

A Sea Change
Political, Natural,
and Cultural
Ecologies of the
Mediterranean

A Sea Change **Political, Natural,** **and Cultural Ecologies** **of the Mediterranean**

Edited by

Yiannis Colakides, Tatiana Kourochkina,
Helena Pérez, and Victoria Sacco

First published in Spain, 2024, by Quo Artist
A Sea Change © 2024 edited by Yiannis Colakides,
Tatiana Kourochkina, Helena Pérez, and Victoria Sacco,
is licensed under CC BY-NC 4.0



ISBN 978-84-09-62011-1
Designed by Amanda Gamboa
Typefaces: Dutch811 BT by Bitstream
Printed in Barcelona by Fullcolor Printcolor SL

This book is published with the support



**Co-funded by
the European Union**

This project has been funded with the support from the European Commission.
This communication reflects the views only of the author,
and the Commission cannot be held responsible for any use which may be
made of the information contained therein.

Project Partners

KONTEJNER

EUROPEAN COMMISSION
MOMus
EUROPEAN COMMISSION



QUO ARTiS
■ ART AND SCIENCE FOUNDATION

- 6** **Preface: Facing the Waters of Change**
Quo Artis
- 7-10** **Foreword**
Yiannis Colakides
- 11-13** **Introduction**
Tatiana Kourochkina, Helena Pérez, Victoria Sacco, and Yiannis Colakides
- SCIENCE**
- 16-23** **About Nature, the Oceans and What We Have to Meditate Upon**
María Antonia González Valerio
- 24-37** **Enbluement: Searching Enactive Interfaces to Participate in the Living Planet**
Josep L. Pelegrí
- 38-49** **The Sea Will Heal Itself**
Veroniki Korakidou and Ferdinando Laconi
- ECONOMY**
- 52-59** **The Dead Eye and the Deep Blue Sea: An Illustration of the Illegal Fishing Economy**
Marta Puxan-Oliva
- 60-65** **Liopetri, a land-port: Narratives of Development**
Dr. Ellada Evangelou
- 66-73** **Fishing, Art and Gentrification**
Marc Garrett
- WORKSHOPS**
- 76-83** **Re-sacralising Nature: A Deep Immersion at the Llobregat's Delta**
Joaquín Jara
- 84-85** **A Sea Chance for Thessaloniki**
Thouli Misirloglou

The Rationale Behind a Comprehensive Concept	86
Areti Leopoulou	
Post-Platform: Detecting the Unseen, Tracing the Impending	87-88
Nadia Kalara	
Mass Souvenirs: Product Design Workshop	89-91
Thanassis Babalis, George Bosnas, and George Giannikopoulos	
RESIDENCIES	
Life Aquatic: Reflections on Artistic Residencies within KONTEJNER's Heard by the Deep Programme in Split, Croatia	94-103
Ana Bedenko	
A Reflection on my Time in Residency	104-107
Carmen Salas	
EXHIBITIONS	
Money, Ruins, and the Sea	110-117
Irini Papadimitriou	
Sea Blindness	118-125
Régine Debatty and Carmen Salas	
Flood Tide of Resistance. An interview with Oliver Ressler	126-131
Régine Debatty	
Postscript	132-133
KONTEJNER team	
Appendix	
Diary of Events	135-143
Biographies	144-153
Parters	154-155

Preface:

Facing Waters of Change

Quo Artis

Located in the Mediterranean—a region where a rich maritime legacy intersects with pressing environmental challenges—the *A Sea Change* project aimed to create alternative ways of looking into some of the issues common to the EU member countries of the region.

This reader encapsulates the essence of the interdisciplinary research collaboration that unfolded over the two-year duration of this international project (2022-2024), benefiting from the co-funding provided by the Creative Europe programme of the European Union. It embodies the pinnacle of collective endeavours by the four participating organisations: KONTEJNER (HR), serving as the lead partner, alongside MOMus – Experimental Center for the Arts (GR), NeMe (CY), and the Quo Artis Foundation (ES), marking a critical juncture in their collaborative journey.

6

This ambitious project delved into the intricacies of the blue economy in the Mediterranean region and focused on promoting critical creative innovation around the blue economy practices through interdisciplinary and intermedia arts, as well as artistic and curatorial research.

A Sea Change could be considered as a call to action and reflection. It asks us to consider how we, as a global and interconnected community, can respond creatively and effectively to the environmental crises that threaten our shared marine heritage. It challenges us to think beyond traditional boundaries, advocating for a world where art and science collaborate to bridge new pathways toward sustainability and resilience.

As such, this book acts as both a detailed account of the project's initiatives and outcomes, and a call to actively consider the vital challenges it explores. It demonstrates the effectiveness of interdisciplinary and intercultural cooperation, highlights the innovative essence of the Mediterranean region, and presents a critical outlook for the conservation and sustainability of our seas.

Foreword

Yannis Colakides

Two years have already passed since the commencement of the *A Sea Change* project. Starting in June 2022, *A Sea Change* was a project co-funded by the European Union. It focused on promoting creative innovation around blue economy practices through interdisciplinary and intermedia arts, as well as artistic, and curatorial research.

Culminating in Barcelona with an exhibition in 2024, the project developed between Croatia, Cyprus, Greece, and Spain. Led by Kontejner (HR) in collaboration with MOMus (GR), NeMe (CY), and Quo Artis (ES) as partner organisations. During 2022-2024, partner, and collaborating organisations were involved with different communities to catalyse a positive impact on the environment, the marine ecosystem, and the well-being of coastal populations, with special emphasis on Blue Economy urgencies both at the local and European level.

The project unfolded across various sectors, including environmental sciences, tourism, and design, and included residencies, public programmes, educational activities, and documentary productions, promoted, and catalysed changes in local environments and produced new works of art and intersectional collaborations to build a more sustainable, diverse and inclusive Mediterranean.

Although two years is a short time, we have seen that the existing geo-political, and ecological challenges of the Mediterranean have multiplied and intensified. This foreword, can only scrape the surface of the disparate contexts within which our projects were organised.

Ecologically Mediterranean countries emit 5% of the world CO2 emissions, and two thirds of them exceed the recommended by the World Health Organisation levels of air pollution with some areas having 100 μ g/m³ when the world average is 39.6 μ g of PM2.5m³, and the EU average is 14.2 μ g of PM2.5 m³. Plastic

pollution within the sea is also a problem with 50% of marine litter on the seabed is plastic. And concentration of microplastics on the surface of the sea exceeds the maximum threshold and reaches more than 64 million floating particles per km². Add to the above the 184 million tonnes of solid waste dumped into the sea per year, the pesticides, and other contaminants that end up in the sea, including the sound pollution from sea traffic.¹

The ecological crisis however, cannot be investigated separately from the geopolitical situation of the region. Currently, the whole of North Africa and most of the Levant region suffer from ongoing armed conflicts that further harm the environment, but also create security issues for innumerable refugees who travel on unreliable boats to reach the perceived prosperity, safety, and stability of the EU. The rise of the extreme right in the EU, and the anti-(non white)-refugee regulations exaggerate the economic, and racial inequality that is becoming institutionalised in some EU countries, where refugees from the Ukraine are welcomed, but refugees from Africa, or Arab nations such as Syria, Libya, Palestine, and Yemen are treated as illegal immigrants and in many cases, deliberately left to drown.²

8

The discovery, and beginning of exploitation of fossil fuels in the Eastern Mediterranean region has escalated old conflicts. In the case of Cyprus, the long term diplomatic conflict with Turkey, however, in the case of Gaza, Israel is raging a genocidal war which makes use of US and UK weapons against the Palestinian people. Meanwhile, Israel continues the exploitation of the natural gas discovered within Palestinian waters. “We’re not getting off the gas”³ was Benjamin Netanyahu’s response to US president Biden

1. “SoED 2020: State of Environment and Development in Mediterranean,” *Plan Bleu*, <https://planbleu.org/en/soed-2020-state-of-environment-and-development-in-mediterranean/>

2. “The world’s deadliest sea crossing,” *Amnesty International*, 27 January 2020, <https://www.amnesty.org.uk/worlds-deadliest-sea-crossing-mediterranean>

3. Alex Woodward, “‘We’re not getting off the gas’: Netanyahu rejects Biden’s plea to de-escalate in Gaza,” *Independent*, 11 March 2024, <https://www.independent.co.uk/news/world/middle-east/netanyahu-biden-gaza-ceasefire-b2510936.html>

when he was asked to de-escalate his attacks, making it all too obvious that his war is not an ideological one against Hamas, but a brutal, ethnic cleansing campaign for the control of natural resources.

A historical example of how geo-politics affect heritage, and the environment is the Suez Canal. The canal was completed in 1869, and it offers vessels a direct route between the Red Sea and the Mediterranean. It was constructed by the French firm *Compagnie universelle du canal maritime de Suez* that was given the permission by the then British Colonial authorities in Cyprus, to use stones from the ancient walls of Amathus, hence erasing an important part of the island's history. By 1875 the canal was operated by the government of the United Kingdom, which was collecting all the profits until 1956 at which time Egypt's president Gamal Abdel Nasser revoked Egypt's concession and transferred the canal's operation to the state-owned Suez Canal Authority. This precipitated the Suez Crisis, and resulted in the British-French-Israeli invasion of Egypt.⁴ The canal itself cleared the passage of a lot of invasive fish species which are affecting the ecosystem of the Mediterranean as they prey on endemic species, many of which are now facing extinction.

9

The success of the Mediterranean countries in the tourist industry further destroys both the aquatic, as well as the social, ecosystems. In the past decades, the destination points for many tourists expanded dramatically. Because of this, many communities have lost their connection to their own history, which is now reduced to short paragraphs of tourist bait in guide books, and in-flight magazines.

Coastal communities such as those in Nice, Mallorca, Ayia Napa, Corfu, etc, are no longer popular because of their rich and intricate local customs, but because of their homogenised nightlife. One tourist site for Mallorca expressed a universal sentiment present in most of the region's inhabitants: "Majorca, with a hard 'j,' is a place invented by foreigners, where the sun always shines, the beer flows and the nearest

4. Neil Caplan, *Futile Diplomacy: Operation Alpha and the Failure of Anglo-American Coercive Diplomacy in the Arab-Israeli Conflict 1954-1956*, Routledge, 1997

you get to local culture is an argument with a taxi-driver. Mallorca, the local name for the island, is quite different and far more complex.”⁵ The modern tourist industry relies on over-simplified cliches targeting the young and those who are desperate to escape their daily, exploitative jobs offered to them by a heartless economic system.

I am editing this book from a place which is only 800km from Libya, 370km from Gaza, 250km from Lebanon, 250km from Syria, and 11km from RAF Akrotiri, the UK controlled spy and military hub that, according to news sources, plays a pivotal role in the bombings of the region.⁶ The context I am writing from, however, is not conspiratorial but comes from a deep wish for a better, more equalitarian, and just future. A sea change is indeed needed to reach there.

5. Steve Keenan, “Mallorca v Majorca: which is correct?,” *TimesOnline*, 6 July 2009: <https://www.thetimes.co.uk/article/mallorca-v-majorca-which-is-correct-q2sx38hwv5h>

6. Matt Kennard, “U.S. Spies have ‘Wide Range’ of Facilities on UK’s Cyprus Base Near Gaza—and Share Material ‘daily’ with Israel,” *Declassified UK*, 1 December 2023, <https://www.declassifieduk.org/u-s-spies-have-wide-range-of-facilities-on-uks-cyprus-bases-near-gaza-and-share-material-daily-with-israel/>

Introduction

Tatiana Kourochkina,
Helena Pérez, Victoria Sacco,
and Yannis Colakides

Starting June 2022, *A Sea Change* is a project co-funded by the European Union and is focused on promoting creative, critical, innovation around the Blue Economy practices through interdisciplinary and intermedia arts, as well as artistic and curatorial research.

Culminating in Barcelona with an exhibition in 2024 organised by Quo Artis, the project developed between Croatia, Cyprus, Greece and Spain, and was led by KONTEJNER, in collaboration with MOMus, NeMe and Quo Artis as partner organisations.

During 2022-2024, partner and collaborating organisations engaged with different communities to catalyse a positive impact on the environment, the marine ecosystem and the well-being of coastal populations, with special emphasis on blue economy urgencies both at the local and European level. The project unfolded across various sectors, including environmental sciences, tourism and design, and involved a series of exhibitions in the participating organisations' countries.

The activities of *A Sea Change* included workshops, residencies, documentary productions, screenings, a symposium, artist talks, seminars and dissemination events, promoted and catalysed changes in local environments, and produced new works of art and intersectional collaborations aiming to contribute towards a more sustainable, diverse and inclusive Mediterranean.

This book, co-edited by Yiannis Colakides (NeMe), and Tatiana Kourochkina, Helena Pérez and Victoria Sacco (Quo Artis), and published by Quo Artis, constitutes the final outcome of the project. With it, we pay homage to the different actors and institutions that have made this project possible, while also adding final reflections from scientists, and cultural agents.

This book does not cover all the activities produced under this project. Instead, it attempts to capture some of the major issues explored. Those interested in investigating the individual activities in depth are encouraged to visit the project's website on <https://a-sea-change.net> where much of the audio-visual documentation is presented. As such, this book is distilling the project into its major investigative themes: Science, and Economy; and its major tools that included Workshops, Residencies, and Exhibitions.

Science has been informing us for thousands of years about the damage humans are inflicting on the environment. Theophrastus, in the 4th century BC, warned how the draining of marshes had made particular localities more susceptible to freezing, and speculated that lands became warmer when the clearing of forests exposed them to sunlight.¹ It is nevertheless only since the 19th century, in the height of the industrial revolution, that humans have made sufficient advancements that are actually leading our planet's environment to total distraction.

12

The interconnection between humans and the oceans, as well as the urgent need to reconsider our relationship with nature, emerges as a central theme in the works of several contemporary authors. María Antonia González Valerio invites us to contemplate the significance of the ocean beyond its role as a habitat, encouraging meditation on our connection with it. Similarly, Josep L. Pelegrí explores how reaffirming this connection can catalyse a societal transformation, wherein humanity evolves towards a more equitable relationship with nature. Combining substantiated scientific research with art, Veroniki Korakidou and Ferdinando Laconi designed an underwater art installation to raise awareness about the importance of protecting marine areas as habitats for crucial species like *Posidonia Oceanica*.

The geopolitical and environmental contexts of the project are briefly discussed in the Foreword, the economic contexts are investigated with texts by Marta Puxan-Oliva who focuses on labour exploitation in the fishing economy; whilst Marc

1. Diogenes Laërtius, *Lives of the Eminent Philosophers*. Ed. James Miller. Trans. Pamela Mensch, Oxford University Press; Annotated edition, 2018.

Garrett and Ellada Evangelou critically explore the issues of gentrification faced by coastal communities.

As one of the *A Sea Change* project's aims was the outreach to communities not directly involved with the arts, a series of workshops were organised to engage diverse audiences. One of them was by Joaquín Jara who led a workshop on art and ecology to explore our connection with natural ecosystems from an interdisciplinary perspective. MOMus utilised the project to foster inclusion and creativity by addressing the relationship between art, the tourism industry, and everyday life in the port, highlighting the importance of cultivating collective awareness about the oceans. Its programme attracted people who are interested in photography, product design, or architecture, and encouraged them to engage with issues related to the environment, sustainability and the gentrification of coastal communities.

The project offered five residencies to ten individuals. Most are artists, and some are curators. Ana Bedenko interviewed artists who use their work to investigate and promote symbiosis between humanity and the marine world, as well as communication between species through sound, and Carmen Salas reflects upon the project's impact on her curatorial and creative process.

The public programme of the *A Sea Change* included seven curated exhibitions organised by the consortium partners. Each exhibition was conceived to address the complex issues investigated by the project. Irini Papadimitriou sheds light on how our consumption-driven society overlooks the consequences of our actions on the planet; Régine Debatty and Carmen Salas focus on the geopolitical, ecological and humanitarian phenomena that unfold in the Mediterranean basin but remain shielded from public scrutiny, and Oliver Ressler investigates climate justice as a necessary process to restore our environment.

Art emerges as a powerful tool to promote awareness and change, and the diverse approaches in the *A Sea Change* project converge in a call to action, urging us to reassess our relationship with the oceans and to adopt more sustainable practices that promote equity and the preservation of marine ecosystems for future generations.

SCIENCE

About Nature, the Oceans and What We Have to Meditate Upon

María Antonia González Valerio

To think about the oceans is to pose a question about what the ocean means, and from what viewpoint. The ocean is not just water or a habitat for multispecies that we, humans, must take care of.

It matters whom we listen to, and what we attend to; how many actants, characters, participants, and agents are involved in the narratives we produce about the oceans. Who speaks, and for whom, and about what. Who has a voice? And who are we willing to listen to?

16

What are the oceans for the workers inside a cargo ship, or for fishermen, or for the ones who drill the oil pits, or for those to whom the sea represents a deadly frontier? Who can hear their voices? And what for? Abhorrors of such humans... In which narratives do they fit? To denounce the abuse of capitalism, to detract oneself from capitalism, to dream about better worlds that are fair to multispecies, to hear the voice of the octopus, or the sound of the jellyfish, or the waves battling against the rocks. What are the oceans? For whom do they produce the incredible wealth linked to the exploitation of its resources, fundamental resources that provide us not only food but merchandise?

The oceans are losing their biodiversity at an incredible pace—the oceans, as the earth. The living organisms and their environments are commodities, and the ones that cannot be merchandised do not have a space in the human realm, in the capitalist human realm.

But who is accountable for the exploitation of the oceans? For the killing of the organisms? For the pollution of the waters? Who is accountable for turning the oceans into shipping lanes full of containers and the waste they produce,

including the combustible that they throw into the water? Since almost everything we have, use or come in contact with, comes through the oceans. (But, who is “we”? Who is accountable?)

The question is not about the consumer. The guilty, stupid, weak consumers that cannot help themselves from buying goods that come from who knows where, that were produced in terrible labour conditions, that destroyed the environment, that impoverished whole ‘third world’ populations... The question is not about the consumers and their ‘carbon footprint’ and their behaviour, and their inability to be good, to act with honour, to be fair, to procure the wellbeing of their community and of future generations. The question is not about the consumers. Who can be held accountable? Who is responsible for taking accountability?

The solution is not in ‘empowering the oceans’ and turning to a ‘green ecology’ that will save ‘us’ (who is “us”?) from doomsday.

Why should we trust capitalism?

The ocean appears in uncountable narratives. The ocean is part of the human condition, of how we inhabit the world. To think about the ocean is to think about the slave trade, the destruction of the American continent via European colonialism, the migrations (illegal, deadly, persecuted), the merchandise inside those immense and innumerable containers, the millenary battles that have taken place there, the mountains of trash, the pollution (from plastics to PFAS), the expeditions (as in Moby Dick and the sperm-whale commerce to light the houses of the Western World with whale-oil), the landscape, the fishing and farming...

What are the oceans?

What is water?

Something as obvious and as needed as water, something so constant as the sky, something that is an ineluctable part of what life is... Water and air. Therefore, life. Water has been considered one of the four elements since Aristotle, or as a divine force since the beginning of times, and is always there. But where is it?

Spaces and times determine how water appears and emerges, how it flows, through which surfaces it glides, how deep it goes, when it evaporates, and who or what it irrigates and nurtures. Water is often trapped in human entanglements, becoming a commodity, an object of capitalism, a necessity for industries, and a valuable and desirable natural 'resource.' Even if it comes and goes knowing no political borders, it gets defined by geopolitics and therefore operated –tied– according to national interests.

By being entangled in human stories, water becomes different. By being affected by human activities, water becomes altered. There is no simple water; it does not respond merely to a chemical formula since what water is, or whatever it may be or become, is part of the human condition. Then it is conditioned by humans even if we would like it to be independent of how we inhabit this planet (still).

Water bodies. Fountains. Springs. Rivers. Canals. Seas. Rain. Glaciers. Oceans. Changing constantly. Spilt over by new living and non-living ecosystems, plants, microorganisms, plankton, chemicals, pathogens, microplastics, consumer products, wastewater, industry, tourism, and real estate. Inevitably. What is the order of that change? What is its law? What transforms water bodies? What causes, forces, elements, atrocities and absurdities could we invent/explain relating to the changes that water bodies undergo? And what changes with/within/by/in/through water bodies?

Water has temporalities that go through specialities. Ancient time of water. Within former territories. Memories held by narratives, by images that tell the stories of what was there before, of how water was in a certain circumstance.

What appears to be the circumstance of water? And how does it occur? What is enveloped or traversed within that circumstance? What living entities, ecosystems, industries, chemicals, pathogens, technologies, families, consumer products, diseases, waste and imageries come to be by the circumstance of water? And how does that matter? For whom?

It matters whom we listen to. It matters how we abide by the limits of water. And yet, what is water?

Water is immersed in the question of sustainability. So let's talk about sustainability, ecology and the environment; let's talk about this movement that asks us to act urgently from all disciplines. A new morality is on the horizon: Let's save the planet. Yes, please, let's save the planet.

In this, the arts and science (artsci) community probably has something (a lot) to say, at least a whisper, if not a loud scream, about the current destruction of the planet; this is the theme of our time.

I see a new morality emerging in a very problematic way; as we know, morals are double-faced and lazy in thinking. Morality prevents critical thinking, that is, reflecting upon the conditions of possibility, the mechanisms, and the devices that make something possible. Morality acts with given facts or ideas and indicates the direction of the path; not heaven, oh no, we have had enough of that, but a thriving green earth, a sustainable world, with clean energy and talking rivers.

What does clean energy mean? Deep-sea mining, or the coup orchestrated by the US in Bolivia, where there is much lithium? What kind of euphemism is this notion of 'clean energy'? There is a lot to say here, but there is no chance, time, or space; we are in a rush to save the planet.

Energy for what and for whom; why do we need all that energy? What are we aiming for? (Good questions do not need an answer but a long meditation.)

The new morality that art (and artsci) is shaping with much ambition has an agenda that includes as its most important topic –maybe– arising new sensibilities; it is teaching us how to care for the other, how to listen to the other, be with the other, become with the other; especially and most importantly the non-human other. To do that, it needs to provide at least two things: the idea of the other, and the devices that can sensitise us towards the other.

But who or what is the other, and when, and under which conditions? It is not a fixed position. It depends on how and from where “we” ask about the other (who is “we” in all this discourse) (can the other speak? the subaltern, as Gayatri Spivak once asked, but can we listen?).

The indigenous other is also a new morality in art and art-science. But who is the ‘indigenous’? What are ‘we’ naming as indigenous? And why would they be understood under the same strange label, all of them, from the Sami people to the Wixárika? Is not the label too broad, so broad that it erases what is precisely mandatory to preserve, that is, the differences? Instead of indigenous (from the Latin adverb “inde”: Of place, from that place), we should call them by their names; they deserve their own identity and not this ellipsis that summarises so many cultures, temporalities, territories, multiplicities in one word that obliterates what there is. They don’t even know themselves as ‘indigenous;’ they are, for example, and I am only talking about Mexico: Nahuatl, Maya, Zapoteco, Mixteco, Otomí, Totonaca, Tzotzil, Tzeltal, Mazahua, Mazateco, Purépecha, Mixe, Huichol, and so many others; and we should call them by their names in their own languages because these are the names that were given by Spaniards, we should say: Náhuatl, Maya, Binizáa, Nuu sávi, Hñähñü, Tachihuiin, Batsil winik, etc.

20

But going back to our business of saving the planet, nature has not always been regarded as the other and much less as a subaltern that we need to save (what kind of action tale or adventure novel are we telling ourselves when ‘we’ appear as the heroes that are saving ‘nature’); something important needed to happen for nature to be considered as the other: modernity, the raise and invention of subjectivity, the understanding of reality in terms of subject and object. We, I, the subject, the reason is no longer nature (secularisation had to happen, and also some relinquishment from the divine). This story is too long to be told here, but let’s keep in mind that nature is no other; it is not in front of us, or outside, or an object that we can measure; to think in that way is to stay in the very logic of modernity.

Although we cannot do it another way, we don't choose to be modern, and we do not quit being modern; to think that 'we' have that power as a superpower is all too human, all too modern, in as much as thinking that with innovative technology, with more and more cutting edge technology we are going to save the planet: technological patches that remain in the same logic. The problem, though, is not a technical one. And now we see artists trying to innovate in the technological realm: be creative, think outside the box, do something new, try to fix this problem with pollution, with plastics, and so on. But it is not about re-engineering reality. It is not like together, arts, sciences, and technologies will invent the solutions to fix our world. Maybe a new planet: we could ask Elon Musk for a spacecraft (oh! he is so creative).

In this new morality, some others have preeminence, of course, not every other. From there on, we have some moral truths: be good, hug your dog (often, but not your cat), eat organic (do not think about the labour conditions of the peasants, or the illegal immigrants that harvest by hand the beautiful strawberries in the US, but most of all avoid eating meat: you should not be cruel to animals-); hug a tree, expand your sensibility, pay heed to all the non-human realm (is vast): from dogs to cows to corals to ticks to microbiota to plants, they have 'agency,' the rocks, the air, the water, the sun. Oh, nature! Oh, holy nature, you are a temple... And if you refuse to do this, to have sustainable behaviour (how much plastic have you used today, and what about your carbon footprint?)... What is the threat of not complying with the new morals? What kind of shame and guilt hang upon those who do not conform to the norm? Greenwashing, whitewashing, artwashing...

Art appears as a new green morality that speaks for a new green future where justice abides. Art acts, thus, in a platonic style: Plato expelled the poets from the republic because they confused the youth, they were not telling the truth, and their morals were perverse. The new morality-conforming art is part of the politics of the republic, so to say.

To acquire the new sensibility required by this morality (very urban, very western), art has created magnificent artefacts where instead of having nature in a diorama, we can actually see/hear/feel/experiment with what nature is: smell the essence of a dog inside the gallery. But do we need to bring soil into the museum to remind us that we are living beings? Do we need to have sex with trees? Or do we need Augmented Reality, and Virtual Reality, to become one with the other?

