving, are threatened, just as they were for the artists on the ship, leading to heightened senses. The inner world of the protagonist is claustrophobic and paranoid. The lighthouse is unforgiving. Viewers were invited to the lighthouse to view the work, with time allowed for their own exploration of the space and experiencing the island and sea from a height. The contrast between glass and stone, the silence interrupted by wind and sea gives the viewer a small slice of the experience of Barry's fictional world. The lighthouse is situated on the south east head of the island, with a military-straight road leading to it. The experience of this artwork begins on this walk, away from Áras Éanna, the church and handball alley.

The Foul Sound

Although Aerial/Sparks has come to a close, it is not the end. The experiences of the artists, their work, lives on through further exhibitions. Some of the artists will continue to develop work in collaboration with scientists, for example sound artist David Stalling is continuing work with Professor Sergei Lebedev. Four students in GMIT Letterfrack have been selected to work with musicians Stephen Brown and Mel Mercier, and architects Laoise Quinn and Oisín Jacob to create new work using wood, sound and space. Named after the body of water between Inis Oírr and Inis Meáin, *Foul Sound* creates space and connection between students, place and artists. The Foul Sound was created as part of the Galway 2020 Small Towns Big Ideas programme, works will be presented in late 2021/2022.

Artist Louise Manifold, through six years of development, partnership, building connections and trust has also insured that the legacy of Aerial Sparks continues, evolving and agile. Experiences by artists, communities, organisations and places have, over the timeframe of the project and into the future, created a unique and multifaceted artwork.

*Inish Oirr,
a film essay without images*

Megs Morley



Fade from black

The viewing plane appears open and vast, a full anamorphic vista
exposed to a terra firma of limestone, particles of crushed bones compressed into solid rock.
Under a microscope, (*Field of view: 3.5 mm, polarising filters*)
Crystal forms luminesce alongside tiny spinal, skeletal remains
The surface is karst.
Saltwater, *sáile*, digests the softer bonal matter leaving the crystalline rock
Where there is empty space, larger crystals of calcite have grown.
This process of living, dying, transforming, metamorphosis, and time –
silently presses and etches onto the island's skin with its terrible, tiny power.

This land is a vast repository, collecting and recording the processes and traces of the past,
and for the forgetting of them.

VO: It is the archive in process, the final museum.

On the east of the island, a stage erupts from the foam
Like a gift presented to King Canute, a strange act of theatrical mimesis unfolds
I have a conversation with a stranger about time and physics.
"In the middle of my life, I find myself lost. I find myself lost" she says.
How can you simultaneously be the one who is looking at it and the one who is being looked for?
She tells me "It's called fiction."

The first work of fiction was the first act of evolution, and of revolution
A pressing of the past, repeating, echoing
it can now only be seen through analogy and allegory
like how fragments of light intersect between a play of mirrors and texts
or how silver crystals decompose to form images,
or how acid bites into metal,
light burns into celluloid
Shattered into infinite configurations of 1s and 0s of photonic data
Transforming imagery into sound.

A diamond stylus traces the sound wave etched *Inish Oirr*

100 years to construct memory in physical form – to inscribe it from the landscape itself-

There's a lighthouse

A fixed co-ordinate to navigate through *the sounds*

and to anchor collective remembering.

VO: We may drown in floods of memories just as we may be torn apart by the multitude of identities.

Tracing the perimeter of the island by eye, the horizon distorts the sense of scale.

Moiré exceeds sensor resolution

It could be 5 kilometres, the perfect archipelago of escape and containment.

Continuing, the camera traces the figure of a woman cycling towards an empty hall.

Inside she enters a palace of sonic seismic artefacts

Echoing, reverberating, repeating, in light and darkness.

VO: An artist has created a virtual escape through the containment of the body and the disappearance of perspective.

13:03 Sound Light Vibration

Inside the belly of the ship, there is a kitchen and table

Deployed as prosopopoeiae

detecting the echoes and waves of the past, and the memory of them,

Things, then more things, and then other things.

Things that are thrown from the deep to reveal themselves, as spectacles of decay, so that we can dance joyously on their bones and exposed imperial carcasses.

The camera now pauses on a small black and white photograph depicting bodies of Aran thrown against rocks by the sea. What is exposed in this image is the exploitation and violence of the origins of ethnographic cinema.

It is through the female body, voice and *caoineadh* they remain.

Their aural bodies passed through breath, body and air, the entanglement and aliasing of living and non-living.

A promise lies dormant in the geology of this bedrock

Immerse deeply in landscape, (*fill screen, look for glitches*)

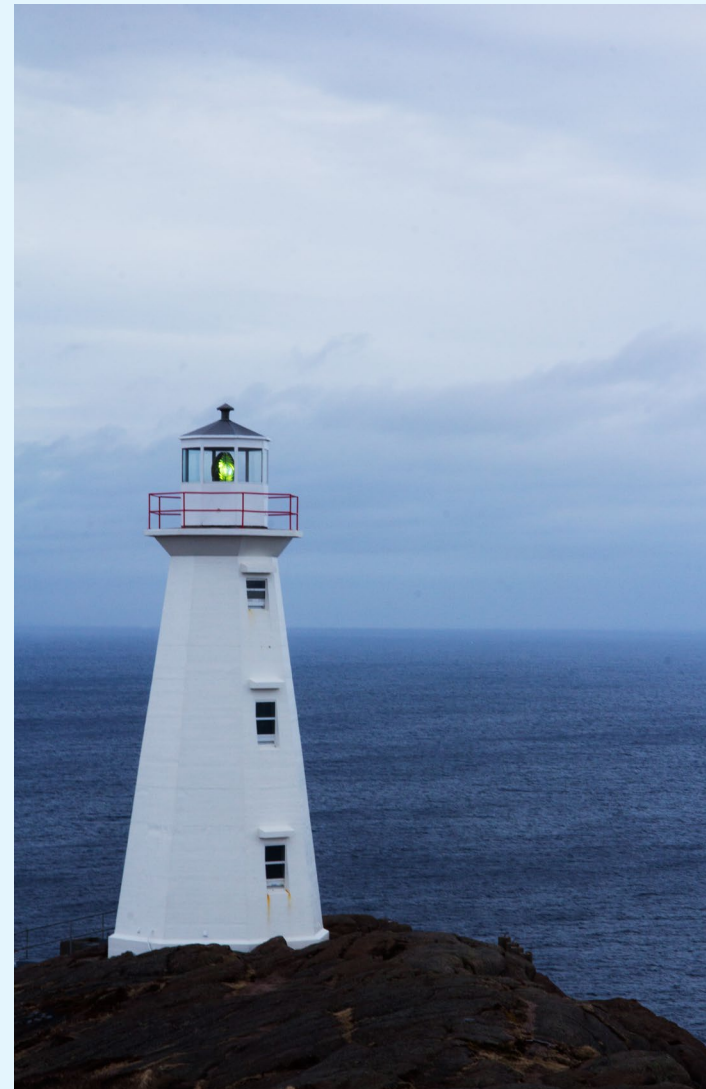
In the shale and sheet flat, ungiving and unforgiving.

It is in the erosion that life survives.

VO: It is in the crevices and cracks that life blooms.



Images: Louise Manifold 2017



AERIAL/SPARKS ARTISTS & SURVEYS



AILÍS NÍ RÍAIN

KEVIN BARRY

DAVID STALLING

KENNEDY BROWNE

ROBERTINA ŠEBJANIČ

CAROL ANNE CONNOLLY

MAGZ HALL

AILÍS NÍ RÍAIN

East-West: Where Morning is the Sea

5 min

A meditation on time spent at sea where music and imagery allude to the grasp of the sea, living beyond our imagination and the favour of viewpoints. This musical composition includes a wide variety of sounds created inside a grand piano percussion, slides, plucked strings, snippets of melody and keyboard sounds. All sounds, with the exception of the voice, come from one piano.







KEVIN BARRY

Island Time: A monologue in nine chapters

6 min 55 sec

With elements both of radio play and of digital theatre, *Island Time* sounds a tragi-comic tone. Primarily inspired by its unique location, the lighthouse on the Island of Inis Oírr off the coast of County Galway, Ireland.

Written and performed by Kevin Barry

Sound Design and Foley by Jean McGrath

With kind support from the Commissioners of Irish Lights.





EXTRACT FROM E-MAIL TO JEAN MCGRATH, SOUND DESIGNER

... anyway, here some possible Foley effects. A few of these might go a long way but see what you think ...

Far-off ships as they head for Cadiz or wherever.

The Kelly dogs going apeshit in the yards.

Debris blowing around the yards in the spring gales.

An eerie hum of singing from a possessed field nearby.

Creaking gate and turning pedal to suggest a postman's arrival.

Scrape of a razor across a pale, shaky face.

Rustle of tall grasses moving in a field.

A low hum of morning traffic around Ennistymon – maybe it's mart day.

Sound of a thrush slapping at fierce pace into a window.

Sound of a small hours kerfuffle with a guard in Ennistymon (we can do this outside the lighthouse!)

From the little dream sequence, when he spaces out and travels the globe, maybe we can rustle up tiny little riffs to suggest some of the places named ... a muezzin call-to-prayers in Cairo ... children playing in Greek hills ... rain falling in Paris.