What kind of living being are we that we need to go through these artefacts to feel? Numbness of senses, lack of thinking, or what? The picture is bigger; the questions need to be more precise, historical, attentive, and at a low pace; we have to think carefully, with serenity. Nature is not a closed concept: what nature? When? We could speak of nature as genomics, landscapes, national parks (where they can afford that), the physical world, measurable phenomena, forces, a planet polluted and a doomed space. What idea of nature?

22 Let's ask the question about nature carefully, but consider who is posing the question. Are we posing the question as humans, animals, thinkers, subjects, nature, women, Latin- Americans, as living beings, as capitalists, as consumers, as predators (we don't get eaten); and from where, from pain, from fear, from a body, from a female body... It matters.

Because in this query, inside nature, we must be aware of the condition from which we are thinking and operating since we, as humans, are responsible and accountable for our deeds, and not the non-human with all its alleged 'agency.'

So, who are they talking to when they say 'the Anthropocene,' 'anthropocentrism,' and 'speciesism'? To all that humanity that has never been included in human rights, in the social contract, for example?

There is no universal human subject; things happen in a place, in a time, in a community implicating many actors (humans and non-humans) that do not participate in the same way in what is happening. How to listen to what is happening? With what ears, with what attention, with what (un)purposive attitude? Who listens? To what? And when I listen, who I am?



img. 1 *Infinite calm* by Amelia García Escoda, is a 254 x 125 cm painting that springs from a non-cognitive perception of our Ocean, an example of a sensory pathway towards an expanded reality. Image courtesy by the artist.

Enbluement: Searching Enactive Interfaces to Participate in the Living Planet

Josep L. Pelegrí

The Severo Ochoa accreditation, the highest seal of excellence at the Spanish research level, was granted in 2020 to the Institut de Ciències del Mar (ICM), CSIC, as a recognition of its commitment towards both outstanding research and the promotion of talent. However, ICM's engagement goes much beyond science and talent *per se*: we are deeply committed to society through the promotion and endorsement of participative and innovative actions in marine social sciences. At ICM, we understand that Science by itself is wonderful but becomes fully significant when it advances society towards harmony with and for people and Nature. The Troubled Waters colloquium is a wonderful occasion to explore how Arts and Sciences can effectively embrace each other to build this harmonious relation with Nature. Indeed, both Arts and Sciences share creativity as one of their essential qualities, providing complementary views and enhancing our perception of reality.

25

Here we explore why the Ocean is a central element in this societal transformation. We start by briefly examining the crucial role of the Ocean in our planetary ecosystem and follow reflecting upon anthropogenic global change, a probably familiar but often poorly understood topic. Finally, we delve into how we can effectively encourage individuals to reinforce their connection with the Ocean. The corollary is that this reconnection represents an opportunity for *Homo sapiens* to evolve as a species, shaping an equitable relation with Nature and between fellow humans.

The Ocean and the Planetary Organism

The Ocean is an extraordinary global regulator, holding most of the properties that participate in the metabolism of the Living Earth, not only water but also nutrients, carbon and even oxygen. Indeed, as a result of variations in the patterns and rates of water circulation, there are major changes in the transfer of properties from the Ocean to the atmosphere that

drive natural climate change. The prominence of the Ocean is also remarkable in key aspects such as primary production and the hydrological cycle. The Ocean is responsible for about half the global primary production, hence providing half of the atmospheric oxygen, and is a major player in the water cycle, holding 97% of the liquid water on Earth and effectively transferring rainwater to the continents, with about one-third of the precipitation on land arriving from excess evaporation over the Ocean. Hence, we can envision the Ocean as the essential and central mechanism of life, both as a constituent of all known living entities and as a regulator of their environment; as a consequence, over 95% of the metabolic activity of our planet takes place in the Ocean.

26

As for any living organism, the Earth regulates itself in a dynamic complex fashion through many pulsating modes. The most prominent one is the seasonal cycle, as illustrated by the sequences of sea surface temperature (SST) and sea surface colour (SSC) composite images. The SST images display the winter cooling of high-latitude surface waters in both hemispheres, which represents the origin of subsurface transoceanic (years to decades) and global (centuries) oceanic pathways, truly resembling a circulatory system. The fluxes departing at high latitudes behave as the annual systolic phase of the pulmonary and basal circulatory ocean systems. The SSC images further show the distribution of chlorophyll and colour pigments that sustain global primary production, with high-latitude primary-production spring blooms in both hemispheres together with equatorial and eastern-boundary year-long moderate production. Primary production is characterised by the exchange of oxygen and carbon dioxide between ocean and atmosphere, in a way resembling the respiratory system of our planet.

Asides the annual cycle, many other frequencies take place, from the daily to the glacial-interglacial cycles. Particularly, during the last 3 million years, with a periodicity ranging between 40,000 and 100,000 years, the Earth has shifted between glacial periods with weak global overturning circulation – causing weaker latitudinal and vertical fluxes of energy and inorganic nutrients and carbon, and hence reduced primary production – and interglacial periods of relatively

fast global overturning circulation – leading to a much more effective distribution of solar energy and nutrients that drive a warmer climate and an enhanced planetary metabolism. A swifter interglacial flow not only causes an increase in primary production but also raises the concentration of sea-surface dissolved inorganic carbon, which controls the concentration of carbon dioxide in the atmosphere; this natural increase in this dominant greenhouse gas drives an increase of the mean land-sea surface temperature, as discussed below.

The Ocean is indeed the great planetary connector, extending worldwide in the fluid domain and reaching the atmosphere and lithosphere through the hydrological cycle (img. 2). Far from homogeneity, the Ocean has complex spatial structures both in the horizontal and the vertical. We may think of it as composed by numerous subsystems, each with specific and complementary characteristics, with energy and other properties cascading downscale from the largest transoceanic gyres all the way to the smallest existing eddies, of the order of millimetres, where plankton and viruses delve; these smallest eddies may only last a second but, for a living being that reproduces in time scales of the order of hours or days, this is a substantial fraction of its lifetime. Indeed, most of the metabolic activity of the Earth takes place at these tiniest scales, which behave as actual cells of our planet. This multiple-scale Ocean circulatory system – and its extension to the continents via the atmosphere – efficiently reaches the surface of the entire planet.

27

Global Change

Since its primal birth some 4,500 millions of years ago, the planetary organism has progressively evolved towards increased resilience, first through chemosynthetic life forms and some 2,000 million years ago via dominant photosynthetic species. The two critical elements of this evolution have been an increase in complexity, reflected in the growing biodiversity, and a decrease in entropy (a measure of the degree of disorder), obtained via the efficient transformation of the incoming solar radiation. The evolution of our planet has not been continuous, in particular it has experienced at least five mass extinctions, but indeed the pathway of natural global growth has always been towards complexity and order. Nowadays, however,

we face a potentially dramatic disruption of this progression through anthropogenic-driven global change with two main facets: the degradation of natural ecosystems and climate change (img. 3).

Nowadays, the degradation of natural ecosystems is essentially caused by a lack of harmony between our species and Nature. *Homo sapiens* represents a relatively very small fraction of life on Earth – one single species with a biomass of about 0.06 gigatons of carbon as compared with a total living biomass of some 550 gigatons – but yet behaves as the owner rather than as part of Earth. This leads to an unsustainable use of the Earth's resources in many different ways, from contamination to overexploitation, and affects the quality of the marine and coastal ecosystems, with a direct influence on the health of individual organisms and the evolution and subsistence of entire species. Possibly its principal impact is on the current extremely fast rate of biodiversity loss: it is estimated that about one million species, or about 10% of all existing species, are currently at the risk of extinction.

28 Considering our ecological footprint and the Earth's biocapacity, we can calculate the Earth's overshoot day, or the day of the year when our usage of the Earth resources reaches its homeostatic natural capacity. It turns out that in the early 1970s we began overexploiting our planet and by 2022 we overshoot the global resources as early as August 1st. However, this responsibility is not equally shared among all nations: while people in most countries, particularly the western developed countries, overuse the planet's resources, there is a minority of African and Asian countries that still do not cross out of the sustainability index.

One important aspect to keep in mind is that our planetary footprint is not only affecting other species, it also impacts *Homo sapiens*. Indeed, people in countries that do not cross the sustainability thresholds are very often overexploited to the benefit of the richest countries. But our unrealistic behaviour also affects the quality of life of people in the abusing nations through both ecoanxiety – an emotional uncertainty about our future because of the unbearable degradation of our environment – and solastagia – which is related to our loss of solace because of the spiralling acceleration in our lifestyle.

The second face of global change is climate change,

directly caused by the Earth system absorbing an excess of solar energy of anthropogenic origin. The main changes can be explained in terms of a simple radiative balance. The surface of the Sun is at a mean temperature of about 5500°C and radiates outwards light predominantly in the visible spectrum (short-wave radiation). The Earth occupies a tiny (about two ten-thousands) of the Sun's firmament, so that it receives a spatiotemporal average radiation (energy per unit area and time) of some 340 watts per square metre (Wm^{-2}), of which around 100Wm^{-2} are reflected back to space from both the clouds and the Earth's surface. The remaining short-wave radiation (240Wm^{-2}) crosses the atmosphere and is incorporated into the Earth system, which warms up to about -79°C , and radiates back to space mainly in the infrared (long-wave radiation). In contrast with the incoming short-wave radiation, the outgoing long-waves are partly trapped by greenhouse gases in the atmosphere, dominated by water vapour and carbon dioxide. The atmosphere then heats up and radiates as a relatively thin spherical layer encompassing the entire planet, half into outer space and the other half back towards the Earth.

The current temperature of the Earth's surface is well above this -79°C thanks to the greenhouse gases in the atmosphere, especially carbon dioxide. In preindustrial times, the mean atmospheric concentration of carbon dioxide in the atmosphere was about 280 parts per thousand (ppt) but, because of the burning of fossil fuels and other industrialisation processes, it has continuously increased up to 420ppt in 2022. As a result of the rise in this and other greenhouse gases, the atmosphere blocks an increasingly greater portion of the outgoing Earth's infrared radiation, growing from 37.5% in preindustrial times up to about 39.0% in 2022. The outcome is that the atmosphere warms further and radiates back to Earth a greater portion of energy – so that the average flux of energy incorporated into the Earth system has increased from 240Wm^{-2} in the 19th century to 242.2Wm^{-2} by 2020, rising the mean land-sea equilibrium temperature of the Earth from 13.8°C to 15.0°C . The continuous use of fossil fuels to satisfy the worldwide demand of energy will represent that the atmospheric concentration of carbon dioxide will increase further and the surface of the Earth will continue warming. The outcome depends directly on our collective lifestyle, in

what is known as the shared socioeconomic pathway (SSP). The most realistic projections suggest that the greenhouse blocking will increase up to somewhere between 40.6 and 41.3% by the end of the 21st century, leading to a mean global surface temperature between 16.6 and 18.3°C.

The Ocean has had a prominent role regulating the anthropogenic impact on the Earth's climate, in particular storing over 90% of the excess heat of anthropogenic origin. This huge heat storage (about 5×10^{23} Joules since the end of the 19th century) has happened despite the increase in the average temperature of the entire water column being only about 0.1°C. This relatively small increase contrasts with an increase of 0.9°C of the sea surface waters, those that are in direct contact with the atmosphere; combined with a rise of 1.6°C in the surface land, this has led to an increase in the surface land-water of 1.3°C. Additionally, one fourth of the anthropogenic carbon dioxide has ended into the Ocean, hence partly reducing its atmospheric concentration. Despite this reduction, this greenhouse gas contributes to about 63% of the excess energy that receives the Earth (with two-thirds coming from fossil fuels and one-third from land use). Methane is the second main contributor, accounting for 11%, with one-third arising from fossil fuels and two-thirds from land use. The anthropogenic changes in these gases contrasts with the natural changes described before, which were ocean-driven. The anthropic forcing is imposed through the combustion of fossil fuels, but the effect is similar: the energy entering the system increases and the planet warms further. The collateral consequences are the most dramatic ones: the excess energy drives more frequent extreme weather events, which are superimposed onto a continuous sea-level rise (about 1 m by the end of this century and possibly ten times more by the year 2300).

The current and future global SSP will determine the amount of greenhouse gases introduced into the atmosphere and the climate of the coming centuries. For example, SSP4.5 represents a dramatic yet realistic radiative disequilibrium of 4.5 W m^{-2} , which would increase the surface mean temperature of the Earth beyond the 2.0°C safety threshold proposed by the United Nations via the Intergovernmental Panel on Climate Change (IPCC). The main underlying threat comes from the long residence time of greenhouse gases in

the atmosphere, which in the case of carbon dioxide is over 50 years. This means that even if our society was capable of fully and instantaneously switching into green energy sources, many decades will be needed before the Earth absorbs the anthropogenic excess energy.. This energy and associated temperature increase would translate into further sea-level rise, more frequent intense storms and substantial spatial changes in the hydrological cycle. In this context, it is particularly relevant to the evolution of the huge amount of Antarctic continental ice, as it would largely control future sea-level rise.

Enactive Interfaces and the Future of *Homo sapiens*

Our planet has naturally evolved towards complexity and order, as a living system characterised by increasing harmony and growing resilience. Paradoxically, it is *Homo sapiens*, a species that often prides itself of being at the cusp of this evolution, who threatens this natural evolution and even menaces its own existence as a species. Humankind has developed sophisticated new technologies, such as artificial intelligence, but its natural intelligence – which we could define as its capacity of living in harmony with Nature, including its own congeners – seems to have progressively decreased.

31

But there is indeed an opportunity: for the first time in human history, we recognise the finite nature of our planet and the dramatic consequences of overexploitation, we realise that we must transform our lifestyles to stop mortgaging the future of the coming generations. A transformative change towards a new harmony with Nature is shaping up, sustained by both bottom-up social movements, and top-down investment opportunities (img. 4). There is a real chance for a revolution based on a deep-awareness of the human-Nature connection: this is the collaborative revolution.

The ‘sustainable use’ of a resource has often been simplified as solely requiring a temporal stability of the system, but this is truly an anthropic utilitarian perspective. The collaborative revolution requires much more than ‘correct handling’ of the Earth’s finite resources, it implies that we feel as part of the living planet rather than its owner. It implies viewing ourselves as part of a harmonic system that grows in complexity, turning our differences as individuals and species into an opportunity to increase the planetary complexity:

sustainable implies growing together – *subs-tenere*, to hold from the base, to support and take care of – and develop implies an evolution towards greater complexity – *des-enveloppeur*, to unfold an inner potential.

The collaborative revolution – with and for people and Nature, with the Ocean as an essential participant – implies growing from individual into planetary consciousness. This new revolution demands much more than cognitive knowledge of the processes and complexity of natural systems, it requires the sensory experiencing of Nature, an expanded cognition of our connection with Nature, and a profound awareness that we are not isolated entities. Only *senses* and *mind* together can bring powerful and lasting *sentiments*, can turn people towards deep and lasting blue enlightenment, *enbluement*. Only intellectual understanding together with lasting sensory experience can bring full consciousness of our existence as part of the living Earth.

32

To unfold these capacities we do require a new discernment of Nature, we must develop our natural intelligence, we must discover new or perhaps remember old traditional ways to expand our interaction with Nature. Arts are indeed a central element in this search towards an expanded vision of the surrounding world, in the reconnecting of our cognitive potential with the sensory interaction and intuitive perception of the environment. Our world is brought about, or enacted, via active exercising, which generates ‘meaning.’ Cognition is not predefined, it is actually something subjective, based on active participation. This enactive knowledge, or expanded cognition, is gained through doing and living rather than thinking

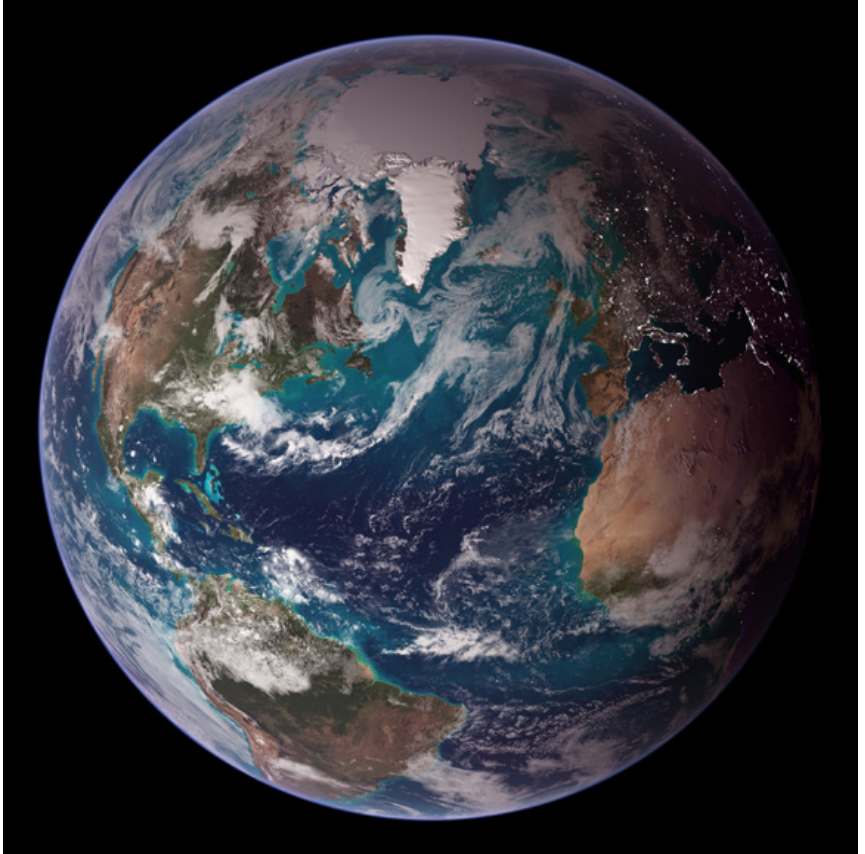
The challenge is to develop methods, tools and strategies that can translate this expanded cognition to society, particularly to the school system, the youth networks and stakeholders. These methods are enactive interfaces, interactive systems that generate expanded knowledge by adding cognitive and sensorial experimentation. Some of the characteristics of these enactive interfaces must: focus on revealing and experiencing the present moment, in space and time; blend scientific frame and structure with poetic and artistic languages, enhancing intangible associations and resonances; regularly incorporate field and laboratory

activities as part of an interactive process of learning, and co-creation; and recognise and endorse natural intelligence, the wisdom of the Earth.

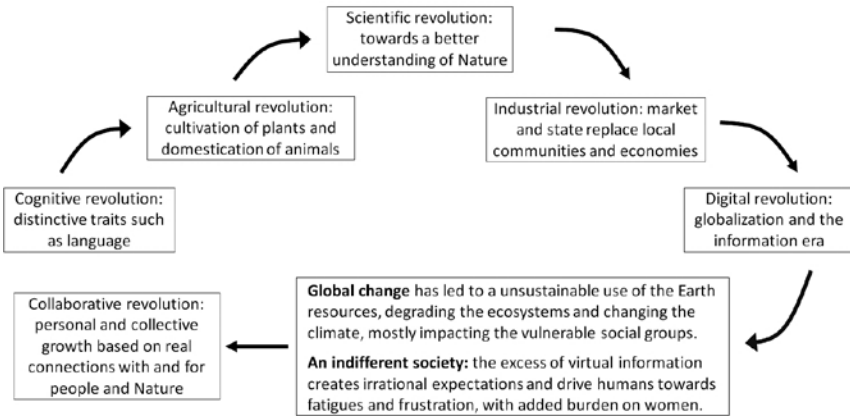
How do we want to evolve individually? What are our true and most-inner desires? Surely they are those that bring a mood of full and peaceful enjoyment of every moment. And how do we want to evolve collectively and as a species? Turning into technological creatures that will have to compete with machines much faster and accurate than ourselves? Or do we want to grow towards new and more spiritual (inner and sensory) dimensions? The awareness that we are not separate individual entities but rather, that we are inter-connected among ourselves and with all other species, with water as the essential connector, should help us get rid of our individual and collective egoisms and create a new future for the coming human generations and the entire planetary organism.

Humankind and the Ocean are equal participants of the collaborative revolution, with, and for people, and Nature. This collaboration requires an expanded cognition of Nature, with the Ocean as its central and essential component: it demands enbluement, an enlightenment of our belonging to the Ocean based on the combination of cognitive knowledge and sensory experience. We are in front of a unique opportunity for *subs tenere des-envelopar*, to grow towards greater complexity as individuals and as a species. But this growth is not technological complexity, not even the welfare society, it is individual and collective harmony and happiness with people and Nature, based on true and lasting connections: empathy, sensibility, trust, hope, joy, love.

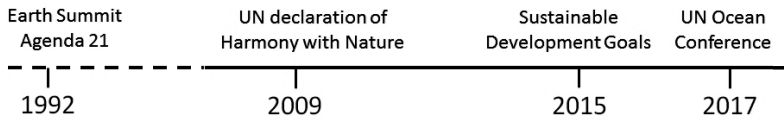
I acknowledge the Goddard Space Flight Center, NASA, for preparing and making available the Blue Marble series of Earth images. I am deeply indebted to Amalia García Escoda for sharing her inspirational *Infinite Calm* painting. This research has been supported by project OCEAN-AGORA (ref. no. TED2021-129426B-I00), funded by the Spanish government (MCIN/AEI/10.13039/501100011033) and the EU (NextGenerationEU/PRTR), by project PREP4BLUE (grant agreement ID 101056957), funded via the Mission Ocean & Waters, and by the Spanish Government through the Severo Ochoa Center of Excellence accreditation (CEX2019-000928-S). This article is a publication of the Unidad Océano y Clima of the Universidad de Las Palmas de Gran Canaria, an R+D+I CSIC associate unit.



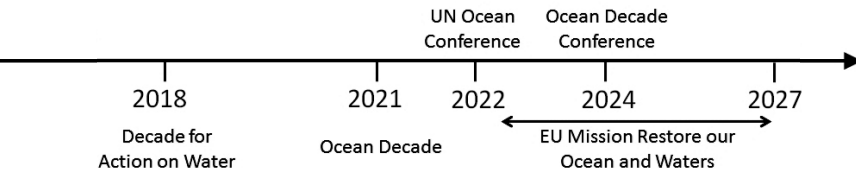
img. 2 Composite view of planet Ocean from the perspective of the North Atlantic, obtained using images from multiple satellite missions over different time periods, as prepared by the Goddard Space Flight Center, NASA, <https://www.earthobservatory.nasa.gov/images/8108/twin-blue-marbles>.



img. 3 The five revolutions of humankind have brought us to a global crisis, but it may also be understood as an opportunity towards the collaborative revolution, with and for Nature and people.



img. 4 For the first time in history of humankind, both bottom-up movements and top-down policies recognize that our collective lifestyle is overexploiting planet Earth.





38

img. 1 Shot from the pilot installation after three months, September 2020. Photo: George Rigoutsos.

The Sea Will Heal Itself

Veroniki Korakidou and Ferdinando Laconi

Introduction

This article discusses the scope and intentions of an art-ecology-technology project as the ongoing artist-scientist-researcher collaboration of visual artist Nantia Skordopoulou (GR), with marine biologist Ferdinando Laconi (IT/GR), engineer and field researcher Apostolos Roditis (GR), underwater photographer Giorgos Rigoutsos (GR), and interdisciplinary media art theorist and cultural manager Veroniki Korakidou (GR). The result of this collaboration is the design of an interactive underwater art installation focusing on the protection of marine areas to monitor fields of *Posidonia Oceanica*, an oxygen producing flowering marine plant, endemic in the Mediterranean sea. This plant belongs to the family of *Posidonia*, a genus most commonly referred to as “seagrass,” certain species of which can also be found around the south coast of Australia (*Posidonia Australis*).

The evolutionary history of the seagrass genus *Posidonia*, dating circa 100 million years back, is a powerful reminder of the earth’s long history of past geological epochs.¹

Posidonia seagrass species are protected by both national and international law, such as the Barcelona Convention for the Protection of the Marine Environment (1975).² While most fields of *Posidonia* seagrass are endangered or threatened, their importance to the conservation and restoration of the

1. “The Tethys Sea closure during the Miocene is thought to have played an important role in the disjunction of Mediterranean and Australian taxa (Searle et al. 1987, Robertson & Comas 1998)” cited in: Aires, Tania & Marba, Nuria & Cunha, Regina & Kendrick, Gary & Walker, Diana & Serrao, Ester & Duarte, Carlos & Arnaud-Haond, Sophie. (2011). “Evolutionary history of the seagrass genus *Posidonia*,” *Marine Ecology-Progress Series*. 421. 117-130. 10.3354/Meps08879.

2. “Protection status: The *Posidonia* Seagrass is protected at different levels: international, European, national and local,” *Posidonia Network*, <https://medposidonianetwork.com/conservation-status/>

marine ecosystems is vital, since they provide marine species with food, shelter, and areas to breed, besides producing oxygen and absorbing CO emissions. Furthermore, the conservation of seagrass meadows is studied as a method to combat coastal erosion and the rise of the tides as effects of human exploitation of coastal resources. In the light of recent research, there is also evidence that *Posidonia* spheroids are able to filter and intercept plastic in coastal areas.³ Thus, protection of existing seagrass meadows, as well as restoration of heavily polluted and overfished marine areas by encouraging and monitoring *Posidonia* seagrass growth, allows for natural marine ecosystems to grow themselves, without any further human intervention.

The Site-Specific Underwater Installation

The proposed underwater installation consists of twelve 3d printed plastic sculptures, representing embryos at different stages of their development, tied to the seabed. It is designed to be easily transported and re-installed, forming a temporary floating circle of buoys. This artificial reef, will be marking, each time, a specific diving spot, within a marine sanctuary, where fields of *Posidonia* seagrass are thriving. Marine sanctuaries are protected sea areas where human activity, such as fishing or tourism is restricted.⁴ Only researchers are allowed to approach and dive through these areas, to collect samples, study, and monitor the growing ecosystem. Under certain permissions, non-extractive mild activities, such as sailing, swimming, diving, or snorkelling may still be permitted on certain access points within marine reserves,

40

3. Porcino N, Bottari T, Falco F, Natale S, Mancuso M. *Posidonia* “Spheroids Intercepting Plastic Litter: Implications for Beach Clean-Ups”. *Sustainability*. 2023; 15(22):15740. <https://doi.org/10.3390/su152215740>

4. Protection involves the prohibition of any material discharge, man made constructions or any physical activity that may disturb or alter the sea floor, and of course, fishing. Extractive activities include collecting from the sea floor any form of living or dead animals or shells, rocks, sand or marine sediments or driftwood.

mostly to raise environmental awareness.⁵

Visual artist Nantia Skordopoulou designed this site-specific installation after interviewing field researchers and, therefore, she selected plastic as a light, floatable material, which adds to the ephemeral nature of the sculptural part of the installation and its transportability. The material itself carries an innate message conveyed with the symbolic form of the human embryos, connoting the recently proposed geological epochs Plastocene and Anthropocene, introduced by environmental humanities' theorists.

This installation is not meant to be invasive to the marine environment, nor permanent, but portable, to be re-installed in different marine locations, serving as a prop to assist marine researchers during their field work.

A pilot testing of the installation prototype took place on June 1st, 2020 during COVID-19 lockdown in Greece. The sculpture was left as a buoy, and three months later, on September 1st, the researchers revisited the diving spot to observe and keep track of any changes that took place over the period of three months.

Therefore, engineer and field researcher Apostolos Roditis proposed to co-design a system for data collection integrating wireless sensors⁶ placed inside the sculptured embryos to provide field researchers the possibility to remotely monitor the area and keep track of certain environmental values (such as temperature, salinity etc).

Furthermore, the telematic layer added to the site-specific installation, can serve as a tool for creating remote sensing access points elsewhere, for the purpose of engaging different publics in marine conservation activities.

5. There are several different levels of protection according to Marine Protected Areas (MPA) classification
<https://www.classifypas.org/en/mpas-classification/>

6. Such as HOB0 pH and Temperature Data Logger Bluetooth Low Energy (BLE), an advanced portable multiparameter water monitoring probe. The HOB0 MX2501 data logger requires the HOB0connect app and a compatible mobile device or Windows computer.
<https://www.aquaread.com/products/water-quality/ap-5000>

From the artist's and curatorial perspective, this piece can be a trigger for fine art underwater 'slow experiences' in the form of guided on-site low-carbon footprint visits to the proposed art installation within protected areas, functioning as an accessible to the public marine biological station. The visitors will be able to sail, swim, snorkel or dive through, and people with physical disabilities will also be encouraged to participate, with the assistance of specially trained experts. Such art experiences (low-carbon footprint, ephemeral, transportable, research-oriented, interactive, inclusive) may serve as a thought vehicle to shift from the mass industrial model of recreational diving in large scale, permanent cement artworks, and sites of archaeological interest (i.e. shipwrecks, ancient ruins etc), within the experience economy. Most times we overlook the fact that even alternative forms of tourism, such as recreational diving, or underwater tourist attractions are not actually taking into consideration the preservation of marine ecosystems within their process.

The proposed visitors' experiences include environmental awareness guided tours by marine conservation experts. Emphasis is given on raising awareness pointing to the heavy pollutants, such as the fishing⁷ and tourism industries, sharing information about the carbon footprint of industrial activities,

42

7. "Ghost fishing" occurs when abandoned fishing nets are either floating at the sea surface or caught in reefs, smothering coral and continuously trapping and killing marine life. Weighed down by dead wildlife, eventually ghost nets sink to the sea floor, where scavengers feed from the carcasses trapped on the nets. Eventually, ghost nets either integrate with the seafloor (and would, therefore, create even more damage, if tried to be removed), or, free from their weight, they emerge back to the surface where they continue their destructive course. Needless to say, that part of this microplastic consumption finishes in the human food chain. The extent of this phenomenon is yet not fully measurable: "Derelict fishing gear is a highly visible source of marine plastic pollution, causing mortality and ecosystem degradation with uncertain long-term consequences. The quantity of derelict gear entering the oceans remains unknown because of heterogeneity in fishing gear and effort, as well as inadequate monitoring." Brandon Kuczynski, Camila Vargas Poulsen, Eric L. Gilman and others. "Plastic Gear Loss Estimates from Remote Observation of Industrial Fishing Activity." *Fish and Fisheries*, vol. 23, 2022, 22–33. <https://doi.org/10.1111/faf.12596>

educating on the use of plastic in everyday consumption and valorising relative legislation. The aim is to empower citizens to take environmental and climate action while reconsidering their everyday habits and adopting new stances about contemporary lifestyle, mass production and consumption.

The artwork was documented on film, to be exhibited as a video installation separately, in museums and gallery spaces. The sculptural pieces will also be exhibited, ideally, floating in large salty water aquariums with living *Posidonia* seagrass plants. Data collected from the on-site installation will be later used for creating a soundscape for the off-site exhibition. An environmental awareness program for both youth and adults will accompany the exhibition with DIWO art, technology and science hands-on workshops, focusing on upcycling and 3D printing materials from beach cleanings (i.e. ghost nets, plastic packaging, etc) and transcoding research data. The project received a HackS+T+Arts: Circular Futures Prize with the support of S+T+Arts Regional Centers and Onassis Cultural Center in July 2022.⁸

Biofouling, Epibiosis, Homeostasis

From the perspective of the environmental scientist Ferdinando Laconi, this installation can raise awareness to the wide public about the creation of artificial reefs to stimulate the natural process of biofouling (or biological fouling). This process refers to the accumulation of microorganisms on top of hard surfaces, which encourage the spontaneous growth of algae, seagrass and other marine species. Such accumulation, not limited to marine ecosystems, is referred to as epibiosis, whereas “microorganisms (e.g. bacteria, microalgae) but also the small motile life stages of macroorganisms (e.g. larvae and spores) behave like passive propagules in this viscous,

43

8. “Conscious Dives,” *Onassis*, <https://www.onassis.org/people/conscious-dives-slow-artventure-experiences>

hydrodynamically dominated environment.”⁹ According to Harder, “Sessile life requires a stable substratum. On the benthos, motile life stages and sessile adult forms compete for rigid surfaces making non-living (i.e. inanimate) hard substratum a limited resource. Epibiosis (greek *epi* ‘on top’ and *bios* ‘life’) can be considered as a direct consequence of surface limitation and results in spatially close associations between two or more living organisms belonging to the same or different species.”

Biofouling is a natural process that is unavoidable and unstoppable after an object is submerged underwater. Some examples of this occurrence are offshore gas platforms, marine aquaculture facilities both inshore and offshore, submerged infrastructures (i.e. pipelines etc), docks and other harbour constructions, sites of archaeological or historical importance (i.e. shipwrecks, old ruins etc) and sometimes the results can be destructive from man made structures which call for heavy measures to be taken, such as cleaning up submerged surfaces with toxic chemicals. However, artificial reefs create opportunities for the expansion of benthos and have been used for the requalification of underprivileged marine areas or to prevent coastal erosion. A current trend is contemporary art large scale cement sculptures created to serve as major tourist attractions. However, such interventions may cause even more damage than simply leaving the seabed to rest and naturally recuperate.

44

Biofouling is a boundless topic with numerous fields of application, which generates ideas for artistic creation, especially when conceptually linked to specific human activities. Any material object, be it natural or man made, that is submerged into water will undergo, over time, several layers of physical, chemical and biological degradation and become gradually an integral part of the environment. All seaworn objects fallen in the sea either intentionally or

9. Tilmann Harder. “Marine Epibiosis. Concepts, Ecological Consequences and Host Defence.” In: Hans Curt Flemming, P. Sriyutha Murthy, Rangharajan Venkatesan, and others. *Marine and Industrial Biofouling*. Springer Series on Biofilms, Springer, Heidelberg, 2009, 219-231. https://doi.org/10.1007/978-3-540-69796-1_12

accidentally, will gradually stimulate this natural process. The impact of salinity and the activity of living organisms will cause the gradual deterioration of the submerged objects, which will eventually become colonised by a growing community of organisms, until achieving a balance of organisms within an ecosystem called homeostasis.

Ecosystem homeostasis is a type of equilibrium, where populations of species within the ecosystem are changing over time in cycles, however, their average value remains relatively stable. According to Sokolova et. al. (2012) : [...] “energy-related biomarkers can be used to determine the conditions when these metabolic transitions occur and thus predict ecological consequences of stress exposures.[...] Determination of bioenergetic sustainability at the organism’s level (or lack thereof) has practical implications. It can help identify the habitats and/or conditions where a population can survive (even if at the cost of reduced reproduction and growth) and those that are incapable of supporting viable populations. Such an approach will assist in explaining and predicting the species’ distribution limits in the face of the environmental change and informing the conservation efforts and resource management practices.”¹⁰

45

Evolution And Symbiotic Adaptation

The sea is our archetypal mother, a metaphor for the subconscious, both individual and collective. All life on earth originated from the sea. Our own bodies are archives, where all life events are recorded and documented, passed down from generation to generation, through our DNA code. From the origins of our existence, when our distant marine ancestors first inhabited the earth, to the microplastics we consume today, our bodies are containers storing deep gene knowledge of nature’s evolutionary mechanisms. What can we learn from the sea, in order to evolve or, in fact, which

10. Inna Sokolova, Markus Frederich, Rita Bagwe and others. “Energy Homeostasis as an Integrative Tool for Assessing Limits of Environmental Stress Tolerance in Aquatic Invertebrates.” *Marine environmental research*, vol. 79, 2012, 1-15. <https://www.sciencedirect.com/science/article/pii/S0141113612000712>

of these mechanisms should we remember, since they are stored as memory within our genetic code? The main concept underlying this installation is about reconnecting to this ancient womb, remembering how to transmute ourselves into cosmic beings, like stargard embryos whose umbilical cords create a strong bond with the environment. This bond connects humans with all other life forms, as well as inorganic matter.¹¹

The oceans are estimated to provide approximately 50% of the oxygen on earth's atmosphere and absorb 25% of the CO₂ emissions. Climate emergency, global warming, the melting of the ice and the rise of the sea levels are threatening human civilisation on earth. The interest in maintaining a sustainable environment thus, is one about the survival of the human species. However, the environment's sustainability doesn't really rely on human conservation, but rather urgently needs the opposite: an urgent global abstention of human intervention. Nature has the innate capacity of creating homeostasis and repairing itself. Maybe the question then, is not so much one of ecology, but one of awakening humanity before going extinct. Human agency according to the universal law of selection and function which drives evolution is about making choices. What can we, humans, learn from the sea? What can we learn from homeostasis? How can we use this knowledge for self-repair? What choices to make?

46

It is a common fact that our increased interest in ecology became accurate, only after it became a general acknowledgement that earth's natural resources are finite. Over the past decades humans are becoming all the more aware that natural resources are not unlimited. But when it comes to global warming and the rise of sea levels, the main concern is not so much about protecting the environment, as to prolong the definite limit of human existence on earth. In this age of climatic emergency where the risk of human extinction is visible, both the humanities and the sciences are focusing on

11. According to a recently published evolutionary law, both living and non-living systems are evolving and become more complex over time. See Michael Wong, Carol Cleland, Daniel Arend and others. "On The Roles of Function and Selection in Evolving Systems." *PNAS*, vol. 120, 2023. <https://doi.org/10.1073/pnas.2310223120>

discovering ways to learn from nature. The sea will heal itself but will humans redefine humanism within this ecological turn? Will we learn how to co-exist and co-evolve with nature?

Symbiosis can, indeed, be a mechanism of adaptation, as an alternative to mutation. In fact, certain marine organisms, instead of incorporating foreign genes into their genome, choose to develop close relationships with other species, who are providing them with beneficial products or processes. One example of a symbiotic mechanism can be the nematodes, who farm bacteria for food. However, this symbiosis is parasitic¹². Such an evolutionary mechanism, as symbiotic adaptation, that is not parasitic, has been observed in some marine species. Certain examples express strategies for survival, also, driven by climate change. For instance, the cyanobacterial sponge symbiont *Candidatus Synechococcus Spongiarum*. In this case, symbiotic adaptation drives genome streamlining of the cyanobacterial sponge symbiont.¹³

12. Olivera Topalović, Mette Vestergård. “Can Microorganisms Assist the Survival and Parasitism of Plant-Parasitic Nematodes?” *Trends in Parasitology*, vol. 37, 2021, 947-958. <https://doi.org/10.1016/j.pt.2021.05.007>

13. “These genetic modifications imply that *Ca. Synechococcus spongiarum* SH4 represents a low-light-adapted cyanobacterial symbiont and has undergone genome streamlining to adapt to the sponge’s mild intercellular *Candidatus Synechococcus spongiarum* environment.” Zao Ming Gao, Yong Wang, RenMao Tian and others. “Symbiotic Adaptation Drives Genome Streamlining of the Cyanobacterial Sponge Symbiont *Candidatus Synechococcus Spongiarum*.” *mBio*, vol. 5, 2014. <https://journals.asm.org/doi/10.1128/mbio.00079-14>

In Conclusion

This artwork discusses the idea of investigating new survival strategies for the human species, taking example from the environment's extraordinary capacity to reach homeostasis. Before it is too late for taking any further action towards reversing the dystopia of climatic doom, which is rising upon humanity by urgently halting the destruction of the environment as a result of the irrational human overexploitation of natural resources we need to reconsider our role as humans on earth, modes of production and revisit the humanistic paradigm on the level of such a critique. Questions that can be put forward may focus on:

- What can we learn from nature's innate mechanisms for self-repair, such as homeostasis?
- How can we apply scientific research as a thought vehicle to create meaningful art experiences in a climate driven economy?
- How can an art installation express and embody the exploration of life complexity, and, finally,
- How can human beings learn from natural evolutionary processes in order to prevent their own extinction?

48

This installation poetically transfers a loud signal of nature's possibilities to recover and human possibilities to protect and encourage this recovery, whereas the human past, present and future lie interconnected.



img. 2 Shot from the pilot installation after three months, September 2020. Photo: George Rigoutsos.

ECONOMY

The Dead Eye and the Deep Blue Sea: An Illustration of the Illegal Fishing Economy

Marta Puxan-Oliva

The blue economy needs to address labour abuse at sea. In this short article I will provide a few insights into sea narratives about labour abuse from a global perspective. First, I will set out a few points on the global fishing economy and ocean management. I will then discuss the experience of labour abuse by using the graphic memoir of modern slavery *The Dead Eye and the Deep Blue Sea* by Cambodian author Vannak Anan Prum.¹ The memoir is an example of how narratives can recount the problems in the global fishing economy and its links to individual experiences of abuse at sea.

52

As authors such as Laurent Benton explain, since initial discussions on the Law of the Sea in the 17th century, ocean management has been negotiated internationally and considered as global commons: a space where use rights were open to all by natural law.² As Garrett Hardin famously predicted in his controversial essay “The Tragedy of the Commons,”³ this conception has serious inherent problems, since it inevitably leads towards maximum conflictive exploitation and a clearly unsustainable environmental and, thus, economic model. In contrast to other land-based resources, global fisheries are also managed internationally since fish partly live in international waters and move in an ocean space without material frontiers. Due to this international spatial conception, the FAO is responsible for supervising and making decisions about world fisheries.

1. Vannak Anan Prum and Ben Pederick. *The Dead Eye and the Deep Blue Sea*. Seven Stories Press, 2018.

2. Lauren Benton. *A Search for Sovereignty: Law and Geography in European Empires, 1400–1900*. Cambridge University Press, 2009.

3. Garrett Hardin. “The Tragedy of the Commons.” *Science*, vol. 162, 1968, 1243-48.

In this sense, FAO member states adopted the Code of Conduct for Responsible Fisheries in 1995 aimed at examining fisheries, establishing principles for fishing practices, and proposing management and cooperation mechanisms that would ensure fishing remained as sustainable as possible from a global stance. In 2020, the FAO published “The State of World Fisheries and Aquaculture,”⁴ a report celebrating the 25th anniversary of the Code of Conduct, framed within the 2030 Agenda and its 14 goals on the protection of oceans. The report analysed the state of world fisheries and aquaculture based on data up to 2017. In line with the adopted framework, the report responds to the needs to secure the sustainability of fisheries’ from a global perspective and expresses concern over thus far underdeveloped aspects with ever-expanding importance, such as the gender perspective in the fishing industry.

One of the report’s major concerns is illegal, unreported and unregulated (IUU) fishing. As it observes: “One key area for restoring the sustainability of fishery resources during the last decade, as also emphasised by the SDGs, has been combating IUU fishing.”⁵ Illegal fishing is especially difficult to track when it takes place on the high seas, when ships fish with convenience flags in foreign waters, or when mechanisms such as transshipment obscure catch origin. Several strategies such as coordinated catch control at ports or petitions to mark fishing gear have progressively been implemented. The report highlights transshipment as a challenging practice that needs to be further explored and understood as a method of illegal fishing, and studies are now looking into the practice. As the report highlights:

“Transshipment has become an intensely debated issue as one of the potential loopholes in global fisheries management. Transshipment is widely used in a number of fisheries to reduce operating costs and maximize fishing opportunities. Transshipment operations, particularly those

4. FAO. *The State of World Fisheries and Aquaculture 2020. Sustainability in action*. Rome, 2020. <https://doi.org/10.4060/ca9229en>
5. *Ibid*, 102.

occurring at sea, are difficult to monitor and control. Therefore, transshipment can become an entry point for catches originating from IUU fishing activities into the market. The risk of transshipment contributing to IUU fishing is heightened in regions where fisheries governance is weak and the capacity to monitor and control is low.”⁶

The report devotes some space to observe social responsibility in fishing. IUU fishing not only endangers environmental sustainability, but also threatens, and sometimes directly violates, labour rights. In this regard, illegal fishing and transshipment are, as we will see in a specific example, a key instrument for modern slavery. As the FAO report indicates, the problem with detecting and controlling labour abuse in the fishing sector is that workers’ voices go unheard, either through having been silenced or overlooked, or through being denied the space to speak out through testimony. Previous reports concerned with illegal fishing, such as 2013’s “Stolen Seafood: The impact of Pirate Fishing on Our Oceans”⁷ from the NGO Oceana, already outlined illegal fishing as a threat to biodiversity and human rights, looking at them side by side and taking an ecosystemic approach that combined economic, social, environmental and human rights perspectives in its analysis.

54

The Thai fishing industry is a case in point in terms of labour exploitation at sea that garnered a lot of attention in the first decade of the 21st century. As journalist Ian Urbina observed in a chapter dedicated to this example in his now celebrated book *The Outlaw Ocean*,⁸ knowledge about what happens at sea in these mostly Thai ships can only be grasped through the narratives of those involved, since even images are difficult to capture. In this sense, Vannak Anan Prum’s

6. Ibid, 112.

7. Margot L. Stiles, Ariel Kagan, Emily Shaftel and Beth Lowell. “Stolen Seafood: The Impact of Pirate Fishing on Our Oceans.” *Oceana*, 2013. https://oceana.org/wp-content/uploads/sites/18/Oceana_StolenSeafood.pdf

8. Ian Urbina. *The Outlaw Ocean: Journeys Across the Last Untamed Frontier*. Knopf, 2019.

graphic memoir *The Dead Eye and the Deep Blue Sea: A Tale of Modern Slavery* is a privileged testimonial work, providing detailed access to the processes, conditions and experience of modern-day slavery involved in the illegal catch that supplies the global fishing markets. *The Dead Eye and the Deep Blue Sea* is a first-person transcribed and self-illustrated story by the Cambodian author who was sold into fishing slavery in Thailand in 2005 but managed to survive until 2009, when he escaped and was allowed to return home. He explains the system underpinning the slavery economy which involves several sectors such as the fishing and palm oil industries in countries including Malaysia, Burma, Cambodia and Thailand. The book tells his story through bright, flat illustrations that are visualised as episodes or snapshots of repetitive moments that characterise a life of slavery at sea.

One remarkable aspect of the memoir is the author's narration of fishing practice. After being sent far offshore, his daily work comprised catching and sorting fish. This was not always easy, since like snakes, sharks, or manta rays, the fish had to be beaten to death. The ships worked day and night and never returned to shore, staying offshore so that the ports could not control neither illegal catches nor labour. Transshipment made this possible. As he explains:

“Once a month, the *Took Tho* came to collect the fish. Offloading would take a full day and night. And as soon as we finished we were forced to set the nets and start all over again. So the work continued, day and day out, month after month.”⁹

Moreover, fishing involved both workers who paid for the privilege of working and others who were robbed of their belongings and told they were in debt for transportation and board. Indeed, this meant they were indentured labour. After arriving aboard, Prum asked a fisherman when he would be going home, “he answered with a question: *Did you pay to get here?*. Prum says no, and his peer says: *Well, stop asking questions. You have been sold.*”

9. Vannak Anan Prum and Ben Pederick. *The Dead Eye and the Deep Blue Sea*. Seven Stories Press, 2018, 70.

Episodes of brutal violence echo other historical practices of slavery, such as when Prum explains how the captain used a whip made from a manta ray, with the illustration showing a man with a whipped back that strongly recalls cotton-picking slaves in the US South in the 19th century. Other practices such as throwing men overboard—a common practice in the colonial era Middle Passage that transported slaves from Africa to America—are also present in Prum’s story. He provides testimony of men thrown into the water because they were sick or injured, bitten by sharks when they had to defecate into the sea while tied by ropes or who just jumped overboard themselves. It was also common to find human bodies entangled in the fishing net catches. Prum’s story and images strongly speak to other brutal slave narratives ranging from the historical such as Solomon Northup’s *Twelve years a slave*,¹⁰ to the contemporary, such as Fred d’Aguiar’s *Feeding the Ghosts*.¹¹

Prum’s narrative indirectly signals that the slave-based fishing industry operates within a region and therefore, constitutes a regional problem, with constant references to slaves from Laos, Cambodia, Thailand and Burma. Since the fishing industry operates beyond national borders or territorial waters, this regional problem benefits from a legally anomalous space and its conflictive ties to international regulations. As Prum recounts:

“Time passed and I survived. One day we were fishing illegally in Indonesian waters, flying the Indonesian flag. We saw a navy ship on the horizon. It was heading our way fast. So we started frantically hauling the nets up out of the water. But the captain stopped us and instead cut all the lines. He ordered us below and set the autopilot toward international waters.”¹² Reaching international

10. Solomon Northup. *Twelve Years a Slave: Narrative of Solomon Northup, a Citizen of New-York, Kidnapped in Washington City in 1841, and Rescued in 1853, from a Cotton Plantation Near the Red River, in Louisiana*. Miller, Orton and Mulligan, 1855 (1853).

11. Fred D’Aguiar. *Feeding the Ghosts*. London: Chatto & Windus, 1997.

12. Vannak Anan Prum and Ben Pederick. *The Dead Eye and the Deep Blue Sea*. Seven Stories Press, 2018, 104.

or another country's waters means prosecution is immediately hindered, since monitoring ships only cover their own waters. Furthermore, international waters are considered global commons, so fishing in these waters is still subject to heated negotiations and policing is left to international institutions and cooperation. The UN Treaty of the High Seas is still in the ratification stage, enabling these waters to remain an instrument for masking illegal fishing and labour.¹³

The Dead Eye and the Deep Blue Sea does not reflect on global economic and environmental problems tied to global fishing markets and cheap fish. The memoir never speculates about global capital involved in the fishery chain or the problem of illegal fishing and its role in endangering ocean sustainability. Nevertheless, a couple of insights point to the environmental impact from this illegal fishing industry. In one illustration, Prum explains that the ship's bycatch was stored and dried in the lower decks of the ship. This produced heavily poisonous smoke that workers constantly inhaled, providing a telling example of what Joan Martínez Alier¹⁴ and Rob Nixon¹⁵ later called "the environmentalism of the poor." Another powerful image highlights the close link between catching fish and catching people. The black and white image shows Prum holding a fish: they have both been hooked, tying their deadly fates together.

Prum's story, along with others from the Thai industry that eventually came to light, gained international fame when he was awarded the 2012 Trafficking in Persons Report Award from the US State Department, presented to him by Hillary Clinton. In 2018, Prum's graphic memoir was published by Australian Seven Stories Press, an imprint of Random House

13. See the information about the state of the treaty of the High Seas on <https://www.un.org/bbnj/>

14. Juan Martínez Alier. *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*. Edward Elgar, 2002.

15. Rob Nixon. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press, 2011.

Australian. The book narrates a true story recounted orally by Prum, which was transcribed and translated to accompany each illustration. The book is framed with a foreword from the American cultural critic, writer and editor Anne Elizabeth Moore, an introduction by Minky Worden, Director of Global Initiatives at Human Rights Watch, and an afterword by Kevin Bales, Professor of Contemporary Slavery at the University of Nottingham. Their writings underscore, showcase, historize and denounce modern slavery by presenting Prum's narrative to an international audience. While this frames the book within the fight for human rights, it also worryingly repeats an international strategy whose framing mechanisms resemble the 19th century slave narratives taken up by other voices to legitimate victims' experiences. I am not criticising the editorial strategy here, which ultimately makes Prum's narrative available to a wide international audience. This strategy makes Prum's narrative a graphic documentation and personal memory of a global problem that involves illegal fishing, the current operation of global fishing markets and modern slavery which is, in part, possible due to the opportunities arising from difficulties in managing oceans. Nevertheless, the book is folded into the international publishing market which itself contributes to subsuming specific non-Anglo-European experiences into the global scandal of human trafficking. And it is only through this Anglo-European framing and publishing authority that the book gains legitimacy.