The hands of a heavy, heavy old clock turning.

Pots and pans clattering and clanging for his cooking duties.

A little float or waft of spoken Irish from farmers in an evening field.

Kevin Barry



DAVID STALLING

Palace of Ships

Multichannel sound, moving image, lighting

Duration 20' (looped installation)

I had no idea what it would be like to set out on a residency aboard the Celtic Explorer research vessel. Being in a spacious yet confined environment on the vast Atlantic Ocean for nearly three weeks without the possibility of disembarking was a daunting prospect. After we left Cobh Harbour, I was pleased that the scientific team was very welcoming of my presence as an artist during this seismic deployment survey, making me an unofficial member of their team right from the start. I assisted with assembling and testing the Ocean-Bottom-Seismometer units, which were to be deployed at eighteen locations across the Celtic Sea. It was fascinating from my perspective as an artist who has experience working with sound to learn how these devices work. Having a keen interest in acoustics and anything related to recording and making sounds, I found that the way seismologists look at waves is quite like how I engage with them, except that seismic waves are well below the human spectrum of hearing. Seismologists collect wave recordings of seismic events to interpret the movements of the earth's structure, while I gather wave recordings to create compositions. When we found these connections in knowledge production between scientific research and art practice, our conversations centred around developing ways of making seismic events not only audible but also musical.



Prior to the residency I was unable to fully grasp the complete loss of balance and groundedness that occurs when heading through a storm at sea. When the swell of waves moves in one direction and the wind into another, the crew call it ‘confused sea’, causing erratic pitch and roll, which eventually dislodges your daily rhythms and routines. Being constantly on edge like this heightened my perception of the sounds on the ship: agitated rumbles, with the cries of the aching ship body resembling whale song; wind howling and whistling through the poles and cranes. Thunderous clangs of rogue waves hit us sideways, exciting the steel vessel like a giant resonant bell, accompanied by the sound of objects rattling and sliding around. The sameness and repetitive nature of events is interrupted by the unpredictable element of surprise, such as moments of zero gravity before being swung forcefully into an unexpected direction. I felt strong parallels here with some of my ideas about structuring sound work. Experiencing it physically with my whole body provided an unforgettable, multi-sensory perspective that informed the piece I created.

Palace of Ships manifested as an immersive audio-visual soundscape of my experiences and these investigations into sonic, seismic, and cultural milieux of the Celtic Sea. It consists of recordings I made on the ship, sonifications of seismic data, and a text from the 8th century Old Irish poem “Anbthine mór ar muig Lir”, describing a perilous journey during an ocean storm. The poem resonated with my encountering of the confused sea while evoking centuries of history navigating this body of water. The seismic array deployed by the scientific team recorded 19 months of data. I chose to work with three days from this plethora of potential material: one particularly active day from a seismic point of view (during July 2019); one day with a tornado, which formed over the Atlantic and ended up sweeping over Ireland on 15 February 2020; and a very quiet day during April 2020 toward the end of the first pandemic lockdown, where there was little human activity present. Making long records of seismic activity audible to the human ear involved manipulating their pitch and duration. In this domain of listening, geological time becomes tangible and the naturally occurring seismic tremors and human-made sounds take on musical qualities. In turn, the recorded readings from the poem were slowed down and became sonic strata of historical artefacts. Through this work, which combines various sonic and visual elements related to my residency and the affiliated scientific research, I aim to share a sense of loss of equilibrium, a lack of balance and state of uncertainty.

Palace of Ships was realised in collaboration with Prof Sergei Lebedev and Dr Maria Tsekhmistrenko of the Geophysics Section at the Dublin Institute for Advanced Studies. Reading of text by Paddy Sammon, based on a pronunciation guide by Prof Liam Mac Mathúna. Additional readings and vocalisations by the artist.



KENNEDY BROWNE

Manned-Unmanned

2 min 22 sec

Amhrán a Gligín

4 min 7 sec

Kennedy Browne's work stages encounters with real and speculative artefacts washed up on the Island of Inis Oírr off the West Coast of Galway. An automated US military vessel used for target practice, destroyed by gunfire and beached on the island in 2019, becomes an instrument for Connemara sean-nós improvisation in music and dance. An ornate silver coral rattle (gligín) becomes the subject of an Irish-language ballad of a libertarian space or sea colony gone wrong.

Dancer: Gearóid Devane

Accordion player: Colm Devane

Composition: *Colm Sonny's* and *Ard Mór* by Colm Devane

Sound recordist: Bob Brennan

Sound mix: Seán MacErlaine

Amhrán a Gligín composed and performed by Eoghan Ó Ceannabháin



AMHRÁN A GHLIGÍN

LE EOGHAN Ó CEANNABHÁIN
KENNEDY BROWNE



Ar chuala sibhse a chairde faoin ngligín linbh álainn
 A thug an sruth 'steach ar an oileán seo Dé hAoine
 Ó deir siad gur le páiste a raibh cliú mhór agus cáil air
 Mar gur daoine mór le rá a bhí 'na mhuintir
 Sin iad an dream a shocraigh an lá úd é thabhairt do na sála
 Is cathair bhreá a chur a snámh amach thar sáile
 Mar bhí na billiún punt 'na lámha 'sní raibh gean acu ar cháin
 Ná níor thaitnigh leo bheith breathnú ar na bochtáin.

Is leagadar 'mach an t-ór a bhí acu ina bpócaí
 Nó gur fhostáodar dream tógáil 'gus searbhóntaí
 Mar théis gur acu bhí an t-eolas bhí a gcuid lámha leochail
 Is b'fherr an obair thabhairt 'gun dream a bhí gan dóchas
 'S dá bhfeicfeá an chathair a thóg siad 's í seoladh ar na farraigí
 Ní chreidfeá gur ar an domhan seo a d'fhás sí
 Níos áille ná an tSean Róimh nó fiú Cathair Chonstaintín
 'S nach breá'n rud gun dream tógáil gan bheith dímhaoín.

'Nuair a bhí an chathair tógthí, nár scaoil siad leis na rópaí
 Agus as go brách leo 'mach ' dtreo bhun na spéire
 Thugadar mairnéalaithe leotha raibh eolas acu ar sheoladh
 'dtreos nach gcríochnóidís amuigh ar charraig aonair
 Ghealladar a saoirse do chuile oibrí dian ann
 Da bhfágfaidís an tír agus a muintir
 Mar gur fearr i bhfad an saol a bheith freastal chuile mhian
 Ag lucht a' rachmais agus dream na mbolg-líonta

Friends, have you heard about the beautiful baby's rattle
 That came ashore to the island this Friday
 They say it belonged to a baby who was very famous
 For his family were very important people
 These are the ones who decided one day to run away
 And to float a fine city out on the ocean
 Because they had billions of pounds of wealth and they weren't fond of tax
 Nor did they like to be looking at the poor

And they put out all the gold that they had in their pockets
 And hired a bunch of builders and servants
 Because although they had the knowledge their hands were weak
 And anyway it was better to give the work to hopeless cases
 And if you saw this city as she sailed across the seas
 You wouldn't believe that she grew upon this Earth
 More beautiful than Ancient Rome or even Constantinople
 And wasn't it great that the builders weren't left idle?

When the city was built they loosened the ropes
 And off they went towards the horizon
 They brought sailors with them that knew of sea-faring
 So that they wouldn't end up on some lonesome rock
 They promised their freedom to every hard worker
 That would leave behind their homeland and their people
 Because it was a much better life to serve the every whim
 Of the wealthy and the full-bellied ones

Ach ní rabhadar seacht seachtainí a' seoladh ar na farraigí
 Nuair a thosaigh an t-achrann mór agus an réabadh
 Mar gur thuig na mairnéalaigh go ngabhfaidh an lot go tóin poill
 Dá ngabhfaidís ar stailc an lá céanna
 Ghlaodar ar na bossannaí 'gus rinneadar a n-achainí:
 Pá cheart agus roinnt laetheantaí saoire
 Ach théis gur chualadar an bás uilig 'sea a dhiúltaigh lucht an rachmais iad
 Óir ní sheod é an fáth gur thréagadar lár tíre

Mar sin shocraigh lucht an rachmais gan glacadh leis an gcacamas
 Ach éalú leotha 'mach dtreo íor na spéire
 Is thógadar an rocket is mó ariamh dá bhfacthas
 Óir ní ghlacfaidís le hordú riamh ó éinne
 Ach nuair bhíodar réidh le haghaidh an blasht-off sea thuigeadar a ndearmad
 Ní raibh innealtóir ar bord ná captaen spéire
 Ansin a chualathas an pléascadh as seo go Gort na gCapall
 Agus séadadh suas na gligíní uilig le chéile.