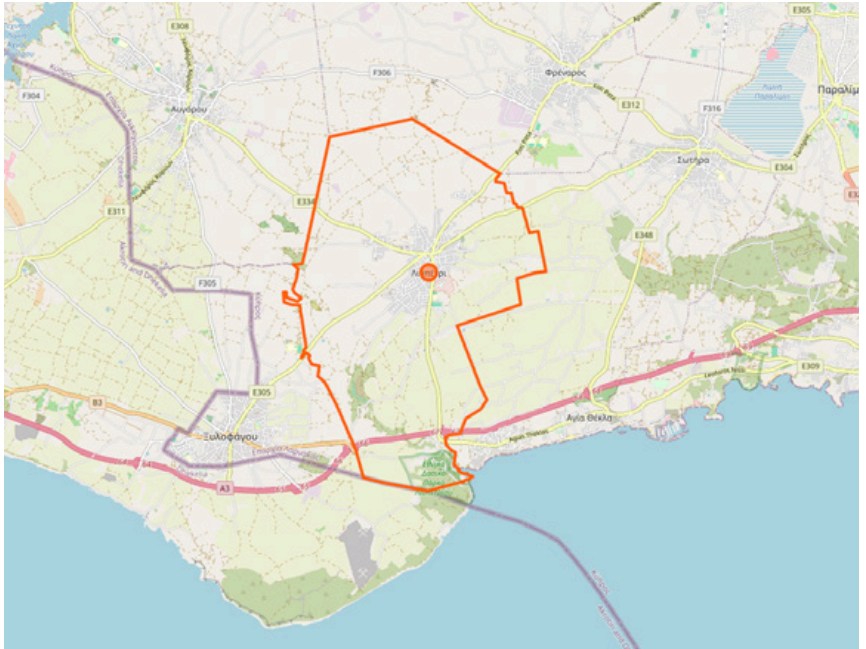
These shortcomings aside, in this brief article I have aimed to set out a couple of narratives that show how illegal fishing relates to the global blue economy, endangering biodiversity in our oceans, losing control of what is being fished, and threatening fair labour conditions for seafarers. As the narratives underscore, illegal fishing is possible because of the fragile management of the sea in a combination of national, regional and international administration. Narratives need to be connected in order to have a broader view of the problem, bringing together highly diverse discourses that currently look into illegal fishing from very different perspectives. These narratives range from an FAO report that ambitiously aims to assess the state of world fisheries—a type of narrative that necessarily takes a grand,

abstract perspective, even when it concerns human problems such as gender bias in the sector—to other texts at the opposite end of the spectrum such as *The Dead Eye and the Deep Blue Sea*. The latter provides graphic and literary material that highlights the continuous, harsh, daily experience of years of slavery in a unique case and from a human perspective overlooked by expert reports. In this instance, the narratives seem to complement one another, providing deeper awareness of the networked problems that impact the life of one individual, as well as biodiversity loss in the oceans. Narratives are connected through the challenges of the blue economy which makes us question all steps in the chain, their profound impact on human lives, and all the ways in which sea narratives can be told. The research for the ERC Consolidator Grant project entitled “Ocean Crime Narratives: A Polyhedral Assessment of Hegemonic Discourse on Environmental Crime and Harm at Sea (1982-present) – OCN,” analyses both expert and literary and film discourses on environmental crime and harm at sea through a combined approach. This enables us to identify and trace networked conflicts, as well as how we understand and define their management in order to map what kind of ideological discourse looks set to drive the future of our oceans.¹⁶

59

Acknowledgements: Funded by the European Union (European Research Council Consolidator Grant (ERC CoG), Ocean Crime Narratives (OCN), GA 101043711). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Council Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

16. See the project’s website at <http://ocn.uib.eu>



60

img. 1 Liopetri map by Open Street Maps.

Liopetri, a land-port: Narratives of Development

Dr. Ellada Evangelou

Introduction

Cyprus has been termed a 'land island' (Gr. χερσαίο νησί),¹ an island whose people have a relationship of dependence with its inland, rather than with the sea that surrounds it. In the vast majority of villages and towns around Cyprus, cultivating the land and farming has taken precedence over maritime activities, such as fishing or trade. Trade and exchange of goods has been conducted through the ports of the island, but the relationship with these outlets has been mostly about trading goods to and from the island. In comparison to the situation in other islands of the Mediterranean, where many men were mariners, few men were working as sailors or engaged with other sea-based professions.

The village which is the case study of the present paper, Liopetri, is the exception that confirms the rule. Although the village itself is not on the seaside, the natural geography of the area allows for a proximity to the Potamos (river), a natural fishing bay, where the sea enters the land in what appears to be the delta of a river. This has been the principal connection of the village and its inhabitants with the sea. According to accounts by locals,² until the 1960s there were three fresh water springs at the far inland end of the port, and forests of eucalyptus and cane around it. Fauna and great amounts of shells were also part of the life in the area, as well as a root (rizari / ριζάρι) that was used to produce red clothes dye. Moreover, according to Kallis (1992), the river port was the loading station for the export of pomegranates to Beirut until the 1940s. The Potamos also had a quarry for large stones, both for domestic use and for export to nearby countries such as Egypt, mostly used during the British colonial period.

61

1. The term, as that relates to Cyprus, appears in the book by Antonis Hadjikyriakos, *Χερσαίο νησί: Η Μεσόγειος και η Κύπρος στην Οθωμανική Εποχή των Επανάστασεων*. Psifides Publications, 2023.

2. Panagiotis Kallis, A. *Λιοπέτρι Αμμοχώστου: Τα που θυμούμαι* 1987. Cyprus, 1992, 40-45.

In its most recent history, and by the 1980s, the fisheries that were constructed in the sea brought with them the first signs of pollution to the area, and in addition to the eucalyptus forest being cut for timber, and the springs drying up, the look of the area changed from luscious green to dry and barren. Although the population of fishing boats increased in the latter half of the 20th century, it then decreased after the 1990s.

The present paper aims to shed light into the relationship of the river of Liopetri with the village, and how the sea and the land have interacted in modernity, in order to produce the current, 21st century identity of the village itself. The area of Liopetri and its environs, the build-up area, orchards, and the Potamos, have entered (well behind other communities in the area), the phase of extensive construction of tourist units, hotels and other buildings. The ways with which this process is taking place and how it has been received by the inhabitants of Liopetri at present day, is intrinsically connected to the past of the community, of the river, its legacy and its presence in daily life.

The present analysis focuses on collective memory as that has been formulated from the late 1950s onwards, how memory and trauma have been preserved and repressed, their manifestations in the Potamos area, as well as ways with which these narratives are acutely politicised.

62

Location

Liopetri is the middle of an area, where on the west the British bases restrict commercial exploitation of the land or seafront, whereas in the east lies the most heavily exploited villages in terms of tourism infrastructure in Cyprus, Ayia Napa, and Protaras. Around the Liopetri village, as well as in the area of the Potamos, there are several projects in progress. These projects aim to upgrade areas around the village, moving from the focus on agriculture to focusing on servicing the tourist industry and providing new housing units (img. 1).

Reflections on these developments by direct stakeholders (Liopetri natives) is seen in interviews conducted in Liopetri in April 2023. The researcher spoke with several individuals from the village, five men and women, in their 50s, 60s, and 70s,³ living in Liopetri, Nicosia, and abroad. Interviews were

3. Interviewees: Andreas (55), Andreas' parents (over 70), Chrysta (60s), daughter of Kosma Nikola (over 70).

conducted in the village itself, in the context of a walking tour around the village. The interviews were informal and although questions were addressed to the interviewees, much of the conversation emerged organically, and related to the concerns about the ongoing changes in the Potamos and the area in general. Interviewees were concerned with the development outside the core of the village, the inaccessibility to the Potamos (as the area has been closed off for a few years for renovation purposes), as well as the changes made to public monuments.

The interviewees were concerned with the changing socio-economic situation of the village. They noted that although Liopetri was an agricultural community, another source of income for families was the Potamos and the access to the sea, with mostly men but also some women, supporting the families and complementing their income through fishing. It was also confirmed by local sources that in the mid 1980s, there were around 70 fishing boats and 140 people involved in fishing (Kallis, 45). The fishing boat numbers had reduced drastically by the time of the present study.

Spatial Development

In the map, issued by the Ministry of Interior of the Republic of Cyprus in 2022 (img. 2), a large array of different types of construction and land development can be seen: around the village in pale yellow, is the zone for housing construction; on the beachfront, the development in tourist construction in pale blue; the national park in neon green, and the protected river basin and port area can be seen in olive green. It is easy to notice the difference in landmass between the housing and tourist areas, in relation to the protected areas of parks and the river.

As mentioned already, the reconstruction of the area of the Potamos has been highly anticipated by the press. A process that started in 2013, with planning for the reconstruction / renovation project of the river and environs, with a budget of 8 million euros, co-financed by EU and Republic of Cyprus funds, to the project that was internally sensationalised by being referred to as “the Cypriot fjord.”⁴

4. Βάσος Βάσου, “Ποταμός Λιοπετρίου: Ανάπλαση του κυπριακού «φιόρδ»!,” *ΠΟΛΙΤΗΣ*, 24 July 2020, <https://politis.com.cy/politis-news/cyprus/384931/potamos-liopetrioy-anaplasi-toy-kypriakoy-fiord>

Construction eventually started in the area in 2020, and was projected to finish in March 2023, but delays had meant that by September 2023, the work was still unfinished.⁵ This meant that the Liopetri residents, as well as the general public, had no access to the area for years. In the interviews, the Liopetri natives reflected on being cut off from the river, from customs of their community, but also for some families, from their livelihood.

The press presented updates on the progress of the work in the Potamos in January 2023, when then president of the Republic of Cyprus, Nicos Anastasiades, serving the last foot of his second term in office and marking his legacy throughout the island, symbolically places the founding stone of the works in the port. What is noteworthy in this occasion, are the micropolitics that we witness.

In his speech during the event, president Anastasiades mentions the following:

64 “(...) some months ago the late Kyriakos Trisokkas (Liopetri muhtar) hosted me in the fish tavern which is here. Unfortunately (at the time), I had not checked whether the work was underway. I had then told him that I would make the inauguration myself, and he had then told me, ‘Mr. President, the works have not started yet.’ It was then that I was shocked, and I did everything humanly possible, I intervened where I needed to so that we can stand here today at this level of advanced construction.”⁶

The president in this excerpt, is very comfortable admitting that the system is broken, since the construction work was two years late in starting its implementation. He does however, feel responsible to fix it, by personally intervening, as per his promise to the recently departed community leader, and his friend. The intervention is clearly framed by patriarchal values of the fulfilment of the promise between two men, rather than the priority to change/establish the policies that create sustainable solutions to possible future delays.

5. Τάσος Περγίδης, “Ποταμός Λιοπετρίου: Καταγγέλλουν καθυστέρηση στα έργα ανάπτυξης και αποκλεισμό των εστιατορίων,” *διάλογος*, 19 April 2022, <https://dialogos.com.cy/potamos-liopetrioy-kataggelloy-n-kathys-ter-si-sta-erga-anaplastis-kai-apokleismo-ton-estiatorion/>

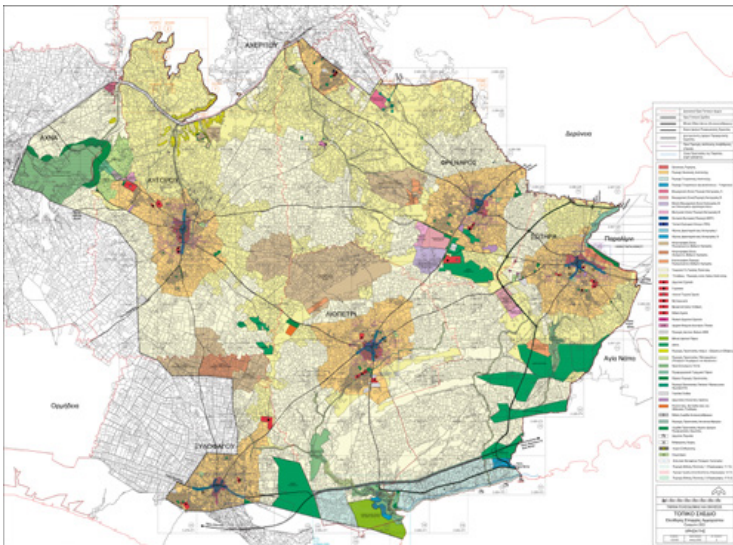
6. “Χαιρετισμός του Προέδρου της Δημοκρατίας κ. Νίκου Αναστασιάδη στην κατάθεση του Θεμέλιου Λίθου για την ανάπτυξη του αλιευτικού καταφυγίου στον Ποταμό του Λιοπετρίου,” *Γραφείο Τύπου και Πληροφοριών*, 22 January 2023, <https://www.pio.gov.cy/ανακοινωθεντα-αρθρο.html?id=32518#flat>

In Conclusion

This has been an exercise in zooming into a community, in an effort to find the connection between the space of Liopetri, the Potamos, and its people, as they advance towards a future of development. From the general area, to the Potamos and back to the heart of the village, everything is changing. The outlet of the village towards the coast, through the river area, is a relationship that seems to have dried out in the past decades, encouraging a nostalgia of the past, as it savours links and ties to that past.

What we have seen from the conversations, the press, and the overall research material is that the space carries deep narratives and connections with the past, of this land-port, a living lung of sea culture and fishing in a village of the Cyprus plain. Though the manifestations of development and patriarchal structures that deprive Liopetri and the Potamos a voice in how 'development' will be carried out, a nostalgia for the past, and a strong sense of collective memory, are alive in Liopetri natives.

65



img. 2 Liopetri map issued by the Ministry of Interior of the Republic of Cyprus in 2022.



66

img. 1 Local fishing area, Liopetri Famagusta District, Cyprus, April 2023.
Photo: Marc Garrett.

Fishing, Art and Gentrification

Marc Garrett

When the founders of the Limassol-based NGO, NeMe, invited me to contribute to the *A Sea Change* project, *Living with Others* and involving a two-week research residency and visits to the Liopetri fishing area in the spring of 2023, memories of my trawler fishing experiences as a young boy flooded back. I was 10 years old when I went trawler fishing with my stepfather Ken on the coast at Southend-On-Sea, UK. I never enjoyed it. We would wake up very early, about 3 am and sometimes remain on the boat for several days. I still remember the wintery cold of the North Sea. So cold I could not feel my fingers, and my teeth would chatter. It was all part of his simple strategy of trying to make a man out of me. I was unsure why I did not fit into his version of a proper son. My short stint as a fisherboy ended abruptly when a large wave bumped the trawler upwards and swept me off the deck into the sea. It was all very quick. As soon as I was in the water, my stepfather's arms reached into the waves, pulled me up and threw me back onto the boat deck. He shouted and swore at me. I was not sure whether he was angry with me or worried for me. I think it was both. There were various areas along the South Coast region where my stepfather used to fish. His main fishing crew resided in Old Leigh, an old fishing village in Essex, an area of Leigh-on-Sea, 30 miles east of London, down the River Thames.

The area has now been gentrified, and only small parts of its historic identity remain as a fishing village. Of course, when living in London, I lived through various forms of gentrification daily. We experienced gentrification at Furtherfield's warehouse space (HTTP Gallery) in Haringey, London. The neighbouring clusters of warehouses had all been taken over by artists, designers, and students from the creative industries once full of rag trade workers.

While we were there, it was a thriving local community. We used the warehouse for exhibitions, events, and projects from 2002 to 2011. Unfortunately, the rent was raised by 25%. It coincided with a 2% reduction in our regular funding as part of Arts Council England funding cuts to all National Portfolio Organisations (NPO). This was because of the austerity cuts imposed by the Conservative and Liberal coalition in response to the financial crash 2008. David Stuckler and Sanjay Basu published their groundbreaking book, *The Body Economic: Why Austerity Kills*, in 2013.¹ Meticulous research found that since the financial crash, suicides had risen by 10,000 across the USA and Europe. And millions of people across both continents had lost access to basic healthcare. Even though austerity programmes gave the impression that everyday people needed to pay the consequences for the crash, it was not them (us) who caused it. It was caused by “subprime mortgage lending, hedge funding, toxic asset trading, the uncontrolled boom in financial derivatives trading, and the part that the slashing of ‘red tape’ played in allowing these activities to take place under the radar...”² Although hundreds of art organisations lost their funding in the UK, we thankfully managed to receive ours, and due to our strong relationship with the Haringey council, we were offered two spaces in Finsbury Park. However, being in the park brought us directly to a diverse community dealing with poverty. So many of our exhibitions and projects reflected social contexts relating to local people. Some themes include austerity, ecology, class, racism, ecology, neoliberalism, colonisation, surveillance, and the patriarch. Like austerity and neoliberalism, gentrification haunts the lives of contemporary artists (and those who live around them). Especially when they seek independent studio space. The worst examples of gentrification prioritise the economic interests of distant property developers (often

1. David Stuckler and Medicine Sanjay Basu. *The Body Economic: Why Austerity Kills Hardcover*. Basic Books, 2013, 2.

2. Vickie Cooper and David Whyte. *The Violence of Austerity*. Pluto Press, 2017, 5.

in league with cash-strapped and ideologically ambiguous Local Authorities) with scant regard for existing residents. The process colonises poor urban areas, and communities are displaced and replaced by wealthier people, improving housing for those who can afford it and attracting new business that caters to the incomes of those who have out-priced the locals. The documentation of sustained resistance to the Heygate Estate developments, particularly the critique of Art Angel's failed Heygate Pyramid project, provides an excellent case study of artists affected by or researching the politics of gentrification. Chris Morris, a local resident who chronicles regeneration efforts in a blog, said, "it seems as if Artangel have the privilege of direct access to the council and developers, whereas local people do not."³

Writing for *A_N* magazine, Newcastle-based artist Kathryn Hodgkinson discussed the pitfalls of arts and gentrification. Referring to the artist Grayson Perry described the issue as a "social pattern" and characterises artists as the "shock troops of gentrification" who take advantage of cheap housing and studios and has suggested that artists add so much value to an area that developers should pay them to live there. A highly logical, if unlikely, fantasy.⁴ These conditions reveal a dismal double bind for socially engaged artists as they find themselves complicit in processes that can negatively affect the lives of long-standing residents in places regarded as ripe for development. I strongly disagree with Perry's final comment on this matter. It is opportunistic to ignore the plights of those living nearby, suffering the conditions imposed by gentrification. Blaming artists who rent cheap studios for gentrification misses the point. Gentrification is not a decision

69

3. Peter Walker. "Heygate pyramid: London estate's evicted residents damn art plan." *The Guardian*, 12 December 2013.

<https://www.theguardian.com/uk-news/2013/dec/12/heygate-pyramid-london-estate-evicted-condemn-artwork>

4. Kathryn Hodgkinson. "Resisting gentrification: why we should fight hard to protect affordable creative spaces." *A_N*, 25 November 2016.

<https://www.a-n.co.uk/news/resisting-gentrification-why-we-should-fight-hard-to-protect-affordable-creative-spaces/>

by artists but by councils and corporations. The world we grudgingly inhabit is a place that is ruled by people who do not care for those struggling under the effects of climate collapse, poverty, and inhumane neoliberal frameworks. It is a regime that reduces human relations to profit, naturalises competition and pushes responsibility onto the individual.⁵ Mark Fisher explained it well when he referred to the phrase attributed to Fredric Jameson and Slavoj Žižek, that “it is easier to imagine the end of the world than it is to imagine the end of capitalism.”⁶

70 Compared to anywhere in Cyprus, the UK has a much cooler climate. However, like everywhere now, climate change is making our country warmer. Liopetri, as a place, is much more picturesque, and the companies developing the area for tourism have promised the local fishermen new state-of-the-art fishing sheds if they agree to move further up the river. Will these sheds be free or rented to the fishermen at an affordable rate? Only time will tell. However, tourism can do strange things to a place. Changing its ethical, ecological and social contexts. As Hakim Bey astutely put it in his essay *Overcoming Tourism*, “The real place of the tourist is not the site of the exotic, but rather the no-place place (literally the ‘utopia’) of median space, liminal space, in-between space [...]”⁷ Bey was mainly discussing travelling liminal spaces such as airports and buses. Yet, I feel it is also appropriate to extend his observation to tourist sites. For me, they declare spatial oddness, as if they are shadowlands, ghost areas of their former selves, where indigenous culture offers itself as a spectacle, a parody of what it really is. And that’s the deal. To experience the reality of a place is to be a part of its lived

5. Jorge Garza. *Gentrification, Neoliberalism and Place, Displacement and Resistance in Flagstaff*. Northern Arizona University ProQuest Dissertations Publishing, 2018, 2.

6. Mark Fisher. *Capitalist Realism: Is There No Alternative?*. Zero Books, 2012, 2.

7. Hakim Bey. “Overcoming Tourism.” *Urbigenous*, 1994, 2. https://urbigenous.net/library/overcoming_tourism.html

histories, dialogues, and struggles.

In recent news about the Cornwall coast is that 16 of its local beaches were declared a pollution risk, and the “main contributing factor to polluted beaches is [...] fertilisers, pesticides, oil, and untreated human and animal waste all entering waterways, such as rivers.”⁸ The disturbing legacy of the UK privatised water industry has been in the news for a while, but it has recently become an even bigger national topic. “Swimming in contaminated water can lead to gastroenteritis, hepatitis, giardiasis, skin rashes, amoebic dysentery, nose, ear, and throat problems, pink eye, and other respiratory illnesses.”⁹ In addition, there have been various sightings of masses of fish dying due to the sea and rivers losing oxygen due to hot weather,¹⁰ as well as regular sewage being dumped into the sea around the coasts of the UK.¹¹

Through the years, tourism and the population have grown in Cyprus. The Kyrenia District, one of the six districts in Cyprus, is a very popular harbour but also has a crumbling sewage system. There are spills into the sea from pipes leading directly to the town’s coastline every day. The town was originally planned for 25,000 residents and is now home to more than 100,000 people. Locals have mentioned a “stench of waste being spilt onto roads outside their homes.” Tourists have also complained about what they suspected was “sewage

8. Elliot Ball. “Sixteen Cornwall beaches hit with raw sewage warning after heavy rainfall.” *Cornwall-News*, 5 July 2023.

<https://www.cornwalllive.com/news/cornwall-news/sixteen-cornwall-beaches-hit-pollution-8575804>

9. Ibid.

10. Ethan Davies “Thousands’ of dead animals spotted in Salford Quays after ‘huge fish kill.’” *Greater-Manchester-News*, 12 June 2023.

<https://www.manchestereveningnews.co.uk/news/greater-manchester-news/thousands-fish-dead-spotted-salford-27113172>

11. Helen Wilson-Beevers. “People warned to avoid 83 UK beaches because of raw sewage dumped nearby.” *The Independent*, 16 March 2023.

<https://www.independent.co.uk/travel/news-and-advice/uk-beaches-raw-sewage-warning-b2301186.html>

from the nearby hotels.”¹² The UK was once labelled the “dirty man of Europe”,¹³ thanks to its out-of-control pollution when it joined the EU in 1973. However, the EU made successive UK governments cohere to environmental standards. Since Brexit, there are serious concerns that the UK is going backwards and is becoming the “dirty man of Europe” again, with terrible impacts on our soil, air, water, health, and wildlife. In the late 90s, in our home town, Southend-On-Sea, councillors asked locals to swim in the water to prove they had rid the sea of pollution. My brother was among a few locals brave enough to test it out. For their bravery, they each were paid ten pounds by the local Conservative council. Thankfully, he survived.

Under the stranglehold of extractive capitalism, humans and nature are endlessly exploited and only seen as relevant within the narrow confines of being products for money-making ventures. There is a massive struggle ahead of us, and fighting against unethical business practices and governments that allow or even instigate ecological disasters for profit will not be easy. However, there is no hierarchy of who is more important to critique and challenge regarding these disastrous conditions. Climate collapse is a class issue because it mostly impacts the poor worldwide. We must challenge our engagement with the world as artists, curators, techies, academics, and humans. Our relationship with modernity needs an immediate reassessment. Our addiction to technology, alongside capitalism and its constant acceleration, has impoverished us environmentally. We need an urgent reconfiguring of our relationship with the world that is effective and beyond lip service. “The psychic and social structures in which we live have become

72

12. “CYPRUS: Sewage spills, sea pollution the norm for historic harbour town.” *Financial Mirror*, 22 September 2019.

<https://www.financialmirror.com/2019/09/22/cyprus-sewage-spills-sea-pollution-the-norm-for-historic-harbour-town/>

13. “Dirty Man of Europe: The importance of European Directives in Protecting our Green and Blue Spaces.” *Surfers Against Sewage*, 16 June 2016. <https://www.sas.org.uk/updates/dirty-man-of-europe/>

profoundly anti-ecological, unhealthy, and destructive.”¹⁴ One way to reconfigure ourselves is to stop chasing the illusion of feeling relevant through whatever practice we are part of. Be local whenever we can. It means reconsidering what our art looks like, whom it is meant to talk to, and why it exists in the first place. Individual freedom and expression is a capitalist throwback. The luxury of believing one’s specialness, originality, and supposed genius is a diversion. We must no longer play the game that serves the agenda of the privileged, who prefer to hedge our futures for personal gain and against nature. It is high time we refused to feed a vampiric culture dependent on extraction and acceleration.

14. Suzi Gablik. *The Reenchantment of Art*. Thames & Hudson Ltd; New Edition, 1994, 6.

WORKSHOPS



img. 1 *Intervention Vertical and horizontal position, Sabadell, Spain, 2004-2016. Photo: Joaquín Jara.*

Re-sacralising Nature: A Deep Immersion at the Llobregat's Delta

Joaquín Jara

As an environmental sculptor, I see my artistic practice as a calling to rediscover our environment through critical, ephemeral, and reflective interventions that seek to generate an emotional bond with our ecosystems and its different communities. I also showcase the value of workshops as emotional, semiotic, and material tools that bridge the gap between the human and non-human subjects present in our surrounding ecosystems.

On April 22nd 2023, I conceived an art and ecology workshop to share my experience undertaking sculptural interventions in a wide range of natural environments with an ecological, sustainable, and heritage aware approach. This event took place at the Prat de Llobregat's marshes, more specifically, at the natural park of El Remolar. During this workshop, the participants were encouraged to connect with artists, researchers, designers, and philosophers that had previously intervened at the *Troubled Blue* symposium organised in the framework of the *A Sea Change* project. This opportunity allowed us to address our bond with natural ecosystems with an interdisciplinary approach.

77

We began the workshop with a theoretical segment that introduced conceptual tools to create an archive of the land. This archive is an essential pathway into the history and communities that permeate the territory, a rich and complex subject on its own.

After creating a clear archive of El Remolar's natural park, I proposed a series of perceptive and cartographical exercises to the participants. In this segment, I focused on sensible and performatic exercises that engaged with our own presence, our memory, and the environment. This series of activities seek to create, communally, an emotional bond with a specific landscape through a series of symbolic gestures to bring back the ritualistic nature of this practice. Amongst the exercises, we were gifted with the presence of artist Robertina Sebjanic, who introduced us to the subaquatic sound landscapes of the natural park. The workshop culminated

with a portrait of the wide range of elements that form the landscape, understood as a subject with a particular set of ecosystemic, historical, geographical, aesthetic, and cultural elements.

Through a transdisciplinary and multisensorial experience, I incorporated an ecological gaze that allowed us to become aware of the fragile nature of our environment and its delicate biological interrelations. An environmentally sensitive approach to this process reinforces the global identity of the landscape, a rich subject with aesthetic, social, political, and affective implications that go beyond our anthropocentric gaze. By coming closer to the lush ecosystem of the Llobregat's Delta, we have connected with the complex network of communities that live within it, fostering a sentient and empathetic gaze towards the Other.

Binding Ourselves Together Through the Landscape, Biodiversity, and Emotions

78 The workshops provided the participants with tools to create a plastic intervention in a specific landscape with an environmentally friendly methodology. The materials I introduced are symbolically linked to the territory and have the least possible impact on the environment, can be easily degraded over time, and can be (re)integrated in the landscape. In the case of the Lobregat's Delta, I brought honey, and black poplar wood, which are harmless or foster the environment's biodiversity and its particularities: the ground's pH, fungi, xylophage species, etc The workshops gave voice to the conceptual frame and the hidden history of the landscape so we may recover what we lost in our alienated, urban lives: an intimate relationship with the forces that transform the landscape and its inhabitants, such as seasonal cycles, which influence the fauna and the flora, and the presence, or lack thereof, of bioindicators that actively repair the environment.

In order to fully comprehend the extent of our environment's untransferable richness, human communities need to develop an affective connection to the landscape as a subject. Only by learning to re-sacralise our relationship with Nature, and by bringing back an empathetic and emotional approach to natural ecosystems, we will be able to bind ourselves to it, and to the notion that Nature and sanctuary are

inherently bound together.

(Re)sacralising Nature through the Sanctuary

The legacy and the latent potential of the sanctuary can be understood by analysing two aspects: an anthropological aspect that stems from ancient communities, who sacralised spaces characterised by specific elements that I will outline below, and a contemporary aspect that grants special protection to a specific environment due to its ecosystemic value, safeguarding its biological integrity from the human pulsion to capitalise it.

Ancient sanctuaries were places chosen by human communities because of their orographic and geographic particularities: hills, primal forests, sources of rivers, streams, or fountains, and unique geological formations. These landscapes and their surroundings enabled the survival of communities thanks to their natural resources. From the Palaeolithic period to the beginning of the Roman Empire, the sanctuary consisted of a specific natural space designed to worship local divinities. These divinities originated from the Ctonic divinities (in Ancient Greek, *khthónios* meant “belonging to the land”), which were linked to natural cycles and the concept of *Genius loci*, a Roman term used to describe the “spirit of a place,” which was maintained to describe the particular local landscapes of Mediterranean communities.

79

In Ancient sanctuaries, there was a defined area called *Témenos*, a space where the symbolic relationship between the community, and the sacred place was depicted through an altar and a temple. In the Ancient Greek canon, the temple represented a sacred forest, with columns that served as trees, and an altar that was used as the original rock where humans left their offerings. Unfortunately, the *Témenos* became more and more focused on architecture and gradually lost its original meaning, shifting the focus from the environment, to a self referential subject.

Consult the Genius of the Place: The Historical and Symbolic Influence of the Genius Loci in Our Relationship with the Landscape

In classical Roman culture, the *Genius loci* represented the protective spirit of the place, an entity to be reckoned with in every interaction with the sanctuary. In the temple, the *Genius*

loci was venerated and incarnated through a sculpture that, in its beginnings, could be a *Betilo*, a simple unsculpted stone, or a *Xoanon*, a sculpture made of wood with very poorly defined forms, very close to the idea we have of the African fetish than to classical Greek sculpture. The word 'fetish,' in this context, refers to objects or sculptures that have a magical or religious connotation.

The *Genius loci*, then, was the result of the emergence of semiotic, sensory and symbolic contents resulting from a way of relating to that environment, a folklore, a political, aesthetic and philosophical synthesis that linked that community to the place through ritual and veneration, a container of particular ecological and cultural meanings. In the past, survival depended on communities maintaining a good physical and psychological relationship with places.

This mode of relating to the natural environment as the epicentre and origin of the community went into decline when an antagonism between the so called civilised and the wild emerged. The *Genius loci* represented the necessary relationship between opposites, as one of the attributes of sanctuaries was to serve as neutral spaces for human encounters with the forces of nature, the divine, and with other external communities, strangers or enemies.

80

Unfortunately, this form of relationship changed drastically when the Roman Emperor Augustus proclaimed himself as the *Genius loci* of the entire Roman Empire, which symbolically and aesthetically homogenised the different environments that made up the Roman provinces of the Mediterranean, displacing the original meaning of *Genius loci*. Thus, the territory and its inhabitants became capitalisable resources, and the environment was transformed into another tool for the Empire.

Today, these historical events present us with an epistemology and a way of life that shaped the interaction of human communities with the ecosystems of the Mediterranean. Neutralising the wild and strange in order to civilise it, smoothing out cultural differences without considering the need to preserve life in all its ecological and patrimonial multiplicity, are capitalist strategies that prevail in contemporary market dynamics, and which are responsible for the pollution and environmental chaos that is taking its toll

on us today. From an artistic perspective, it is also our duty to recognise the impact of human activity on our planet: climate change and the sixth extinction are without doubt a point of no return.

The Contemporary Sanctuary: Moving Towards a Legal Oasis

The contemporary sanctuary is successfully introducing the notions of natural wealth and heritage, which are essential for advancing public awareness and improving existing legislation. It consists of a series of legally protected areas delimited to care for and preserve the planet's biodiversity. We can say that, thanks to this idea of preservation, natural sanctuaries are the only places in the world where we cannot intervene in our civilising quest. They are terrestrial or marine areas that, by virtue of their biological and geographical richness, are protected and conserved by law. Some are managed by autonomous communities, local governments and, in some cases, by international organisations and conventions, such as the European Landscape Convention. Their status as natural heritage allows the protection of ecological reserves and endangered species so that their reproduction and restoration is possible. This minimises human intervention, restricts its impact and encourages the development of scientific research.

The notion of a legal subject applied to various natural environments has advanced the terms of their protection, as this qualification broadens the definition of ecosystem and presents it as a complex subject beyond its location. In Spain, a motion has been raised to grant legal status to the Mar Menor in Murcia, a unique natural environment that has been degraded in recent decades by urban planning and agricultural management to the point of almost vanishing as an ecosystem. As a legal entity, the Mar Menor will be protected against any action that could affect it directly or indirectly, such as the pollution of the tributaries that flow into it. Fortunately, on October 3rd 2022, the Law for the Recognition of Legal Personality of the Mar Menor Lagoon and its Basin was published in the Spanish Official State Bulletin (BOE). With the new regulation, this environment becomes a subject of law that fulfils a non-profit social function, which will allow citizens to demand before the courts

the reparation of damages caused to the lagoon.

Other examples of initiatives to protect natural environments include India's Ganges River Action Plan, which has yet to materialise, and the designation of rivers, moorlands, and regions in Colombia as legal subjects. These initiatives represent an opportunity to ensure the protection and conservation of Nature.

Natural subjects in danger: the case of the Llobregat's Delta

Each river uniquely interacts with the territories it flows through, relating to them and carrying with it the experience of its erosion in the form of silt, and minerals. In the case of the Llobregat's Delta, the Natural Park stands as an exceptional natural subject with its own identity in harmony with other natural subjects, such as migratory birds, dunes and plants, forming a complex ecosystem of natural, chemical and biological connections.

Globally, deltas are considered particularly fragile environments of great importance from the point of view of biodiversity and ecosystemic balance, as they function as meeting points between the river course and the sea and create environments of unique natural richness born from the encounter between freshwater and saltwater.

82

The location of the workshop in the natural setting of the Llobregat Delta is not innocent: Barcelona's airport, a highly invasive economic hub, is located in the vicinity of its biodiversity rich marshes. The decision to build the airport in this area was influenced by an economic boom that favoured economic development over the fragility and importance of the ecosystem. As a result, the rich and delicate environment of the Delta was compromised, not because of ignorance, but because of the imbalance between different societal interests and values.

At the end of 2023, regardless of the growing awareness of the environmental, social and economic challenges facing the region, the Catalan employers' organisation Foment del Treball proposed a project to expand Barcelona's airport, increasing its capacity by 30% without questioning the validity of the mass tourism model or putting sustainable

development goals in the spotlight. This expansion, which is yet to be constructed, would entail the destruction of what little remains of the original habitat, which is home to a diversity of migratory birds, fish, and endemic botanical species. The resulting loss in terms of legacy for future generations will be incalculable.

Being able to recognise the environment as a liminal, dynamic entity subject to the influence of social, historical, political, and aesthetic components is essential to keeping the environment alive. Performative actions, such as workshops or artistic interventions, allow us to recover an intimacy with Nature that we have lost after centuries of alienation and exploitation of natural resources and, ultimately, to restore the sacred nature of our environment. Cases like the Llobregat's Delta remind us how fragile our sanctuaries are, and how imperative it is to fight collectively to keep them alive.



83

img. 2 *Art and Ecology Workshop, Llobregat's Delta Natural Park, Barcelona, Spain, April 2023. Photo: Joaquín Jara.*



84

img. 1 At the Thermaikos Gulf, scene from the photography workshop *A Sea Beyond its Aesthetics*, April 2023.
Photo: Ioustini Drakoulakou.

A Sea Chance for Thessaloniki

Thouli Misirloglou

The city of Thessaloniki, this familiar stranger, Greece's second city in size and population, is vitalised by its seafront and its proximity to the water element. Thessaloniki is not immune to the major threats faced by coastal cities across the Mediterranean, such as climate change, rising sea levels, pollution, overfishing, desalination, as well as volatility in the political, social and communication spheres. The policies for addressing these threats remain the exclusive prerogative of governments, widening the distance from civil society and – to an even wider degree - artistic society.

The goal of the involvement of Thessaloniki's Metropolitan Organisation of Museums of Visual Arts (MOMus) in the *A Sea Change* project was not exclusively artistic in nature, simply presenting exhibitions that would revisit images of the Mediterranean's canonical mythology and history. Instead, we aspired to bring together diverse practices, people, disciplines, ideas, and approaches, and create more decentralised narratives.

Through photography, design and unconventional cartography, the three projects -that took place in wider areas associated with the maritime environment, and in the city's centre and periphery- endeavoured to turn our gaze towards places (geographical but mostly conceptual and mental), at a scale that was both smaller, focusing on the human factor, and more fluid, found in that grey zone where policies appear to have disappeared. In this intermediate space, revisiting the landscape, in all its dimensions, proved a fruitful and potentially seminal process. It is in this potentiality that the prospects of an alternative type of sustainability that goes beyond political wishful thinking, lie.

Thessaloniki can share hope with all the other inspirational partners of *A Sea Change*.

The Rationale Behind a Comprehensive Concept

Areti Leopoulou

For MOMus, the *A Sea Change* workshops were much more than just a set of activities. They served as a multidimensional, informative, and educational undertaking, as a dynamic platform for three public projects we were eager to see in action and explore their potential.

Our concept was not one-sided but, on the contrary, as comprehensive, and wide-ranging as possible: what are the elements that define the microcosm and microclimate of Thessaloniki's seafront and port, where two of the cultural institutions comprising MOMus are based? And, in turn, how do these institutions operate, how do they reach out to the public, how do they encourage creativity, being part of a wider urban and maritime environment?

86 How do the different facets of Thessaloniki operate in this outskirts of the city, which is isolated yet also fully integrated into its seafront at the Thermaic Gulf?

The artist's gaze, the tourism industry, and the port's everyday life: were the three axes—corresponding to photography, product design and architecture respectively—that defined our choice of activities at MOMus-Experimental Center for the Arts through the *A Sea Change* project.

Aiming at inclusion, creativity and cultivation, without any aesthetic, thematic or conceptual limitations.

With full awareness and understanding that each project and workshop succeeded in delving into aspects and facets of a place undergoing constant and rapid social and environmental transformations, a place searching for new strategies and constantly adapting its tactics.

This was the rationale behind the three workshops organised by MOMus-ECA in collaboration with the *A Sea Change* project. The reasoning and methodology of these projects are presented below by the very people who implemented and fully experienced them, and to whom we extend our warmest thanks.

Post-Platform: Detecting the Unseen, Tracing the Impending

Nadia Kalara

October 2023

Workshop and Online Presentation

Post Platform: Detecting the Unseen, Tracing the Impending is an arts and architecture workshop organised by visual artist and associate professor at the School of Architecture, Aristotle University of Thessaloniki, Nadia Kalara. The workshop is held in the framework of the Creative Europe funded project *A Sea Change*, which focuses on promoting creative innovation in the cultural and natural ecosystems of the Mediterranean.

The workshop participants were students attending the 5th cycle of their postgraduate master's programme *Advanced Design: Innovation and Transdisciplinarity in Design*, at the School of Architecture, Aristotle University of Thessaloniki. The 5th cycle of the programme focuses on the constant dialogue of architecture and design with the past, as well as on the importance of references, big data and metadata in the design process. Within that framework of references, memories and their loss, the postgraduate programme looked at the sea-front of the city of Thessaloniki.¹ The Post-Platform workshop was part of the postgraduate programme's syllabus and focused on Pier A of Thessaloniki's port. A number of selected undergraduate students, who had completed the 8th semester of the elective course *Art and the City: Un-Mappings* by the spring semester of the 2022-2023 academic year, also took part in the workshop,² and called to elaborate on the cartographic methods they formulated during the course.

87

1. <http://advanceddesign.arch.auth.gr/>

2. <http://unmappings2.blogspot.com/>

Objectives and Methodology

Given that recent years have seen the intensification of tourist and cultural uses of Pier A, we believe there is great scope for researching and evaluating the environmental, economic, and social issues related to this development. The workshop aspired to identify the problems, politics, and aesthetics of the location through the application of alternative mapping practices. Students were asked to formulate their own, subjective research schemes for the location and then study its hidden aspects, mapping its ephemeral, tactile and corporeal elements, always mindful of the symbiotic relationship between people, public space, and the sea.

Pier A of Thessaloniki's port can be perceived and experienced as a transport platform, as an ever-changing spatial and temporal surface, as a transit or intermediate zone, as a theme park or a heterotopia, as a setting, an augmented space, a place that is simultaneously real and virtual. The workshop aspires to give participants the opportunity to act as artists and architects-researchers; as ethnographers of the mundane. The goal is to formulate visual cartographic methods inspired by the practices and examples discussed during the programme. These include a broad range of illustrative examples of the trend popular among visual artists and architects from the 1950s, to the present cartographic experiments, to highlight the dormant meanings of place, craft alternative narratives about the city, and critically reflect upon the representations and uses of the urban environment. Assisted both by updated psychogeography methods and mental and critical mapping, and above all by the fascinating poetics of mapping and cartography in contemporary visual art, participants were invited to focus on everyday practices that exemplify a location, going beyond formal design dictates. They were expected to formulate and implement perceptual and sensory expansion experiments in space; apply methods of visual interpretation of atmospheres; detect, observe and evaluate the micro-ecologies and ecosystems of the location; and to develop and apply methods of documenting and recording the location's unseen, hidden, secondary and marginalised elements. Their commentary was indirect and suggestive or explicit and activist and participants were free to use any visual and expressive medium (or combination thereof) of their choosing.

Mass Souvenirs: Product Design Workshop

Athanasios Babalis, George Bosnas and George Giannikopoulos

July 2023

Mass Souvenirs was the title of a workshop focusing on innovation and research in the fields of industrial design, the arts and handicraft, as well as on the interdisciplinary collaboration of artists with the private and public sectors. The project linked issues of mass tourism and the environment with practices related to local identity, local production and the formation of memory. The workshop focused on souvenirs as tokens of remembrance, and aimed at introducing innovative design and artistic practices that can lead to high quality, competitive objects produced through the partnership of artists and the tourism industry.

Project Implementation

Workshop participants were selected following an evaluation of their skills and experience based on the portfolios they had submitted. The jury made their selection with the goal of ensuring the broadest possible representation of artistic and other skills in the final line-up of participants. The selection method proved very constructive, judging by the amount of interaction and knowledge/experience-sharing among participants, who submitted exceptionally innovative ideas and design proposals as well as high-quality prototypes.

Methodology

A. Project presentation and analysis

Analysis of the concept of the souvenir as an object; basic principles of the souvenir and its purposes; what souvenirs offer to each party (designer - producer - retailer - customer). History of the souvenir with illustrative examples. The role of designers. Examples of souvenirs currently available on the market. Analysis of the concept of Locality - Universality (and

of the symbolisms ‘projected by the object,’ i.e. the narratives associated with it and how these are told). Materials used in the production of souvenirs and how these relate to the concepts of locality/universality, local production methods and/or the specific history of each place. The cost factor: production and distribution costs. The appeal factor: “*Love at first sight.*” The marketing factor.

B. Research of the souvenir market (both on-site in the city of Thessaloniki, and online)

Participants visited a number of (preselected) shops and other venues (such as museums) that offer souvenirs, came into direct contact with the objects and studied their quality, innovativeness, cost and range. Participants also researched the history and culture of the city (and the country) and commented on the stereotypes that souvenirs help propagate about Greek culture.

C. Design ideas and production of prototypes: methodology

90 Every participant was free to set their own objectives (design brief) based on their personal skills and preferences. Participants then embarked -with our supervision and assistance- on the core product design process (Mind mapping - brainstorming – organising ideas – creating designs and models - evaluation - final selection of design ideas). This was followed by the production of prototypes based on the original models and ideas, using various materials (such as paper, foam board, clay and wool). Every idea was collectively evaluated by all workshop participants, whose comments helped improve the original concepts. 3D models were created for several of the concepts, some of which were assigned to external partners for the partial or full production of presentation prototypes. Many of the objects produced were created by the participants themselves using the agreed upon materials.

November 2023

The Sea Beyond (its Aesthetics) was a photography seminar held at the premises of MOMus-Experimental Center for the Arts, between 25 and 29 April 2023.

Photographers Stratos Kalafatis and Lia Nalbantidou worked alongside a group of younger photographers to produce original photographic material.

Ioustini Drakoulakou was an invaluable volunteer contributor.

Seminar participants included professional and amateur photographers (both self-taught and formally trained), art school graduates and scientists from different disciplines, of different ages and with varying degrees of photographic experience. Members of this diverse, interartistic and transdisciplinary group had the opportunity to fruitfully exchange views and ideas.

We are delighted that the seminar inspired the production of original artworks and allowed the forging of strong artistic bonds among participants. Thanks to the *A Sea Change* project and its partnership with MOMus-Experimental Center for the Arts, we all had the opportunity to start a new dialogue on photographic practice.

To better prepare participants, the following resources were provided for digital repérage (UTUBE): Angelochori, Thessaloniki: Walk-through of Angelochori (Thessaloniki Greece). *Megalo Embolo* Lighthouse & Fortress in Angelochori, GeorgeSal. The *Megalo Embolo* Lighthouse of Thermaic Gulf. *Megalo Embolo* Lighthouse, Angelochori, Travelling in Greece.

Thessaloniki Shipyards: Visit to Thessaloniki's shipyards. *Piratologio*, the Shipyards of Thessaloniki. Shipyard, Pylea, Thessaloniki, Greece (unedited drone footage). Aerial view of the largely unknown Shipyards East of Thessaloniki (4K drone video), Thessaloniki shipyards.

RESIDENCIES



94

img. 1 Fara Peluso during her research residency within the *Heard by the Deep* programme. Photo: Aleksandar Topalović.

Life Aquatic: Reflections on Artistic Residencies within KONTEJNER's Heard by the Deep Programme in Split, Croatia

Ana Bedenko

Fara Peluso was artist in residence at the Mediterranean Institute for Life Sciences in Split, Croatia, within KONTEJNER's programme *Heard by the Deep* in May 2023.

Ana Bedenko: How did your research on the diatom microalgae begin?

Fara Peluso: My multidisciplinary research on diatoms began in 2017 thanks to my graduation project *VIVA*, a speculative study of the sea slug symbiont *Elysia chlorotica* and the salamander *Ambystoma maculatum*, proposing a symbiotic relationship between human and algae through photosynthesis. Thanks to the DIY *Hack the Panke* project, since 2018 my research combines DIY biology with microscopy, phenomenology and speculative design in public formats that question the relationship between humans and bodies of water.

AB: How did you first develop the project *Theca*?

FP: *Theca* is the outcome of the ongoing trans-disciplinary research *The Function of the Invisible* focused on diatom microalgae, their role in biodiversity and life maintenance.

It was developed at EctopiaLab in 2022, in collaboration with Cultivamos Cultura, the Gulbenkian Science Institute, with PhD Giulia Ghedini, leader of the Functional Ecology Group. We studied the coexistence of different diatoms with

other algae species, observing their system of maintenance and competition, bringing them together in an environment of interaction, and information sharing between organic and inorganic matter, living and non-living entities.

The project is a post-human feminist and artistic practice that shows how humans have always been bonded with diatom organisms, acquiring a hybrid identity motivated by the philosophical work of Donna Haraway about human-machine, human-animal relations and supporting the idea that “a cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction.”¹

AB: How does your background in design inform your artistic practice?

FP: Being strongly fascinated by forms present in nature and considering them a great design strategy I discovered the existence of frustule, diatom’s microscopic cellular structure. Furthermore, I adopted a more inclusive approach, designing works that consider biological interactions and acknowledge a whole system inhabited by all the living organisms.

96

Speculation, fiction, and critical design played a fundamental role encouraging me to deeper explore fields of science, technology but also poetry and philosophy, supporting my exploration of human and more-than-human relationships.

AB: What was it like conducting your research on the other side of the Adriatic Sea?

FP: Thanks to the *Heard by the Deep* residency in Split, I had the chance to reflect deeper on my relationship with the bodies of water and their ecosystem, combining the practices of sampling and cultivation with microscopy and phenomenology. The everyday closeness to the Adriatic Sea led me to discover a new diatom species, enriching my scientific and aesthetic background.

AB: How did the scientific support of the Mediterranean Institute for Life Sciences influence the project?

1. Donna Haraway. “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century” in: *Socialist Review*, 80, 1985, 65–108.

FP: Thanks to the support of Katarina Trajković and Sanda Raić, I observed under the microscope of MedILS institute the diatom species inhabiting the nearby seawater zone. At MedILS, the project focused on diatoms' bodies, as bodies of water, and the dynamics of their cellular structure and silica formation. Thanks to the proximity of the sea, the practice of microscopy was combined with the philosophical idea of phenomenology questioning how to dismantle the anthropocentric lens and proposing cooperative practices. This led me to constantly examine my idea of microscopy asking what the observation of an almost invisible existence can teach us.

AB: During your residency you also had the opportunity to collaborate with the academic staff from the Faculty of Science, University of Zagreb, and visit the Croatian National Diatom Collection.

FP: The research moved towards taxonomy identification, thanks to the support of the Croatian National Diatom Collection in Zagreb. Meeting professor Marija Gligora Udovič and the research assistant Mirela Šušnjara helped identify the Gomphonema diatom species from the previous sampling activity in Split.

97

We observed how its frustule functions and discussed how the morphology adapts to the environment, concluding that every small entity inhabiting this planet exists and is environmentally adapted, carrying a function and deserving a situated study.

AB: Have you always felt connected to the sea? Why is it important to raise awareness about the dangers of marine pollution and the threats to biodiversity?

FP: I always felt connected to the water, especially to the sea, spending a lot of time listening to the sound of waves. I believe that through our breath we connect with the underwater world. By listening and focusing on our breath we feel bonded and recognise similarities in a loop of survival and belonging. Furthermore, algae supply oxygen to the world and it is our duty to protect and repair their "unseen" worlds.

AB: How would you like to further develop your research?

FP: The long-term ambition of the research and the artistic practice is to continue studying diatom microalgae and their water ecosystems as bodies of water, exploring sea and freshwater environments around Europe. The steps will be documented through sketching and dedicated writing about eco-hydro-feminism and phenomenology alongside microscopy documentation with videos and images. The material will be used to develop new artworks and to build an archive for future exhibitions.

AB: What are your predictions for future hybrid and symbiotic modes of living?

FP: Through my practice I aim to employ care and resilience from nature translating them as models for human social constructions. I believe that through speculation and design of hybrid artefacts these models can become part of our daily life as well as instruments of contemplation about the contemporary ecological disasters, social and environmental injustices.

98 I hope these objects can contribute to healing the world as part of an ecofeminist initiative aimed at repairing the ecological disasters of capitalist and patriarchal culture.

Artist Marko Marković conducted his research *Mutual Aid Orchestra* in collaboration with the ME of marine geophysics Josipa Vujević in May 2023 at the Mediterranean Institute for Life Sciences in Split, Croatia, as part of KONTEJNER's programme *Heard by the Deep*.

Ana Bedenko: How did your collaboration start?

Josipa Vujević: When Marko and I met 17 years ago, we joked about our jobs, and I told him that I “talked” to dolphins. For all these years there was the idea that we would try to get in touch with dolphins in the future.

Marko Marković: We have known each other for a long time as we both used to live in Split, on the Adriatic Coast. At the time, I was studying at the Art Academy and curating a performance festival with an interest in different forms of socialisation. Josipa was an engineer observing the depths of the Adriatic Sea. We gradually agreed it would be interesting to collaborate and came together for the KONTEJNER residency. The intriguing part was the innovative approach of combining art and science and expanding DIY concepts. It was a great model for research on living conditions in the sea and above-the-surface communities.

AB: Marko, this residency is an extension of your artistic interest in interspecies communication, could you elaborate?

MM: In my opinion, sound is a communication strategy for self-organisation among species. I am researching transformational environments in different communities affected by unbalanced economies, environmental pollution, class, and socio-political circumstances.

In 2021 I researched the sound interaction between orangutans in the Imperial Schönbrunn Zoo in Vienna, and a musical ensemble *Ausländer* (where I sing). We played acoustic and electronic music to orangutans for one month. With the changes in tempo and harmonies the animals' moods also changed and we understood there is dynamics within the group. By playing music we have established sound communication entering an empathic relationship with these intelligent primates – we became part of the group.