But they weren't seven weeks sailing on the seas
 When the conflict and the consternation began
 Because the sailors understood that it'd all go to the ocean floor
 If they went on strike that very day
 They called the bosses and they made their demands:
 Fair pay and some holidays
 But although they listened to the requests, the wealthy ones refused them
 Because it wasn't for this that they had left the land

And so the bosses decided not to take any of this shit
 But to escape out towards the skyline
 They built the biggest rocket that had ever been seen
 Because they weren't to take orders from anyone
 But when they were ready for blast-off they realised their mistake
 They didn't have an engineer on board nor a captain
 And the blast was heard from here to Gort na gCapall (on Inis Mór!)
 And the eejits were all blown up together

ROBERTINA ŠEBJANIČ

Selachophila: Cetorhinus maximus - Limaria hians

6 min 50 sec

This immersive audio installation intertwines sean-nós vocals with the narration of a storyteller and field recordings of above and below the depths of the Atlantic Ocean.

Sound: Robertina Šebjanič

Selachophila: Cetorhinus maximus - Limaria hians

Sean-nós vocals by Caitríona Ní Cheannabháin and Róisín Seoighe.

Narration by Polona Torkar

Recording of narration by Rok Kovač

Sound mastering by Aleš Hieng Zergon





ROBERTINA ŠEBJANIČ

THE ATLANTIC TALES

In May 2019, I joined a multidisciplinary team of scientists on the RV *Celtic Explorer* for a 15-day research voyage in the shelf seas around the North coast of Ireland as part of the Backscatter and Biodiversity on Shelf Sea Habitats (BaBioSSH) Survey. Led by Dr. Chris McGonigle of Ulster University, the survey focused on the use of emerging and novel technologies to improve knowledge of species diversity in marine ecosystems, particularly in marine-protected areas and special areas of conservation. The survey included the deployment of Baited Remote Underwater Video Cameras at sampling sites, and collecting video footage using the Marine Institute's ROV Holland 1.

My research-based artworks are predominantly concerned with cultural, (bio)political and ecological realities of human imprint on the aquatic environment, its consequences and challenges in the frame of combining arts science and technology. It was my first time on a research vessel, sailing the waves of the Northern Atlantic. The team of scientists focused on the study of sediment communities and the use of the latest sonar technology to map the seabed. The survey employed non-invasive remote sensory technology to gain a better understanding of species diversity which has given me a new perspective on aquatic life.

On the RV *Celtic Explorer*, I occupied my days recording sounds, reading, writing, watching basking sharks, gannets, seagulls, and the jellyfish encountered on the surface of the ocean. I also got to know the people involved, spending time with the science team during the briefing each day and having the opportunity to work alongside them, as they collected and analyzed samples from the sea bed. On one of the days we found a flame shell which has huge importance for the environment and this area of the seabed. It was really interesting to see something that comes from the deepness of the oceanic floor.

It was especially inspiring for me to think about measurements like CTD data that complement the float data, allowing oceanographers and climate modelling to better understand the role of the Atlantic Ocean in climate change and biogeochemistry. That flame shell in the sample was a game changer, a tiny 0.5 cm shell integral to the growth of the coral reef. It was interesting to find out that the presence of the animal is the presence of a memory - of the past and also of the potential future.

Swimming each day, very slowly and gracefully, were basking sharks, who filter plankton at the sea surface. Both of these animals I had encountered for the first time. I could not stop thinking about them when coming back into the harbour in Galway.

So I wrote a story about them and gave it to narrator Polona Torkar to read and also variations of the same text to sean-nós vocalists Caitríona Ní Cheannabháin and Róisín Seoighe to sing. I mixed my field recordings of the Atlantic Ocean with the sean-nós vocals and Polana's narration to create a composition / radio broadcast / song. The work is 42 minutes long. These are the stories of the waves of the Atlantic Ocean, of basking shark and flame shell, of their life present / past / future.

ROBERTINA ŠEBJANIČ

THE ATLANTIC STORIES: SELACHOPHILIA
CETORHINUS MAXIMUS & LIMARIA HIANIS

CHAPTER 1 - THE ATLANTIC OCEAN

CHAPTER 2 - CETORHINUS MAXIMUS

CHAPTER 3 - LIMARIA HIANIS

CHAPTER 4 - THE ECONOMY OF PAST

CHAPTER 5 - THE ECOLOGY OF TODAY

CHAPTER 6 - TALKING WITH EACH OTHER

CHAPTER 7 - DEEP TIMESCALES OF OCEAN MEMORY

CHAPTER 1 THE ATLANTIC OCEAN

The ocean's constant is movement. It ceaselessly strives for balance.

Cold water is generally denser than warm water. In an endless loop, warm water thus floats on top of colder water until chilly winds that blow over the ocean and the evaporation they cause reduces its temperature enough for it to sink to the bottom of the ocean.

Water with high salinity is denser than water with less salt and the same principle of continuous sinking and rising applies.

This constantly mobile system of deep-ocean circulation is known as the global ocean conveyor belt, which moves water around the globe. The ocean conveyor belt turns over the waters approximately every 500 years to make a complete turn around the globe and some of the water remains unmoved for centuries.

All of the global oceans and seas are interconnected. They are together in this loop, which shapes the Earth's climate. The creatures travel with it and against it. They know how to harness its nature to find optimal living conditions. Or we should say, they knew. The human imprint has brought on such drastic developments to change water inside out.

The world's waters are getting warmer, and in consequence the winds are ever faster too.

Aquaforming is present. It confuses all who consider the ocean their home.

Hear them.

Hear their stories.

CHAPTER 2

CETORHINUS MAXIMUS

The memories that basking sharks (Cetorhinus maximus), flame shells (Limaria bians) and other creatures, human and non-human, encode and store in the neuronal networks of their brains are fundamental to their existence as individuals and as parts of collective societies, such as coral reefs, which flame shells form by their nesting and also by working as a binding agent for other species and materials.

Multiculturalism and emotional memories.

The ephemeral nature of relationships.

Interconnectivity.

New environments are dissected from both conducive and subversive harmonies.

Implicit dialogues.

The enthralled serendipity of meeting creatures from the ocean each day.

They bring tales of the deep sea with them.

Every aspect of this vast oceanic system can be viewed as holding memory: from short-term to long-term, individualized and collective.

The ocean of today is filled with life. This life encodes memories of its ancestors. Its waters are full of untold stories of the creatures who had been floating and lining the waters of the ocean in its preexisting states.

The genetically informative DNA and RNA molecules, which direct the production of proteins and other of life's building blocks, are part of the water structure.

And we drift.

And we glide.

A journey on the Celtic Explorer research vessel.

The patterns of the waves, changing with the winds, currents and the vessel...

"Sunfish, sunfish!" I hear excitement in Chris's voice, happy to meet another creature. The other.

My first encounter with a basking shark. I see his dorsal fin stand erect like a mini sail. The huge and graceful creature is slowly gliding past us... We all see the fin, protruding through the water and the being, traveling past the boat.

It is my first encounter with this majestic and slowly moving giant. But it would not be the last one.

On the next day, we saw two. And then again one. And then three more... Each day we encountered them, gliding on the surface and then disappearing into the deep of the Atlantic Ocean. They had been our companions and we shared the ocean's surface with them on the Celtic Explorer.

They are a solitary species, but when they were next to us they did not seem so solitary anymore. Such old-fashioned gliders.

These sunbathing giants sleep in the ocean's deep, sieving plankton from the waves.

Filtering and gliding.

Their movement is slow and gracious.

Their presence huge and harmless.

This migratory species is traveling the world and brings the stories of every ocean and sea with them.

The basking shark is a fish, a big one

Order: *Lamniformes*

Family: *Cetorhinidae*

Genus: *Cetorhinus*

Species: *Maximus*

The genus name Cetorhinus is derived from the Greek ketos, denoting a marine monster or a whale, and rhinos, meaning “nose”, while the species’ name maximus is Latin, meaning “great.”

The first “song” names his names in different languages. Listen to the way he’s called and imagine the plurality of places he’s been.

Common English names include basking shark, bone shark, elephant shark, hoe-mother, shark, and sun-fish.

Cetorhinus maximus is his Latin name.

albafar (Portuguese),

an liamhán gréine (Irish),

beinhákarl (Icelandic),

brugd (Swedish),

brugda (Faroese),

brugde (Danish),

büyük camgöz (Turkish),

büyükcamgöz balığı (Turkish),

cação-peregrino-argentino (Portuguese),

colayo (Spanish),

dlugoszpar a. rekin gigantyczny (Polish),

éléphant de mer (French),

frade (Portuguese),

gabdoll (Maltese),

gobdoll (Maltese),

Golema psina (Croatian),

jättiläishai (Finnish),

kalb (Arabic),

karish anak (Hebrew),

koesterhaai (Afrikaans),

k’wet’thenéchte (Salish),

mandelhai (German),

marrajo ballenato (Spanish),

marrajo gigante (Spanish),

Morski pes orjak (Slovenian),

peixe frade (Portuguese),

peixe-carago (Portuguese),

peje vaca (Spanish),

pèlerin (French),

peregrino (Spanish),

peshkagen shtegtar (Albanian),

pez elefante (Spanish),

pìxxitonnu (Maltese),

poisson à voiles (French),

relengueiro (Portuguese),

requin (French),

requin pèlerin (French),

reremai (Maori),

reuzenhaai (Dutch),

riesenhai (German),

sapounas (Greek),

squale géant (French),

squale pèlerin (French),

squalo elefante (Italian),

tiburón canasta (Spanish),

tiburón peregrino (Spanish),

tubarão frade (Portuguese),

ubazame (Japanese).

CHAPTER 3

LIMARIA HIANS

Grabbing samples from the deepest corner of the sea floor.

We are taking samples to confirm what it is possible to see through a camera from a 50 and 100 metre distance. When the samples are in, the whole team comes to inspect the contents of the little bowl.

Terry has happy news. An important finding has happened. A flame shell. A tiny, half-a-fingernail-big shell. We all admire its colour. It is elusive and brightly coloured. An orange fringe of tentacle-like filaments emerge from in between its valve.

*The flame shell's binomial Latin name is *Limaria hians* (Gmelin, 1791).*

Its scientific classification:

Kingdom: Animalia

Phylum: Mollusca

Class: Bivalvia

Order: Limida

Family: Limidae

Genus: Limaria

Species: Hians

Limariae hians or flame shells live hidden on the seabed in nests. They use their byssal thread to form these nests by binding small stones and shells together, enclosing themselves as a form of protection. Individual nests expand over time, eventually overlapping with other nests, thus starting a formation that expands the reefs. Holes in the reefs allow fresh seawater to flow through, preventing stagnation. Such reefs support a diverse marine ecosystem with one study showing six nest complexes supporting 19 species of algae and 265 species of invertebrates. This is what we see and know, but there is still a lot we are not able to grasp or sense.

The majority of the operation on the boat was done by remote sensing and was non-invasive. It is highly important the observations are done in a non-invasive manner.

We found these remarkable specimens with their dazzling array of orange tentacles in Irish waters. We did not realise these small, but extremely important, creatures dwelt under the waves just off the coastline.

CHAPTER 4

THE ECONOMY OF PAST

The basking sharks as a species have prospered for at least 30 million years, but have been pushed to the brink of extinction in just a couple of decades due to fishing, human intolerance, misunderstanding and mismanagement. Two hundred years ago, the Irish would read nighttime stories by the flicker of an oil lamp, and these lamps would also produce the warm glow to light their 18th-century streets. These lamps were fuelled with basking shark liver oil. We also used it to moisturize our skins, as it was known as the richest source of squalene, an extra-fine industrial lubricant and cosmetic moisturiser, for a long time.

*They produced light in our house.
Their liver gave us the oil.
Each cabin knew them.*

*The economy of the creature.
The vastness of it.
Its slowness and gentleness did not aid the animal to be.
Just as it is and acting as it does.
Practising empathy might be a way.
But do we know how to transcend who we are and approach a being we don't know.
We hear.
We touch.
We sense.
We listen.*

The majority of the operation on the boat was done by remote sensing and was non-invasive. It is highly important the observations are done in a non-invasive manner.

CHAPTER 5

THE ECOLOGY OF TODAY

*Are we aware that the future has always been uncertain?
In these times, we can most definitely feel it, and what comes next will be a reflection of our now.*

*The currents communicate the changing times to the creatures.
The humans are too near.
We are too loud.
They feel acidic.
They are acidic.*

*Marine life food doesn't taste as good. They filter and consume ever increasing quantities of human residue.
It is the taste of deliberate and careless human actions, which have been taking place since all but forgotten times.
Humans, our imprint has gone too far. We are changing the waters from inside out. Is it time to react or should we wait to see how answereth the sea?*

*Omnipresent is the sound of the boat.
How to avoid them,
yet still have the pleasure of basking in the sun, still have our reef.*

CHAPTER 6

TALKING WITH EACH OTHER

When encountering a giant migratory basking shark and a tiny flame shell, we might ponder, if they know each other, and if yes, how do they exchange stories?

They surely know each other. Among the messengers are microorganisms we call plankton, which both of them are eating and releasing. Both of them have similar circles, each is filtering his own. Water that is filtered through them carries information on their surroundings.

There is no need for the flame shell to move. Its simple life revolves around building a reef, not aware of the importance this has for the waters and the globe. Temporary body. Experiential body.

The basking shark conveys tales from waters far and wide, while the flame shell tells its reef's everchanging history. It's a polytemporal time. Non defined. Assemblages.

Let us familiarize ourselves with them and let us hear what they have to say. The chemical information they receive while filtering the waters is their tale.

The story.

What is happening. Where they were and where they will go.

An intersection of a multiplicity of variably deep and diverse timelines.

The time of the flame shell.

The time of the basking shark.

That is the measure of time.

Is the measure of time temperature?

Is the measure of time density?

Is the measure of time the conveyor belt, when it makes a loop?

Do we feel time in the fluidity moving slowly or on different levels with different speeds?

If we are unable to define time, what can we sense?

How then to sense each other?

The flame shell, the basking shark, me.

The journey is its way.

It's traveling where the water temperatures are just right.

The flame shell listens to the tunes the shark picked up in faraway oceans and seas. The basking shark sings of the creatures, places and spaces it had encountered.

And then it is time for it to sing about its coral reef.

Gene-information exchange represents just one element of the highly evolved communication systems used by marine bacteria. It's a biogeochemical cycle and in it, all that has occurred throughout the entirety of the ocean's history.

CHAPTER 7

DEEP TIMESCALES OF OCEAN MEMORY

Numerous tales of sea serpents and monsters have originated from sightings of basking sharks cruising single file, snout to tail, near the surface of the water. Decomposing remains of basking shark carcasses have been brought to the surface by commercial fishing gear and have also been known to wash up on shore.

Basking sharks have relatively small skulls in comparison to their body length, and so it seems quite unbelievable to many people that these carcasses are those of a shark and not some unknown beast.

Flame shells are hidden under other species that share their nest. From the ocean's deep they tell the stories of their world and their community. The basking sharks are navigating the ocean according to its thermodynamic character.

The majority of the operation on the boat was done by remote sensing and was non-invasive. It is highly important the observations are done in a non-invasive manner.

Basking Shark is a fish, a big one.

Conservation status: Vulnerable

There are only 10,000 of them, gliding in the oceans and seas. Their population is decreasing.

Kingdom: Animalia

Order: Lamniformes

Family: Cetorhinidae (T. N. Gill, 1862)

Genus: Cetorhinus (Blainville, 1816)

Species: Maximus

The flame shell's binomial Latin name is Limaria hians (Gmelin, 1791).

Conservation status: Not extinct.

Kingdom: Animalia

Phylum: Mollusca

Class: Bivalvia

Order: Limida

Family: Limidae

Genus: Limaria

Species: Hians

Multiculturalism and emotional memories.

The ephemeral nature of relationships.

Interconnectivity.

New environments are dissected from both conducive and subversive harmonies.

Implicit dialogues.

The enthralled serendipity of meeting creatures from the ocean each day.

They bring tales of the deep sea with them.

They bring tales of the far seas.

What do they say about planetary time-trajectories?

We have to try and see beyond our human perception.

Let's listen and hear them. And let's not work with them tomorrow, but today.

Here they are around us:

gliding, nesting and filtering.

Filtering, gliding and nesting.

Nesting, filtering and gliding.

They sing a song of oceanic water geographies that are far wider than our cultural narratives.

Planetary transformations are in progress.

Tales from the deep are here.

CAROL ANNE CONNOLLY

Answering Echoes

Giclée prints on Hahnemuhle Photo Rag, 600 x 600mm.

Ambisonic sound installation, 2020.

Carol Anne Connolly's work is influenced by time spent in the Mid-Atlantic on a scientific survey led by the School of Biological, Earth and Environmental Sciences (BEES), University College Cork.

Her research was informed by conversations with marine scientists while at sea, the writing of marine biologist & conservationist Rachel Carson (where the title of the work comes from), and technology that employs sound for scientific research. With a particular interest in ideas that relate to our connection, perception and understanding of deepwater landscapes, Connolly collaborated with INFOMAR, Ireland's national seabed mapping programme, at the Marine Institute, Galway. Utilising INFOMAR's three-dimensional representations of the Irish seabed, generated by multi-beam acoustic technology, the artist has composed sonic portrayals of the ocean landscape using photoelectronic synthesisers, a technology that turns imagery into sound. The artist employed a virtual version of the ANS synthesiser; a musical instrument created by Russian engineer Evgeny Murzin in 1937 and used by Soviet composers including Edward Artemiev for the score of Andrei Tarkovsky's film *Solaris*.

Answering Echoes takes the form of an immersive experimental sound installation, with sonic representations of the seabed landscapes.

Artist Credits:

Answering Echoes

Giclée prints on Hahnemuhle Photo Rag, 600 x 600mm.

Ambisonic sound installation, 2020.

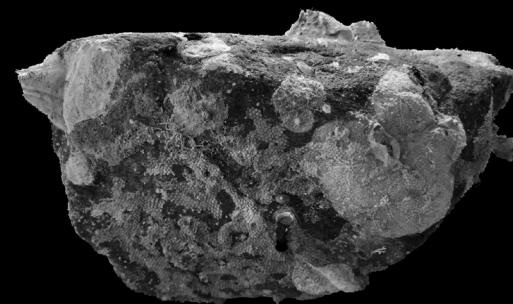
All images courtesy of the artist. Three dimensional sea bed landscape imagery created in conjunction with INFOMAR. INFOMAR is the Department of Communications, Climate Action and Environment (DCCAE) funded national seabed mapping programme, jointly managed and delivered by Geological Survey Ireland and Marine Institute.