The concept of Mutual Aid as a factor of evolution is relevant to my understanding of interspecies coexistence. Even when coming from opposite food chain positions, species create alliances to survive extreme living conditions. Considering the Adriatic Sea an extreme environment affected by anthropogenic sound pollution it was our intention to investigate the living conditions of sea mammals and communicate this problematic in the public sphere.

AB: Josipa, you are professionally linked to the marine sphere – what was it like to implement your research into the art field?

JV: My intentions in life are always motivated by the idea of what can be done to improve something. This collaboration with an artist, where I contribute my knowledge and experience, excites me firstly because it offers a completely different approach to the problem we are trying to illuminate, and secondly because we are trying to use the evolutionary theory of devices based on scientific knowledge of how marine mammals communicate.

100

AB: What is the goal of this interdisciplinary project? Tell us about Passive Acoustic Monitoring (PAM) and Active Acoustics Monitoring (AAM).

JV: The question is how to make contact with another species on a rational, mutually accepting level. PAM is a technology (hydrophone arrays, sound amplifiers and PC) used to measure, monitor, and identify sound sources in underwater environments, allowing scientists to eavesdrop on the acoustic behaviour of marine animals (whale song, fish chorus, snapping crabs), natural abiotic sounds (wind, earthquakes) and man-made sounds (cargo ships). AAM should be developed as an active acoustic monitoring system, a system that can send messages to marine mammals.

MM: The idea is to upgrade existing PAM technology from a surveillance system to a communication system. By listening to the sound and frequency from the sea

mammals, recording them with a PAM system and upgrading the technology, we could eventually return the signal underwater and see if we get a response. I see it as music between sea mammals and humans.

AB: The overarching topic of the “Heard by the Deep” is the anthropogenic sound as perceived by marine and coastal life. What is your relation to sound and noise pollution?

JV: Since I conduct research with acoustic sensors in the sea and on the seabed, my work is directly linked to the creation of anthropogenic noise pollution. From this perspective comes the idea to improve things.

MM: Sound, like music, can have positive and negative effects on mood. Both in humans and animals, it can have therapeutic effects and influence behaviour with predetermined stimuli in the everyday environment. Understanding communication through sound, it is interesting to look for models that bring harmony and create inspiring links between species. By researching sound communication, we intend to establish contact with intelligent mammals in the Adriatic and understand the mutual signalling within the spectrum of underwater sound pollution.

AB: What was it like to develop this project within a scientific institution (Mediterranean Institute for Life Sciences)?

MM: My experience was very inspiring in many ways, encompassing the communication with both humans and animals. I had interesting conversations about life on the micro cellular level and as the engine of a self-organised system (human body) with molecular biologist and geneticist Dr Miroslav Radman, founder and director of MedILS. Discussions about art and music with ethnomusicologist and musician Danica Radman were inspiring in every sense. After a sailing expedition in the Brač canal in search of the dolphins we returned to the coast without finding them. In the evening the group of dolphins was swimming and playing next to the Institute shore – they came to show themselves and check us out. If this was the case, then we were in a great place to enter an empathic relationship.

AB: How can the project improve the lives of human and non-human inhabitants of the coastal, and underwater communities?

JV: The project is more than just the application of existing scientific methods. It offers the opportunity to develop new approaches to protecting marine life and achieving a better coexistence of human and non-human life.

MM: My first project in the context of *Mutual Aid Orchestra* was in Split Zoo in 2015 where I was vocalising with the tiger Dimitrij. Unfortunately, due to lack of financial support the wild animals were dislocated from the Zoo. In 2023 the Adriatic Sea will become a noise pool endangering natural inhabitants of the sea. These catastrophic effects are not only harmful to sea animals but to humans as well. Hopefully, this project will inspire people to take care of their environment and acknowledge the importance of coexisting with other species on an emotional and organisational level. By protecting water, we protect life.



103

img. 2 Marko Marković and Josipa Vujević during their sailing expedition within the *Heard by the Deep* residency. Photo: Toni Meštrović.

A Reflection on my Time in Residency

Carmen Salas

I spent most of September 2023 in the NeMe residence in Limassol alongside curator Régine Debatty. The residency was part of *Sea Blindness*, an exhibition about the Mediterranean Sea that ran between September and October.

During my time in Cyprus, I began to question my curatorial and creative process over the last few years and to reflect on the art world, its structure and its possible futures. Where are we as a sector with regard to transformation and where are we going? How are we responding to the many challenges society is facing? How does my work fit into all this? This short piece is a way to share some of my thoughts during the residency.

104

Aside from making new friends, learning from the local context and meeting interesting people from both sides of the Cyprus green line, what has stayed with me most is realising how important it is to advocate for a different value framework for the arts. One that values people, relationships and the health of the planet as key outcomes. One observation that has shaped my worldview and changed the way I work is acknowledging that rushing into projects without putting the right amount of care, time and attention into the process, and the different aspects that make the project possible (people, relationships, funding, etc) is neither just nor sustainable in the long run. We end up overlooking the needs and/or lessons that emerge at every stage of the process and the aspects that might need to change or be improved.

This is an unfortunate reality of a sector that must often dance to the rigorous rhythms of funding rounds, tight budgets and unrealistic production schedules; symptoms of a wider malaise that seems to afflict every creative industry on the planet. While there's little to be done about some of these factors, I am now more mindful of such considerations when pondering a new venture.

While I was in Limassol, I also reflected on the way artistic practices are used to address today's global challenges, what possible futures there are for us and what role we have in shaping those futures. As a community, it is striking how little our artistic approaches have changed in the past few years. I feel we still make use of narratives that are too often inaccessible to diverse audiences, or that focus too much on negative interpretations of the future, as is the case with dystopian and apocalyptic climate futures. What impact do these stories have on people? Do they nurture positive change, or do they just exacerbate polarisation, paralysis and social unrest? What other forms of narrative are there aside from critically or conceptually addressing a topic or raising awareness about an issue? To what extent is our work aligned with the complex world we live in and what is yet to come?

What I am missing from the current arts worldview, particularly in the art+tech field, is more examples of projects that show that another world is possible. Narratives that give us hope and optimism that there is a way to overcome the mess we are in and provide audiences with the means to think and act differently upon social, political and environmental issues. Why are we not including in our events and programmes more artists, creatives, activists, thinkers, and strategists whose work focuses on imagining and orchestrating alternative futures? We need to hear from more people who go beyond the critical, high-tech, and dystopian way of looking at things in order to envision a fairer and more attainable future.

As scientist, artist, and educator Ayesha Khan wrote in her piece *Focusing on what we're FOR, more than what we're against* helps us build relationships: "It is important to strike a balance between focusing on what we're dismantling versus what we're building. The reality is when we build, we simultaneously dismantle."¹ Khan's words resonate profoundly with me, especially at a time when our world is crumbling before our eyes.

1. Ayesha Khan, "Focusing on what we're FOR, more than what we're against helps us build relationships," *studocu*, 4 May 2023, <https://www.studocu.com/ro/document/universitatea-din-bucuresti/metodologia-cercetarii-stiintifice/focusing-on-what-were-for-more-than-what-were-against-helps-us-build-relationships/63333279>

I am glad the *Sea Blindness* exhibition provided a platform for projects like *Marine Caves and Benthic Terrazzo*, which represents the kind of practices I believe are needed within the arts in the current context. Created by Greek artist collective Hypercomf, the project addresses the issue of plastic pollution in the marine cave ecosystems of Chania in Crete. It involved a year-long collaboration with marine biologist Markos Digenis for a detailed field study, and the development of a series of floor tiles made from oceanic pollutants collected during an exploration of the caves. “A sustainable design proposal that parallel to providing a use for this waste material and reintroducing it to the human home and domain, would help reduce the amount of concrete and river/marine sand extracted from the natural environment for such uses.”²

Marine Caves and Benthic Terrazzo sheds light on the transformative role creative practice can play in the context of the current ecosocial crisis. It revolves around the message of responsible consumption, sustainable art production, and the values of care and ecosystem restoration and preservation. And it highlights the systemic approaches that can inspire people to develop and embody other societal and economic values that are more sensitive to the Earth and its inhabitants. Projects like this bring a sense of hope and accountability for our future, while adding breadth and purpose to the arts. There is a quote on the Onassis Foundation’s page showcasing this project that reflects on these ideas: “the larger oceanic issues clearly require systemic transformations such as the reformation of the social mentality towards consumption and the re-evaluation of our practices using a new set of values, one that focuses on the long term implications of our practices.”³

2. “Hypercomf and Markos Digenis are working together on the Studiotopia residency at Onassis Stegi,” *Onassis*, <https://www.onassis.org/news/artist-team-hypercomf-and-scientist-markos-digenis-are-the-residents-of-studiotopia-artscience-programme-hosted-by-onassis-stegi>

3. “Hypercomf and Markos Digenis are working together on the Studiotopia residency at Onassis Stegi,” *Onassis*, <https://www.onassis.org/news/artist-team-hypercomf-and-scientist-markos-digenis-are-the-residents-of-studiotopia-artscience-programme-hosted-by-onassis-stegi>

As someone who feels very deeply about the world and those inhabiting it, the last decade’s challenges—including border conflicts and recurrent natural disasters—have had a deep impact on the way I approach life and work. I have spent the past few years reflecting on my practice and how best to work through change and transition via art and culture. Looking ahead, I intend to connect and work with, support and learn from artists, creatives and practitioners from across disciplines who are guided by a commitment to help society navigate these uncertain times. I want to work with peers who see creative practice as an essential means to articulate, propose and organise new strategies for coexistence. With my work, I want to contribute to making the arts less precarious, and I want to seek out more people who share similar goals and ask similar questions.

The work of Cassie Robinson⁴ was very present during my time in Limassol. I listened to some of her podcasts⁵ during my daily walking ritual by the sea. I find her expertise and knowledge in the fields of behaviour change and collective consciousness, and what she calls “resourcing the transition,”⁶ “hospicing endings,”⁷ and “imagining and seeding the new”⁸ to be not only impressive, but also very valuable for a society in transition.

107

4. Cassie Robinson, <https://www.cassierobinson.work>

5. Cassie Robinson, “Podcasts,” <https://www.cassierobinson.work/talks-panels-podcasts-1>

6. Cassie Robinson, “Becoming 2023 – some of the things I’ll be doing this year,” *Medium*, 4 January 2023, <https://cassierobinson.medium.com/becoming-2023-some-of-the-things-ill-be-doing-this-year-940ce5bf72be>

7. Cassie Robinson, “How do we help things to die?,” *Medium*, 11 January 2019, <https://medium.com/thefarewellfund/how-do-we-help-things-to-die-29aef0c39e0a>

8. Cassie Robinson, <https://www.cassierobinson.work>

EXHIBITIONS



img. 1 *Floating Fragments* by Seema Nusrat. Sea Art Festival, Busan Biennale, 2023. Photo: Irini Papadimitriou.

Money, Ruins, and the Sea

Irini Papadimitriou

Writing at a time when the effects of human activity on the environment were not as evident as they are today, Rachel Carson, in the preface for the second edition of her influential work *The Sea Around Us*,¹ refers to the alarming action of depositing of radioactive and other contaminated waste of the Atomic Age in the ocean. Carson contemplates on the “curious situation that the sea, from which life first arose, should now be threatened by the activities of one form of that life.” Over sixty years later, with our oceans facing severe threats from human activity, and no area in our planet’s waters remain untouched, Carson’s reflection on a sad reality could not be more relevant.

In *The Boundless Sea: A Human History of the Oceans*,² David Abulafia, is taking the Pacific as his starting point, the largest and oldest ocean basin on the planet, and the first where seafaring peoples appeared, presents a history of the world and humanity from a maritime perspective. Abulafia, in this epic work of human movement and connections, unfolds histories of exploration, cartography, trade, piracy, forced and voluntary migration, and a lot more, taking the reader away from the land / earth and placing the focus on the body of water that covers most of our planet.

While we are thinking of the world in a terracentric or landcentric way, most of us ignore the fact that histories of human civilisation cannot be separated by histories of the seas and oceans. In fact, human communications and supply chains across the globe are unthinkable without the oceans, since our vast internet data is travelling through undersea cables, and almost 90% of the goods we consume are transported around

1. Rachel Carson. *The Sea Around Us*. Oxford University Press, 1961.
2. David Abulafia. *The Boundless Sea: A Human History of the Oceans*. Penguin Books, 2020.

the world with ocean shipping. Capital literally flows into the mainlands from the sea. Pretty much everything we are surrounded by has arrived to us after being on a long journey in a shipping container. A metaphor for a society that reaches for automation, profitability and human exploitation, the container has been elemental to globalisation and global trade. To quote Rose George “shipping is so cheap that it makes more financial sense for Scottish cod to be sent 10,000 miles to China to be filleted, then sent back to Scottish shops and restaurants, than to pay Scottish filleters.”³ The oceans’ role in distributing worldwide commodities that most people have ignored until now, became quite apparent back in March 2021 when the *Ever Given* container ship got stuck and blocked the Suez Canal for days causing a massive global trade disruption. During the COVID-19 pandemic, numerous containers stuck in ports around the world resulting in shipping delays, prohibitive costs, and in some cases empty shelves in stores.

112

Seeing the astonishing number of vessels and sea traffic on real-time tracking maps like MarineTraffic is shocking, and it certainly makes the ocean look more like an avenue at peak hour, rather than the quiet, vast empty surface most of us perceive it to be.

Liam Campling and Alejandro Colás in the opening line of their book introduction, *Capitalism and the Sea: The Maritime Factor in the Making of the Modern World*⁴ describe global capitalism as a “seaborne phenomenon.” The authors are reminding us of the importance of the connection between the marine and terrestrial and how this relation has been intensified under capitalism “incorporating the oceans into the law of value, extending maritime commodity frontiers and attempting in the process to ‘flatten’ the geophysical division between solid ground and fluid water.” It is actually important to understand the connections between humans, and nature, and how our consumer society focuses on profit and eternal

3. Rose George. *Deep Sea and Foreign Going*. Granta Books, 2018.

4. Liam Campling and Alejandro Colás. *Capitalism and the Sea: The Maritime Factor in the Making of the Modern World*. Verso, 2021.

growth rather than questioning how our activity is impacting the planet.

Throughout humanity's history, the seas and oceans have been providing - and continue to do so - immense resources to peoples and countries worldwide. Sources of food, medicines, jobs, energy, minerals, and services, but also serve as sites for trading routes, cross-cultural exchange and migration. Our seas and oceans have always been central to many industries and world economies. But the ocean also regulates our climate; it stabilises temperatures, absorbs greenhouse gases and generates oxygen - keeping us alive, while storing big amounts of CO₂ and playing a significant role in climate change mitigation.

The sea and ocean are not just bodies of water that connect/separate parts of land across the globe, or just surfaces for transporting commodities. The seas are important and rich ecosystems on their own, and despite our deep connection with this ecosystem, and the fact that we emerged from these bodies of water, we still perceive them as remote places, distant and separate from our existence. It is a paradox that we treat our waters as a dumping site, when our survival depends on them. Indeed, in our capitalist society we treat the seas as a vast industry we can endlessly exploit. A factory to satisfy our needs and greed, a disposal ground for plastic, toxic waste and discharges causing the fast acidification and warming of waters that can have catastrophic effects for our planet, or a utopian place for the land's elite to potentially escape from regulations, governments, and national borders.

It is indeed ironic that we are discussing deep sea mining as a way to source minerals needed to support green technological innovation when we know that such activity will be damaging to ocean floor and marine life and negatively impact the environment, and people who depend on the ocean for sustenance. The argument is that there is a growing demand for powering up our electronics and "green" electric cars, but as one would expect there is no clear regulation, a comprehensive governance system or clear discourse about who would benefit or who would be impacted from such activity.

To paraphrase Andreas Malm in *Fossil Capital*, exploring the development and history of fossil economy from the 19th century coal-powered steam engine, what has been created is a system of power for exploiting human and natural resources, a system that is still operating today and continues to fuel injustice.⁵ If ocean exploitation continues to grow and operate without rules, what would this mean for the future of the planet's human and non-human entities?

These topics and questions about our relationship with the sea and the ocean as a space of globalisation, deregulated labour and exploitation, and their environmental and social impacts, have been explored recently as part of my curatorial research, the outcomes of which resulted in two exhibitions, *Money, Ruins, and the Sea* at NeMe in Limassol,⁶ and *Flickering Shores, Sea Imaginaries* for Busan Biennale's Sea Art Festival 2023 in Busan.⁷

114 These projects took place right at the heart of two coastal communities that while are far apart geographically, both have, throughout history, strong connections and interdependence with the sea. At the same time, both Limassol and Busan (Ilgwang Beach) face increasing challenges due to climate change and experience destructive events due to human development and activity: coastal erosion and physical alterations to shores, pollution, loss of biodiversity and much more.

Limassol in Cyprus, positioned on the maritime highway that connects important trade routes in the Mediterranean, Persian Gulf, Indian Ocean and Pacific, a desirable place due to low tax and golden visas, and a place caught in the middle of international geopolitical players and their agendas, has been experiencing extensive urban development - mainly due to an influx and alleged illicit movement of foreign capital. On the other hand, Ilgwang, an old seaside town with fishing, diving, and seaweed farming communities right at

5. Andreas Malm. *Fossil Capital*. Verso, 2016.

6. <https://www.neme.org/projects/a-sea-change/money-ruins-and-the-sea>

7. <https://www.saf2023.org/?lang=en>

its heart, has also been transformed by fast development, as it is situated within commuting distance from Busan, South Korea's second largest city and the sixth largest port in the world.

Coasts are important and rich spaces for understanding links between maritime areas, but also for deconstructing land-sea binaries, central to ideas of sovereignty, territoriality and jurisdiction. The aforementioned exhibitions presented work that engages critically with marine environments, challenging existing - extractivist and exploitative - relationships with the seas and oceans, and enabling different perspectives for engaging with these vital ecosystems highlighting the need for different forms of governance. At NeMe, displayed works by artists such as Vladan Joler (*New Extractivism*)⁸ or FRAUD (*Partnerships*)⁹ that delve into subjects of supply chains, critical raw resources, treaties, policies and regulations, explore historical and contemporary forms of exploitation as well as old and new forms of colonialism. Artists Xandra van der Eijk (*Ghost Reef*)¹⁰ and Robertina Šebjanič (*Aquatocene - Subaquatic quest for serenity*)¹¹ engage with the ocean, underwater habitat and marine life through listening experiences. They make us aware of sounds from the ocean's depths, but also human sonic pollution and our impact on marine organisms, while calling for empathetic strategies. On the other hand, Kyriaki Goni, challenging established forms of sovereignty and power, presents a speculative cooperative platform for storing personal data, in sustainable floating and solid data havens on islands in the Aegean Archipelago (*The Aegean Datahaven*).¹² Moving away from the traditional art domain of the gallery

115

8. Vladan Joler, "New Extractivism", <https://extractivism.online/>

9. FRAUD, "EURO_VISION," <https://euro-vision.net/>

10. Xandra van der Eijk, "Ghost Reef," <https://www.xandravandereijk.nl/projects/ghost-reef>

11. Robertina Šebjanič "Aquatocene - Subaquatic quest for serenity," <https://robertina.net/aquatocene/>

12. Kyriaki Goni, "The Aegean Datahaven," <https://kyriakigoni.com/projects/the-aegean-datahaven>

to the public realm, the Sea Art Festival 2023 exhibition presented artistic interventions around the seaside town, indoors, using community spaces or traditional dwellings, and outdoor spaces, alongside the beach and Ilgwangcheon river, and next to Halmae and Halbae Shrines in Samseong-ri village.¹³

Here, artists such as J.R. Carpenter and Tomo Kihara (*This Is Not A Good Sign*),¹⁴ Seema Nusrat (*Floating Fragments*),¹⁵ Studio 1750 (*Aquatic Garden*),¹⁶ Renata Padovan (*Mangal series*)¹⁷ and Lab C (*Muddy Water*)¹⁸ created works that invite playful interactions and responses while posing important questions about climatic conditions, or bringing to our attention water ecosystems affected by human activities. In the Sea Art Festival Lab visitors were invited to explore urgent topics of sand scarcity, plastic pollution, and shipping industry futures, while this was also a space for workshops and participation, including the *Sea Art Festival Manifesto*, a collectively authored document composed of questions exploring, interrogating and understanding our relationships with the sea.

116

Can art and transdisciplinary collaborations and exchange enable new thinking about our relationship with bodies of water and help us engage in action for the health and care of our oceans? Both projects aimed to activate spaces for critical conversation and dialogue, but also present work that not only makes us aware of critical or alarming issues, but also work about cooperation, resistance and restoration.

13. It is important to state that *Flickering Shores, Sea Imaginaries* was made possible with the cooperation and support of Ilgwang residents, and the exhibition and relevant programme was embedded in the community.

14. J. R. Carpenter & Tomo Kihara, "This Is Not A Good Sign," <https://not-a-good-sign.com/>

15. Seema Nusrat, "Floating fragments," <https://www.seemanusrat.com/work/floating-fragments>

16. Studio 1750, <http://www.studio1750.com/>

17. Renata Padovan, <https://www.renatapadovan.me/>

18. □□□ □, <https://linktr.ee/labc2018>

These exhibitions make a case about the importance of art and artists engaging with environmental and sociopolitical issues, responding to ocean colonisation and sea capitalism, but also nurturing new forms of knowledge and thinking that could inspire alternative visions and action. Artists such as Ari Bayuaji (*Weaving the Ocean*)¹⁹, Julia Lohmann and Kayoung Kim (*Department of Seaweed*)²⁰ show us that regenerative rather than exploitative ways of working with our environment are possible.

Art has the power to make us see things differently. In this case it shows us that land and sea share the same materiality, but also that human and non-human entities are deeply entangled with both and are part of the same ecosystem.

What does the sea remember? Who governs the sea? How can we become good ancestors for our ocean? Are we ocean yet?²¹ (*Sea Art Festival Manifesto* questions).

19. Ari Bayuaji, “Weaving the Ocean,” <https://www.aribayuaji.com/works/weaving-the-ocean/>

20. Department of Seaweed, <https://www.departmentofseaweed.org/>

21. Sea Art Festival Manifesto questions.



img. 2 *Money, Ruins, and the Sea* (installation detail).
Photo: Nicos Avraamides.



118

img. 1 César Escudero Andaluz, *F.U.C.K.- ID. Free Universal Cut Kit for Internet Dissidence*, 2017. Photo: Jafra Abu Zoulouf.

Sea Blindness

Régine Debatty and Carmen Salas

Over the years, researchers, historians and creatives have employed the term ‘sea blindness’ to depict humankind’s inability to identify and understand certain issues related to our seas and oceans, such as environmental protection, migration flows or global logistics and their impact on coastal ecosystems. Sea blindness is caused by a wide array of factors such as: negligence, ignorance, or a lack of interest to address these issues. We can be informed about the general lack of interest and perspective towards problems at sea investigated in *Freightened: The Real Price of Shipping*, a 2016 produced documentary by the French director Denis Delestrac¹ which exposes the environmental and human costs of marine transport, a powerful and unregulated industry that moves millions of dollars and yet remains largely unknown to most people.

The *Sea Blindness* exhibition at the NeMe Arts Centre, shed light on the major geopolitical, ecological, and humanitarian phenomena that unfold in the Mediterranean basin but remain shielded from public scrutiny for a variety of reasons. Many human interventions in the Mediterranean are commonly disregarded, as in the cases of submarine communication cables, the shipping industry and other critical infrastructures because of their lack of visibility or because they concern geopolitical relations, and as such seem too abstract or remote. Other aspects, however, have to contend with the indifference of the already oversaturated attention span of the general public, as it often happens with matters related to environmental degradation and migration.

The Mediterranean geopolitical, social, and environmental landscape has undergone significant changes throughout the years. The continuous flow of people, goods and ideas intersecting in this part of the world, not only

1. Denis Delestrac, director. *Freightened: The Real Price of Shipping*. Polar Star Films, 2016.

reminds us of its historical and strategic importance, but also its complexity and fragility due to different political regimes, religions, and cultural heritages, economic resources, and the ongoing geopolitically instigated crisis situations. It does not come as a surprise that a great number of the world's conflicts - humanitarian, environmental, energy, security, and geopolitical dominance, originate in and around the Mediterranean basin.

Global capitalism is one of the major factors that has profoundly transformed the world's oceans and seas. It has also disrupted our system of values and the way we relate to the natural world, which is, paradoxically, the main source of our global commodities. As valuable as the Mediterranean Sea is, as an essential source of food and exceptional marine biodiversity, and a critical transportation route for almost everything we consume, many citizens, and by extension many of their governments, are generally unaware of their dependence on it. In fact, current modes of production and distribution result in a situation where people are as oblivious to the uniqueness of the seas as they are to sectors like agriculture, until they are made aware of the importance of these ecosystems for their lives, or until they experience the absence of the commodities these ecosystems provide. This shows the kind of 'sea blindness' our society experiences.

120

Sea blindness comes in many forms. One being Europe's flagrant inaction to the ongoing humanitarian crisis in the Mediterranean caused by wars in North Africa, and the Levant region. As we write in early August 2023, we are faced with a growing number of cases. One of the most recent episodes happened in June 2023 inside the Greek Search and Rescue Region (SAR), where a boat transferring hundreds of migrants sank near the coast of Pylos. A joint investigation between the research group Forensis, The Guardian, German public broadcaster ARD, and Greek non-profit organisation Solomon exposed "inconsistencies in the Hellenic Coast Guard's (HCG) account and indicates that over 600 people drowned as a result of actions taken by the HCG."² According to this investigation,

2. "The Pylos Shipwreck investigation," *Forensis*, 2023.
<https://counter-investigations.org/investigation/the-pylos-shipwreck/>

there also “appears to have been a series of efforts by the HCG to distort and manipulate evidence related to the incident and silence witness accounts.”

A few months earlier, in February 2023, there was another tragedy, this time off the coast of Italy’s Calabria region, which claimed the lives of at least 94 individuals, many of them children. These, ongoing, humanitarian disasters take place on the backdrop of a series of measures and agreements adopted by the EU and individual European countries to curb immigration from Africa and the East. They range from Italy’s nationalist government actively sabotaging the work of sea rescue charities to the EU striking “strategic partnership” deals with Turkey and Tunisia that make it increasingly difficult for people to reach and settle in Europe.