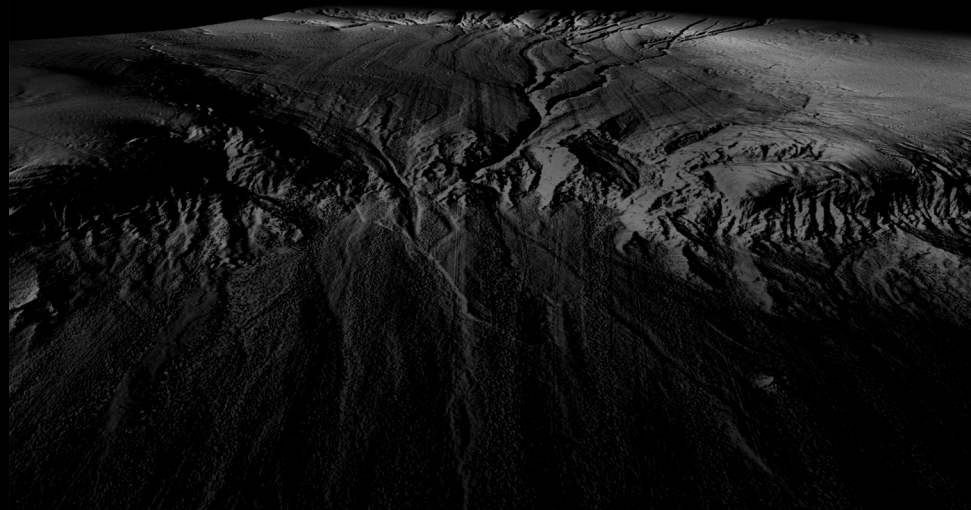
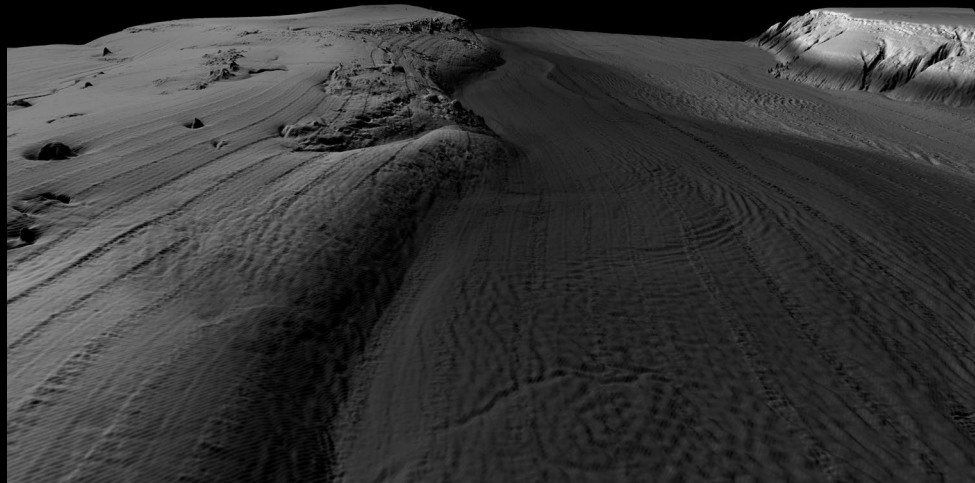
With thanks to:

Fabio Sacchetti & the INFOMAR team, Rosemarie Butler & Stephanie Ronan of the Marine Institute.

Prof Andy Wheeler, Aaron Lim and Luke O'Reilly of the School of Biological, Earth and Environmental Sciences (BEES), UCC and all the crew of the Celtic Explorer.

Ambisonics Ireland.





MAGZ HALL

Waves of Resistance (Radio art without borders)

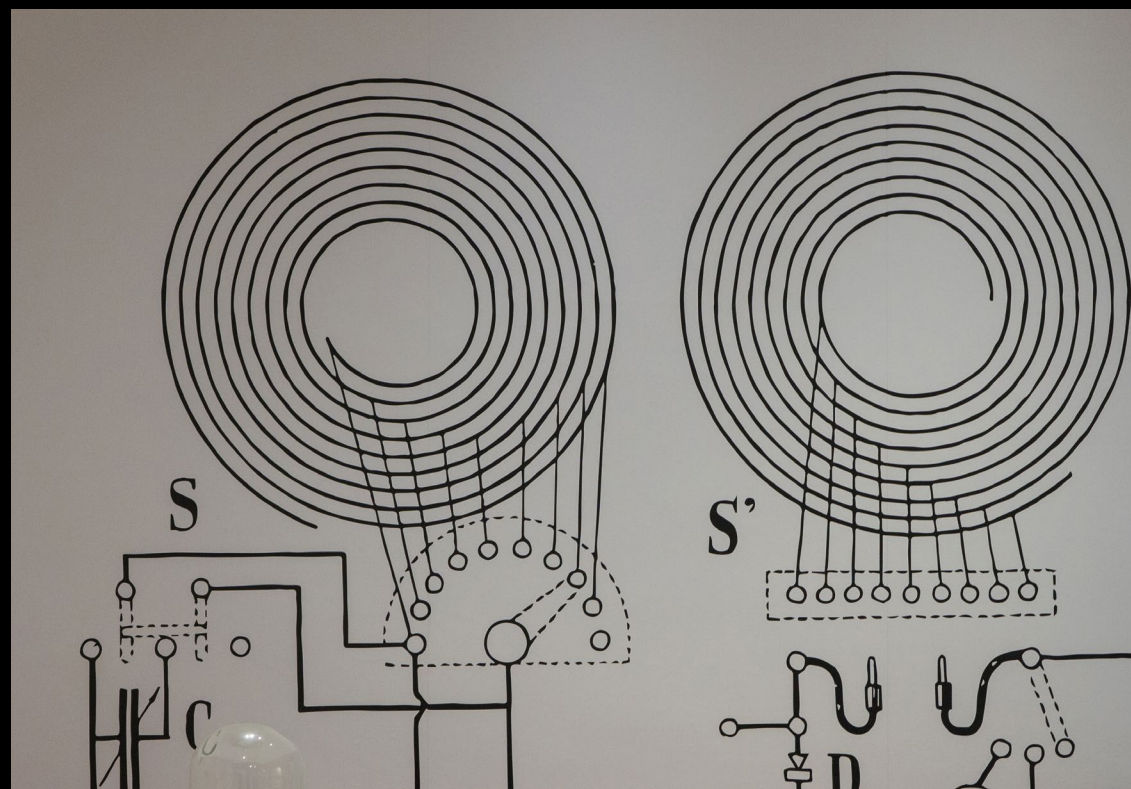
Tonnta Friotaíochta (Ealaíne raidió gan teorainneacha)

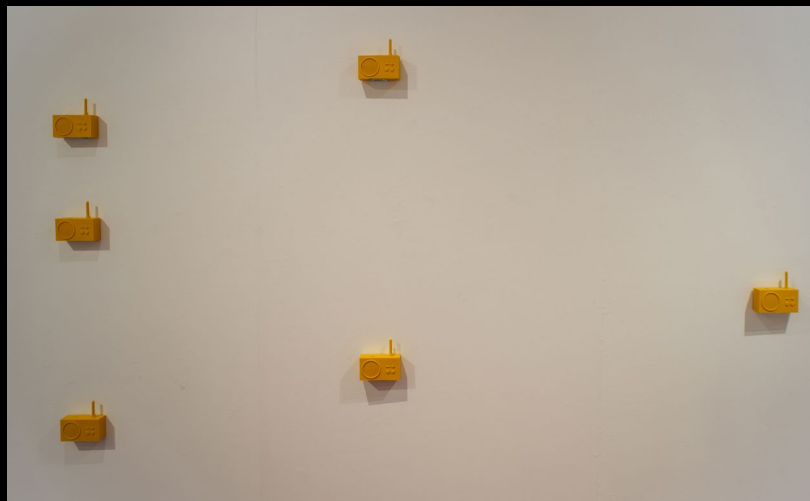
10 min 53 sec

This radiophonic poem draws on radio's rich history as a tool not only for propaganda but for artistic creation. The poem makes reference to the artist's enforced and growing isolation first through Brexit and then through lockdown in light of the COVID-19 pandemic.

In the spirit of transnationalism, *Waves of Resistance* sends a broadcast from the phantom Island of Hy-Brasil once mapped off the West Coast of Ireland. The broadcast relays a message of peace, hope and unity across all borders, in Irish and English.

Narrator: Máiréad Ní Chróinín, Alexandra Jueno





WAVES OF RESISTANCE MAGZ HALL

PREPARATION

I was commissioned with fellow artists Ailís Ní Ríain, Carol Anne Connolly, David Stalling, Kennedy Browne, Robertina Šebjanič and Kevin Barry to create compelling standalone art works for radio broadcast in Ireland and Europe. Aerial/Sparks invited an Irish and European listenership to rethink modern wireless imagination to reconnect with our ocean wilderness, one of the last remaining unknowns. I was to be an artist in residence on a journey in August 2019 from Galway to Hamburg on the RV *Celtic Explorer*, a research vessel which uses sonar to scan the seabed.