The European practices of non-assistance turn the Mediterranean into both, a burial site where thousands of desperate individuals from Africa and Asia disappear, and a liquid frontier that discourages the movement of human beings from the South to the North. This discrimination of who has the right to travel and set foot on a territory finds uncomfortable echoes in the history of colonialism in the Mediterranean region. Imperialism was not the only motive for European colonists. The desire to explore, to spread “civilisation” and impose a Western perception of the Mediterranean also resulted in occupation, forced modernisations and other exercises in supremacy.

Another form of sea blindness refers to topics related to surveillance and digital sovereignty concealed under the surface of the Mediterranean Sea. Because of its key position between Africa, the Middle East, and Europe, the network of fibre optic cable hubs and undersea sensors distributed around the basin enables digital connectivity for millions of people and supports the economies of three continents. The submarine infrastructure also plays a critical role in Europe’s right and ability to control its own digital data. Its importance for regional security is such that the EU fears that it could be sabotaged³ by foreign intelligence agencies or

3. “Security threats to undersea communications cables and infrastructure – consequences for the EU,” June 2022
[https://www.europarl.europa.eu/RegData/etudes/IDAN/2022/702557/EXPO_IDA\(2022\)702557_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2022/702557/EXPO_IDA(2022)702557_EN.pdf)

non-governmental actors as part of what is sometimes called “hybrid warfare tactics.”⁴

An important aspect that is little-known, or ignored by many people is the relationship between the land and the sea, and how land processes affect the ocean and seas. For example, this interaction includes “the examination of the nutrient load and eutrophication, the connection of cables or the transmission of energy to the national energy network, and connections between land and sea transport, ports, cities and towns and the recreational use of the coastal area.”⁵ It has already been proven that intensive farming and the use of pesticides and fertilisers poison fresh water, and marine ecosystems. It also causes soil erosion and reduces soil utility, productivity, and biodiversity. There are many studies advocating for the importance of sustainable practices and biodiversity for food security, and to preserve critical rural and coastal habitats.⁶ Preserving (and growing) varieties of grains is crucial if we want to prepare for the repercussions of the climate crisis. “In the future, plant breeders might need to tap the traits from one variety to make another more resilient to warmer, stormier, or drier weather, or to save a prized variety from disease.”⁷

122

With more than 17,000 marine species, 20 to 30% of which are endemic, the Mediterranean basin is a

4. “What the internet looks like: Underwater cables in the Middle East,” *Middle East Eye*, 3 March 2021 <https://www.middleeasteye.net/news/underwater-cables-internet-middle-east>

5. “Land–sea interaction,” *Maritime spatial plan for Finland 2030*. <https://meriskenaariot.info/merialuesuunnitelma/en/land-sea-interaction/>

6. “Sustainable Agriculture for Biodiversity. Biodiversity for Sustainable Agriculture,” *Food and agriculture organization of the United Nations*, 2018. <https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1136968/>

7. Kelsey Nowakowski, “Why we need small farms,” *National Geographic*, 12 October 2018. <https://www.nationalgeographic.com/environment/article/photos-farms-agriculture-national-farmers-day>

biodiversity hotspot.⁸ Unfortunately, many of these species are considered vulnerable, endangered or threatened with extinction. Pollution, droughts, invasive species, marine heat waves, habitat degradation and poor management of natural resources are important contributors to the decline of biodiversity in the whole region. While anthropisation and mass tourism are putting additional stress on coastal areas, life in the high sea is disrupted by the growing concentration of noisy and highly polluting shipping and cruise traffic. Alongside plastics and industrial contamination, moving ships have changed the chemical and physical composition of the sea as evidenced in ocean acidification, depleting oxygen levels and warming waters. What was once considered a landmark in transport and technological innovation, is increasingly causing harm to the coastal and marine ecosystems.

The recent approval of the world's first international high seas treaty brings hope among all of the distressing news coming from the Mediterranean. The new agreement adopted by the UN's 193 Member States in June 2023 "contains 75 articles that aim at protecting, caring for, and ensuring the responsible use of the marine environment, maintaining the integrity of ocean ecosystems, and conserving the inherent value of marine biological diversity."⁹ The UN High Seas Treaty, which has been approved after twenty years of consultations and two weeks of talks, shows the multilateral political dialogue, cooperation and collaboration efforts taken by all State Members to forge a common wave of conservation and sustainability in the high seas beyond national boundaries and to accelerate climate ambition towards a more sustainable, resilient and equitable future.

Can we imagine the Mediterranean as a shared space, valued and protected by all the cultures that live around and beyond it? Can we find new ways to relate to the

8. "Biological diversity in the Mediterranean," *UN Environmental Programme*. <https://www.unep.org/unepmap/resources/factsheets/biological-diversity>

9. "Beyond borders: Why new 'high seas' treaty is critical for the world," UN News, 19 June 2023. <https://news.un.org/en/story/2023/06/1137857>

Mediterranean Sea that do not rely solely on capital, power struggles, and geopolitical dominance but on a healthy and sensible balance between protection of the sea and sustainable marine economies? Could the sea become a collective, cross-border project that takes into account the wellbeing and right to exist of all forms of life, humans and non-humans, microbial and vegetal?

The *Sea Blindness* exhibition and accompanying programme of events aim to help us rethink how we relate to the Mediterranean sea, how the relations and cooperation between the Northern and the Southern, Eastern, and Western borders of the basin unfold, as well as the influential role the region plays in world's geopolitics and in securing economic, environmental, and social prosperity.

Artistic and research engagements on these topics throw light on both collective concerns, and political responses to challenges arising in the Mediterranean basin. Through their work, the participating artists and scholars, explore the infrastructures, phenomena, tensions, and relationships unfolding in and around the Mediterranean, revealing on one hand, the complex mechanisms of humans, food, and material flows taking place in the Mediterranean Sea, and their impact at a social, political and environmental level, and on the other hand, the importance of sea protection and conservation for social, economic, and environmental prosperity. The exhibition also presented artists who propose critical, speculative, and sometimes satirical approaches to understanding the growing effect technology has on political and territorial realities, the geopolitical, and mass-surveillance issues surrounding the long-standing practice of undersea cabling in the Mediterranean, as well as poetic proposals to reimagine our relationship with marine ecosystems.



125

img. 2 FutureFarmers, *Seed Journey*, 2016-2023.
Photo: Jafra Abu Zoulouf.



126

img. 1 *Flood Tide of Resistance* exhibition views.
Photo: Jafra Abu Zoulouf.

Flood Tide of Resistance.

An interview with Oliver Ressler

Régine Debatty

I remember the years 2008 and 2009 as a period when many art institutions across Europe dedicated major exhibitions to “the changing planet” and in particular to the effects that global warming, pollution, land erosion and other sources of environmental degradation were having on the living world. At the time, raising awareness about the unfolding eco-carnage was a theme like many others for artists. Their works were visually arresting but most of them never stepped out of museum or gallery spaces.

Today, however, it is hard to look at the environmental emergency as if it were an artistic theme like any other. Legislations, corporate promises and governmental efforts to “drive down emissions” are too weak to prevent planetary breakdown. Most are not even implemented anyway. This is why more and more artists are now putting their practice and skills directly at the service of the climate justice movement.

Flood Tide of Resistance, an exhibition that opened at the NeMe Arts Centre in Limassol, Cyprus on 7 October 2022 presented the work of artists who actively support the climate justice movement. The artists selected by Oliver Ressler cover many grounds, deploy different strategies, and come from various parts of the world. Their tactics and degrees of involvement vary: Tools for Actions creates playful tools that climate activists can appropriate and use; Tiago de Aragão documented and participated in the mobilisations of indigenous communities against the destruction of their livelihoods; the members of No Grandi Navi have campaigned with vigour against cruise-ship tourism in Venice, etc.

The exhibition at NeMe is a spin-off of *Overground Resistance* which opened the previous year, in 2021, at frei_raum Q21 exhibition space in Vienna. Both shows have the same vigour and messages but along with the projects that

took place on land, visitors of *Flood Tide of Resistance* will also discover activism that takes place at sea.

I caught up with the curator of the exhibition, artist and filmmaker Oliver Ressler, to ask him a few questions about climate justice, new forms of civil disobedience and artistic engagement.

Régine Debatty: Hi Oliver! I found it interesting that instead of the usual show about climate movements, the exhibition explores the climate justice movements. Could you tell us about the distinction?

Oliver Ressler: I think in the Global North many people assume the problem with the climate is primarily too much carbon in the atmosphere, and therefore we have to achieve decarbonisation. While it is necessary to achieve decarbonisation, this is not enough. We also need to talk about climate justice, to recompense the Global South which, in a historical perspective, contributed much less to global warming, while facing the most severe, most brutal consequences of climate breakdown. A change in our perspective is important: In regard to climate breakdown, the North is the debtor, and it has to start accepting this inconvenient role and start transferring huge amounts of money as compensation for the damages that occur due to extreme weather events; money, which will also be needed to pay for adaptation measures and decarbonising the South.

128

RD: How important is it for artists to collaborate with NGOs, local activists, indigenous communities and other actors of the climate justice movement?

OR: If you care about the future of life on the planet, you have several possibilities to continue working as an artist, doing work in relation to, and in collaboration with, protagonists of progressive social movements. I am afraid that classical studio practice is becoming more and more cynical and irrelevant... We are already witnessing some artists taking on the responsibility of documenting actions and creating tools that can be used to spread the word and broaden anti-extraction activities. Others participate in shaping the visual appearance of groups, creating tools that can be used in direct action. Some collaborate in designing the choreography

of mass actions of civil disobedience. Others establish new networks of collaboration and support indigenous or under-privileged communities in sacrifice zones. I believe all of these are very meaningful activities.

RD: The exhibition you curated for frei_raum Q21 exhibition space was titled *Overground Resistance*. The show you curated for NeMe is “Flood Tide of Resistance”. If I understand correctly, it is more focused on the sea. How did you go from a show that looks at climate justice resistance on land to one that looks at marine environments?

OR: It would be boring to repeat exactly the same show I already did the year before. In addition to the works that were presented at Museumsquartier in Vienna, at NeMe Arts Centre we also included artworks focusing on resistance specific to the sea, connecting my curatorial research to a research project NeMe was already involved in. It recognises the importance of the sea as a space where the perpetuation of the neoliberal economy happens. Commodities are moved around the planet in crude oil-burning container ships, but the sea is also an extraction site for raw materials. Right now, corporations and states are competing for control of the deep-sea mining sites of the future. Whether or not this new round of accumulation, exploitation and destruction will become reality will depend on the capacity of our movements to grow and block and intervene.

RD: How do activists make the defence of the sea more urgent and visible when, as is often the case, it is easier for many of us to relate to where we live (the land) and less so to what is out there in the vast sea?

OR: Many people live in coastal or seaboard areas; for those people it is natural to care about the sea, and maybe also expand direct action to the sea. For years, No Grandi Navi in Venice have been trying to stop cruise ships entering the laguna. Using their small boats, they obstruct the large cruisers directly with their bodies. Their actions keep these huge ships from landing, and also create a new kind of imagery, which gets distributed by the mainstream media, making the issue more visible to a wider public. The struggles against mass tourism, against climate breakdown and against the destruction of the laguna converge in these amazing

actions. After years of struggles, at the very least, No Grandi Navi succeeded in hindering the cruise ships from entering the laguna.

RD: In his book *How To Blow Up a Pipeline*, Andreas Malm¹ calls for the climate movement to escalate its tactics in the face of ecological collapse. The situation is so dire, and the absence of an adequate response is so depressing, that we do not have time for peaceful protests anymore. Is this something you would agree with? Is it ever acceptable to resort to sabotage and ‘controlled’ violence if the cause is just, urgent, and ignored after decades of quiet protests and other peaceful tactics?

OR: Andreas Malm explains quite clearly that ongoing business-as-usual means more and more new extraction projects that vandalise our environment and negatively affect our climate. It should be the responsibility of states to dismantle the climate-wrecking industry and to expropriate the owners and shareholders. As we know, there is not a single state doing this. Property rights seem untouchable. Therefore, whether we like it or not, it appears that our only way to expropriate the climate wreckers is to do it ourselves, through sabotage or by destroying their machines. Such actions have been happening for decades; e.g., the Ogoni people in Nigeria, in their fight against Shell’s murderous oil extraction,² have a long record of destroying pipelines.

It is absolutely clear that the non-action of states will lead to a global wave of sabotage on a scale the planet has never seen before. It will happen on that scale as soon as people sense that this is the only chance to prevent further disasters.

1. Andreas Malm, *How To Blow Up a Pipeline*, Verso 2021.

2. Michael Oduor, “Justice at last: Shell agrees to pay \$110M over oil spills in Nigeria,” *AfricaNews*, 12 August 2021, <https://www.africanews.com/2021/08/12/justice-at-last-shell-agrees-to-pay-110m-over-oil-spills-in-nigeria/>



131

img. 2 *Flood Tide of Resistance* exhibition views. Photo: Jafra Abu Zoulouf.

Postscript: A Sea Change and Beyond

KONTEJNER team

In the final months of the *A Sea Change* project, four cultural organisations from four Mediterranean countries reflected on the two intensive, exciting, challenging, and fruitful years of working together on a wide range of sea-related topics. This publication is one of the key results of reflections, processes, insights and outcomes that emerged from our collaborative efforts.

Through this project, the ambitious themes of blue economies, lives of coastal communities, biodiversity of the sea and coastal zones, tourism, sustainable living and climate change were addressed by numerous European and international artists, curators, activists, museum professionals, academics, researchers, scientists, and cultural workers together with the citizens and local communities in the areas where project activities took place. The project successfully brought forward the many benefits and potentials as well as challenges and less-than-ideal conditions of cross-sectoral collaborations necessary in investigating such a complex and significant thematic frame. In the implemented collaborative processes, project partners KONTEJNER (HR), MOMus – Experimental Center for the Arts (GR), NeMe (CY) and the Quo Artis Foundation (ES), activated and involved an array of cooperating institutes, NGOs, scientific, and cultural institutions, heritage sites, schools, and universities. These specific, programme, and research-oriented collaborations, went beyond the commonality of the thematic perspective: they strongly emphasised mutual interest in the operationalisation of the interdisciplinary work and the creation of innovative impulses through direct action and critical thinking, reaching outside the limits, further, beyond the sea change we strived to achieve.

Encompassing a rich variety of communities and territories, ranging from urban coastal areas and rural archipelagos to underwater worlds and deep sea waters, the *A Sea Change* adventure marks one modest but productive chapter in the new, resilient European cultural landscape – one that we are proud to be a part of, and will continue to nurture together in the years to come.

Appendix

Diary of Events

07/10/2022-04/11/2022

Flood Tide of Resistance. Exhibition organised by NeMe, coordinated by Helene Black and curated by Oliver Ressler; NeMe Arts Centre, Limassol, Cyprus. Participating artists: Tiago de Aragão, Lauren Bon and the Metabolic Studio, Noel Douglas, Francisco Huichaqueo, Gilbert Kills Pretty Enemy III, Kathy Jetñil-Kijiner & Aka Niviâna, Laboratory of Insurrectionary Imagination, The Natural History Museum, Oliver Ressler, Enar de Dios Rodríguez, Theo Prodromidis, Rachel Schragis, Seday, Jonas Staal, Tools for Action, No Grandi Navi.

08/10/2022

Flood Tide of Resistance. Seminar organised by NeMe, coordinated by Helene Black and curated by Oliver Ressler; NeMe Arts Centre, Limassol, Cyprus. Speakers: Oliver Ressler, Lena Johanna Reisner, Sophie Goltz, Noel Douglas. Supported by the Cyprus Deputy Ministry of Culture, Embassy of Austria in Cyprus

135

09/10/2022

Sign Wars: How can we talk with and add to political struggles with images?, workshop organised by NeMe, coordinated by Yiannis Colakides, and Helene Black; NeMe Arts Centre, Limassol, Cyprus. Workshop mentor: Noel Douglas.

22/10/2022

Flood Tide of Resistance. Seminar organised by NeMe, coordinated by Helene Black and Yiannis Colakides; NeMe Arts Centre, Limassol, Cyprus. Speakers: Martin A. Hellicar, Maria Hadjimichael.

18/11/2022-16/12/2022

Money, Ruins, and the Sea. Exhibition organised by NeMe, coordinated by Yiannis Colakides and Helene Black, and curated by Irimi Mirena Papadimitriou; NeMe Arts Centre,

Limassol, Cyprus. Participating artists: Ursula Biemann, FRAUD, Kyriaki Goni, Vladan Joler, Nye Thompson, Liam Young, Robertina Šebjanič, Xandra van der Eijk.

19/11/2022

Money, Ruins, and the Sea. Seminar organised by NeMe, coordinated by Yiannis Colakides and Helene Black, curated by Irini Mirena Papadimitriou; NeMe Arts Centre, Limassol, Cyprus. Speakers: Ismail Ertürk, Irini Mirena Papadimitriou, Ingeborg Reichle, Xandra van der Eijk.

20/11/2022

Money, Ruins, and the Sea. Workshop organised by NeMe, and coordinated by Yiannis Colakides and Helene Black; NeMe Arts Centre, Limassol, Cyprus. Workshop mentor: Irini Mirena Papadimitriou.

01/02/2023-01/10/2023

Living with Others. Documentaries production organised by NeMe, coordinated by Helene Black and Aysu Arsoy. Directors: Iliada Charalambous and Nurtane Karagil; editor Aycan Garip. Director: Helene Black; editor: Yiannis Colakides; cinematography: Nicos Avraamides; drone pilot: Nicolas Demetriou; film crue: Anastasia Venizelou. Appearing with thanks: Andreas Onoufriou, Liopetri activist and researcher; Ellada Evangelou, Historian; Christa Antoniou, artist, historian; Burak Ali Çiçek, Marine Biologist; Antonis Zambas, Niki Zamba, K. Hambis, Panagiotis Katsiaris, Hasan Deniz Akbora, Iskender Madak, Mustafa Yanaroglu, Orhan Taskoparan, Asaf Insan, Firuz Denyali, Huseyin Boyacigil, Fahad Tashadud, Barbaros Oz, Peyman Hodjati, Emir Akcali, Cyril Lafon, Alp Erguven.

13/04/2023-16/04/2023

Living with Others. Residency for Ruth Catlow; organised by NeMe.

13/04/2023-01/05/2023

Living with Others. Residency for Marc Garrett; organised by NeMe.

21/04/2023

Troubled Blue. Weaving hybrid solutions for sustainable marine futures. Symposium organised by Quo Artis, coordinated by Tatiana Kourotchkina and Helena Pérez Guerra; BAU, College of Art & Design, Barcelona, Spain. Speakers: Daniel G. Andújar, Patricia Carbonell, Denis Delestrac, Ignasi Ferrer, Camila Maggi, Anna Majó, Anne-M. Melster, Filippo Minelli, Kasia Molga, Cris Noguer, Ana Otero, Josep Lluís Pelegrí, Marta Puxan, Maja Smrekar, María Antonia González Valerio, Carole Viaene, Robertina Šebjanič. Technical/logistical support: Virus Cultural, Barcelona. Local partners: BAU, College of Art & Design, Barcelona, Spain.

21/04/2023

Presentation of the A Sea Change project. Participation in a panel discussion at the Creative Europe Showroom. City Youth Theatre, Split, Croatia. Speaker: Davorika Begović.

22/04/2023

Workshop on Art & Ecology by environmental sculptor Joaquín Jara at Llobregat's river delta. Workshop organised by Quo Artis, coordinated by Tatiana Kourotchkina and Helena Pérez Guerra; El Remolar - Filipines and the beach of Viladecans. Workshop mentor: Joaquín Jara. Local partners: Consorci per a la protecció dels Espais Naturals del Delta del Llobregat.

137

25/04/2023-29/04/2023

The Sea Beyond (its Aesthetics). Photography workshop organised by MOMus and curated by Areti Leopoulou; MOMus-Experimental Center for the Arts, Thessaloniki, Greece. Workshop mentors: Stratos Kalafatis & Lia Nalbantidou. Workshop participants: Ania Vouloudi, Nikos Kapetanios, Miranda Papadopoulou, Spyros Paloukis, Ragousi Lamees Iole, Elena Marinos, Stef Tsakiris, Ariadne Anadelta, Despina Tasoudi, Dimitris Chantzaras, Sofia Darmousli, Odysseas Tsompanoglou, Meni Seiridou, Aggelos Barai, Panagiotis Pappas, Vasilis Nempeglertis, Andreas Katsakos, Stavros Dagiouklas. Technical/logistical support: Costas Cosmidis, Cleo Gousiou.

03/05/2023-28/05/2023

Fara Peluso's 'Theca. The Function of the Invisible' residency for artist and designer Fara Peluso at the Mediterranean Institute for Life Sciences (MedILS). Residency organised by KONTEJNER, coordinated and curated by Davorka Begović (head curator), Ana Bedenko, Ena Hodžić; Mediterranean Institute for Life Sciences (MedILS), Split, Croatia. Local partners: MedILS team and the Mediterranean Institute for Life Sciences (MedILS), and M Multimedia Cultural Centre Split (MKC) / Dom mladih. Media partner: Radio Kampus.

04/05/2023-21/05/2023

Marko Marković's 'Mutual Aid Orchestra' residency at the Mediterranean Institute for Life Sciences (MedILS); in collaboration with Josipa Vujević. Residency for Marko Marković and Josipa Vujević (engineering collaborator) organised by KONTEJNER, curated and coordinated by Begović (head curator), Ana Bedenko, Ena Hodžić; Mediterranean Institute for Life Sciences (MedILS), Split, Croatia. Technical/logistical support: KONTEJNER team, MedILS team, Toni Meštrović. Local partners: Mediterranean Institute for Life Sciences (MedILS); Multimedia Cultural Centre Split (MKC) / Dom mladih. Media partner: Radio Kampus.

138

06/05/2023-20/05/2023

Heard by the Deep. Field recording workshop organised by KONTEJNER, curated by Davorka Begović; Sea and the Split coastline (on land and by boat); Mediterranean Institute for Life Sciences (MedILS). Workshop mentors: Davorka Begović, Toni Meštrović. Workshop participants: students of the Split Arts Academy and Marine Studies Department of the University of Split. Technical/logistical support: KONTEJNER team, MedILS team. Media partner: Radio Kampus. Local partners: Mediterranean Institute for Life Sciences (MedILS); Multimedia Cultural Centre Split (MKC) / Dom mladih.

16/05/2023-20/05/2023

Heard by the Deep. Exhibition organised by KONTEJNER, coordinated and curated by Davorka Begović (head curator), Ana Bedenko, Ena Hodžić; Multimedia Cultural Centre Split

(MKC) Gallery / Dom mladih, Split, Croatia. Ministry of Culture and Media of the Republic of Croatia; Participating artists: Marco Barotti, Stijn Demeulenaere, Fara Peluso, Francisca Rocha Gonçalves, Robertina Šebjanič + AV performances: Fragile Fragments by pantea, u-matić, telematique; Line | +1233m –1233m by Robertina Šebjanič and Tanja Minarik. Technical/logistical support: Mario Gracin, Franko Sardelić. Local partners: Mediterranean Institute for Life Sciences (MedILS); Multimedia Cultural Centre Split (MKC) / Dom mladih.

20/05/2023

Presentation of the 'Heard by the Deep' field recording workshop. Artist/Curator's Talk organised by KONTEJNER; Mediterranean Institute for Life Sciences (MedILS), Split, Croatia. Speakers: Davorika Begović, Toni Meštrović. Local partners: Mediterranean Institute for Life Sciences (MedILS); Multimedia Cultural Centre Split (MKC) / Dom mladih.

20/05/2023

Presentation of Fara Peluso's MedILS residency 'Theca.' The Function of the Invisible'. Artist Talk organised by KONTEJNER; Mediterranean Institute for Life Sciences (MedILS), Split, Croatia. Speaker: Fara Peluso. Technical/logistical support: KONTEJNER team, MedILS team. Local partners: Mediterranean Institute for Life Sciences (MedILS); Multimedia Cultural Centre Split (MKC) / Dom mladih.

139

20/05/2023

Presentation of Marko Marković and Josipa Vujević's MedILS residency Mutual Aid Orchestra', the strategies of sound communication between species in extreme living environment. Artist Talk organised by KONTEJNER; Razred / Multimedia Cultural Centre Split (MKC), Croatia. Speakers: Marko Marković, Josipa Vujević. Logistical/ Technical support: KONTEJNER team, Multimedia Cultural Centre Split (MKC) team. Local partners: Mediterranean Institute for Life Sciences (MedILS); Multimedia Cultural Centre Split (MKC) / Dom mladih.

06/06/2023

Presentation of the A Sea Change project at the Night of Ideas #2 SEA ART round table. Participation in a panel discussion organised and coordinated by the French Institute in Croatia; KIC - Cultural and Information Center, Zagreb, Croatia. Speakers: Davorika Begović (KONTEJNER), Maud Baignères, Davor Mišković. Supported by the Cultural and Information Center and the French Institute in Croatia, KIC - Cultural and Information Center.

12/06/2023-19/06/2023

Mass Souvenirs - product design. Workshop organised by MOMus, coordinated by Areti Leopoulou; MOMus-Experimental Center for the Arts, Thessaloniki, Greece. Workshop mentors: Athanasios Babalis, George Giannikopoulos, and George Bosnas. Workshop participants: Andriotis George, Chatziiakovou Olga, Vlachopoulou Katerina, Ziuta Ioanna, Kokolaki Paraskevi, Mavromatidou Anastasia, Mikrou George, Michaelidou Aphrodite, Panagiotidou Chrysa, Piliotidou Yianna (Sheep In Bath), Paula Gianna, Foka Ioanna, Thalassa Christina, Papaioannou Stella, Typou Alexandra. Technical/logistical support: Costas Cosmidis, Antonis Vlachos.