My first visit to Galway in summer 2018 took me to a place where radio and aviation history collide in spectacular fashion: the remote site of what was once a huge (and the first) commercial transatlantic station of Guglielmo Marconi.

The station was built in the remote bog side area of Derrigimlagh directly after Marconi's first transatlantic broadcast from Poldhu in Cornwall to Newfoundland on 12th December 1901. Marconi received \$80,000 from the Canadian government and built a station at Glace Bay, Nova Scotia. He set up a permanent station at the most westerly point he could find, choosing Derrigimlagh after testing various sites. Derrigimlagh is an unforgettable place. The peat bog is flanked by the stunning Connemera Mountains, known as Na Beanna Beola (The Twelve Pins). There is a breathtaking 5km looped walk around the abandoned site, tracing some of the history via recorded broadcasts alongside several hysteroscopes, which made me want to learn more.

The station started commercial signalling between Derrigimlagh and Glace Bay on 17th October 1907. It housed a gigantic condenser house, a powerhouse with six boilers and an aerial system consisting of eight, 210-foot high wooden masts, extended eastwards over a hill for half a kilometre.

The aerals gave off huge sparks as they carried very high voltages which could be heard across the area.

On the site there is now a cone-shaped memorial, a tribute to British airmen John Alcock and Arthur Whitten Brown who were the first pilots to fly non-stop across the Atlantic from St John's, Newfoundland in 1919. They recognised the Marconi site by the masts and chose to crash land their Vickers Vimy biplane in Derrigimlagh bog land, thinking it was just flat ground behind the Marconi wireless station. This first transatlantic flight took 16 hours 28 minutes. The pilots wore electrically heated overalls, fur lined gloves and helmets. They heralded another world first in communications by delivering the first transatlantic airmail in history, bringing a sealed post office mail bag with private letters with them.

The flight was world news and can be seen as the perfect accidental, ground-breaking PR radio stunt, for their flight and the Marconi site were now forever linked in aviation history. News that Marconi, a known master of public relations, must have been overjoyed with.

The station closed in 1922 after it was attacked by Irish republican forces. Marconi sought compensation from the Irish government, which was not forthcoming and the station, which at its height employed several hundred people and had its own railway line, was closed shortly afterwards and its contents sold for scrap. Technology advances meant that a more powerful station was built at Caernarfon in North Wales as the radio revolution moved on at a heightened pace.

It was amazing to experience how this remote bog side place once played its part in the most innovative radio technology in the world, run on peat power. The history and uses of wireless are profound and expansive; industrial, scientific, and political. I was really looking forward to further engaging with radio airspace and its use at sea over the next year.

In summer 2019, I returned to Galway to spend my residency on the RV *Celtic Explorer* as it sailed to Hamburg. I also visited the island of Inis Oírr where the work from all participating artists was to be exhibited as part of Galway European Capital of Culture in September 2020.

I spoke with Galway-based performance artist and activist Margareta D' Arcy, an important figure in Irish culture, Irish pirate radio and women's rights. She campaigned to stop US military flights into Shannon Airport amongst many other actions, a totally inspirational woman whom I wanted the work to reflect in some way.

For many, including me, the idea of life at sea is a very daunting prospect. However, Aerial/Sparks producer and fellow artist, Louise Manifold, had no problem convincing me that this was a fantastic opportunity to spend time on a research vessel where marine-based sonar radio projects thrive. Several years build up for the trip did make me nervous as hell when it came to it. How would I cope? I used to get really seasick on ferries as a kid and that haunted me a lot.

A huge deluge of rain started as I left home and followed me to Galway where the temperature stayed around 15°C, so I was relieved I had left my sandals at home. This trip would take me from Galway around the Scottish Islands, across the North Sea to Hamburg.

Looking into the radio history between Galway and Hamburg pointed me to the infamous William Brooke Joyce, aka Lord Haw Haw, who was hung for treason in England for his Nazi radio propaganda. He left America at two years of age to live in Salthill, Galway and was educated at Coláiste Iognáid, a Jesuit school in Galway (from 1915–21). Son of a mixed Catholic and Protestant marriage, his mother was a staunch unionist. He was forced to leave for London by the IRB due to his association with the Black and Tans. He studied English at Birkbeck University and failed to get into the civil service. He went on to become a key member of the British Union of Fascists; under Mosley, he formed the National Socialist League. So it was also rather chilling to discover he lived in Whitstable for a year, seven miles from my current home in Kent and rumour has it he ran a radio and electrical shop. Local papers document him leading Blackshirt rallies in 1936 as Director of Propaganda for the BUF at Whitstable Foresters Hall. This all was quite depressing and highlighted how history has a way of repeating itself with the rise of a new kind of racism fed by UKIP across Kent.

At the outbreak of WW2 Joyce made Nazi propaganda broadcasts from Germany; his last was from Radio Hamburg in 1945. He was shot and captured shortly afterwards with a fake British passport which didn't save him from the gallows even though he was technically American. Nigel Farndale's book (2005) claims Joyce made a deal with MI5 to get his English wife Margaret released without charge for treason and these MI5 links went to his grave. His remains were exhumed from HMP Wandsworth by his daughter and reinterred at a church in Galway in 1976.

Before I set sail, an afternoon's respite of sunshine took me to the island of Inis Oírr with Louise. It was a truly magical place, the perfect Wicker Man type location off the coast of Ireland. Part of the Aran Islands, I found out later it was also used for shots of Father Ted's Craggy Island.

This was a truly inspiring place to be showing work for Galway 2020 with its devastatingly beautiful stone walls and scenery. However, the tiny ferry boat journey from Galway was very choppy, and quite frightening. I was covered in sea wash that day, hair wet and thinking 'What I am doing?' as the small ferry rollercoasted through the Irish sea and my stomach was in my mouth. This proved to be good therapy for my bigger trip on the *Celtic Explorer* which was never as turbulent as that short trip.

RV CELTIC EXPLORER SEASICKNESS

My first two nights of rolling waters at sea had me bouncing in bed against the flat wooden board you put next to your bed to stop you rolling off, and in my case being thrown out of the bed. Every item had to be locked down, otherwise it flew across the room.

The first night I couldn't sleep as I was tossed like an astronaut up and down into my mattress which lucky for me was made to absorb heavy impact. It was just too rocky to record and hard to navigate a safe path from my bunk to my suitcase which was sliding along the floor.

Thankfully, my seasickness tablets worked wonders and I only wretched once (due to the motion mixed with the smell of rancid water as I tried to take a shower). This was during very rough sea which sent water whooshing across the bathroom floor like a tide, a very odd sensation and a bit like being in a horror film as the vile water splashed over me. Apparently stale water sits in the pipes and only gets out if the boats are rocking around. This was the most unpleasant way to learn that fact. The smell I will never forget and is hopefully one I will never have to inhale again.

This trip was on a mission to pick up scientists in Germany who were going to embark on a survey around the North Sea measuring sea pollution. So it was just me and the crew of 12 guys on the voyage. It was a relief that I was not the only one getting my sea legs, as two of the youngest crew members, who were in their mid-twenties, were just starting several months' work experience for marine engineering degrees.

The ship did seem like a ghost ship without the scientists. Their bays lay empty, waiting to be inhabited, with photographic reminders everywhere of various projects, and machinery and desks all waiting to be used. I was the only passenger and felt a bit useless as the artist outsider. The project reminded me of The Artist Placement Group, except those artists could go home at night. On a ship you are in a contained space and this affects you. I imagine it's like getting used to prison life. I knew I only had to do it for five days though. I don't think I could have done it for longer, such was my craving for land as I found out.

In some ways this project would have been ideal for The Artist Placement Group, founded by Barbara Steveni and John Latham. They argued that artists are a human resource underused by society, because they are isolated from the public by the galleries and shielded from the mundane realities of industry, commerce and government. As the Tate puts it, "The idea was that artists, designated Incidental Persons by Latham, would bring completely alternative ways of seeing and thinking to bear on the organisations they were placed in. APG would thus recognise the artist's outsider status and turn it to positive social advantage."

On the second eve at sea, we had to divert and stop near a port in a remote part of Ireland to let a crew member off due to a family emergency. I was tempted to get off as well, as seeing land pulled me towards it. But as much as I wanted to get off, I overcame my gut reaction to abandon ship. Sleep made all the difference to my mood as I slept soundly on my second night despite the rocking and the sea throwing my body around. We sailed via the Isle of Skye and other Scottish islands, highlands looming through the mist, and onto the ominous Cape Wrath.

LIFE ON A WORKING VESSEL

Radio music and satellite TV kept the crew going, which is exactly how I am getting through winter lockdown as the rain pours against my windows. In the ship's kitchen daytime TV ruled, whilst the ship's navigators tuned into different radio stations depending on personal tastes, providing a soundtrack to the day and the journey. Listening to Gold FM seemed fitting as pop songs about the sea popped up a lot like Surf City by the Beach Boys and other classics. The soothing if mind-numbing domestic themes of daytime radio and TV clearly helped the crew stay sane and perhaps normalised working in extreme conditions at all hours.