140

27/06/2023

Presentation of the A Sea Change project at the MADE IN Dialogs: Maritime Goods conference. Seminars organised by the Museum of Arts and Crafts, OAZA design collective, Drugo More; Nikola Tesla Technical Museum, Zagreb, Croatia. Speakers: Ana Bedenko (KONTEJNER), Koraljka Vlajo, Maja Kolar, Ivana Borovnjak, Davor Mišković, Ivana Katić, Ivica Mitrović, Lidia Boševski, Tatjana Bakran-Petricioli, Donat Petricioli, Vedran Horvat, Hrvoje Carić, Tea Perinčić, Nikša Mendeš, Marino Budicin, Nives Giuricin. Local partners: Museum of Arts and Crafts Zagreb, OAZA design collective, Drugo More, Nikola Tesla Technical Museum

12.8.2023-26.8.2023

Living with Others. Residency for Iliada Charalambous, Nurtane Karagil, and Aycan Garip; organised by NeMe.

10/09/2023-31/03/2024

Post Platform - art and architecture. Workshop organised by MOMus, coordinated by Areti Leopoulou; MOMus-Experimental Center for the Arts, Thessaloniki, Greece. Workshop mentor: Nadia Kalara. Workshop participants: Marina Chatzitoulousi, Theocharis Dospras, Aristidis Georgiadis, Christos Gerotherodoros, Efthimia Kantourou, Chrysa Koulina, Maria Nantsou, Olympia Nazaridou, Athina Tasiou. Technical/logistical support: Costas Cosmidis, Cleo Gousiou, Antonis Vlachos. Local partner: Aristotle University of Thessaloniki, Greece.

13/09/2023-05/10/2023

Sea Blindness. Residency for Carmen Salas, organised by NeMe. Supported by the Cyprus Deputy Ministry of Culture.

16/09/2023

Living with Others. Seminar organised by NeMe, coordinated and curated by Helene Black and Aysu Arsoy; NeMe Arts Centre, Limassol, Cyprus. Speakers: Iliada Charalambous, Nurtane Karagil, Ellada Evangelou, Aysu Arsoy.

16/09/2023-03/10/2023

Sea Blindness. Residency for Régine Debatty, organised by NeMe.

19/09/2023

FREIGHTENED The Real Price of Shipping. Screening organised by NeMe, curated by Carmen Salas and Régine Debatty; Cyprus University of Technology, Limassol Cyprus. Local Partners: Cyprus University of Technology.

22/09/2023-22/10/2023

Sea Blindness. Exhibition organised by NeMe, coordinated by Yiannis Colakides and Helene Black, curated by Carmen Salas and Régine Debatty; NeMe Arts Centre, Limassol, Cyprus. Participating artists: Futurefarmers with Ignacio Chapela & Alfonso Borroagán, Forensic Oceanography, Giovanna Reder (Border Forensics), Moritz Frischkorn, César Escudero Andaluz, Heba Y. Amin, Ingo Niermann & Eduardo Navarro, Ruba Salameh, Hypercomf, Jafra Abu Zoulouf, Denis Delestrac, Ana Serna & Paula Iglesias, and Corina Schwingruber Ilić.

23/09/2023

Sea Blindness. Seminar organised by NeMe, coordinated by Yiannis Colakides, Helene Black, curated by Régine Debatty, Carmen Salas; NeMe Arts Centre, Limassol, Cyprus. Speakers: Carmen Salas and Régine Debatty, Alfonso Borroán, Charalampos Theopemptou, Manfred A. Lange.

24/09/2023

Curators in Conversation. Curator's Talk, organised by NeMe; NeMe Arts Centre, Limassol, Cyprus. Speakers: Carmen Salas and Régine Debatty.

27/09/2023

Sea Blindness. Artist/Curator's Talk, organised by NeMe; coordinated by Yiannis Colakides and Helene Black, curated by Carmen Salas and Régine Debatty; NeMe Arts Centre, Limassol, Cyprus. Speakers: Régine Debatty, Jafra Abu Zoulouf.

27/09/2023

142

All Inclusive, and *They're Just Fish*. Screenings organised by NeMe, coordinated by Yiannis Colakides, Helene Black, curated by Carmen Salas and Régine Debatty; NeMe Arts Centre, Limassol, Cyprus.

11/01/2024-14/01/2024

Post Platform - projects' presentation. Exhibition organised by MOMus, coordinated by Areti Leopoulou, curated by Nadia Kalara; MOMus-Experimental Center for the Arts, Thessaloniki, Greece. Participating artists: Marina Chatzitoulousi, Theocharis Dospras, Aristidis Georgiadis, Christos Gerothodoros, Efthimia Kantourou, Chrysa Koulina, Maria Nantsou, Olympia Nazaridou, Athina Tasiou. Technical/logistical support: Costas Cosmidis, Cleo Gousiou, Antonis Vlachos.

07/03/2024-03/03/2025

Beyond A Sea Change: Rethinking the Mediterranean. Online virtual reality exhibition organised by Quo Artis, coordinated by Elisa Rodríguez Campo, and Helena Pérez Guerra; Vortic Art Limited Platform. Exhibition participants: Daniel García

Andújar, Andrea Lamount/SEL with Eduardo Noya aka NOIA, Kasia Molga, Robertina Sebjanic, Laia Ventayol. Technical/logistical support: Luís Eduardo García, Manuel Marques, Paula de la Pava, Albert Pelay, Vortic Art Limited, Gustavo Wallin.

07/03/2024-30/04/2024

A Sea on Edge: Critical Horizons of a Resilient Mediterranean. Exhibition organised by Quo Artis, coordinated by Helena Pérez Guerra, and Victoria Sacco Pfeiffer; Sant Pau Art Nouveau Site, Barcelona, Spain. Participating artists: Helene Black, César Escudero Andaluz, FRAUD (Audrey Samson & Francisco Gallardo), Daniel García Andújar, Katja Loher, Filippo Minelli, Robertina Šebjanič. Supported by H-Farm, Embassy of Slovenia in Madrid, Istituto Italiano di Cultura Barcellona, Hewlett Packard. Technical/logistical support: tat LAB, Barcelona. Local partners: Sant Pau Art Nouveau Site, àngels barcelona, LOOP Barcelona.

07/03/2024

A Sea Change Round Table. Seminar organised by Quo Artis, coordinated by Helena Pérez Guerra; Sant Pau Art Nouveau Site, Barcelona, Spain. Speakers: Davorka Begović, Joan Llorc, Helena Pérez, Robertina Šebjanič.

143

19/04/2024

State of Matter is a State of Mind. Artist's talk organised by NeMe, coordinated by Yiannis Colakides and Helene Black; NeMe Arts Centre, Limassol, Cyprus. Speaker: Toni Meštrović.

Biographies

144

Athanasios Babalis is an industrial and product designer based in Thessaloniki Greece. His work ranges from electrical appliances and professional cooking equipment to furniture, home accessories and packaging. He studied product and furniture design at the London Metropolitan University and at the Royal College of Art in London, England. His professional career started in London as a freelance designer and continued in New York where he worked for seven years for companies such as Dimensional Media Associates Inc. and Dakota Jackson Inc. In 2003 he returned to Thessaloniki where he established his design studio, through which he designs for a variety of clients. In 2005 he started his academic career as professor of Furniture and Product Design at the state colleges of TEI of Western Macedonia and later at the TEI of Thessaly. Today he teaches design at the AKTO College and the International Hellenic University, in Thessaloniki. In 2014, together with the designer Constantinos Hoursoglou, he co-founded Shibui.

Ana Bedenko is curator, project manager at KONTEJNER, and an independent editor, curator, and researcher. She participated in various research, curatorial and publishing projects (14th Venice Architecture Biennial; *Female Design History in Croatia 1930-1980: Context, Production, Influences*; Triennale di Milano 2022; Creative Research into Anomalies, Failure and Resistance; Architectural fanzine *Arhitektura U...*, etc.). Ana also worked at the Museum of Contemporary Art Zagreb on curatorial and archiving projects, and at *Oris* architectural magazine where she was an editor of the magazine and other publications for several years. Her main interests lie in curatorial and (self)publishing practices.

George Bosnas studied furniture design and material technologies in the University of Thessalia, Greece and obtained his degree with distinction and excellence in 2008.

He continued his studies in Scuola Politecnica SPD, Milan with a master course in industrial design in 2010. After his return to his homeland, he started his working career in the production section. Ever since, he has been collaborating with European agencies. His work focuses on furniture and industrial design. His work has been featured in design magazines, blogs and he has participated in some of the most important exhibitions such as *100% Design London*, *Salone Del Mobile* and *Maison & Object*. In 2017 he won the Grand Prix Hirosaki Award and has set his personal future goals even higher.

Yiannis Colakides is an architect. He co-founder NeMe with Helene Black. Since 2006 he has been a peer reviewer for Leonard Abstracts Service, and as from 2023, its co-coordinator. From 2018 he is a peer reviewer of Leonardo Journal (MIT Press). He (co-)curated numerous cultural projects, and (co-)edited a number of books, the latest ones being *State Machines: Reflections and Actions at the Edge of Digital Citizenship, Finance, and Art* (Institute of Network Cultures, 2019) with Marc Garrett and Inte Gloerich; and *Frankenstein Reanimated: Creation & Technology in the 21st Century* (Torque, 2022), with Marc Garrett.

Régine Debatty is a Belgian curator and art critic who lives in Turin, Italy. In 2004, she created <http://we-make-money-not-art.com/>, a blog which has received numerous distinctions over the years, including two Webby awards and an honorary mention at the STARTS Prize, a competition launched by the European Commission to acknowledge “innovative projects at the interface of science, technology and Art.” Régine writes and lectures internationally about the way artists, hackers and designers use science and technology as a medium for critical discussion. She is a Visiting Instructor at the School of Machines, Making & Make-Believe in Berlin. She created *A.I.L.* (Artists in Laboratories), a weekly program about the connections between art and science for Resonance104.4fm, London’s legendary art radio station (2012–14.) She has collaborated for numerous publications, most notably co-authoring the ‘sprint book’ *New Art/Science Affinities*, published by Carnegie Mellon University (2011) and has

co-authored the book *E-Relevance - The Role of Arts and Culture in the Age of Artificial Intelligence* for the Council of Europe (2022).

Dr. Ellada Evangelou has studied in Cyprus and the United States. She has worked as a dramaturg, theatre director, workshop facilitator, and independent consultant, in collaboration with theatre companies, NGOs, and international organisations. She teaches courses in theatre and dramaturgy in higher education in Cyprus and the United States. She is interested in the relationship between theatre/dramaturgy and identity, and works in the intersection of activism and scholarship in post-colonial, post-conflict communities. She is co-founder of Rooftop Theatre, a 2020-21 Global Fellow of the International Society for the Performing Arts, as well as the Artistic and Executive Director of the Buffer Fringe Performing Arts Festival from 2019 to 2022. She was the curator for the *Boundary Crosser* Artistic Residency at CYENS Center of Excellence.

146

Dr. Marc Garrett completed his PhD at Birkbeck University, London, UK in 2021. His work explores post digital contexts of working-class culture as part of an intersectional enquiry. He co-founded the arts collective Furtherfield as a collaborative platform online in 1996 with artist Ruth Catlow. It has two physical venues, a gallery, and a Commons lab, both situated in the park in Finsbury Park, London. Garrett has curated over 60 contemporary Media Arts exhibitions and projects nationally and internationally.

He has written many critical and cultural essays, articles, interviews, and books about art, technology, and social change. He has recently co-edited with Yiannis Colakides *Frankenstein Reanimated: Creation & Technology in the 21st Century* (Torque 2022). Currently editing the book *Furtherfield: 25 years of Art, Technology and Social Change*, (to be published by Torque).

George Giannikopoulos is an architect and industrial designer. For more than 25 years he has been engaged in product development with Aemos Design+Engineering studio and in teaching product design in different academic institutions in Greece.

Dr. María Antonia González Valerio holds a PhD in Philosophy. She is a full-time professor at the Faculty of Philosophy and Literature at the National Autonomous University of Mexico (UNAM). Her academic pursuits are situated within the intersection of ontology and aesthetics, as well as the interdisciplinary realm of arts, sciences, and humanities, with a specific focus on art involving biomedicine. As the director of the Seminar Arte+Ciencia, she facilitates collaborative engagements between artists, academics, and scientists, fostering interdisciplinarity that yields graduate education, specialised theoretical research, artistic creations, and exhibitions. Additionally, she is a curator and the driving force behind the artistic collective Bios ex Machina. She is the author of the books (selection): *Through the Scope of Life. Art and (Bio)Technologies Philosophically Revisited* (Springer, 2023), *Cabe los límites: Escritos sobre filosofía natural desde la ontología estética* (México: UNAM/Herder, 2016), *Un tratado de ficción* (México: Herder, 2010), and *El arte develado* (México: Herder, 2005).

Joaquín Jara is an environmental artist and sculptor based in Barcelona. He attended the Llotja School of Applied Arts in Barcelona (Escuela de Artes Aplicadas), and the Camberwell School of Arts and Fine Arts in London. His art practice revolves around sculptural actions and portraits, giving agency to the natural non-human environment through interventions of ritual nature in which concepts like identity, heritage, ecology, and sustainability come intertwined to create ephemeral sculptural objects. These pieces are meant to be impermanent and in perpetual dialogue with the transforming factors at play in nature: the seasonal process, the passing of time, and the activity of living creatures, which interact with the sculpture until they (re)own it. Taken as a global dynamic subject, expansive and submitted to the influx of social, historical, political and aesthetical components, the environment is mapped and portrayed by the artist in a process that crystallises and dilates time, space, and matter. His work as an environmental sculptor in different parts of the world has led him to develop performative pieces in different settings, such as installations, exhibitions, and media, such as cinema and contemporary dance.

Dr. Nadia Kalara is a visual artist and associate professor in the School of Architecture of Aristotle University of Thessaloniki where she lives and works. Her artwork and research attempt to establish a dialectic between history, landscape and architecture. Her practice runs through multiple media and she often attempts to create a complex perceptual situation encouraging viewers to refigure spatiality and meaning.

Dr. Veroniki Korakidou is a post-media art theorist, cultural manager and interdisciplinary researcher. Her research focuses on the collaborative process at the intersection of art, technology and the life sciences, including both hybrid bio digital art practices and environmental art forms related to natural ecosystems. She is an Adjunct Professor at the Hellenic Open University, School of Applied Arts (2016-) and recently served as an Academic Fellow at the University of Thessaly, Department of Culture, Creative Media and Creative Industries (2020-2023). Past positions include being a Visiting Lecturer at the Department of Graphic Design and Visual Communication, University of West Attica in Greece (2014-2016) and a Research Associate at the Media Department of the National and Kapodistrian University of Athens, where she worked as co-organiser for the EU research project *eMobiLArt* (Culture 2007-13). She authored or co-authored several articles in international peer-reviewed Journals including *Technoetic Arts*, *Intellect*, and *Leonardo Journal*, MIT Press.

148

Tatiana Kourochkina is curator and cultural manager specialised in Art and Science. She is a co-founder and director of Quo Artis. She has a degree in History and a second-level Master in Landscape Architecture (IUAV, Italy). She thinks that every person is a garden itself and that we are sharing a common planetary garden as humanity, and she believes that art and science are two perfect allies to take care of it.

Dr. Josep L. Pelegrí has been an educator and oceanographer in several countries and held positions related to industry, academia, and research. Josep Lluís has extensive experience as graduate supervisor, principal investigator and research

manager in ocean sciences, which include the supervision of over 20 PhD thesis, the leadership of numerous national and international research projects, and policy positions such as the Dean of the School of Marine Sciences at Universidad de Las Palmas (1998-202), the Spanish National Coordinator in Earth Sciences (2006-2010), and the Director of ICM-CSIC (2018-2022). Since 2003, Josep Lluís has been a researcher at the Institut de Ciències del Mar (ICM-CSIC), working on varied topics that span from ocean circulation and climate to marine social sciences.

Ferdinando Laconi is a natural scientist born in Sardinia, Italy, currently living and working in Athens, Greece. He holds a Degree in Natural and Environmental Sciences from the University of Sassari, Italy, with a graduation in Marine Biology and Ecology. He also holds a professional Master Diploma in Waste Management from the Autonomous Region of Sardinia and a Technical Certificate in Agriculture. For his graduate thesis titled: *Biofouling in off-shore fish farms* (2008) he conducted a practical one-year field research project, analysing samples of algae, marine organisms and plants taken from fish farm nets. He is an avid diver (Advanced Open Water Padi) with extensive diving record in Italy, the Red Sea and the Aegean, having been actively involved in numerous beach cleaning activities through different non-governmental organisations in both Greece and Italy. In 2020 he founded the Conscious Dives collective, which in 2022 was awarded 3rd prize for the collaborative project *Plastic Futures* at HackS+T+Arts: Circular Futures Hackathon organised by S+T+Arts Regional Centers and Onassis Cultural Centre in Athens, Greece. He is Head of Biofouling at the Institute of Unnecessary Research.

Dr. Areti Leopoulou holds a Ph.D. in Art History. She is currently a curator of exhibitions, collections, and publications at the MOMus - Museum of Contemporary Art, as well as the Thessaloniki Biennale of Contemporary Art. She has numerous research contributions for exhibition catalogues, conferences and art editions. In 2017, Futura Pub., Athens published her book *Beneficial Parasites*. Her interests are focused on the field of conceptual art and more specifically on the macro/

micro-political engagement of artistic actions and interventions in everyday life. She is a member of the ICOM-Hellenic Committee, the Society of Greek Art Historians and of several editorial committees for cultural publications and journals.

Dr. Thouli Misirloglou Art Historian, is the Director of MOMus-Museum of Contemporary Art-Macedonian Museum of Contemporary Art, and State Museum of Contemporary Art Collections. She has specialised in art history, exhibition curation, cultural management and collection mobility. During 2005-2006 she contributed to the reactivation of the Thessaloniki Contemporary Art Center of the State Museum of Contemporary Art. Then, she contributed to the largest exhibition of the permanent collections of the Macedonian Museum of Contemporary Art in Athens (2006-2007) as its curator, assuming its directorship in 2017.

Throughout her professional career she collaborated with museums, public, and private artistic organisations, organising numerous exhibitions with institutions and artists from Europe (Germany, England, Italy, France, Spain, Cyprus, etc.), and USA. She was artistic advisor and general coordinator of the *International Festival of Dimitria* of the City of Thessaloniki for five years (2014-2019) and has participated as coordinator in more than ten European cultural programs. She has published numerous articles in journals, scientific, and artistic publications, and edited numerous artistic books. She was a member of artistic evaluation committees and participated as an invited speaker at international conferences.

As an executive of the Metropolitan Organization of Museums of Visual Arts of Thessaloniki since the establishment of the organisation in 2018, she served as deputy director of MOMus-Museum of Contemporary Art-Collections of the Macedonian Museum of Contemporary Art and State Museum of Contemporary Art, as well as of MOMus-Experimental Arts Center.

Irini Papadimitriou is a curator and cultural manager, whose practice draws on interdisciplinary and critical discourse to explore the impact of technology in society and culture, and the role of art in helping us engage with contemporary issues. She is currently Creative Director at FutureEverything in

Manchester UK, and was the Artistic Director for the *Sea Art Festival 2023* in Busan, South Korea. She was previously the Digital Programmes Manager at the V&A, and Head of New Media Arts Development at Watermans.

Recently curated exhibitions include: *Flickering Shores, Sea Imaginaries*, Sea Art Festival 2023, Busan; *AI: Who's Looking After Me?* with FutureEverything and Science Gallery London; *Money, Ruins, and the Sea*, NeMe, Limassol, Cyprus; [Digital] Transmissions with FutureEverything and Jordan National Gallery of Fine Arts, Amman, Jordan; *Plásmata: Bodies, Dreams, and Data*, Onassis Stegi, Athens; *You and AI: Through the Algorithmic Lens*, Onassis Stegi, Athens; *Artificially Intelligent*, V&A London.

Irini is a co-founder of Maker Assembly, a critical gathering about maker culture, and she has been a co-curator for the Arts & Culture experience at Mozilla Festival, including the 2019 exhibition *Trustworthy AI: Imagining Better Machine Decision Making*. She has served as a jury member for *Prix Ars Electronica*, *D&AD Awards*, *Lumen Prize*, *EU STARTS* and *ACM Siggraph*.

Helena Pérez has been part of different projects and institutions linked to the promotion, research, and production of contemporary art. She holds a BA in Art History, a Certificate in Arts Management (Birkbeck College, UK), and an MA in Contemporary Art Theory (Goldsmiths University, UK). She has worked on educational projects for institutions such as Tate Modern, and in contemporary art galleries including Sutton Lane, àngels barcelona, RocioSantaCruz, as well as not-for-profit arts organisations, including the Kadist Art Foundation in Paris, BAR Project, Hangar, Centre for Artistic Production & Research in Barcelona. Since January 2023, she has also served as a Project Coordinator at Quo Artis.

Dr. Marta Puxan-Oliva is a Distinguished Researcher at the Universitat de les Illes Balears, Spain. She has worked at the Universitat Pompeu Fabra, Harvard University, the Universitat de Barcelona, and the Universitat Oberta de Catalunya, and she has conducted research projects at New York University, Princeton University, the University of

Chicago, and Harvard University, with a Marie Skłodowska Curie Outgoing Fellowship from the European Commission (2012-15).

She is a specialist in comparative literature, expert in the fields of narrative theory, comparative racial studies, ecocriticism and global literary studies.

She has published articles in *Poetics Today*, *Studies in the Novel*, *English Studies*, *Letral*, *Journal of Global History*, and the *Journal of World Literature*. Her book *Narrative Reliability, Racial Conflicts, and Ideology in the Modern Novel* (Routledge, 2019) bridges narrative theory with the constitution of racial ideologies. Currently, she works on the global novel in the I+D project, co-directed with Neus Rotger, *The novel as global form: Poetic challenges and cross-border circulation* (2021-24).

She is the IP of the ERC Consolidator Grant Project “Ocean Crime Narratives: A polyhedral assessment of hegemonic discourse on environmental crime and harm at sea (1982-present).” European Commission, 2022-2027 (GA 101043711).

152

Oliver Ressler is a curator, artist, and filmmaker who produces installations, projects in public space, and films on issues such as economics, democracy, migration, climate breakdown, forms of resistance, and social alternatives.

Ressler has had solo exhibitions at Berkeley Art Museum, USA; Museum of Contemporary Art, Belgrade; Centro Cultural Conde Duque, Madrid; Alexandria Contemporary Arts Forum, Egypt; The Cube Project Space, Taipei; Kunsthaus Graz, Graz and comprehensive solo exhibitions at Wyspa Institute of Art, Gdansk; Lentos Kunstmuseum, Linz; Centro Andaluz de Arte Contemporaneo – CAAC, Seville; SALT Galata, Istanbul; MNAC – National Museum of Contemporary Art, Bucharest; LABoral, Gijón; Cultural Centre of Belgrade; Belvedere 21, Vienna; and participated in more than 400 group exhibitions.

For the Taipei Biennale 2008, Ressler curated the exhibition *A World Where Many Worlds Fit* which focused on the counter-globalisation movement; *It's the Political Economy, Stupid*, a travelling show on the financial crisis, (co-curated with Gregory Sholette), has been presented at nine venues (2011-2016); *Overground Resistance*, presented in two venues (2021-2022); and *Flood Tide of Resistance* presented at the NeMe

Arts Centre in 2022. Between 2019-2023 Ressler has directed *Barricading the Ice Sheets*, a research project on the climate justice movements, funded by the Austrian Science Fund. www.ressler.at

Victoria Sacco is an independent curator and professor at the Escola Superior de Disseny (ESDi), La Salle and the Universitat Carlemany (UCMA). Since February 2024, Victoria has been collaborating with Quo Artis foundation. Previously she worked as artistic director of LOOP Festival. She also writes for *La Maleta de Portbou* and is the editor of *Muntadas. Con/Textos III. Una antología crítica* published by La Virreina Centre de la Imatge in 2020. In 2023, she curated the exhibition *Once upon a time* by Leeds Animation Workshop at the Virreina Centre de La Imatge.

Carmen Salas is a curator, cultural strategist and producer. She holds a BA in History of Art from Granada University, and an MA in Arts Policy and Management from Birkbeck University, London. After spending more than 15 years exploring the creative and critical use of technology via conferences, live audiovisual events, and festivals, some of which Carmen Salas founded in London (Alpha-ville) and Mexico City (Connecting the Dots), she then moved into advocating for creative practices that are transformative and regenerative in their nature. Her work also addresses the need to build a just infrastructure for the arts, and to re-evaluate and readapt the traditional modes of artistic creation, curation and exhibition so they can better contribute to societal transition towards more sustainable futures.

Supporters

αλφameγα

Austrian
Embassy
Nicosia

Generalitat de Catalunya
Departament
de Cultura



Deputy Ministry of Culture

GOVERNMENT OF THE REPUBLIC OF CROATIA
Office for Cooperation with NGOs



H-FARM



ISTITUTO
italiano
DI CULTURA
BARCELONA



Republika
Hrvatska
Ministarstvo
kulture
i medija
Republiki
of Croatia
Ministry
of Culture
and Media

la cama sol
ediciones

Zaklada
Kultura nova



Financijski
podržava



REPUBLIKA DE ESLOVENIA
GOV.SI

Local Partners

àngels barcelona



ARISTOTLE UNIVERSITY OF THESSALONIKI | SCHOOL OF ARCHITECTURE
ADVANCED DESIGN:
INNOVATION AND TRANSDISCIPLINARITY IN DESIGN
POST-GRADUATE PROGRAMME OF STUDIES



BAU, CENTRE
UNIVERSITARI
DE DISSENY
DE BARCELONA



Lab for Animation Research



Cyprus
University of
Technology



Institut
de Ciències
del Mar



EXCELENCIA
SEVERO
OCHOA



Recinte
Modernista

Quo Artis would like to express its gratitude to private supporters who made this publication possible. These extraordinary people are: Gonzalo Martín del Arco, Alberto Ojinaga Cebrián, Fernando Castiñeiras, Francesca Agnolin, Francesco Zucchetta and Giovanni Zucchetta.

A Sea Change introduces us to critical,
and sometimes, subversive views
of the Blue Economies of the Mediterranean.

QUO ARTIS
■ ART AND SCIENCE FOUNDATION