One night I watched a documentary about another ship, also called the Explorer, the biggest cruise ship in the world. The contrast was stark. I was on a working vessel, practical and efficient, no frills and no waste either. All wastewater was pumped clean and no waste was put in the ocean; dirty water contaminated by oil for instance was carried back. As we headed up the wonderful Elbe River to Hamburg, past gigantic industrial ships and docks, a ginormous cruise ship parked itself in front of the sun and actually blocked it out. It was shocking to see in action. Looking back, the chilling nature of these cruise ships was not lost as they became COVID-19 prisons for elderly tourists.

Back on the *Celtic Explorer*, the crew ate like horses and food was clearly a great comfort to them and a key part of their day. My appetite was

not really on top form. The ship's motion made me feel queasy and I forced myself to eat and drink and not let it get to me.

I really missed nature to be honest, plants and flowers particularly, which made me think plants at sea would help sailors to feel more at home. The crew are on the vessel for three weeks at a time. They said plants would be too much trouble to look after and this got me thinking. It would be easy to design a sailor's plant and radio holder; air plants only need water spray occasionally. I wished I had brought a plant with me. The Italian female captain in the super cruiser documentary had in fact brought a garlic bulb for good luck. This was not the case on the *Celtic Explorer*, no good luck items were forthcoming when I enquired.

Land of course was what I was totally drawn to and I felt calm and safe when I could see it. Seeing birds was a welcome sign, we were near land. The sea seemed strangely empty of traffic and sea life until we got near Germany. However, dolphins were spotted off the Scottish islands and I saw the tiny fin of a minke whale, just a hint of what lies beneath.

RESPECTING THE SEA

Radio communication use was limited to the emergency channel 16 which was always on. There was not much coming over the waves on the edge of the Minch, a strait in north-west Scotland, separating the north-west Highlands and the northern Inner Hebrides from Lewis and Harris in the Outer Hebrides. It's also known as Skotlandsfjörð in Old Norse.

The *Celtic Explorer* has three engines. They were very quiet which one would expect as this was the quietest ship when it was built. It travels at 11 knots, or 12.66 miles per hour, so goes quite slowly to save fuel up in the Highland seas. In the distance, I could see ghostly outlines of mountains like sound waves, the shapes were amazing. Going past the Isle of Skye the sun came out for a while and it was rather spectacular.

The captain told me you have to respect the sea. I was learning to do just that. I felt a bit guilty when one of the first things he told me is that no one

should ever go to sea if they are frightened of it. It wasn't that I didn't like the sea, I just didn't like being sea sick. He also explained the sea maps which show you what lies on the ocean bed, a multitude of ship wrecks and cables.

This trip got me thinking how industrial the sea is. Our route took us over cables, pipelines, past oil platforms and windfarms. We all have romantic notions of the sea but it's a working place and a dangerous one. As the captain pointed out, "If you thought about the wrecks you would never go to sea." This was good advice. It's always best not to dwell on what could go wrong, put safety first and focus on the job in hand and do it well. My job was to ponder how I could tempt the crew to come near my microphone which proved to be a very hard job indeed. They preferred to stay out of the limelight and get on with their work and I didn't want to upset them. This was a very male environment, indeed probably the most male one I have encountered, and I did feel very much the outsider in a working brood.

Brexit was on my mind and I had some very passionate discussions, both ways in fact. The UK captain had been a fisherman with a lifetime of experience to share and clearly fishing quotas have had an impact on livelihoods.

I ventured into the bowels of the ship after two days and met the ship's engineer who was in a great mood as it was his birthday. He was happy to tell me on mic about how the ship runs and the detail of the engine room. This was one of the most industrial and intense sound experiences even with noise cancelling headphones on the engine sounds exploded in my ears and reverberated across my body. I have been recording a diary of my thoughts and some of the sounds from my voyage. The sea sounds different in every stretch we have done.

I took many photos and made films in addition to recording a diary. One of the films I made was of the view out of my port hole. I also did some judging for the CMA Creative Radio Awards, which was a pleasure, as well as reading through PhD student Ben Horners PhD on podcasting. A real joy was spending evenings up on the top deck watching the sea unfold, listening to the radio and chatting to whoever was at the helm.

The most interesting radio message I heard was telling ships to avoid a sea cable which was now floating in the North Sea. As we got closer to Hamburg it picked up and the messages were now in German. Unlike the radio air space there is not a universal sea language. The ship had an impressive collection of semaphore flags which sat unused. A legacy of the telegraph system which had been replaced by radio communications, they remained onboard if radio failed. None of the crew I spoke to had ever used them which seemed a shame.

SAILING UP THE RIVER TO HAMBURG

The last day was my favourite as we sailed up the river to Hamburg. I felt exhilarated. The weather was hot and balmy and the sunset spectacular as we passed more and more life: green land, cyclists, boats, power stations, windfarms, giant electric pylons, towers. It got busier and busier and the sun got hotter and hotter until it burnt out and burst into the most amazing pink hues reflected in the waters below. The pinkest sunset ever and clearly so because of the huge amount of pollution in the air. You could smell the oil and the stink of tankers and feel it on your skin as dust hit and darkness crept in. The sky was lit up by the lights of the huge city of Hamburg. I felt alive and excited by the pull of the city.

I had two dreams of being in London whilst on the boat, but this was better. I used to live on the River Thames and one of my dreams was returning there and walking along the docks which had been gentrified beyond recognition. Now I was sailing along Hamburg's River Elbe. It took all day. My body felt more grounded, I was so glad to be near land and such an amazing city. It's funny but I was reminded of sound films which celebrate industry in the 1920s; sailing into a city past huge tankers and boats as big as castles. This was exciting and industrial, a kind of sea version of landscape on the road to New York in *The Great Gatsby* as we drew nearer the city. The roar of industry had its spell until that very large super cruiser crushed the sun out, the vile face of mega cruising in action spoiling the scenery.

The next day I walked around Hamburg's wonderful park and Japanese garden. I dipped my feet in the river in the 31° heat. My body still swayed in motion with the sea and I looked at plants and felt less contained. After three days I was still swaying. I've read you can get Mal de débarquement syndrome (MdDS), a neurological condition usually occurring after spending time at sea, which I was most fortunate not to get.

I certainly learnt a lot from the experience and conquered my own personal fear of being at sea and getting seasickness. There is a book by Susan Jeffers, *Feel the Fear and Do It Anyway*, which is how I feel now. It was such a privilege being afforded this opportunity and the crew were all fantastic.

When I was younger, I once spent weeks watching a flat mate in Ecuador learn to paraglide and thought he was crazy as it seemed so dangerous. On the very last day of his course, I had the opportunity to have a go after much deliberating. I was tied to his instructor on the top of a cliff. I was absolutely terrified but what an amazing experience it turned out to be. As a working artist and mother, I'm not that adventurous these days. This voyage really took me out of my comfort zone and made me appreciate how lucky I am to have such an experience to share. Looking forward to making new work for next summer...

THE WORK

That summer took place during the first lockdown. The project seemed more prescient than ever, as if the time on the *Celtic Explorer* was training for a much longer period of isolation, which has continued for a year as I write.

This experience became a radiophonic installation. It considers how radio can help us during times of isolation. I have been rethinking the human condition in terms of isolation at sea, and how visible and invisible boundaries can be broken via radio waves as an act of resistance and the legacy of radio art across boundaries.

We are all kitchen table broadcasters now. Online streaming means

we have broken free with live streams across the globe for those with technology, power and the internet. However, analogue radio is still a mighty force and affordable for many worldwide. My radiophonic poem draws on my own enforced isolation first through Brexit and then in lockdown. In the spirit of transnationalism, it sends a broadcast from the phantom but once mapped island of Hy Brasil off the Irish coast, relaying a message of peace, hope and unity across all borders.

BACKGROUND TO THE WORK

The birth of Radio Alice in Italy in 1976, and the availability of affordable transmitters and equipment, opened up the radio medium to artists and to a nascent Free Radio movement in Europe. This conjunction of expanded artistic practices and technologically facilitated media activism evolved into an emergent terrain of radio arts activity and led to the establishment of the artist radio stations and artist radio actions which broke boundaries in myriad ways.

Free Radio in Europe inspired the mini-FM movement in Japan led by Tetsuo Kogawa in the 1980s which in turn informed artist-led station Radia (1992) at Banff Arts Center Canada. In 1988, Polish artist Wojciech Bruszewski and German artist Wolf Kahlen were granted an ongoing analogue radio license with which to transmit Bruszewski's art radio project Radio Ruins of Art, intended as a "philosophical discourse on infinity" (Bruszewski, 2007). His inspiration for the radio project came after living in Berlin for a year and then returning to Poland, which was under martial law in 1981, and from where he was unable to leave or travel. I wanted to make a work about broadcasting across borders.

RADIO HISTORY SEEPS AROUND GALWAY...

For my installation at Áras Éanna on the island of Inis Oírr, I found a pure white crystal which was placed on a kitchen table in the gallery alongside

Margaretta's D'Arcy's engaging book, *Galway's Pirate Women*.

In the 1980s, Women's Scéal Radio was a kitchen table pirate station run by activist and performance artist Margaretta D'arcy. She broke government censorship to broadcast women's voices from across the Irish divide. A 1970s court ruling took away most of the risk for pirate broadcasters as radio equipment was allowed for training. A loophole in Irish law until 1988 meant that during the 70s over 200 pirate radio stations were broadcast across the country. As long as the Gardaí couldn't find a crystal in the transmitter, they couldn't close it down. The law was changed in 1988 and the loophole closed.

Yellow waterproof radios broadcast my radiophonic poem in Gaelic and English, featuring the voices of Máiréad Ní Chróinín and Alexandra Jueno. Mixed in are sounds from my voyage on the *Celtic Explorer* and from my garden during lockdown, and a rhythmic arrangement I made with my analogue wasp synth. The radios are arranged in the pattern of crystal lattice as natural crystal was a key part of the first radio receivers I found a pure white crystal at the Marconi site in the bog side of Derrigimlagh.

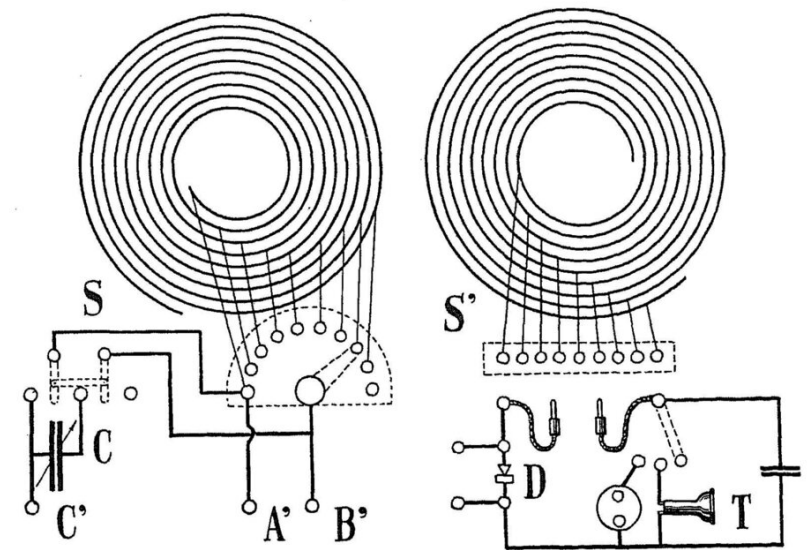


Image: Radio receiver 1914, Verhandlungen der Naturforschenden Gesellschaft in Basel, 1914, page 155.

Author: Hans Zickendraht

The vinyl diagram which forms part of the installation is of a universal crystal receiving apparatus 1914 (crystal radio). The coils are significant as they echo the spiral of life and death found in Celtic art across Ireland, such as kerbstone 67 found at Newgrange which also features two concentric circles. Thus, the diagram can be seen as forging a link to the prehistoric Celtic world, engaging with the universal motif of the coil as spiral on this early electronic circuit design. Crystal radios relayed sound with no external power.

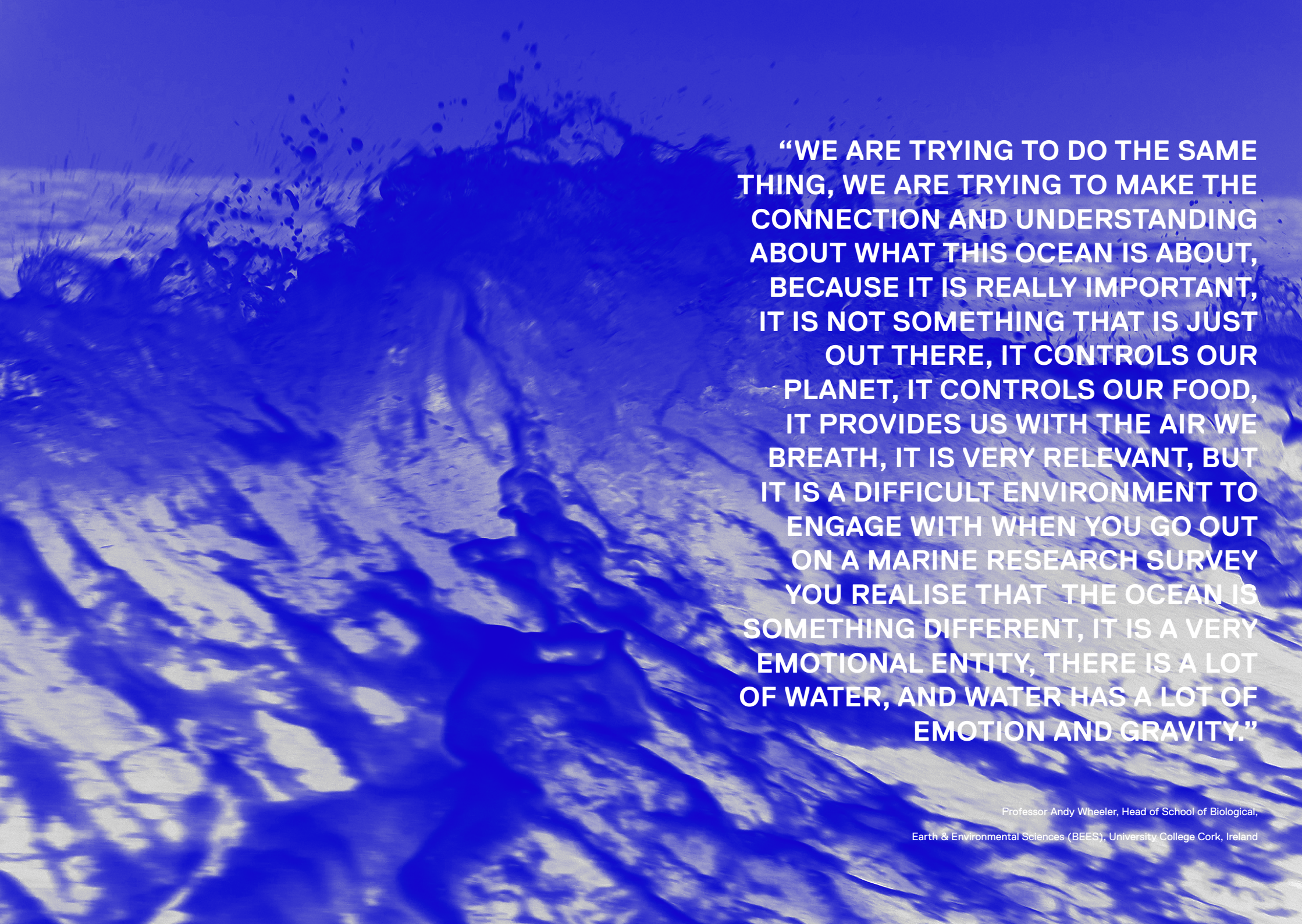
REFLECTING IN A TIME OF LOCKDOWN

I made an audio diary of my time on the passage from Galway to Hamburg. Listening back a year later, it's interesting how this short sea containment was to be a dry run for many months of lockdown. Like the crew at sea, radio music helped me get through it. But like Walter Benjamin before me, with each news hour the spell was broken. Benjamin wrote during the Second World War about how his friend the radio had been occupied by politicians and propaganda and how it had turned against him as he tried to flee. As it was in his time, radio had become an agent of propaganda, used to conceal mistakes by those in power.

My garden routines kept me sane in moments of despair during the first lockdown. I grew beans and other vegetables for the first time, the process soothing my mind as the deeply depressing gravity of the pandemic unfolded. Whilst at sea I thought about gardens and nature a lot. During lockdown, like many I have found comfort in nature and its unbroken cycle. Sea swimming this year near my home in east Kent has been reviving and life affirming, a perfect balance for me between sea and land.

It's interesting, and certainly in my mind no coincidence, that during this third lockdown the most popular song on TikTok is currently a sea shanty.

Listen to an excerpt from *Waves of Resistance – Tonnta Friotaíochta*:
<https://www.aerialsparks.org/magz-hall>

A photograph of a person swimming in the ocean, viewed from above. The water is a deep blue, and the person's head and arms are visible. The entire image is covered with a semi-transparent blue overlay. On the right side, there is a large block of white text in all caps.

**“WE ARE TRYING TO DO THE SAME
THING, WE ARE TRYING TO MAKE THE
CONNECTION AND UNDERSTANDING
ABOUT WHAT THIS OCEAN IS ABOUT,
BECAUSE IT IS REALLY IMPORTANT,
IT IS NOT SOMETHING THAT IS JUST
OUT THERE, IT CONTROLS OUR
PLANET, IT CONTROLS OUR FOOD,
IT PROVIDES US WITH THE AIR WE
BREATH, IT IS VERY RELEVANT, BUT
IT IS A DIFFICULT ENVIRONMENT TO
ENGAGE WITH WHEN YOU GO OUT
ON A MARINE RESEARCH SURVEY
YOU REALISE THAT THE OCEAN IS
SOMETHING DIFFERENT, IT IS A VERY
EMOTIONAL ENTITY, THERE IS A LOT
OF WATER, AND WATER HAS A LOT OF
EMOTION AND GRAVITY.”**

Professor Andy Wheeler, Head of School of Biological,
Earth & Environmental Sciences (BEES), University College Cork, Ireland

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